HOUSING CHRONICALLY HOMELESS VETERANS: EVALUATING THE EFFICACY OF A HOUSING FIRST APPROACH TO HUD-VASH

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Rapidly placing homeless Veterans with severe mental illness into permanent housing is one important goal of the U.S. Department of Housing and Urban Development-Veterans Affairs Supportive Housing (HUD-VASH) program; however, no research has tested whether an explicit organizational alignment of this goal with revised practices could improve outcomes. A demonstration project initiated in 2010 to reform housing placement practices in a metropolitan area enabled researchers to compare an explicit "Housing First" program—offering immediate permanent housing without requiring treatment compliance, abstinence, or "housing readiness"—with a treatment-first program for 177 homeless Veterans. The Housing First initiative successfully reduced time to housing placement, from 223 to 35 days, housing retention rates were significantly higher among Housing First tenants, and emergency room use declined significantly among the Housing First cohort. The results suggest that a national Housing First model for the VA would be associated with improved outcomes for Veterans experiencing homelessness. © 2013 Wiley Periodicals, Inc.

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The Obama Administration and Congress have called for the elimination of Veteran homelessness; specifically, the U.S. Department of Veterans Affairs (VA) has established the bold goal of eliminating Veteran homelessness by 2015. To accomplish this mission, VA has increased resources, transformed its service model to focus on homelessness prevention and permanent housing, increased partnerships at both the federal and local levels, and implemented research-informed best practices.

A primary example of this transformation is VA's decision to adopt a Housing First approach for the U.S. Department of Housing and Urban Development VA Supportive Housing (HUD-VASH) program. HUD-VASH is a joint effort between HUD and VA to move Veterans and their families out of homelessness and into permanent supported housing: HUD supplies housing assistance through its Housing Choice Voucher Program while VA provides case management and supportive services through its healthcare system. This collaboration is an important tool in ending homelessness among Veterans; research has shown that permanent supported housing ends homelessness for individuals and families who require the most intensive, long-term assistance to obtain housing stability (Caton, Wilkins, & Anderson, 2007). Specifically, findings have indicated that "having any stable housing has a dramatic improvement on outcomes, especially those related to residential stability and use of institutional settings, such as hospitals, detox, jails and prisons" (Rog, 2004, p. 340).

Although the most notable outcomes of permanent supported housing are in the area of housing stability as opposed to clinical outcomes, the implications for preventing recurrent homelessness among a high-need population are impressive. In fact, a summary of data on housing stability outcomes for permanent supported housing programs indicates that retention rates in these programs are between 75% and 85% in the first year and up to one half of the residents remain in the program longer than 3 years (Caton et al., 2007). In addition to its effect on housing stability, permanent supported housing also reduces tenants' use of other institutional services such as shelter, hospitals, and correctional facilities (Culhane, Metraux, & Hadley, 2002).

As originally conceived, permanent supported housing advocates asserted that individuals with serious mental illness should live in "normal" households regardless of their level of functioning (Blanch, Carling, & Ridgway, 1988). This approach required that the housing be permanent, physically separated from and unaffiliated with mental health services, and reflective of the individual's housing preferences (Carling, 1990; Ridgway & Zipple, 1990). However, as the model has evolved in practice, two broad categories of permanent supported housing have emerged: Housing First or low demand programs, and housing readiness or high demand programs (Caton et al., 2007).

The two approaches vary in their engagement and admission practices. Traditional, high demand programs generally require that an individual be "housing ready"—maintaining sobriety, participating in treatment, agreeing to an intensive service plan—requirements that are contrary to the model as originally articulated by consumer advocates and researchers. The Housing First approach, however, is viewed as an "alternative to linear residential treatment" that offers housing without the condition of sobriety or services involvement (Tsemberis, 2010, p. 13), and is more faithful to the consumer-oriented model as originally proposed. This distinction in admission criteria is often carried through to the program's service approach; services may be mandatory in the high-demand or linear approach and focused on issues other than housing, while the Housing First approach places primary focus on attaining housing, maintaining housing stability, and then, over time, assisting and encouraging the individual to participate in services.

The evidence base for Housing First, which was primarily pioneered in the homelessness field by Pathways to Housing in New York City, has demonstrated improved outcomes related to housing retention and stability, reductions in services utilization and associated costs, and improvements in quality of life (Tsemberis, 2010). Housing retention rates among the high-need population housed with a Housing First approach have been recorded at 85% at 1-year posthousing (Pearson, Montgomery, & Locke, 2007; Tsemberis, Gulcur, & Nakae, 2004) and up to 80% at 2 or more years posthousing (Stefancic & Tsemberis, 2007; Tsemberis & Eisenberg, 2005; Tsemberis et al., 2004). In addition to housing retention, individuals receiving the intensive, community-based services provided through Housing First programs often decrease their use of more expensive emergency and inpatient services. Several studies have found decreases in inpatient medical and mental health services during formerly homeless individuals' tenure in Housing First (Gulcur, Stefancic, Shinn, Tsemberis, & Fischer, 2003; Hirsch & Glasser, 2008), as well as decreases in emergency care (Hirsch & Glasser, 2008).

HUD-VASH was initially funded in 1992 with fewer than 4,000 vouchers available for homeless Veterans. Since 2008, this number has increased to 48,045 HUD-VASH vouchers and the program is operating in all 50 states, the District of Columbia, and Guam. In an effort to determine the feasibility of implementing a Housing First approach in HUD-VASH and to test the efficacy of the approach, VA awarded funding from the FY 2009 budget to provide HUD-VASH case management to two providers located in a metropolitan area: a local community-based services provider and the local Veterans Affairs Medical Center (VAMC). The community-based services provider used a Housing First approach to house and provide services for homeless Veterans while the local VAMC employed a linear, stepwise "housing-readiness" model (treatment as usual [TAU]). The purpose of this study is to determine whether Veterans participating in a Housing First approach to HUD-VASH receive housing more quickly, maintain long-term housing stability, and decrease the use of more intensive and expensive health care services such as urgent care and inpatient mental health care, compared with Veterans in a TAU approach to HUD-VASH.

METHODS

Participants

This naturalistic demonstration project compared two groups of Veterans who were experiencing homelessness and were admitted to a HUD-VASH program in a major metropolitan area. The Veterans were either placed in one of two groups: Housing First or TAU. The Housing First group (N=107) received a consumer-driven case management model developed by Pathways to Housing that placed priority on immediately assisting the Veteran to secure permanent housing in independent, scattered-site apartments (Tsemberis, 2010). The Housing First approach offered Veterans services through an interdisciplinary Assertive Community Treatment (ACT) team that included social workers, vocational trainers, a housing specialist, and access to a nurse practitioner or psychiatrist to provide medication management and oversee treatment needs as clinically indicated.

Veterans in the TAU approach (N=70) received the standard VA case management model for HUD-VASH. Within this approach, Veterans either remained at their current placement (e.g., in emergency shelter) or were placed in shelters, residential treatment programs, or transitional housing programs and received treatment services

as HUD-VASH case managers worked with them to address their housing and treatment needs.

Measures

Clinicians affiliated with VA or its contractors collected two types of data for Veterans admitted to HUD-VASH case management services: standard program evaluation data and VA medical record data. The program evaluation data were reported at the time of referral and admission to HUD-VASH, during the housing process, and when the Veteran exited the program, if applicable. Specific data include the following:

- Demographics: age, gender, ethnicity, marital status, military information, employment and income, previous incarceration, homeless status, and treatment needs;
- Process times: dates when Veterans were referred and admitted to HUD-VASH, received the Housing Choice Voucher, and moved into permanent housing; and
- Housing status 12 months after moving into housing.

Data collected from the Veterans' VA medical records included mental health and substance use disorder diagnoses as well as inpatient and outpatient mental health, substance use, and primary and urgent care encounters for the 12 months prior to and after the date when the Veteran moved into permanent housing. The outcomes of interest for this study are time to placement in permanent supported housing, rates of housing retention, and change in urgent care and inpatient mental health services utilization during the 12 months after Veterans were placed in permanent supported housing.

Procedures

We merged homeless program evaluation data with VA medical record data using Veterans' unique identifiers. We computed descriptive statistics and compared differences in demographics across program approaches—Housing First versus TAU—using chi-squares and t tests. In addition, we determined the relationship between program and selected outcomes, controlling for participant characteristics and using multivariate linear and logistic regressions, based on the level of analysis of the outcome variable. This study was approved by the VA Institutional Review Board.

RESULTS

Program Descriptions

Traditionally, Veterans follow a linear process to obtain HUD-VASH housing: once a Veteran is admitted to the program, the case manager begins the process with the local public housing authority (PHA) to obtain the Housing Choice Voucher. Generally, the apartment search begins once the Veteran has been awarded the voucher. After a suitable apartment has been selected, the PHA inspects the unit and the Veteran moves into the apartment. The case manager works with the Veteran through the entire process and provides additional supports as needed.

Table 1 illustrates a number of key differences between the Housing First and TAU approaches to HUD-VASH. The two approaches utilized different processes to outreach

Characteristic	Housing First	Treatment as usual
Outreach	Street outreach, targeting using a vulnerability scale	VA-based outreach teams, Veterans were engaged at the Medical Center
Targeting	Chronic, street homeless	Chronic homeless, with emphasis on women and families
Case management services	Provided by contractor	Provided by VAMC staff
Program entry restrictions	Clean and sober not required	Clean and sober not required
Housing process	Modified process	Traditional process
01	•Inventory of preinspected apartments apartments maintained by contractor	•Case manager assists with housing search
	•Voucher issuance occurs at the time of	•Search begins after voucher issuance

Table 1. Key Differences Between Housing First and Treatment as Usual

Note. VA = U.S. Department of Veterans Affairs; VAMC = Veterans Affairs Medical Center.

lease signing

to Veterans in need of permanent supported housing, due in part to their locations and affiliation with the local VAMC. While the Housing First approach conducted a great deal of street outreach, the TAU approach most frequently identified potential program participants at the VAMC. Both programs ranked Veterans using a vulnerability measure; the Housing First approach used the measure developed by Community Solutions while the VAMC created its own. Although neither approach required that Veterans be clean and sober at the time of admission, the TAU approach prioritized women and families.

The primary distinction between the two programs was the housing process. The Housing First approach focused on rapid placement into housing, assisted in large part by employing a Housing Specialist, maintaining a database of available and preinspected housing units, improving the relationship and communication with the local PHA, and ensuring the availability of flexible funds to assist Veterans with first and last months' rent, security deposits, and move-in expenses. The TAU approach provided housing assistance through the HUD-VASH case managers; however, there were no dedicated staff or flexible funding sources to assist with the housing process.

Finally, both approaches provided supportive services to Veterans in their programs. The Housing First approach provided flexible, community-based supportive services including around-the-clock case management, access to mainstream services, and assistance in accessing VA services. The TAU approach provided services through case managers in the community as well as onsite at the local VAMC; however, case management was not provided around-the clock.

Demographic Characteristics

Table 2 summarizes the basic demographic characteristics of study participants. Slight differences in the age, gender, and ethnic composition of the Veterans served by each program were observed: those in the Housing First program were older and more likely to be male and African American or Black. However, a more striking difference is that approximately one quarter of the households served by the TAU approach were families, while only one family was housed by the Housing First approach, which highlights the differences in targeting practices between the two approaches (i.e., street outreach vs.

Table 2. Demographic Characteristics of Veterans, by Program Type

	Housing First $(N=107)$		Treatment as usual $(N=70)$		
Characteristic	\overline{N}	%	\overline{N}	%	
Age*	55.	55.9 (8.8)		48.9 (8.9)	
Male gender*	100	93.5%	52	74.3%	
Ethnicity					
Hispanic	1	0.9%	5	7.1%	
Black or African American	100	93.5%	56	80.0%	
White	6	5.6%	6	8.6%	
Other	0	0.0%	3	4.3%	
Family household *	1	0.9%	17	24.3%	
EthnicityEra of military service*					
Pre-Vietnam Era	11	10.3%	0	0.0%	
Vietnam Era	30	28.0%	23	32.9%	
Post-Vietnam Era	44	41.1%	26	37.1%	
Persian Gulf and since 9/11/2001	6	5.6%	18	25.7%	
Unknown	16	15.0%	3	4.3%	
History of incarceration*	55	51.4%	10	14.3%	
Employed*	14	13.1%	24	34.3%	
Chronic homelessness	79	73.8%	44	62.9%	
Homeless 1 year or more	77	72.0%	31	44.3%	
Major Psychiatric/Substance Use Disorder**	41	38.3%	47	67.1%	

Note. *p < .05. **Includes schizophrenic, episodic mood, post traumatic stress disorder, personality disorders, alcohol and drug dependence, and substance abuse.

hospital-based). In addition, the Housing First approach was more likely to house Veterans with a history of incarceration and those who were unemployed.

Although not a significant difference, the Housing First approach housed a greater proportion of chronically homeless Veterans and fewer Veterans who were episodically homeless. Specifically, approximately 72% of the Veterans served by the Housing First approach had been homeless continuously for 1 year or longer; Veterans in the TAU approach were more frequently homeless for a shorter period of time and with fewer episodes. However, Veterans participating in the TAU approach were more likely to have a treatment history with the VA for major psychiatric or substance use disorder—schizophrenic disorders, mood disorders, drug and alcohol dependence—than those in the Housing First approach.

Time to Placement

Figure 1 compares the time from the Veterans' initial program assessment to moving into permanent housing. For the Housing First approach, the duration of this process was approximately 1 month (35 days); for the TAU approach, the process took almost 6 months (223 days). The amount of time required to move a Veteran from initial assessment to admission to the program is fairly similar across the two approaches; however, there is a large disparity across programs in the period of time between a Veteran's admission to the program and moving into housing. This process was 180 days longer for Veterans receiving TAU than for those receiving Housing First, explained mostly by a 3-month delay in the Veteran accessing permanent housing with his/her voucher.

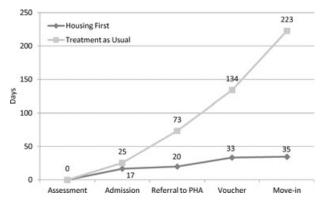


Figure 1. Number of days between initial assessment and moving into permanent housing.

Table 3. Multivariate Linear Regression Models Estimating Relationship Between Intervention Approach and Time to Placement and Change in VA Services Utilization Posthousing

		VA services			
	Time to placement	Change in urgent care visits	Change in days of inpatient mental health		
Intercept	191.984	-0.097	-22.937		
Housing First	-167.944^{**}	-0.379	20.622^*		
Male	-1.383	0.911	5.540		
Age	0.345	-0.028	-0.075		
Any major psychiatric or substance use disorder	-2.856	0.329	-3.548		
Family household	28.929	0.797	13.378		
R^2	0.558	0.024	0.089		

Note. VA = U.S. Department of Veterans Affairs.

To determine the relationship between the approach to permanent supported housing and the time to placement, we ran a multivariate linear regression that controlled for participant characteristics that were significantly different across program types (i.e., gender, age, whether the Veteran had a treatment history with the VA for a major psychiatric or substance use disorder, whether the Veteran was part of a family household). Table 3 provides results of the multivariate linear regression, which indicates that, after controlling for participant characteristics, the housing approach accounted for approximately 56% of the variance in time to placement.

Housing Retention

Twelve months after moving into HUD-VASH housing, 93% of Veterans were stably housed, excluding Veterans who died while in the program. The housing retention rate for Housing First was 98% (n = 99, excluding 6 deaths) and 86% (n = 59, excluding 1 death) for TAU. Veterans housed using the Housing First approach were eight times (odds ratio = 8.332) more likely than those housed using TAU to maintain housing stability for 12 months. (See Table 4.)

^{*}p < .01. **p < .001.

Predictor	B	SE	Wald χ^2	P	OR
Housing First	2.120	0.935	5.141	0.023	8.332
Male	-0.619	1.214	0.260	0.610	0.539
Age	-0.005	0.046	0.011	0.915	0.995
Any major psychiatric or substance use disorder	0.571	0.791	0.521	0.471	1.770
Family household	0.465	1.206	0.148	0.700	1.591
Constant	2.445	2.271	1.159	0.282	

Table 4. Multivariate Logistic Regression Model Estimating Relationship Between Intervention Approach and Housing Stability 12 Months Posthousing

Note. SE = standard error; OR = odds ratio.

Services Utilization Prior to and After Program Admission

We compared Veterans' urgent care and inpatient mental health services utilization during the 12 months prior to admission to HUD-VASH and 12 months after moving into permanent supported housing. See Table 3 for results of the multivariate linear regression that assessed the relationship between program approach and change in services utilization prior to and after permanent housing. Data were limited to only services provided by the VAMC.

Although, in total, there was a decrease in urgent care visits among Veterans in the Housing First approach (66%) and TAU (18%), the differences across programs were not statistically significant. Similarly, Veterans in both programs experienced an overall decrease in the number of days in inpatient mental health treatment: Housing First decreased by 39% and TAU by 98%. The approach to permanent supported housing explained approximately 9% of the variance in these outcomes; the Housing First approach was associated with an overall increase in inpatient mental health treatment days.

DISCUSSION

Housing First has emerged as a highly effective model of permanent supported housing that can support the HUD-VASH program's goal of eliminating Veteran homelessness. The results of this study illustrate that Veterans experiencing homelessness who have psychiatric disabilities or substance use problems can live independently in the community. Data from this and other studies demonstrate that Housing First is effective in accessing permanent supported housing and maintaining housing for single adults, especially for those who have experienced chronic homelessness and have a mental health disability. In addition, these findings support prior studies that have demonstrated the efficacy of permanent supported housing in reducing rates of homelessness and associated heath care utilization, particularly those associated with emergency care and inpatient hospitalizations (Culhane et al., 2002).

Despite some limitations, these data in this study pointed to important differences in the Veteran populations served by these programs. The proportion of Veterans enrolled in both groups showed an emphasis on serving the chronically homeless; however, Veterans enrolled in TAU could be considered more medically vulnerable, while the Housing First group showed more social vulnerabilities (high unemployment, lifetime incarceration history, single households). Both types of vulnerability can contribute to housing instability and treatment compliance issues. This study provided evidence that it is feasible to target

and serve both medically and socially vulnerable chronically homeless Veterans. This highneed population was not only able to obtain permanent housing, but the vast majority maintained it for at least 1 year while decreasing their use of intensive, and typically expensive, services.

One of the primary goals of the Housing First approach is rapid access to and placement in permanent housing. The approach places a great deal of emphasis on moving participants directly from the streets to a home. When compared with TAU, the Housing First approach was quite successful at quickly moving Veterans into permanent housing. An important program-level finding of this study was that systems changes can support rapid placement into housing. Specifically, building a working relationship between HUD-VASH and the local PHA can decrease the amount of time required to move a Veteran from homelessness to permanent housing. Programs can further support this by maintaining a database of housing resources—including an inventory of available and inspected housing units—that enables staff to rapidly house Veterans. Further, accessing creative resources for flexible funding for security deposits, first month's rent, furniture, and other needs contributes to Veterans' rapid access to permanent housing.

Although both program approaches achieved net decreases in urgent care visits and inpatient mental health treatment, neither approach appeared to be significantly related to this decrease. However, even among a population with high levels of needs, permanent supported housing in multiple forms—Housing First and TAU—attained rates of housing retention consistent with other published research.

Despite the positive results of this and other Housing First studies, more rigorous research is needed. Particularly, randomized control studies of Housing First are needed to further evaluate the effectiveness of the model with homeless individuals who are experiencing both substance abuse and mental health issues that complicate the engagement and retention process. VA is in an ideal position to conduct such studies and to further evaluate the long-term implication (i.e., 36 months or greater) of Housing First on housing stability and improved quality of life for chronically homeless Veterans

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