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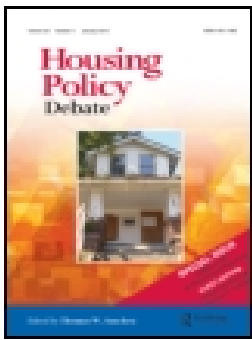
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Predictors of Homelessness Among Families and Single Adults After Exit From Homelessness Prevention and Rapid Re-Housing Programs: Evidence From the Department of Veterans Affairs Supportive Services for Veteran Families Program

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This article assesses the extent and predictors of homelessness among veterans (both veterans in families with children and single adult veterans) exiting the Supportive Services for Veteran Families (SSVF) program, which is a nationwide homelessness prevention and rapid re-housing program geared primarily toward those experiencing crisis homelessness. Among rapid re-housing participants, 16% and 26% of single adult veterans experienced an episode of homelessness at 1 and 2 years post-SSVF exit; the comparable figures at those follow-up times for veterans in families were 9.4% and 15.5%, respectively. Relatively fewer single adult veterans and veterans in families receiving homelessness prevention services experienced an episode of homelessness at 1 and 2 years post-SSVF exit. veteran-level characteristics, including age, gender, prior history of homelessness, and recent engagement with U.S. Department of Veterans Affairs (VA) health care, were generally more salient predictors of homelessness following SSVF exit than variables measuring SSVF program factors or community-level housing market conditions.

Keywords: homelessness; veterans; rapid re-housing; homelessness prevention; housing assistance programs

The bulk of the homeless population in the United States comprises single adult households who experience homelessness on a relatively short-term basis. Findings from the most recent *Annual Homelessness Assessment Report to Congress* indicate that nearly 1.5 million persons experience homelessness at some point over the course of a year (U.S. Department of Housing and Urban Development, 2013a). Of these, roughly 917,000, or 61%, are single adults who remain in emergency shelter or transitional housing for less than 180 days. These individuals might best be described as experiencing nonchronic, or even “crisis” homelessness as their entry into homelessness is often precipitated by a triggering event such as an eviction, a family conflict, or a transition out of foster care, prison, inpatient hospitalization, or other institutional setting (U.S. Department of Housing and Urban Development, 2013b). Despite the size of the population experiencing crisis homelessness among single adults, it is the comparatively smaller group of high-need individuals experiencing long-term or chronic homelessness that has received the most

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attention in recent years from researchers, policymakers, service providers, and other stakeholders. Evidence that permanent supportive housing (PSH)—defined broadly as subsidized housing matched with ongoing supportive services—is an effective intervention for this population (Culhane, Metraux, & Hadley, 2002; Larimer et al., 2009; Rog et al., 2014; Tsemberis & Eisenberg, 2000) has led to widespread and successful efforts to reduce chronic homelessness through the provision of PSH (Burt, 2002; Byrne, Fargo, Montgomery, Munley, & Culhane, 2014; U.S. Interagency Council on Homelessness, 2010). The needs of households experiencing crisis homelessness have received considerably less attention, and this group has had to rely almost exclusively on emergency shelter, which, although serving an important function, provides little in the way of assistance to help persons regain stable housing.

There has been considerable momentum in recent years to expand the availability of flexible housing stabilization services to households experiencing crisis homelessness, but these services have been targeted primarily to *family* households. Indeed, families made up three quarters of all those served by the \$1.5 billion Homelessness Prevention and Rapid Re-housing (HPRP) program, which as part of the American Recovery and Reinvestment Act of 2009, represented the first significant investment of federal dollars in prevention and rapid re-housing assistance (U.S. Department of Housing and Urban Development, 2011). As such, there has been little opportunity or attempt to date to evaluate whether these homelessness prevention and rapid re-housing programs hold promise as effective interventions for improving the residential stability of single adults who experience crisis homelessness. The lack of evidence in this area represents a serious impediment to efforts on the part of policymakers, program planners, and other stakeholders to make the most efficient and effective use of available resources to meet the needs of the group that comprises the largest share of the homeless population.

The decision by the U.S. Department of Veterans Affairs (VA) in 2009 to establish the goal of preventing and ending homelessness among veterans as a national policy priority provided an important opportunity to begin to address this gap in existing research. More specifically, in 2011 the VA implemented a well-funded, nation-wide program intended primarily to serve individuals experiencing crisis homelessness. This program, the Supportive Services for Veteran Families (SSVF) program, provides temporary financial assistance and a range of other flexible services geared toward preventing homelessness among those at risk and rapidly stabilizing those who do become homeless in permanent housing. It is important to note that, despite its name, the program serves both families with children and individual veterans (i.e., veterans who are not part of a family with children). This is an important distinction as evidence suggests that veterans who are part of a family with children constitute less than 5% of all veterans who access emergency shelter over the course of a year throughout the country (U.S. Department of Housing and Urban Development, 2014).

The present study aims both to assess the extent to which veterans who receive SSVF services subsequently experience an episode of homelessness and to identify factors associated with the risk of a homeless episode following exit from SSVF. In doing so, the present study capitalizes on the existence of this large-scale program to undertake what is, to our knowledge, the first attempt to assess the housing outcomes of single homeless adults who receive rapid re-housing services. As such, findings from this study provide important evidence about the potential for rapid re-housing to be used on a broader scale to assist the bulk of the single adult veteran and nonveteran homeless population. In addition, by also including an analysis of the outcomes of veterans in family households and veterans receiving homelessness prevention services, the study makes a more general

contribution to the sparse body of existing research on the housing outcomes of households served by homelessness prevention and rapid re-housing programs.

Literature Review

In recent years there has been a widely recognized shift in homeless assistance policy in the United States toward an emphasis on programs intended to prevent homelessness among households at imminent risk of housing loss or quickly re-house those households that do become homeless (Apicello, 2010; Berg, 2013; Culhane, Metraux, & Byrne, 2011). These prevention and rapid re-housing programs prioritize the stabilization of households experiencing housing crises and aim to do so by providing time-limited, but highly flexible, forms of assistance. Such assistance can include payment for credit repair, short-term rental assistance, security deposits, move-in costs, utility payments, or other financial needs. These approaches have their origins at the local level, where a number of communities including New York City, Hennepin County, Minnesota, and Columbus, Ohio, pioneered the use of flexible assistance to help move households experiencing homelessness into permanent housing as quickly as possible (Culhane, Dejowski, Ibañez, Needham, & Macchia, 1994; National Alliance to End Homelessness, 2004, 2014). More recent initiatives at the federal level have catalyzed the growth of prevention and rapid re-housing programs throughout the rest of the country. These include both HPRP and the passage of the *HEARTH Act of 2009*, which, in overhauling federal homeless assistance programs, made new resources available for homelessness prevention and rapid re-housing on a permanent basis (Berg, 2013). The introduction and subsequent growth of the VA's SSVF program thus added momentum to what is a larger-scale reorientation of the homeless assistance system in the United States toward a focus on "crisis response" (U.S. Interagency Council on Homelessness, 2010) and away from the previously dominant paradigm of managing homelessness through the provision of emergency shelter and other narrow forms of assistance to households already experiencing homelessness.

Regrettably, empirical research on the housing outcomes of households receiving homelessness prevention and rapid re-housing assistance lags far behind the policy and practice context in which these programs are increasingly favored. Comparative effectiveness studies employing rigorous methods to assess the impact of homelessness prevention and rapid re-housing programs remain rare. Only one study to date has employed an experimental design to assess the effectiveness of a homelessness prevention initiative, finding that families in New York City who received a community-based homelessness prevention intervention were less likely than a control group to enter an emergency shelter over a 27-month follow-up period (Rolston, Geyer, & Locke, 2013). A separate multisite study sponsored by U.S. Department of Housing and Urban Development (HUD) used an experimental design to compare housing, health, and other outcomes of homeless families who receive rapid re-housing, transitional housing, a permanent housing subsidy, or emergency shelter placement (U.S. Department of Housing and Urban Development, 2013a). A recent peer-reviewed study used data from qualitative interviews to examine the housing decisions of families participating in that study (Fisher, Mayberry, Shinn, & Khadduri, 2014), but quantitative results on the relative effectiveness of the interventions studied have not yet been published. Beyond these two studies, the body of evidence on the outcomes of households served by homelessness prevention and rapid re-housing programs is limited primarily to less rigorous, non-peer-reviewed evaluations conducted in a number of individual communities that track returns to

homelessness among those receiving prevention and rapid re-housing services (see Burt, Pearson, & Montgomery, 2005; Connecticut Coalition to End Homelessness, 2013; Rodriguez, 2013; Taylor, 2014; Wong, Koppel, & Culhane, 1999). These studies generally have shown low rates of homelessness at one year following exit roughly in the range of 2%–5% for households receiving homelessness prevention, and between about 5 and 15% for households receiving rapid re-housing, although differences in the program models, populations served, and follow-up times make it difficult to compare their respective findings.

In short, despite the growing emphasis on prevention and rapid re-housing, research on the housing outcomes of households participating in these programs remains sparse. Although there is a clear need for additional studies that use rigorous designs to evaluate the impact of these programs, even in the absence of such research there are still a number of important questions about these programs that could be addressed by research that uses observational data. For example, no study has examined the housing outcomes of single adult households receiving assistance from these programs separately from the outcomes of family households. As a result, information on the housing outcomes of single adults assisted by homelessness prevention and rapid re-housing programs remains virtually nonexistent. In addition, no study has examined the relationship between individual characteristics or program factors and housing outcomes after program exit. Assessing whether outcomes vary by individual characteristics is important for understanding for whom these forms of assistance are most effective, and for whom other supports may be warranted. Similarly, examining program factors is important for understanding whether the provision of specific services like rental assistance are more important than others in promoting housing stability, or whether the duration of assistance provided is related to housing outcomes. Such an analysis is complicated because, by design, prevention and rapid re-housing programs tailor services to client needs, but assessing the relationship between program factors and outcomes may provide some important information about the dynamics of these programs. Finally, because prior studies have relied largely on data from single jurisdictions using different program models, they have been unable to test whether community-level factors impact the success of homelessness prevention and rapid re-housing programs. Indeed, some stakeholders have expressed doubt that the type of short-term assistance provided by prevention and rapid re-housing programs are sufficient for achieving housing stability in areas with tight housing markets characterized by high rents and low vacancy rates (Institute for Children Poverty and Homelessness, 2013; Massachusetts Law Reform Institute, 2010).

Considering that the momentum for prevention and rapid re-housing approaches at both the policy and provider level seems unlikely to recede in the near term, investigating the types of questions outlined above may help make inroads toward understanding and refining these programs to make them more effective for the households that they do serve. Therefore, the present study uses data from the VA's SSVF program to examine the housing outcomes of veterans receiving homelessness prevention and rapid re-housing services in communities throughout the entire United States. Specifically, the aims of this study are:

- (a) To assess the extent to which veterans experience homelessness following exit from the prevention and rapid re-housing components of SSVF and;
- (b) To identify veteran, SSVF program and community-level factors associated with risk of homelessness following exit from SSVF.

The SSVF Program

SSVF is a competitively funded program that awards grants to community-based non-profit organizations to provide homelessness prevention and rapid re-housing services to veteran households. The program was launched in October 2011—the beginning of federal fiscal year (FFY) 2012—when the VA awarded approximately \$60 million to 85 grantees in 40 states and Washington, DC. The increase in funding to \$100 million in fiscal year (FY) 2013 allowed for an expansion of the program to 151 grantees in 49 states, Washington, DC and Puerto Rico. Over its first 2 years, the program served 61,041 veteran households comprising 97,979 unique individuals, at an average cost per household of \$2,480 (U.S. Department of Veterans Affairs, 2014). SSVF is poised to assist even higher numbers in the coming years; grants were awarded to 319 grantees in all 50 states, Washington, DC, Puerto Rico, and the Virgin Islands for FY 2014, and announced funding for the program was again increased for FY 2015 to \$300 million.

The primary aim of the SSVF program is to help veteran households who are either at risk of homelessness or currently homeless achieve housing stability through the provision of a short-term, flexible intervention.

SSVF is highly unique in that it is the only VA program that provides services to both veterans and to family members of veterans, even if the veteran is not part of the household. Moreover, the program's ability to provide time-limited, but highly flexible assistance to help resolve housing crises represents a crucial addition to the existing array of VA-specialized homeless programs. Prior to the introduction of SSVF, VA homeless had been limited primarily to conducting outreach, offering case management and short-term emergency shelter and treatment through the Health Care for Homeless Veterans (HCHV) program; providing supportive residential rehabilitation and treatment through its Domiciliary Care for Homeless Veterans (DCHV) program; providing transitional housing of up to 24 months through its Grant and Per Diem (GPD) program; or placing veterans in permanent supportive housing through the jointly administered HUD-VA Supportive Housing (HUD-VASH) program. Thus, SSVF helps fill a gap in the services that had previously been available to veterans facing housing crises and it has helped the VA to emphasize prevention, permanent housing, and engagement with both the VA and community-based healthcare, benefits, and other supports in its efforts to address homelessness among veterans. SSVF also serves a veteran population that is somewhat different than the other specialized VA homeless programs. Most notably, the proportions of female veterans (14.8%) and veterans who served in Iraq or Afghanistan (16.7%) assisted by SSVF are the highest among any VA specialized homeless program (U.S. Department of Veterans Affairs, 2014).

The specific services provided are intended to be tailored to the specific needs of each household, but all SSVF grantees are required to make a set constellation of services available to SSVF participants. These services include outreach to identify and engage veterans in need of SSVF assistance as well as case management to help coordinate the provision of services. SSVF grantees are also required to provide assistance to veterans in obtaining VA healthcare and other VA benefits and to help veterans access community-based forms of support (e.g., transportation services, income support programs, child care, housing counseling, and legal services) that may help them achieve housing stability. Beyond these required services, SSVF grantees can provide temporary financial assistance (TFA) that can be used for a broad range of purposes that may help promote housing stability. TFA payments are made directly to a third party and can be used for short-term rental assistance, security deposits, utility payments, moving costs, child care, transportation, emergency housing, and other housing-related needs.

Importantly, the program prioritizes providing rapid re-housing assistance to currently homeless households over homelessness prevention to those at risk of homelessness. Indeed, grantees are required to spend at least 60% of their funds on rapid re-housing to assist the former group. This decision was influenced by the well-documented challenges in efficiently targeting homelessness prevention services to those who would actually become homeless without any type of assistance (Shinn, Baumohl, & Hopper, 2001; Shinn, Greer, Bainbridge, Kwon, & Zuiderveen, 2013).

Methods

Data and Sample

Data for this study come from two sources: the VA's National Homeless Registry and VA electronic medical records, which were obtained from the VA's Corporate Data Warehouse (Fihn et al., 2014). The National Homeless Registry is a comprehensive database that integrates information on the utilization of all VA-specialized homeless programs. It includes client-level data on SSVF participants, including sociodemographic characteristics, service event dates, and services provided through the SSVF program. Individual SSVF grantees collect these data using a standardized format that adheres to the technical standards for Homelessness Management Information Systems (HMIS), created by HUD to facilitate the collection of a common set of data elements on homeless program services utilization across all programs throughout the country. Data collected by grantees are then uploaded to the National Homeless Registry. The National Homeless Registry also houses data from the Homeless Operations and Management Evaluation System (HOMES), which tracks the utilization of VA-specialized homeless programs other than SSVF (Tsai, Kaspro, Kane, & Rosenheck, 2014).

SSVF program data were used to select the study's sample, which included all 41,545 veterans who exited the SSVF program at some point during FFY 2012 or FFY 2013 (i.e., between October 1, 2011 and September 30, 2013), a time period encompassing the first 2 years of the SSVF program's existence. Information on veterans' housing status at entry was used to classify veterans as receiving either prevention (veterans currently housed but at risk of homelessness) or rapid re-housing (currently homeless veterans) services. SSVF program data also capture whether veterans are part of a household with children under the age of 18, and this information was used to classify veterans as either veterans in families or single veterans. Veterans who were part of a household with multiple adults, but no children, were defined as single veterans. This is consistent with how HUD differentiates between homeless families and homeless individuals (U.S. Department of Housing and Urban Development, 2013c).

A total of 656 veterans (1.6% of the sample) were excluded from the final sample because of either a missing or invalid Social Security number, which made it impossible to link SSVF data with HOMES data for the purpose of identifying homeless episodes following SSVF exit as detailed below, or missing information about their housing status at entry, which made it impossible to identify them as receiving either prevention or rapid re-housing services. An additional 1,552 veterans (3.7% of the sample) were excluded because they had a missing or invalid zip code, which made it impossible to identify the location in which they received SSVF services. The resulting final sample of 39,337 veterans was stratified into four subgroups, based on household type (single veterans vs. veterans in families) and SSVF service category (i.e., prevention vs. rapid re-housing). All analyses were conducted separately for each of these subgroups.

Dependent Variable

The dependent variable is the number of days to an episode of homelessness, as identified based on contact with a VA-specialized homeless program, after exit from the SSVF program. This measure was created by merging SSVF data with HOMES data using veterans' Social Security numbers. A homeless episode included any of the following: (a) A record of completion of a HOMES assessment form, which is the intake form for VA-specialized homeless assistance programs other than SSVF; (b) A record of entry into a VA-specialized homeless program; or (c) A record of SSVF rapid re-housing services. Veterans were followed prospectively from the date of their initial exit from the SSVF program until the occurrence of their first episode of homelessness, and veterans who did not experience an episode of homelessness were censored on January 1, 2014, which was the last date for which data were available. The maximum follow-up time was 823 days, or approximately 27 months.

Independent Variables

Veteran Level Variables

Veteran level demographic variables available in the SSVF program data included age, gender, race and ethnicity, and monthly income at the time of exit from SSVF. The SSVF data also included an indicator for the presence of a disabling condition, which is defined very broadly to include physical, mental, or emotional impairments, as well as development disabilities, HIV/AIDS, and diagnosable substance abuse disorders. HOMES data were also used to create a measure of prior history of homelessness, which included any episode of homelessness, as defined above, in the 2 years prior to a veteran's date of entry into the SSVF program. Finally, VA electronic medical records were used to create a dichotomous measure of whether veterans receiving SSVF services had accessed any inpatient or outpatient care provided by the VA at some point in their year prior to exit from the SSVF program. Because not all veterans receiving services from SSVF are users of VA healthcare, this variable was intended to measure engagement with the VA Healthcare System.

SSVF Program Variables

SSVF program data were used to construct a set of variables related to veterans' experience in the SSVF program. A series of dichotomous variables were used to assess whether veterans received any of the following services while involved in the SSVF program: legal services, health or behavioral health services, housing search assistance, rental assistance, security deposit payments, utility payments, and assistance with moving costs. A dichotomous measure of whether SSVF participants remained in the program for more than 90 days (i.e., roughly the average length of participation in the program) was also constructed. Finally, SSVF program data on veterans' housing destination at the time of their exit from the program was used to create an exit destination measure with possible exit categories of nonhousing destination, which included residential homeless programs (i.e., shelter, transitional housing, or safe haven), institutional settings (i.e., hospital, detox, jail/juvenile detention, or foster care/group home), places not meant for habitation, or hotel/motels institution; temporary destination with family or friends; HUD-VASH; other permanent housing (i.e., housing rented or owned by a veteran with or without a housing subsidy; permanent housing arrangement with family or friends); or other/unknown.

Community Level Variables

SSVF program data capture the zip code of the last permanent address of veterans at their time of entry into the program, and these zip codes were used as a proxy measure of the location in which veterans received SSVF services. Because data on housing market characteristics from HUD, the U.S. Census Bureau, and other sources measured at the zip code level is highly limited, a zip code to county crosswalk file maintained by HUD (U.S. Department of Housing and Urban Development, [n.d.-b](#)) was used to assign SSVF participants to the corresponding county in which the zip code was located. In cases where a zip code spanned multiple counties, SSVF participants were assigned to the county in which the majority of zip code residents resided, as indicated by the crosswalk file. This resulted in a data structure in which veterans were nested within counties. In turn, county-level measures of housing market characteristics were obtained from both the U.S. Census Bureau and HUD. Specifically, the HUD 50th percentile rent estimates dataset for FY 2012 (U.S. Department of Housing and Urban Development, [n.d.-a](#)) provided the median rent level for a two-bedroom apartment in each county. Additionally, data from the U.S. Census Bureau's 2007–2012 American Community Survey 5-Year Estimates were used to create county-level variables measuring the proportion of vacant housing units, the proportion of renter households, and the proportion of cost-burdened renter households, which was defined using the HUD standard for cost-burden of households paying more than 30% of their income toward rent.

Analysis

Survival analysis, a set of statistical methods well-suited for examining the timing and occurrence of events, was employed to examine episodes of homelessness after veterans' exit from the SSVF program. We used the Kaplan-Meier method to estimate survival probabilities over time following exit from SSVF, and we estimated hazard functions to assess how the risk of an episode of homelessness changed over time following exit from SSVF. Finally, we employed multilevel Cox proportional hazards regression models to assess the relationship among veteran, SSVF program, and community level variables and the risk of a homeless episode following SSVF program exit. Multilevel models were necessary to account for the nonindependence of observations that resulted from SSVF participants being clustered within counties. We estimated a series of models for each of the four household and service-type subgroups. An initial model included only veteran-level covariates, a second model added SSVF program variables, and a final, full model included the community level housing market variables. All models included county-specific random intercepts. These analyses were conducted using the R environment for statistical computing (R Core Development Team, [2012](#)); Kaplan-Meier survival curves were estimated using the survival package (Therneau, [2014](#)), hazard functions were estimated using the muhaz package (Hess, [2014](#)), and the coxme package (Therneau, [2012](#)) was used for the multilevel Cox proportional hazards regression models.

Results

Sample Characteristics

Table 1 presents descriptive statistics for veterans in each of the four subgroups included in the final sample. Single adult veterans receiving rapid re-housing comprised the single largest of the four analytic subgroups. This is a reflection of both the broader homeless

Table 1. Sample characteristics.

Veteran and SSVF program variables	Single veterans		Veterans in families	
	Prevention	Rapid re-housing	Prevention	Rapid re-housing
N	10,848	19,554	4,829	4,106
Age group (%)				
18–29	8.2	7.2	25.4	25.3
30–44	16.1	14.6	39.5	37.6
45–54	31.0	34.1	22.4	23.0
55–61	29.3	30.4	8.9	10.1
62 +	15.4	13.7	3.9	4.0
Male (%)	86.1	90.6	70.4	71.0
Race (%)				
White	47.2	46.8	44.8	46.1
Black	48.0	48.2	49.0	47.6
Other race	4.9	5.0	6.2	6.3
Hispanic (%)	9.9	8.0	13.9	13.6
Disabling condition (%)	53.6	57.4	44.1	45.2
History of homelessness (%)	16.8	51.6	7.9	29.2
Exited in FY 2013 (%)	65.7	70.1	70.4	70.0
Accessed VA healthcare within 1 year of SSVF exit (%)	81.4	87.0	69.0	76.0
Participation length > 90 days (%)	47.7	48.7	51.5	54.8
Legal services (%)	2.2	1.9	2.4	1.9
Housing search services (%)	10.8	16.6	9.5	19.3
Rental assistance (%)	38.7	26.4	44.5	34.6
Security deposit (%)	14.6	39.8	14.4	42.2
Utility payment (%)	15.4	11.8	20.9	17.1
Moving costs (%)	2.9	5.1	4.1	8.9
Exit destination				
Nonhousing destination	3.3	11.9	1.2	5.7
HUD-VASH	18.8	31.9	13.0	26.9
Other permanent	68.7	44.4	76.4	55.3
Temporary w/family or friends	2.9	3.9	2.4	4.7
Other/unknown	6.2	8.1	7.0	7.5
County level variables (N = 1,495)				
	Mean	SD	Min	Max
Median rent, in \$	770.9	234.7	438.0	2060.0
Vacant housing units (%)	15.6	9.4	3.7	75.4
Renter households (%)	14.1	4.5	0.0	36.0
Rent-burdened households (%)	29.3	8.5	5.3	80.1

Note. FY = fiscal year; VA = U.S. Department of Veterans Affairs; SSVF = Supportive Services for Veterans Families ; HUD-VASH = U.S. Department of Housing and Urban Development-VA Supportive Housing.

veteran population, which is primarily single males, and SSVF program guidelines requiring that the majority of funds be spent on rapid re-housing activities. The number of veterans in households with children in both the prevention and rapid re-housing programs is not trivial, however. Approximately 95% of veterans in all four subgroups are either White or Black, with a roughly equal split between the two across all subgroups. The majority of single veterans in both the prevention and rapid re-housing groups, and more than 40% of veterans in families in both service type subgroups, have some kind of disabling condition.

Roughly half of all veterans in each subgroup received SSVF services for a period lasting longer than 90 days. Forms of temporary financial assistance directly related to housing were the most commonly accessed services—specifically assistance in paying rent, a security deposit on a new lease, and utility payments. Rental assistance was the most common service provided to prevention participants, whereas payment of a security deposit was the service most frequently provided to rapid re-housing participants. In contrast, only very small shares of veterans in each of the four subgroups received payments for moving costs or legal services.

The descriptive measures of the county-level variables represent the diversity of the housing market conditions in the 1,495 counties in which veterans received SSVF services during the study's time frame. The average of the median rent for a two-bedroom apartment in these communities was \$771 per month, with a range of almost \$1,600, from \$438 to \$2,060. Vacancy rates and the proportion of rent-burdened households both had ranges greater than 70 percentage points, and the proportion of renter households also varied widely across communities, albeit to a lesser extent.

Homelessness After SSVF Exit

The Kaplan-Meier survival estimates found that, among veterans in families receiving rapid re-housing, 9.4 and 15.5% had experienced an episode of homelessness at 1 and 2 years after SSVF exit, respectively. The comparable 1- and 2-year rates for single adult veterans were 16 and 26.6%. Among prevention participants, 6.5 and 10.9% of veteran families had experienced a homeless episode at 1 and 2 years post-SSVF exit, compared with 10.3 and 17.9% of single adult veterans who had a homeless episode at those follow-up times.

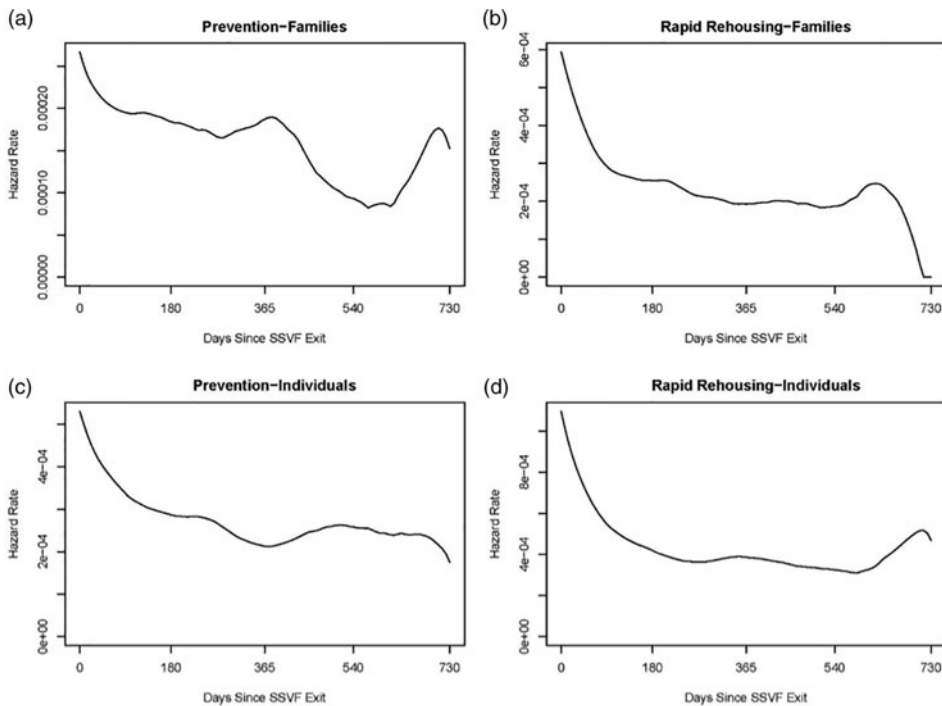
Figure 1 presents the hazard functions for homelessness after SSVF exit for each household and service-type subgroup, with the time since SSVF exit on the x -axis, and the hazard rate on the y -axis. Hazard functions describe the instantaneous risk that an event of interest (in this case an episode of homelessness) will occur over a given time period, provided that the event had not yet occurred at the beginning of the time period (Allison, 1995). In other words, the graphs of the hazard functions in Figure 1 illustrate how risk of homelessness changed over time following veterans' exit from SSVF. In examining Figure 1, it is important to note that hazard functions generally become less reliable toward the end of the observation period as fewer individuals remain at risk of experiencing the event of interest.

The plots of the hazard functions show that the risk of homelessness was highest in the period immediately after SSVF exit for all household and service-type subgroups and then declines sharply thereafter. The risk of homelessness following SSVF appears to level off after about 6 months after SSVF exit for all household and service-type subgroups with the exception of veterans in families who received homelessness prevention services. In the case of this group, the hazard functions show a slight increase in the risk of homelessness from about 9 to 12 months following exit, and then a sharp decline from about 12 to 18 months following SSVF exit.

Veteran, SSVF Program, and Community-Level Factors Associated With the Risk of Homelessness Following Exit From SSVF

Tables 2 and 3 present results from the Cox regression models predicting risk of homelessness after exiting SSVF among prevention and rapid re-housing participants,

Figure 1. Hazard rates of episodes of homelessness following SSVF exit by household and service type.



respectively. In terms of veteran characteristics, age was a predictor of risk of homelessness among single veterans, and among veterans in families receiving rapid rehousing. Among single veterans in both the prevention and rapid rehousing models, those between the ages of 30 and 61 were at an elevated risk of homelessness compared with their peers in the 18–29 age group, with veterans in the 45–54 age group having the highest risk of homelessness compared with this youngest age group. A similar trend was observed for veterans in families receiving rapid rehousing; those between the ages of 45 and 61 were at a higher risk of homelessness following SSVF exit than those in the 18–29 age group. Male gender was associated with an increased risk of homelessness among single veterans in both the prevention and rapid rehousing models, but was not a consistent predictor in either of the family models. Race and ethnicity were not consistent predictors of risk of homelessness following SSVF exit, with the exception of the prevention models for single veterans where African Americans were at a higher risk of homelessness relative to Whites. By contrast, a prior history of VA homeless service use was associated with an increased risk of experiencing a homeless episode following SSVF exit in the full models for all service and household-type subgroups. The presence of a disabling condition was not significantly associated with risk of homelessness in any of the models, although use of any inpatient or outpatient VA healthcare services in the year prior to SSVF exit, a potential proxy for greater medical need, was a strong predictor of increased risk of homelessness in all models.

Apart from exit destination, very few of the SSVF program variables were significant predictors of the risk of homelessness. Indeed, exit destination was one of the strongest

Table 2. Multilevel Cox regression models, SSVF prevention.

	Veterans in families (<i>n</i> = 4,829)			Single veterans (<i>n</i> = 10,848)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age group (18–29 is reference)						
30–44	0.97	0.99	0.99	1.35	1.44*	1.43*
45–54	1.19	1.21	1.21	1.80***	2.00***	1.99***
55–61	1.10	1.16	1.16	1.52**	1.69***	1.69***
62+	0.65	0.68	0.68	1.00	1.06	1.07
Male	1.07	1.06	1.06	1.25*	1.23*	1.22*
Race (White is reference)						
Black	1.22	1.24	1.22	1.18*	1.19**	1.15*
Other race	0.91	0.95	0.92	1.30	1.30	1.29
Hispanic	1.01	1.03	1.03	0.99	0.99	0.92
Disabling condition	1.05	1.07	1.07	1.01	1.08	1.09
History of homelessness	1.39	1.64**	1.63**	1.28**	1.63***	1.62***
Exited in FY 2013	1.60**	1.52**	1.54**	1.68***	1.61***	1.62***
Accessed VA healthcare within 1 year of SSVF exit	2.72***	2.85***	2.88***	2.46***	2.68***	2.65***
Participation length > 90 days		1.07	1.05		0.92	0.91
Legal services		0.89	0.90		0.98	0.99
Housing search services		1.21	1.25		1.25*	1.24*
Rental assistance		1.22	1.23		1.32***	1.3***
Security deposit		0.86	0.85		0.88	0.89
Utility payment		1.13	1.11		0.88	0.90
Moving costs		1.05	1.04		0.94	0.94
Exit destination (compared to with nonhousing destination)						
HUD-VASH		0.14***	0.14***		0.15***	0.15***

Other permanent	0.20***	0.20***	0.33***
Temporary with family/friends	0.34***	0.33**	1.01
Other/unknown	0.35***	0.36**	0.73*
Median rent (in \$100s)		0.99	0.98
Vacant housing units (%)		1.01	0.98*
Renter households (%)		1.01	1.01*
Rent-burdened households (%)		0.99	1.00
SD Random intercept	0.30	0.29	0.23
- 2 Log Likelihood	-2420.33	-2398.62	-9748.6
		-2396.33	-9704.87

Note. SSVF = Supportive Services for Veteran Families; FY = fiscal year; VA = U.S. Department of Veterans Affairs; HUD-VASH = U.S. Department of Housing and Urban Development-VA Supportive Housing. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. Multilevel Cox regression models, SSVF rapid re-housing.

	Veterans in families (<i>n</i> = 4,106)			Single veterans (<i>n</i> = 19,554)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age group (18–29 is reference)						
30–44	0.97	1.03	1.03	1.33**	1.42***	1.43***
45–54	1.33	1.36	1.38*	1.38***	1.52***	1.53***
55–61	1.42	1.46*	1.46*	1.25*	1.41***	1.42***
62+	0.77	0.73	0.75	1.05	1.15	1.16
Male	1.33*	1.22	1.22	1.39***	1.29	1.29***
Race (White is reference)						
Black	0.85	0.94	0.95	1.05	1.06	1.07
Hispanic	0.97	0.93	0.90	0.99	1.02	1.02
Other race	0.90	0.84	0.86	1.12	1.10	1.11
Disabling condition	1.03	1.07	1.05	0.98	1.01	1.01
History of homelessness	1.16	1.54***	1.52**	1.09*	1.50***	1.50***
Exited in FY 2013	1.79***	1.77***	1.74***	1.57***	1.52***	1.52***
Accessed VA healthcare within 1 year of SSVF exit	1.63**	1.94***	1.96***	2.36***	2.60***	2.59***
Participation length > 90 days		0.69**	0.70**		0.88**	0.87***
Legal services		0.51	0.50		0.95	0.95
Housing search services		0.88	0.89		0.97	0.97
Rental assistance		1.00	1.02		1.18**	1.17**
Security deposit		0.60**	0.61**		0.76***	0.77***
Utility payment		1.40*	1.31		0.88	0.88
Moving costs		1.00	1.03		0.95	0.96
Exit destination (compared with nonhousing destination)						
HUD-VASH		0.13***	0.13***		0.15***	0.15***

Note. SSVF=Supportive Services for Veteran Families; FY* fiscal year; VA = U.S. Department of Veterans Affairs; HUD-VASH = U.S. Department of Housing and Urban Development-VA Supportive Housing. * $p < .05$; ** $p < .01$; *** $p < .001$.

Note. SSVF=Supportive Services for Veteran Families; FY* fiscal year; VA = U.S. Department of Veterans Affairs; HUD-VASH = U.S. Department of Housing and Urban Development-VA Supportive Housing. * $p < .05$; ** $p < .01$; *** $p < .001$.

predictors of risk of homelessness following SSVF exit in all models. Those who exited to destinations other than a nonhousing destination were generally less likely to become homeless, with exiting to HUD-VASH having the strongest negative relationship with risk of homelessness. In terms of SSVF services, receipt of assistance for the payment of a security deposit was associated with a decreased risk of homelessness following SSVF exit among both veterans in families and single veterans who received rapid re-housing services. Single veteran prevention participants who received housing search and rental assistance were more likely to have a homeless episode following SSVF exit, and receipt of rental assistance was also associated with an increased risk of homelessness following SSVF exit among single veterans who received rapid re-housing services. Among veterans in families who received rapid re-housing services, assistance with utility payments was linked to an increased risk of homelessness following SSVF exit, although this predictor was not significant in the full model controlling for community level variables (see Model 3 in Table 3). Both single veterans and veterans in families who received SSVF rapid re-housing services for more than 90 days were at a decreased risk of experiencing homelessness following SSVF exit.

The models found almost no significant relationships between the community level housing market variables and the likelihood of homelessness following SSVF exit. The two exceptions were the proportion of vacant housing units and proportion of renter households in a community, in the model for single veterans who received SSVF prevention services. In those instances, a 1% increase in the proportion of vacant housing units was associated with a 2% decrease in the risk of homelessness following SSVF exit, and a 1% increase in the proportion of renter households was associated with a 1% increase in the risk of homelessness following SSVF exit (see Model 6 in Table 2). We also tested models that only included the community level predictors as a group and models that only included each community level predictor separately. These models did not yield substantively different results for these predictors.

Sensitivity Analyses

Given the relatively large number of veterans exiting from SSVF to HUD-VASH, we conducted a post-hoc sensitivity analysis to assess the extent to which our findings may have been impacted by the potential use of SSVF as a mechanism to facilitate transitions to HUD-VASH. We estimated separate versions of the Kaplan-Meier survival curves and Cox regression models for two subgroups of the sample: veterans who exited to HUD-VASH and veterans who exited to destinations other than HUD-VASH. The resulting Kaplan-Meier estimates of the incidence of homelessness at 1 and 2 years after SSVF exit, stratified by household- and service-type subgroup, are presented in Table 4. The comparable rates for the overall analytic sample are also provided to facilitate comparisons. The 1- and 2-year year rates of homelessness among veterans who exited to HUD-VASH were all notably lower than the comparable rates for veterans who exited to other destinations for all four household- and service-type subgroups. This was particularly true for single veterans.

The 1- and 2-year rates of homelessness for the subgroup of veterans comprised only of those who exited to destinations other than HUD-VASH were higher than for the primary analytic sample that included all exiters, but not drastically so. This may be due in part to the fact that non-HUD-VASH exiters comprise the majority of the primary analytic sample. For veterans who received SSVF prevention services, the difference in homelessness rates between the primary analytic sample and the subgroup that excluded

Table 4. Summary of Kaplan-Meier estimates of incidence of homelessness at 1 and 2 years after SSVF exit.

	Prevention				Rapid re-housing			
	Veterans in families ^a		Single veterans ^b		Veterans in families ^c		Single veterans ^d	
	1 Year	2 Year	1 Year	2 Year	1 Year	2 Year	1 Year	2 Year
Primary analytic sample	6.5	10.9	10.3	17.9	9.4	15.6	16.0	26.6
Veterans exiting to destinations other than HUD-VASH	6.7	11.5	11.5	19.6	11.7	18.4	20.1	31.3
Veterans exiting to HUD-VASH	5.5	7.4	5.3	11.9	3.6	8.6	6.4	17.0

Note. SSVF = Supportive Services for Veteran Families; HUD-VASH = U.S. Department of Housing and Urban Development-VA Supportive Housing.

^a Primary analytic sample ($n = 4,829$); Veterans exiting to destinations other than HUD-VASH ($n = 4,203$); Veterans exiting to HUD-VASH ($n = 626$).

^b Primary analytic sample ($n = 10,848$); Veterans exiting to destinations other than HUD-VASH ($n = 8,810$); Veterans exiting to HUD-VASH ($n = 2,038$).

^c Primary analytic sample ($n = 4,106$); Veterans exiting to destinations other than HUD-VASH ($n = 3,002$); Veterans exiting to HUD-VASH ($n = 1,104$).

^d Primary analytic sample ($n = 19,554$); Veterans exiting to destinations other than HUD-VASH ($n = 13,322$); Veterans exiting to HUD-VASH ($n = 6,232$).

HUD-VASH exiters ranged from 0.2 to 1.7 percentage points, depending on the household type and follow-up period. For those who received rapid re-housing the difference was a bit more pronounced, and ranged from 2.3 to 4.7 percentage points, depending household type and follow-up period. The Cox regression models that were estimated for the subgroups of veterans who exited to HUD-VASH and to all other destinations did not differ substantially from the results of the models reported in [Tables 2 and 3](#).

Discussion

This study represents the first attempt to examine the outcomes of households served by homelessness prevention and rapid re-housing programs using a nationwide sample and is the first study, to our knowledge, to report on the housing outcomes of single adult households receiving assistance from these programs separately from the outcomes of family households. Findings from this study indicate that a minority of all veterans who received assistance from the SSVF program—between 10.9 and 26.6% depending on the household type and service type—experienced an episode of homelessness in the VA system within 2 years, although an unknown additional number of veterans are likely to have accessed non-VA homeless services or experienced unsheltered homelessness. Overall, these findings suggest that the majority of veterans who receive SSVF assistance in either preserving their housing (in the case of prevention) or in obtaining housing (in the case of rapid re-housing) are able to avoid homelessness even after they are no longer receiving SSVF assistance. Although it is not possible to draw conclusions about the effectiveness of SSVF from this study, the rates of return to VA homeless services at 2-years following SSVF exit for those who received rapid re-housing services both single adult veterans (26.6%) and veterans in families (15.5%) compare favorably with prior research showing rates of return to homelessness among those exiting emergency shelters to be 46% for single adults (Culhane & Kuhn, 1998) and 22% for persons in families (Wong, Culhane, & Kuhn, 1997). This comparison provides a tentative reason for

encouragement about the potential for the SSVF program to continue to help make substantial gains in preventing and ending homelessness among veterans through the provision of time-limited, and relatively inexpensive, assistance. Nonetheless, the number of veterans experiencing homelessness after exiting SSVF was not trivial, and more research is needed to better understand the reasons why some veterans are unable to maintain housing following SSVF exit, and to assess the extent to which veterans make use of non-VA homeless services following SSVF exit. For example, it is likely that some proportion of those who were not able to maintain housing stability with the assistance provided by SSVF subsequently sought non-VA funded or operated services. It was not possible to determine to what extent this occurred, but such information would allow for a better comparison with prior studies on returns to homelessness among those exiting emergency shelter.

The results from this study also suggest that risk of experiencing an episode of homelessness was highest in the period directly following veterans' exit from the SSVF program, and then declined sharply before leveling off after about 6 months. This finding is highly consistent with patterns observed in prior research examining risks of return to homelessness over time among those exiting emergency shelter (Wong et al., 1997).

This article is the first to report that the housing outcomes of single adult households receiving prevention and rapid re-housing services separately and distinctly from families receiving the same interventions is particularly noteworthy. Prior research has focused on families exclusively (Burt et al., 2005; Rolston et al., 2013) or included them in the same analyses (Rodriguez, 2013; Taylor, 2014; Wong et al., 1999), obscuring information about the outcomes of single adult households. Moreover, despite the fact that single adults comprise the majority of the overall homeless population, they have not been the priority target population for most prevention and rapid re-housing initiatives throughout the country. Indeed, these programs have generated the most interest as interventions for family households, and, as noted above, the most rigorously designed comparative-effectiveness studies of these interventions have been limited solely to families. Findings from this study provide some encouragement for the potential use of these programs among the single homeless adult population. However, veterans in both the general and homeless populations are characteristically different from their nonveteran counterparts, and the present study also relied exclusively on VA data sources. As described in more detail below, this has implications for the interpretation of study findings and also means that results of this study may not be generalizable to the overall single adult homeless population. More research is thus highly needed and could provide crucially important evidence about the potential value of expanding homelessness prevention and rapid re-housing programs for homeless single adults.

Importantly, veterans who were part of a household with children also experienced lower rates of homelessness after SSVF exit than did their single veteran counterparts. This could be because the single veterans have higher housing barriers and, indeed, relatively more veterans had prior histories of homelessness than did the veterans who were in families. However, it is equally possible that the lower rates of homelessness following SSVF exit are an artifact of how the outcome measure was constructed. Apart from the SSVF program, VA-specialized homeless programs have not traditionally served families with children. It is therefore possible that veterans in families who encounter housing crises following their exit from SSVF may turn to the mainstream homeless assistance system, and would not be identified as homeless in the current study.

The observed relationships in the Cox regression models between veteran characteristics and risk of homelessness following SSVF exit are largely consistent

with prior research. Among single veterans, risk of homelessness increased up to the 45– to 54-year-old age bracket and then decreased thereafter; veterans age 62 and older were not found to have a significantly elevated risk of homelessness relative to their 18– to 29-year-old counterparts. This is consistent with prior research that has identified a nearly identical age gradient in risk of homelessness among veterans (Fargo et al., 2012). The particularly elevated risk among those in the 45– to 61-year-old age bracket may be explained by members of this cohort having served in the years directly following the shift to an all volunteer force, a period in which evidence shows a decrease education level and scores on the Armed Forces Qualification Test of those enlisting in the military (Gilroy, Phillips, & Blair, 1990). This finding is also consistent with prior studies that have shown members of this cohort to be at an increased risk of other less desirable outcomes, such as incarceration (Greenberg, Rosenheck, & Desai, 2007). It also aligns with other research pointing to a cohort effect in the overall single adult homeless population that has resulted in the problem having a disproportionate impact on this age group (Culhane, Metraux, Byrne, Stino, & Bainbridge, 2013), although the mechanisms for increased risk among nonveterans may be separate from those of their veteran counterparts. This study also found positive associations between both a prior history of homelessness and recent use of VA healthcare services and increased risk of homelessness following SSVF exit. Both findings, at least to the extent that use of VA healthcare services might signal greater medical or behavioral health needs among SSVF recipients, are consistent with prior research (Bassuk et al., 1997; Heffron, Skipper, & Lambert, 1997; Metraux & Culhane, 2004; Shelton, Taylor, Bonner, & van den Bree, 2009; Washington et al., 2010). On the other hand, the heightened risk of homelessness associated with recent use of VA healthcare services might also reflect an increased willingness among those who seek out VA services for medical needs to also seek out VA assistance when facing housing crises. In either case, more research is needed to better understand the relationship between VA health services use and outcomes of SSVF recipients. This is particularly true given that linking veterans with VA healthcare services is a key component of SSVF services. As such, it may be especially important to assess whether veterans who are able to gain access to VA healthcare as a direct result of their involvement in SSVF experience better outcomes.

By contrast, the findings from the models with respect to the SSVF program variables have little precedent in prior research and are more difficult to interpret. The SSVF program variables are, in accordance with the program's intent to provide tailored services, endogenously determined with receipt of specific service types based on client needs. As a result, it is not possible to draw firm conclusions about whether observed relationships between SSVF program variables and risk of homelessness following SSVF exit represent actual effects of certain SSVF program elements or are simply the result of selection effects. For example, it may be unlikely that the observed positive relationship between receipt of rental assistance and risk of homelessness among single veterans is the result of a causal relationship. Instead, it may be indicative of a selection effect wherein veterans with more severe housing crises are provided with the most intensive form of financial assistance available through the SSVF program. Similarly, veterans with less intensive housing barriers may only need—and be provided with—assistance in paying for a security deposit for an apartment. Thus, it may be appropriate to interpret the observed negative relationship between receipt of a security deposit payment and risk of homelessness as an indication that those receiving such services have less intensive housing needs to begin with rather than as an indication of the

impact of security deposit payments in helping veterans avoid homelessness after exiting SSVF.

The same issue stands true for the findings related to length of SSVF participation and housing destination at exit from the program. In terms of the former, the finding that longer length of SSVF participation was associated with a decreased risk of homelessness in the rapid re-housing models may point to some added benefit of providing services for a longer duration. However, length of participation is also likely to be based on client need and other characteristics, and this may affect the interpretation of this finding. For example, it may be that longer length of service receipt is driven by increased need. If this is the case, then one might expect longer service episodes to be associated with an increased risk of homelessness post-SSVF exit and, consequently, the observed finding of a decreased risk may provide additional support for the positive impact of longer service episodes. On the other hand, it could be that veterans with longer service episodes have more motivation to remain in the program longer, or receive services for longer periods because they are viewed by SSVF grantees as being more likely to succeed in achieving housing stability than other program participants. If this is the case, then the findings from this study would not necessarily mean that duration of service has an impact on risk of homelessness following SSVF exit.

Housing destination at exit is also driven in part by client needs and other characteristics. This is particularly true for veterans who exited to HUD-VASH, a program that is intended to assist chronically homeless veterans with medical, psychiatric, or substance abuse-related disabilities. Nonetheless, the strong relationship between exiting to HUD-VASH and reduced risk of homelessness may point to the protective effect of having an ongoing housing subsidy and is consistent with prior research showing that those who exit homelessness with a housing subsidy are far less likely to return to homelessness (Shinn et al., 1998; Wong et al., 1997; Zlotnick, Robertson, & Lahiff, 1999).

In short, the findings with respect to the SSVF program variables should be interpreted cautiously and serve primarily to underscore the need for additional research to examine the impact of SSVF services and other program factors more directly. As noted above, the type of services provided to veterans is driven in part by their needs, but future research could investigate how to appropriately calibrate the duration, type, and amount of assistance provided to households with similar needs. Such research would allow for a more effective and efficient use of SSVF resources, thereby potentially expanding the number of households the program could serve.

The overall lack of a consistent pattern of associations between community level housing market characteristics and risk of homelessness following SSVF exit is noteworthy and does not provide support for the hypothesis that the success of prevention and rapid re-housing is strongly dependent on the housing market conditions in the locality in which such services are provided. This finding would appear to be inconsistent with claims that the type of time-limited assistance provided by prevention, and especially rapid re-housing programs is not sufficient for helping households remain housed or avoid returning to homelessness once the assistance has stopped. Future research should examine this issue more closely, and perhaps include additional community level factors that may have an impact on risk of homelessness.

This study has a number of limitations that are important to acknowledge. First, the lack of comparison groups of at-risk and homeless veterans who did not receive SSVF prevention or rapid re-housing means that this study cannot address the larger question of whether the program is ultimately effective at preventing or reducing homelessness

among veterans. Moving forward, it will be crucially important for future research to address this issue directly through the use of well-designed comparative effectiveness studies, which should also include a cost-effectiveness analysis. Second, this study's outcome measure is limited in that it only captures use of VA funded or operated homeless assistance services. It was not possible with this measure to identify veterans who made use of non-VA homeless services or who experienced homelessness in an unsheltered location. Incorporating HMIS data from the mainstream homeless assistance system in one or more communities would allow for an identification of both VA and mainstream homeless service use among those exiting SSVF and would go a long way in addressing this limitation. Thus, incorporating HMIS data should be a priority for future research, and newly implemented SSVF data collection standards that require SSVF grantees to identify the HUD Continuum of Care (CoC) in which veterans' received services will make it easier to identify a subgroup of veterans who received SSVF services in a particular CoC and subsequently use mainstream homeless services in the same jurisdiction. More generally, this limitation points to the importance of ongoing collaboration between the VA and mainstream homeless assistance systems both in terms of identifying and assisting veterans experiencing housing crises, and in terms of rigorously evaluating the impact of interventions like SSVF. As an additional, but related, limitation, this study's outcome measure only captures use of homeless services, and does not provide more detailed information about housing stability. Future research could remedy this shortcoming of the present study by using primary data collection to collect more detailed information about housing stability. Finally, this study was not able to include certain factors that may have been especially important predictors of homelessness. One of these factors may have been income level, although the results of models (not shown) that were estimated using just the subgroup of veterans for whom such information was available did not find income to be a significant predictor of homelessness following SSVF exit. Similarly, this study did not include other measures such as education level, adverse childhood experiences, or measures specifically of substance abuse disorders and severe mental illness, all of which have been shown to be risk factors for homelessness. Measures of substance abuse disorders and mental illness might be obtained from VA medical records, but would only be available for those veterans who were actively engaged with VA healthcare services, and who may not be representative of SSVF recipients as a whole. A better alternative would be to use primary data collection to measure these and other potentially important risk factors that are otherwise unavailable within a subsample of SSVF recipients. Future research should address this gap, and generally examine the health-related outcomes of veterans receiving SSVF services.

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No potential conflict of interest was reported by the authors.

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