

Introduction

The issue of homelessness has become more prevalent in the U.S. policy discussion over the past decade. With a two percent increase in the aggregate homeless population between 2019 and 2020, marking four straight years of growth, the total homeless population in the United States comes out to just over 580,000 (HUD, 2021). Furthermore, the unsheltered homelessness population rose by seven percent between 2019 and 2020 (HUD, 2021). According to a study by the California Policy Lab, unsheltered individuals are 65 percent more likely to report physical health conditions, 28 percent more likely for mental health conditions, and 62 percent more likely for substance abuse (California Policy Lab, 2019). Therefore, there are serious risks related to an increasing unsheltered population.

To combat these issues, various locales have employed different methods to combat homelessness, such as housing vouchers and affordable housing programs. While these programs particularly assist low-income households, they are less focused on the chronically homeless. One program labeled “Housing First” is targeted at chronic homelessness and has seen a rise in popularity due to the core concept of providing housing before other methods of care. This is in contrast to other continuum of care (CoC) methods including temporary housing and treatment first. Treatment first in a CoC entails the concept of homeless individuals being required to undergo various rehabilitation programs in order to achieve housing. The methodology of Housing First was designed in contrast to CoCs and revolves around the idea that homeless individuals need a stable living situation in order to address the issues that may have put them in that situation or are causing them to remain in a state of chronic homelessness. As such, communities and crisis response systems work to connect homeless individuals with stable, permanent housing using data-driven assessment systems (USICH, n.d.). A common point of

contention with housing first programs is that they do not require individuals to be in recovery programs before or during their time in housing. However, Housing First instead focuses on providing a space that is more viable for such a program in the initial stages, rather than pre-housing. Like many other programs, the goal of Housing First is to house homeless individuals and lower homelessness rates. There are various other programs that seek similar end goals, such as housing vouchers, supportive housing, and affordable housing (USICH, n.d.). These methods beg the question of cost effectiveness when compared to Housing First. That said, there is also the question of mental health outcomes and which program better serves homeless populations.

This paper examines the impact of Housing First on homeless housing and mental health outcomes. I expect that Housing First policies will improve housing outcomes through increases in housing stability and consistent shelter. This is due to Housing First being centered on permanent housing in which homeless individuals will be subject to less instability and may seek recovery programs as needed. With the primary increase in the homeless population coming from the seven percent jump in unsheltered individuals, it follows that providing permanent housing through Housing First may reduce these increases, even if only through openings in temporary shelter. If the goal of Housing First policy can be realized, then more homeless individuals can be placed in stable housing and eventually exit programs. This, however, is still a challenge considering that the number of sheltered people declined by less than one percent between 2019 and 2020 (HUD, 2021). Additionally, due to higher rates of reported mental health conditions among unsheltered individuals, I hypothesize that a permanent housing method like Housing First has the potential to improve mental health outcomes among unsheltered homeless populations. A more stable living situation also has the potential to improve mental health outcomes for sheltered individuals due to a lowered risk of becoming unsheltered.

To answer the question regarding the impact of Housing First on homeless housing and mental health outcomes, I examine randomized controlled trials from the Chez Soi Study and New York Housing Study. This paper presents relevant statistics regarding housing stability, mental health, and substance use outcomes for those in Housing First programs. In order to address alternative policies and mediating factors, the paper broadens with larger-scale observational studies investigating the effectiveness of expanding Permanent Supportive Housing (PSH) programs and increasing funding for homelessness.

Summary of the Literature

The literature regarding Housing First and PSH programs spans from direct Housing First treatment, to observational studies that examine the effects of federal funding on homelessness. These papers find a range of effects suggesting that Housing First can lead to certain individual improvements, yet federal funding for homelessness programs could have mixed effects. Within the direct treatment effects of Housing First, Stergiopoulos et al. (2019) and Kirst et al. (2015) perform a randomized controlled trial on the Chez Soi Housing First project in Canada, the former examining housing stability and quality of life, while the latter investigates deeper into substance abuse effects. Tsemberis et al. (2004) and Padgett et al. (2006) similarly perform a randomized controlled trial on the New York Housing Study and examine the effects of Housing First on consumer choice, housing stability, substance use, and treatment utilization. Across these randomized controlled trials, results generally suggest positive effects from Housing First on housing stability, while showing no significant increases in substance use despite treatment utilization not being required. Corinth (2017) expands the literature through an observational study across 2007-2014 that suggests limited reductions in homelessness from additional PSH beds. Further, there is some conflicting evidence as to the effect of federal funding towards PSH

on reducing homelessness. Through instrumental variable analysis, Lucas (2017) suggests that federal funding may lead to increases in the number of homeless. Moulton (2013) on the other hand uses a fixed-effects and value-added model to suggest that federal funding towards PSH can reduce chronic homelessness. Overall, experimental designs seem to form a congruent conclusion that Housing First can lead to equal, if not better outcomes for homeless individuals, however there is not a solidified consensus on the overall effect of federal funding towards these programs in reducing homelessness on the aggregate.

A body of evidence supports the conclusion that mental health outcomes could be improved through Housing First programs, or at least not worsened, while also providing potential for a lowered rate of return to homelessness through greater housing stability. Stergiopoulos et al. (2019) examines the effects of Housing First on housing and health outcomes of homeless adults with mental illness. The study stratifies participants by moderate and high support needs. Of 378 participants with moderate needs, 204 were randomly assigned to a Housing First intervention with intensive case management, while 174 were randomly assigned into a treatment as usual (TAU) control group. Of 197 high support needs, 97 were randomly assigned to a Housing First intervention with assertive community treatment, with the other 100 in a TAU control group. Kirst et al. (2017) examines the same sample with a specific focus on substance use among the treatment and control groups. The data was collected for these studies through interviews and surveys performed on a three-month interval. Participants were followed up for two years between 2009 and 2013, but Stergiopoulos et al. (2019) reached further conclusions from an extra four-year follow up period between 2014 and 2017.

Tsemberis et al. (2004) and Padgett et al. (2006) examined the same sample of 225 homeless individuals with mental illness in the New York Housing Study. Of those 225, 126

were randomly assigned to a control under the treatment first Continuum of Care (CoC) model, while the other 99 were assigned to the experimental Housing First group. Tsemberis et al. (2004) investigated the effects of Housing First on consumer choice, housing stability, substance use, treatment utilization, and psychiatric symptoms across 24 months. Padgett (2006) expanded this time frame to 48 months and looked more specifically at drug and alcohol use, as well as substance and psychiatric treatment utilization. The data for these studies was collected through structured interviews performed in six-month intervals for a total of 24 and 48 months, respectively.

Housing stability saw greater success from Housing First than TAU and CoC methods across studies. In the Chez Soi study out of Canada, moderate support needs participants in the Housing First group had a rate ratio of 2.40 days stably housed when compared with the TAU group in the first year (Stergiopoulos et al. 2017). By year six, this rate ratio declined to 1.13 (Stergiopoulos et al. 2017). Among the high needs group, Stergiopoulos et al. (2017) found a rate ratio for the Housing First group of 3.01 in year one, and 1.42 in year six. Overall, in year six, the moderate needs Housing First group had, on average, 9.9% more days stably housed (total of 88.1%), and the high needs Housing First group had 25.18% more days stably housed (total of 85.51%). In the second year of the New York Housing Study, the Housing First treatment group, on average, spent approximately 30% more time stably housed than the control CoC group, with the treatment group spending less than 10% of the year in unstable housing situations (Tsemberis et al. 2004). In all, both studies suggest a faster entrance into housing and better stable housing outcomes for Housing First groups than TAU groups.

Substance use is another important concern when considering that Housing First does not require treatment. Treatment utilization for psychiatric and substance abuse services was

generally higher across the control group in the New York Housing Study; however, there was no significant difference in the substance use outcomes despite higher takeup from the control group (Padgett et al. 2006). The reasoning for higher takeup by the control group likely comes from them being a part of a treatment first group in which these services are required. It is also possible that the treatment first group's substance use could be biased downward from underreporting greater than the Housing First group due to the consequences of not meeting sobriety requirements (Padgett et al. 2006). Kirst et al. (2017), on the other hand, finds significantly less days with alcohol problems from the Housing First group, as well as reduced spending on alcohol when compared to the TAU group; however, no differences were found for illicit drug outcomes. In turn, they find no positive relationship between reducing substance use and required treatment services. In conjunction, the randomized controlled trials from Chez Soi and New York suggest that individuals can remain housed without required supportive treatments and despite psychiatric status.

In spite of these generally positive results of Housing First programs, there remains a question as to whether Housing First can reduce overall homelessness. Corinth (2017) estimates the relationship between additional PSH beds and homelessness rates. He does so using two methods covering panel data from 414 CoCs spanning 2007-2014. In the first method, he controls for time-varying state-level characteristics, time-invariant CoC characteristics, and CoC-level unemployment, median rent, weather, and year-round homeless shelter beds in some specifications. In the second method, he uses instrumental variable analysis, instrumenting the federal funds provided for each CoC.

From the first method, Corinth (2017) estimates that PSH had a modest, long-run negative effect on total homeless counts. While some CoCs saw increases in homeless counts, it

is suggested that this may be attributed to migration to areas with further expanded PSH. Overall, it was found that an additional PSH bed was associated with a 0.04 to 0.12 person decline in long-run homeless counts. From the instrumental variables method, Corinth (2017) estimates that an additional PSH bed has a causal effect of reducing homeless counts by 0.10. With regards to chronic homelessness, Corinth (2017) finds that an additional PSH bed reduces chronic homeless counts by 0.24. He concludes that expanding PSH led to an overall 2% decrease in homelessness. He further explains the below one to one ratio of additional beds to homeless reduction through the fact that this number will decrease if PSH beds are added as homeless individuals continue living in PSH (i.e. homeless individuals do not enter private housing at the same rate the PSH beds are added). He also suggests that a moral hazard for qualification into Housing First programs could be part of what drags his estimates down. Overall, he suggests that the modest estimates could also be attributed to poor targeting, error in homeless counts, and migration in response to expanded PSH.

One of the major mediating factors on the outcomes and implementation of Housing First/PSH is federal funding. In this area, there is conflicting evidence on the effectiveness, or lack thereof, of federal funding towards PSH programs on lowering the homelessness rate. Lucas (2017) estimates the causal effect of federal funding for PSH on homelessness rates using an instrumental variable analysis across three cross-sections from 2011, 2013, and 2015. He utilizes a community's pre-1940 housing share as an instrument for federal homelessness funding at the community level. He controls for a wide range of covariates, while expanding on previous research by accounting for outlier communities (Los Angeles and New York) and adding in unaccompanied youth and children to the homeless population. Lucas (2017) suggests an overall

limited ability of federal funding to reduce homelessness among the most marginalized groups in society.

Specifically, Lucas (2017) finds an increase in aggregate homelessness from federal funding due to increases in the sheltered population (0.183 persons per \$1,000 per 10,000 people). From the basic OLS regression model, he finds that an additional \$1,000 in federal funding per 10,000 people results in a 0.211 person increase in homelessness per 10,000 people in CoCs. Using a 2SLS regression model, excluding the outliers of LA and NY and to a 0.1% significance level, Lucas estimates a 0.309 increase in CoCs incidence of homelessness per \$1,000 per 10,000 people. In general, Lucas also finds that funding is weakly correlated with increases in chronic homelessness and that it is unrelated to unaccompanied youth and child homelessness. Furthermore, increases in funding were unrelated to unsheltered homelessness across all three cross-sections.

Moulton (2013), on the other hand, looks more specifically at the effect of federal funding on chronic homelessness. He also analyzes the costs associated with PSH. Using panel data on homelessness counts from 2005-2007, combined with community characteristics from the American Community Survey (ACS), Moulton estimates a fixed-effects model of new federal homelessness funding. The community-fixed-effects from the ACS are intended to control for time-invariant factors related to chronic homelessness and funding. Moulton also estimates a value-added model without the community-fixed-effects in order to control for a lagged value of federal funding.

Contrary to Lucas's (2017) findings, Moulton's (2013) results suggest a decrease in chronic homelessness from federal funding. Under the community-fixed-effects model to a 1% significance level, he finds that a \$1 per capita increase in federal funding leads to a 1.80 person

decrease in the homeless population per 100,000 people. Likewise, from this model he estimates the first year cost of moving a homeless individual into PSH is \$55,600. From the value-added method, he finds the same effects, also to a 1% significance level, but instead a decrease of 1.627 persons per 100,000. The major contributing group to the decrease in homelessness is from chronically homeless individuals with disabilities. Moulton (2013) also compares the cost of placing homeless individuals in PSH with annual service cost estimates per homeless individual between \$40,000 and \$50,000. Despite the costs being lower than the cost of housing individuals, Moulton posits that PSH programs have higher fixed costs, which leads to the possibility of cost-effective outcomes in the long-run.

In summary, within the experimental papers on Housing First, they find a range of positive effects in housing and substance abuse outcomes. Corinth (2017), on the other hand, suggests that the effect of federal funding for PSH produces only modest improvements towards reducing homelessness rates. Moulton (2013) and Lucas (2017) experience further disagreement, suggesting positive and negative effects from funding, respectively.

Analysis of the Literature

The literature on Housing First and homelessness has various limitations across the different methods used to study causal effects. The literature can generally be split into randomized controlled trials and other observational studies. Among each of the randomized controlled trials, there were specific limitations related to the experimental design. While attrition of subjects was not a major issue, self-reporting error is drawn out from the use of survey data and interviews. In relation to substance abuse, it is likely that individuals would underreport their alcohol and drug use across surveys. Within TAU groups, underreporting was likely higher due to the risks of losing housing or assistance. On the other hand, the randomized

controlled trials are internally valid in seeking causal effects. They draw out causal effects through their experimental design. Of the other studies, the question of internal validity is more prescient. Of main concern is Moulton (2013). Using a non-experimental design for his fixed-effects and value-added models, Moulton runs the risk of omitting unobserved characteristics from his estimates, potentially biasing them. The major risks come from not controlling time-varying factors in the model and relying solely on time-invariant characteristics. These issues do not fully rule out his conclusions, but they should be looked at with modest skepticism. Corinth (2017) has a similar issue with his first model, except that he controls for some time-varying factors as well. Rather, Corinth draws stronger conclusions by using panel data and instrumenting federal funds allocated to CoCs to draw causal conclusions. His instrument remains valid because federal funds are allocated on a lagged basis due to CoCs applying for aid the year before they are made available (Corinth 2017). Thus, these funds, in theory, should be uncorrelated with present shocks to homelessness. Lucas (2017) similarly uses instrumental variables, with pre-1940 housing share appearing to be a relatively valid instrument. It was originally a part of an unrelated funding formula for homelessness grants (Lucas 2017), but likely has little influence on local factors today. In turn, Lucas maintains internal validity. Each of these observational studies still suffer from potential counting errors in the homeless population. For example, with increases in homelessness funding, it's possible that homeless individuals became more visible due to better funding for counting or from migration of populations to better counted areas, such as shelters. The counting limitation does not invalidate the conclusions of each study, but it is important to consider in respect to the findings of each paper.

The generalizability of each paper is also crucial to the research question. While the observational studies had more questions in terms of internal validity, they tend to generalize well to the United States population considering that they all either cover panel data from the U.S. or multiple cross sections. The randomized controlled trials, however, introduce a more localized generalization problem. The four studies examine data from New York City and Toronto, both of which generalize well to large U.S. city populations. On the other hand, they differ from smaller cities and rural populations, where the effects of Housing First could potentially be different. Even so, the current climate for Housing First and homeless programs is oriented more towards larger cities, so this may not be a primary contemporary concern. Nevertheless, as Moulton (2013) only examines effects on chronic homeless individuals, the randomized controlled trials only look at homeless individuals with mental illness or dual diagnosis substance abuse disorders as well. Therefore, Moulton and the randomized controlled trials may not generalize as well to the entire homeless population. It's possible that the aggregate effect of Housing First could be overestimated due to Housing First having a greater effect on individuals who more desperately need assistance. That said, one could argue that Housing First programs are more intentionally designed for the chronically homeless and individuals with a higher level of need, so this limitation does not fully rule out the external validity of each study.

Conclusion

Numerous conclusions can be drawn from the literature on Housing First and homelessness funding. It appears that Housing First can lead to greater housing stability among homeless populations with mental illness. Likewise, there is some evidence of improvements in substance abuse metrics among Housing First groups. There is still, however, lacking evidence

that Housing First leads to more exits from homelessness and homelessness programs. In conjunction with that, Housing First does not necessarily show less returns to homelessness based on the literature, but it is possible that housing stability is related to greater exits into private housing. Future literature would be fruitful in examining the long-run effects of Housing First, particularly after participants manage to exit the program or rather return to being homeless. There is also conflicting evidence around the cost-effectiveness of PSH. While Corinth showed modest decreases in homelessness from funding for PSH, Lucas counters that funding may lead to aggregate increases in homelessness through the sheltered population. If examining these points from the limitation of homeless counting errors, it seems plausible that funding may lead to some modest decreases in homelessness. Still, current funding systems may not be highly effective at reducing homelessness populations. Overall, Housing First seems to hold merit in its possibility to improve outcomes for homeless individuals, but there still remains the question of if Housing First and PSH are cost-effective solutions to the homelessness crisis in the United States.

References

- Corinth, K. (2017). The impact of permanent supportive housing on homeless populations. *Journal of Housing Economics*, 35, 69-84.
- Kirst, M., Zerger, S., Misir, V., Hwang, S., & Stergiopoulos, V. (2015). The impact of a Housing First randomized controlled trial on substance use problems among homeless individuals with mental illness. *Drug and alcohol dependence*, 146, 24-29.
- Lucas, D. S. (2017). The impact of federal homelessness funding on homelessness. *Southern Economic Journal*, 84(2), 548-576.
- Moulton, S. (2013). Does Increased Funding for Homeless Programs Reduce Chronic Homelessness? *Southern Economic Journal*, 79(3), 600–620.

Padgett, D. K., Gulcur, L., & Tsemberis, S. (2006). Housing first services for people who are homeless with co-occurring serious mental illness and substance abuse. *Research on social work practice*, 16(1), 74-83.

Rountree, J., Hess, N., Lyke, A. (2021). Health Conditions Among Unsheltered Adults in the U.S. California Policy Institute. <https://www.capolicylab.org/wp-content/uploads/2019/10/Health-Conditions-Among-Unsheltered-Adults-in-the-U.S.pdf>

Stergiopoulos, V., Mejia-Lancheros, C., Nisenbaum, R., Wang, R., Lachaud, J., O'Campo, P., & Hwang, S. W. (2019). Long-term effects of rent supplements and mental health support services on housing and health outcomes of homeless adults with mental illness: extension study of the At Home/Chez Soi randomised controlled trial. *The Lancet Psychiatry*, 6(11), 915-925.

Tsemberis, S., Gulcur, L., & Nakae, M. (2004). Housing first, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. *American journal of public health*, 94(4), 651-656.

U.S. Department of Housing and Urban Development (HUD). (2021). The 2020 Annual Homeless Assessment Report (AHAR) to Congress. 1-7. <https://www.huduser.gov/portal/sites/default/files/pdf/2020-AHAR-Part-1.pdf>

U.S. Interagency Council on Homelessness (USICH). (n.d.). *Housing*. Retrieved January 20, 2022, from <https://www.usich.gov/solutions/housing/>