Title

Narratives of Death: A Qualitative Study of a Single-Site Housing First Program in San Francisco

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Publication Date

2016-04-01

Narratives of Death: A Qualitative Study of a Single-Site Housing First Program in San Francisco

By

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A thesis submitted in partial satisfaction of the

requirements for the degree of

Master of Science

in

Health and Medical Sciences

in the

Graduate Division

of the

University of California, Berkeley

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Spring 2016

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ACKNOWLEDGEMENTS

This work would not have been possible without the guidance and mentorship of several people, including Dr. Josh Bamberger, Dr. Coco Auerswald, Dr. Leonard Syme, Dr. Jodi Halpern, and Dr. Lori Freedman.

Dr. Bamberger was integral in the conception and instigation of the study. He has provided me with continual support over several years and is the reason that this research was possible. Dr. Auerswald provided essential guidance throughout data collection and analysis. Her support was critical, particularly in the moments when I lost sight of the importance of this work.

Dr. Syme asked questions that encouraged me to think about my research from new and different lights. He provided a grounding perspective that helped me keep sight of the big picture. Dr. Halpern's mentorship before and during the project allowed this research to explore new territories. Lessons I learned from her (and continue to learn) have given me the language to discuss some of the most challenging components of this research. Finally, Dr. Freedman provided insightful and constructive feedback during the final stages of analysis and writing. Dr. Freedman's support helped me continue to move forward when I found myself overwhelmed.

Other people and organizations who have provided guidance during this research include Sarah Dobbins, Dr. Jeff Shonberg, Dr. Karen Sokal-Guttierrez, the Direct Access to Housing program, my classmates and teachers at the UC Berkeley – UCSF Joint Medical Program, and the PRIME-US community.

I would also like to thank my funders, which include the Berkeley Law Human Rights Center, UCSF Dean's Fellowship, and the Joint Medical Program.

Of course, this would also not be possible without the support of my family and friends.

Literature Review:
Interventions to Address Homelessness: Housing First and its Outcomes

Prevalence and Causes of Homelessness

I. The Scope of the Problem: Epidemiology of Homelessness

Housing is a fundamental human right[i] and yet up to 3 million people[ii] experience homelessness every day in the United States[1–3]—a rate that is among the highest of all developed countries.[1,4] California alone accounts for 20% of the nation's homeless as well as over a *third* of people experiencing chronic[iii] homelessness.[3] The term homelessness is used to describe a variety of unstable housing conditions, including emergency shelters, transitional housing programs, safe havens, or places not meant for human habitation, like cars, streets, or abandoned buildings.[iv] Homelessness has been declining on a national level since the early 2000s, but it remains a significant public health and human rights concern, particularly in California.[2]

Despite the enormity of homelessness in California, the state has been making strides towards ending homelessness. According to the 2014 Annual Homeless Assessment Report issued by the U.S. Department of Housing and Urban Development, California was one of the states with the greatest decreases in homelessness from 2013-2014, which is a dramatic shift from its position as the state with the greatest *increase* in homelessness in the previous year. Between 2007 and 2014, California had the largest decreases in individual, youth and family homelessness. While California's achievements should not be understated, the fact remains that two-thirds of California's homeless population, at least 70,000 people, remain unsheltered[v]. Moreover, California still has the highest number of chronically homeless individuals, *85%* of whom are unsheltered.[3] Taken together this information suggests that the state of homelessness in California has two faces: On one hand, California has the greatest number of homeless people overall and has the highest rates of

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[i] Article 25 § 1 of the United Nations Declaration of Human Rights states that "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services..."

[ii] The annual Point-in-time counts are thought to drastically underestimate the number of people experiencing homelessness in America. The most recent count estimate that 578,424 people are homeless in the United States.

[iii] As defined by the US Department of Housing and Urban Development. Their definition of chronically homeless individuals is "unaccompanied homeless individuals with disabilities who have either been continuously homeless for a year or more or have experienced at least four episodes of homelessness in the last three years." (Henry 2014)

[iv] Based on the definition supplied by the US Department of Housing and Urban Development

[v] Someone who is "unsheltered" has a primary nightime resident that is a public or private place not ordinarily designed for habitation by humans, like cars, parks, sidewalks, abandoned buildings, public transportation, or camping grounds. This is in contrast to someone who is may be staying in a shelter, transitional housing program or safe haven.

unsheltered homelessness. Yet over the last seven years, California has also produced the greatest decrease in homelessness, housing over 25,000 people.

While homelessness does still exist in rural areas, it is predominantly an urban phenomenon.[5] According to some estimates, about four-fifths of all people experiencing homelessness nationwide are found in big cities where the effects of redevelopment, gentrification, and housing inequalities have a disproportionately negative effect on this population.[6] This trend is reflected in California. Four out of the ten cities with the highest rates of homelessness nationally are in California. These four cities—Los Angeles, San Diego, San Jose, and San Francisco—account for over a third of all homelessness in the state.[3]

Urban homeless communities have been described as polynucleated niches that develop in "sustaining habitat[s]".[7,8] These communities are often spatially segregated in areas that are near services for the homeless and also characterized by a "tolerant" atomosphere.[9] In fact, research suggests that some cities locate services in a way that confines homeless communities to inhospitable areas, creating what Dear and Wolch describe as "service ghettos".[10] These service ghettos are perpetuated by laws stemming from "not in my backyard" (NIMBY) beliefs that sequester homeless communities away from more affluent areas.[11] For example, in a recent report published by the National Law Center on Homelessness showed that 76% of surveyed cities (n=187) prohibited begging in certain public places and over half of the cities prohibited sitting or lying down in certain neighborhoods.[11]

Locally, between 2007 and 2013 the city of San Francisco issued over 3,000 citations *per year* for violations of codes prohibiting sleeping, sitting, resting and begging in public.[12] These policies are motivated by and disseminate the belief that the presence of people experiencing homelessness will lower property values, increase crime, and decrease the safety of affected neighborhoods.[8,13] Thus, socio-spatial segregation perpetuates social stigma shrouding homelessness and makes it harder for a person to escape it by insulating services to high-density neighborhoods characterized by poverty and crime, and by criminalizing them for their poverty, adding further obstacles to reintegration into the mainstream. [8,13–17]

Homelessness affects all people from children and adolescents to adult men and women, and families.[1] Notably, adult homeless individuals account for over half of the total population and are the group most costly to the safety net system.[18–20] It used to be that homelessness was considered a phenomenon primarily of the adult population, but as time goes on, homeless children, women and families are also increasing in prevalence, particularly families that are female-headed.[1,21] Still, both historically and presently, the single adult male is the most common profile of a person experiencing homelessness in the United States. Blacks are also disproportionately represented, even when compared to low-income housed populations.[1,9]

These demographic patterns are reflected in the makeup of San Francisco's homeless population as well. A 2013 report on this population found that over two-thirds of San Francisco's homeless identify as male (69%), followed by female (27%) and with a small percentage identifying as transgender (3%).

Over half of respondents were between the ages of 31 and 50. Youth homelessness (ages 14-24) accounted for 17% of the population. Regarding race, 29% of respondents identified as White/Caucasian, followed by 26% who identified as Hispanic and 24% who identified as Black/African American. Compared to the general San Francisco population, Blacks and Hispanics were disproportionately represented: 16% of the general population identified as Hispanic compared to 26% among the homeless population. Similarly, only 6% of the general population identified as African American/Black compared to 24% in the homeless population. Other groups that were disproportionately represented in the San Francisco homeless community were people who identified as lesbian/gay/bisexual/transgender/queer (LGBTQ) (15% in general population vs. 29% in homeless population) and men (51% vs. 69%). The disproportionate amount of ethnic minorities in the homeless population could be a down-stream reflection of the unequal distribution of poverty in America.[22]

Homelessness is caused by a myriad of factors ranging from individual vulnerabilities to entrenched failures of the safety net system (section IA of this review). Both the predicting factors and the experience of homelessness itself lead to increased morbidity and mortality (section IB). The use of permanent supportive housing as an intervention has become widespread as the *goals* of homelessness interventions have moved away from treating the individual and have reoriented toward ending homelessness itself (section II). This review will critically examine the use of housing as an intervention for homelessness by focusing on health during the transition from homelessness into housing (section III).

To conceptualize how housing may affect the health of adults experiencing homelessness, this paper will employ lifecourse and ecosocial theories.[23–25] Lifecourse theory emphasizes the cumulative nature of risk factors leading to illness, while ecosocial theory will help illuminate the mechanisms through which poverty leads to illness in the homeless population. Through these theories, this paper will argue for a multidimensional understanding of the causes of ill health among the homeless population. In turn, this perspective on health will inform the researchers' expectations and predictions of the effects of supportive housing on health outcomes.

Lifecourse theory emphasizes the importance of the dimension of time and, more specifically, the different influential stages of a person's development.[23] This theory posits that a person's health status is determined by exposures in childhood as well as adulthood, in other words, that a person accumulates risk over time. Recognizing that health outcomes are affected by experiences throughout life suggests that providing interventions later in life, while potentially beneficial for mitigating exposures to immediate risks and preventing exposure to future risk, will not reverse the effects of the embodied exposures of early childhood.[26] In this case, providing housing to a chronically homeless adult may prevent future exposures that are inherent to homelessness, but will not dramatically change that person's lifecourse or reverse the effects of a lifetime of poverty and illness.[23]

Meanwhile, ecosocial theory will help explain the causes of the marked health disparities seen in the homeless population. Central to ecosocial theory is the notion that people—as both social beings and biological creatures—physically embody the experiences and material of the social world in which they live.[24,25,27] Unequal power dynamics, a lack of social control as well as the exposures inherent to homelessness can lead to ill health, independent of individual-level health behaviors. Even after the provision of housing, a formerly homeless adult will exist within a social environment defined by poverty, stigmatization and discrimination. That is, providing housing will not fundamentally change the social hierarchies that contribute to the embodiment of illness in this population.

II. The complex causes of homelessness

Discussions of the causes of homelessness are complicated by several factors. First, there are both individual and structural vulnerabilities that lead a person to homelessness. The task for researchers is to identify the contributions of each while also recognizing feedback loops and synergistic interactions between the two. Inherent to structural vulnerabilities are the power and social inequities that disproportionately affect certain racial/ethnic groups. Second, risk factors vary based on population: causes of youth homelessness are separate from causes of adult homelessness, which are still distinct from causes of family homelessness.[1,28,29] Third, researchers hypothesize different risk factors based on the *duration* of homelessness. That is, someone who experiences homelessness once is different from someone who is chronically homeless.[1,28] Lastly, causes of homelessness are often also exacerbated by homelessness itself, leading to the proverbial “chicken or the egg” conundrum. In light of all of these complications, researchers are concluding that homelessness is far from “mono-causal”.[1,30–33] While both individual- and structural-level factors have been identified, more recent examinations are tending towards dynamic, multi-factorial models that vary based on population and duration of homelessness.[31]

While teasing out specific risk factors is challenging, themes have appeared in the literature on both individual and structural levels. Examples of individual factors include poverty,[34,35] adverse childhood experiences,[36] mental and physical health issues,[34,37–39] substance misuse,[34,38,39] exposure to violence,[40] and associations with the criminal justice system.[35,41] Meanwhile research highlighting systems level factors have pointed to lack of employment opportunities,[35] housing,[39] and a dearth of safety net services.[1,42] However, several of these predictors cannot be confined exclusively to individual or structural level classifications due to fundamental interactions between the two and other confounding factors.[33,43] For example, poverty, while listed above as an individual risk factor, is the result of structural failures and entrenched inequality.[44]

The relationship between socioeconomic status (SES) and homelessness is fundamental. The National Alliance to End Homelessness (NAEH) included in its 2015 Annual report, entitled *The State of Homelessness in America,* a state-by-state review of trends in poverty, unemployment and the number of poor renter households, recognizing these as major risk factors for homelessness.[45] It is very well established that poverty is also connected to poor health, further contributing to lost housing.[27,34,46] Poverty in the United States disproportionately affects certain racial and ethnic groups, namely African Americans and Hispanic/Latino populations, and, as a result, these groups have higher rates of morbidity and mortality *and* are over-represented in the homeless population.[47] Yet racial health disparities are not explained by socioeconomic status alone. Indeed, data suggests that racism and discrimination also contribute directly to poor health.[24,25,48] These facts seek to emphasize that some racial and ethnic groups are at a higher risk for health problems *and* homelessness due to entrenched structural factors established by centuries of racism and discrimination.[27,48–50] These factors, in addition to contributing to homelessness, will lead to embodied disease and illness that persist over a lifetime.

As mentioned above, pathways into homelessness also tend to vary by age and family type.[1,31,35,51] Particularly among homeless youth, disruptive family dynamics, the experience of trauma and/or other adverse childhood experiences such as abuse and neglect are common initiating causes homelessness.[1,31,51] Meanwhile, causes of homelessness among adult populations tend to focus on poverty, lack of housing resources, trauma, as well as substance use and mental health.[1,28,31,34,52–54] Factors like loss of employment, poverty, and lack of affordable housing characterize entry into homelessness for families.[1]

Finally, the causes of short term or episodic homelessness are different from the causes of long-term or chronic homelessness. Chronic homelessness is defined by the U.S. Department of Housing and Urban Development (HUD) as “an unaccompanied homeless individual with a disabling condition who has either a) been continuously homeless for a year or more OR b) has had at least 4 episodes of homelessness in the past three years.”[3] Chronically homeless individuals are more often exposed to a dangerous triad of psychiatric, physical and social vulnerabilities.[55] Studies have found that disability as a result of psychiatric and substance use disorders is greater among the chronically homeless population than among adults who experience homelessness transiently or episodically.[1,55–57] A 2005 longitudinal study by Caton et al examined the risk factors for long-term homelessness among single adults and found that *protective* factors included younger age, current or recent employment, earned income, good coping skills, and “adequate” family support.[35] The same study found that older age and arrest history were the strongest predictors of *longer* durations of homelessness.[35] Variables that were not significant included race, gender, citizenship status, education level or marital status.

Another study of recurrent homelessness points to the significance of family life in predicting lost housing. McQuistion et al (2013) followed 278 homeless adults over 18 months to examine the factors that predicted exiting and re-entering homelessness. A factor that was significantly shown to contribute to recurrent homelessness was returning to family.[52] That is, a person who left homelessness by moving back in with family had a greater risk of re-entering homelessness. This finding (one of the only variables significant on its own in the analysis) led the authors to speculate that the home environment had contributed to a person's risk of homelessness in the first place. This corroborates other literature that points to an array of family-specific risk factors that can contribute to homelessness, like poor care from a parent, parental instability, inadequate family support, high rates of family mental illness and substance use, as well as child abuse.[34,35,37,38,58] Moreover, not only do adverse childhood experiences increase the likelihood of homelessness, but they also predict the development of *other* risk factors for homelessness, like mental illness, substance use, poor health, exposure to violence, involvement with criminal justice system and lack of employment.[59–61]

Many conditions that lead to homelessness may also be exacerbated by homelessness itself. Lack of family support, for example, may lead to lost housing and, in turn, homelessness may estrange a person from social and familial contacts.[62] This cyclic pattern also applies to mental health problems, substance misuse as well as exposure to violence, and experiences of trauma.[28,29,54,63] Again, it is has been consistently demonstrated that trauma leads to homelessness, particularly among young people.[29] It has also been shown that homelessness increases exposure to trauma in this population.[64] The cyclic, self-perpetuating nature of the risk factors for homelessness makes it difficult to narrow in on the *initial* risk factors—too often the demographics of homeless are mistaken for proximate causes. Several researchers have proposed a model, which posits that the underlying causes—the *root* causes—of homelessness are the structural conditions like lack of resources, housing, and inequality, which effectively turn individual vulnerabilities (like mental illness or family turmoil) into lost housing.[1]

With this perspective, the causes of homelessness can be understood through lifecourse theory. That is, homelessness is the result of an accumulation of embodied exposures over a lifetime—these exposures build on each other, predict future risk factors as well as increase the likelihood of further exposures. Moreover, many of the risks accumulated over a lifetime are the result of low socioeconomic status and the risks inherent to that life course. To this end, Burt et al observed that many "risk factors" for homelessness may actually be "just shorthand ways of representing life circumstances that would be difficult for anyone to handle."[1] With this in mind, providing housing interventions to adults experiencing homeless should help prevent future exposures, but may not reverse the effects of a lifetime of poverty and previous experiences of homelessness.

The list of factors that can contribute to chronic homeless is lengthy and complex, but it is clear that people often become chronically homeless after experiencing years—if not lifetimes—of adversity that range in scope and magnitude. For the sake of policies seeking to improve the welfare of the homelessness population, this phenomenon ought to be viewed as the product of several contributing factors, which cannot be pinned on any one behavior or system. Moreover, poverty alleviation must be central to efforts seeking to end homelessness altogether.

III. Diminishing life chances: effects of homelessness on material wellbeing, safety, and health

As described above, the causes of homelessness are multifaceted and span a person's lifetime. Once a person enters homelessness, they will be at risk of further exposures, which may exacerbate the conditions that led to homelessness in the first place. In his 2010 article *New Homelessness*, Dr. Barrett Lee talks about the effects of homelessness through the lens of "life chances", which he defines as "the ability to benefit from the opportunities while avoiding the pitfalls offered by society."[9] Lee points to three vital domains in which homeless persons often experience encroachments on their life chances: (1) material well-being, (2) safety, and (3) physical and mental health.[9] Previous studies have implicated these areas as causes of homelessness, but they can also be framed, as they are here, as *outcomes* of homelessness. The following section will use Dr. Lee's framework to describe how homelessness affects a person's physical and mental health. To do this, this paper will describe how encroachments on material well-being and safety are also connected to physical and mental shealth.

People experiencing homelessness are at the extreme end of poverty and also face significant barriers to employment and income.[35] As emphasized before, the poverty component of homelessness, though implied, is fundamental. A person of high socioeconomic status will have the resources, prestige, knowledge, and power to avoid lost housing, even when facing similar challenges, like physical and mental illness or loss of family support.[27] Data from a 1996 National Survey of Homeless Assistance Providers and Clients (NSHAPC, n=2938) uncovered a median monthly income of $200 to $288 within a national sample of homeless persons, with 10% of the respondents reporting no income at all.[1] In the NSHAPC sample, single homeless adults had incomes that were 29 to 42% that of the Federal Poverty Level (FPL). Families were not much better off: The sample population had a median income of 43% FPL for a three-person household and 30% FPL for a four-person household. It appears that even among people who qualify for federal benefit programs like Supplemental Security Income, Social Security Disability Insurance, or Temporary Assistance for Needy Families may still not receive them due to a lack of a fixed address and other logistical barriers created by homelessness.[65] In addition to lacking income, a person without a home must literally carry their possessions and thus are always at increased risk of losing material wealth.[1] Moreover, people experiencing homeless face barriers to employment, which include, but are not limited to, low education, work history gaps, lack of transportation, lack of stable address or phone, poor hygiene, mental and physical disabilities, substance use and discrimination.[66,67]

This combination of perpetuated poverty and reduced access to employment makes financial recovery uniquely challenging for people experiencing homelessness. Literature in the domiciled population is clear about the connection between money and health, showing that low-income populations are much more likely to have negative health outcomes.[27,68–71] In the literature about the general population, causal mechanisms are difficult to describe due to complications with reverse causality[vi] and unmeasured confounding factors.[27,68,70] However the connections between poverty and health are more clear in the homeless population: Namely, lack of wealth and income make it difficult for people experiencing homelessness to get health insurance, travel to medical appointments, or buy medications and supplies needed to treat chronic disease.[69,72,73] In addition, without monetary resources this population has limited access to healthy foods or safe living environments.[73] The following paragraphs will explore the connections between homelessness, safety and health more fully.

In addition to encroachments on material well being, homelessness puts a person at increased risk of victimization, including violence, theft, and other physical trauma. The vulnerabilities of living in the public arena cannot be understated—on top of combating geographic and social marginalization, isolation, and poverty, this population must diligently focus on basic survival needs and their own physical protection.[74,75] A simple news search will reveal countless events of horrific victimization of people living outside. For example, a January 2015 article in the LA Times reported that John Frazier, an African American homeless man from Ventura, California, was doused with lighter fluid and lit on fire while he slept on the beach.[76] The three white men who attacked him were strangers. A 2013 report on hate crimes committed against the homeless population issued by the National Coalition for the Homeless found that 1,437 *reported* acts of violence had been committed against homeless individuals between 1998 and 2013. In 2013 specifically, 18 of the 109 documented attacks resulted in death.[77]

Increased victimization is well documented in the academic literature as well. Over half of the homeless respondents in the NSHAPC survey analyzed by Burt et al reported an episode of victimization in their past.[1] Robbery and theft were the most common forms of victimization and almost a quarter of respondents reported being physically assaulted.[1] A separate analysis of the 1999 NSHAPC dataset by Lee et al found that homeless people were more likely to experience theft, physical assault and rape (often all in conjunction) than their housed counterparts.[78] The same study found that men were more likely to be victimized than women. A separate study conducted by Kushel et al (2003) analyzed interviews of 2577 homeless adults in San Francisco shelters and found the highest rates of assault among transgendered persons (38.1% reported assault in previous year), followed by homeless women (32.3%) then by homeless men (27.1%).[79] While differences exist across these studies, each found that among all genders, people experiencing homelessness have a significantly higher rate of assault than the general population.[79] Emphasizing the vulnerability associated with the visibility of homelessness, Kushel et al found that marginally housed women (living low-cost hotels) were less likely to be sexually assaulted than women who were literally homeless (living on the street or in shelters).[79]

Other studies add to these findings by showing increased rates of trauma and victimization among subgroups of the homeless population. Homeless

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[vi] Does ill health lead a person to become low-income or does being low-income precipitate ill health?

people with substance use, mental illness, and physical illness are at an even greater risk of victimization than people experiencing homelessness without these risk factors.[9,78,79] Mental illness, specifically, may be both cause and effect—it may be precipitated by previous victimization and can lead to future victimization, perhaps through making a person less able to recognize and avoid signs of danger.[80]

All of these studies emphasize that people experiencing homelessness are extremely vulnerable to victimization, including assault. These experiences have obvious immediate effects on a person's physical health and prolonged effects on mental health. Studies have shown that victimization can exacerbate mental health problems and, if experienced early in life, can lead to persistent negative self-perceptions of physical and mental health in adulthood.[80–82] A study published in 1998 by Lam and Rosenheck interviewed 1,839 people entering community treatment programs to evaluate the connection between previous victimization and clinical outcomes. Their results confirmed that people with mental illness are at much higher risk of victimization. They also found that criminal conviction, alcohol use, and psychotic symptoms were all positively associated with victimization. In turn, victimization predicted longer stays of homelessness and future victimization.[80] More recently, a study by Perron et al found that non-violent victimization was associated with increased depression.[82] Similarly, a 2014 article by Rattelade et al found that within the homeless population, childhood abuse predicted lower mental health functioning in adulthood.[83]

The third vital domain in which homeless persons often experience encroachments on their life chances proposed by Dr. Lee is poor physical and mental health. The previous arguments have shown how encroachments on material well-being and victimization affect the health of people experiencing homelessness. The following section will outline several additional ways that homelessness leads directly to ill health.

It is well established that homelessness erodes a person's physical and mental health.[40,84,85] Physical health hazards can include problems of environmental exposure, like skin problems and hypothermia.[79,86–89] Additionally, people experiencing homelessness are more likely to be exposed to and infected with infectious disease such as tuberculosis,[88,90,91] HIV,[90,92] and hepatitis C.[93] In addition to their increased risk of environmental exposures, homeless persons experience chronic medical conditions at higher rates and face significantly greater barriers in accessing preventative and primary care.[94] These barriers lead to insufficient treatment of disabling medical conditions.[72,95] In other words, homelessness both increases a person's health needs while simultaneously making it harder to seek care.[94,96] As a result, the homeless population has been found to have higher rates of emergency department use and hospitalization rates that are four times the US norm.[94]

On top of increased physical medical morbidities, components of homelessness can exacerbate, contribute to, or initiate mental health burdens as well.[40,84] Research has shown that people experiencing homelessness have strained family relationships,[97,98] increased anger and depression,[99] and suffer from the negative effects of persistent social stigma.[100,101] The homeless population is continually scrutinized by the public simply by their virtue of being homeless. All of these factors, combined with the experiences listed above, make homelessness itself a source of serious psychological trauma.[102]

Stemming from a multitude of factors, people experiencing homelessness have much higher mortality rates than people who are housed.[27,46,80,103] This corroborates extensive research within epidemiology that has demonstrated that people of lower socioeconomic status (SES) tend to have worse health outcomes and shorter life expectancies than high SES groups.[27,104,105] This pattern is born out when comparing the mortality rates of the homeless population with that of the general population: Studies have found that people experiencing homelessness have mortality rates of approximately 25 people per 1,000 person-years and a life expectancy between 42 and 52 years of age.[103] As a comparison, the mortality rate of the general adult population in 2010 was 7.47 people per thousand person-years and the life expectancy was 78.7.[106] A review of research on premature mortality in the homeless population found that across all age ranges, people experiencing homelessness have a higher risk of death than their housed counterparts and are 3-5 times more likely to die than the general population.[103]

Mortality rates of the homeless population reported in the literature vary significantly by study location, population, and methodology. For example, a study of mentally ill homeless veterans documented a mortality rate of 22 people per 1,000 person-years[107] while another study of “rough sleepers” in Boston (those who sleep outside) conducted by Hwang et al found a mortality rate of 55 people per 1,000 person years. A recent study published in the *Journal of the American Medical Association* (JAMA) by Baggett et al from Boston followed 23,800 homeless and formerly homeless people for five years and found a mortality rate of 14.4 people per 1,000 person years.[108] Better data tracking of this population is needed to reach consensus on the risk of mortality in this population.

Unquestionably, the experience of homelessness is detrimental to a person’s health and diminishes a person’s life chances.[9] As Link and Phelan write, behaviors and experiences are not randomly distributed in an entire population. Instead, they appear in patterns that correlate to geographic, economic, and social clusters that often reflect social segregation. In other words, a person’s environment puts them “at risk of risks”.[44] This theory applies directly to the risks associated with homelessness: Stemming from their multi-domain marginalization, the homeless population is at increased risk of extreme poverty, victimization and trauma as well as increased morbidity and mortality.

The detrimental social, physical, and mental effects of homelessness make *ending* homelessness a humanitarian imperative. Historically, however, interventions directed towards this population have been stymied by stigma and prejudice. Over time the discourse has shifted towards ending homelessness, which reflects new understandings of the causes of homelessness.[22,109] Section two below documents the shifts in intervention over time and introduces the most recent models.

Interventions

I. Perceived causes of homelessness; implications for intervention

The prevailing sentiment towards homelessness in the 20th century was one of rejection and individual blame: poverty was the fault of the impoverished and homeless persons were a glaring example.[101] Concentrating blame on the individual diluted the moral and philosophical pressure to help poor communities.[110,111] Homelessness, in particular, was stigmatized due to its visible "unappealing aesthetics"[112] and its association with other stigmatized conditions like mental illness and substance use.[1] The public's perceptions of homelessness was shaped by a few visible examples and these surface judgments were generalized to the population at large, seeing it as problem largely caused by mistakes of the individual.[101] Historically, this type of stigma has prevented the formation of policies that frame poverty and inequality as a human rights concern and thus stymie public health movements that take systems-level approaches.[113]

Within the last few decades researchers and policy makers, such as the United States Interagency Council on Homelessness (USICH), have come to recognize that homelessness is an "entrenched modern phenomenon"[114] which will require organized efforts to alleviate. USICH is a national council that aims to coordinate the Federal, public and private responses to homelessness in order to orchestrate a cohesive strategy to end it.[115] In their most recent annual report, they list five main strategies for preventing and ending homelessness that recognize the breadth of interventions required to address this issue: (1) increasing leadership, collaboration and civic engagement to help coordinate interventions, (2) increase access to stable and affordable housing, (3) increase economic security to prevent homelessness in economically at-risk populations, (4) improve health and stability of vulnerable populations, and (5) revamp crisis response systems to return people who experience homelessness to housing.[18] Notably, these strategies target both individual vulnerabilities as well as structural factors.

As the discourse around interventions has shifted towards a combination of policy and individual support so has the talk about the *goals* of these interventions: rather than simply supporting people who are experiencing homelessness, the conversation has shifted towards ending homelessness, both through the provision of housing and through preventing homelessness in the first place.[109] Homelessness prevention is known colloquially as "turning off the tap" or "closing the front door".[22] To do this, we must identify which faucets to check and which doors to close. Simultaneously and separately, interventions for people who have already entered must be thoughtfully implemented; these interventions that target the existing homeless population will be the focus of the following section.

II. Individual interventions

Paralleling the varying causal mechanisms of homelessness, interventions that have sought to improve the health outcomes and quality of life of the homeless population have employed both individual and structural level tactics.[1] Individual level programs are often designed to address specific “treatable” individual characteristics, like mental illness, certain infectious diseases, and substance use problems.[1,116,117] Examples include the provision of primary care, case management,[118,119] cognitive behavior therapy,[120] assertive community treatment,[121,122] coordinated health care,[123] as well as substance abuse treatment programs.[119,124,125] A review of these individual-level interventions conducted by Hwang et al (2005) found that using coordinated treatment and support for homeless people with co-occurring mental illness and substance use is more effective than treatment as usual. The different modalities of this support (case management, assertive community treatment) did not produce significantly different effects—in other words just having some sort of support was better than having no support at all.[117] This aligns with a conclusion of a 2014 review, again by Hwang et al, that concluded with an emphasis on “the crucial importance of establishment and maintenance of a positive interpersonal relationship between [the health-care provider] and the person who is homeless.”[116,126]

Of the 73 studies reviewed by Hwang et al in 2005, none demonstrated *consistent* effects on the health of homeless people, although many did show reduced lengths of homelessness.[117] Similarly, the 2014 review found that interventions could improve housing status, reduce mental health symptoms, improve substance misuse, as well as reduce the cost to the system, although no specific models were consistently shown to improve these domains. Both reviews concluded with recommendations that emphasized developing trusting relationships, matching people to the appropriate services for their needs, and coupling services together, when possible.[116] Yet while individual level interventions like assertive community treatment, case management or treatment programs may help improve symptoms in isolation, they do not address homelessness itself.

Understandably, providers who work with the homeless population prioritize treating pressing individual vulnerabilities, like mental health issues and substance misuse.[116] However, as this paper has emphasized, homelessness itself is fundamentally detrimental to a person’s health.[127] To continue to address individual vulnerabilities without attempting to remove a person from homelessness would be a monumental oversight.[128,129] The growing recognition that housing is necessary for improving health outcomes has fueled a movement that aims to provide housing as a *first-line* intervention for people experiencing homelessness.[129,130] Fittingly, this movement has been dubbed “Housing First”.

III. Housing First

“Housing First” (HF) is a movement in homeless healthcare that recognizes that housing should be the first step towards healing and recovery rather than the reward for achieving it.[130,131] HF programs provide formerly homeless adults with housing that combines independent living with wrap-around on-site services—this combination is termed “supportive” housing.[132] The introduction of the HF model into homeless health care marked a dramatic philosophical shift in the provision of housing.[133,134]

The ancestor models of supportive housing can be traced back to research from the 1980s and 1990s that recognized that mentally ill people experiencing homelessness did better when living independently rather than in institutions.[132,135] The housing paradigm at the time—termed the “linear continuum model”[132], “linear residential treatment” or “continuum-of-care”—attempted to provide independent housing through a graduated system of treatment programs.[129,133] However, this design had a number of challenges and the development of supportive housing was due in part to a desire to supplant this linear model.

Described simply, the linear model is a system in which a person moves through a continuum of services *en route* to independent living. The services begin with the most restrictive and then progress towards more autonomous options.[133] A person doesn’t progress or “graduate” until he or she is deemed ready; individuals can also move backwards if their condition (typically a mental illness) worsens.[133] The implementation of the linear model varied from state to state, but examples of included programs in the continuum were quarterway houses, halfway houses, supervised apartments, and independent living. Other models included institutional home-like settings, hospitals, nursing facilities, group homes, or board-and-care centers.[136]

Widespread development and refinement of this model continued from the mid 1970s onward, yet no conceptual clarity emerged.[136,137] Programs didn’t develop standardized systems and, overall, the model failed to adequately address the needs of the people it was trying to serve.[137] Challenges of the model included a lack of client choice, stress stemming from multiple moves, the long time required to reach independence, and the destabilization that was created when housing was contingent on treatment compliance.[129,131,133] Moreover, an overall lack of focus on developing independent living led to a persistent dearth of housing, as so few people reached the final stages. This led to increased length of inpatient stays and increased demand for acute inpatient and emergency services as hospitals took the place of housing for people with no alternative and who did not meet the standards to progress through the linear model.[138] Throughout this shift, the need for housing was exacerbated by the previous deinstitutionalization of the mentally ill when many at-risk individuals were left to fend for themselves.[133]

Despite its widespread use, consumers, advocates and program planners recognized the weaknesses of the linear model and the dire need for more affordable housing.[129,133] As a result, the housing movement experienced a paradigm shift that was defined by prioritizing client-choice,[131,139] creating “homes” not “treatment settings”, and recognizing people as community members rather than patients.[132,133] Additionally, treatment became the second priority *after* the attainment of housing. Thus, the focus was to provide housing first (hence the birth of the movement name) and *then* to work on the skills necessary for each person to be successful in housing—the individualization was a central component.[133] Lastly, the paradigm shift moved away from " least restrictive environments" to "most facilitative environments" where providers recognized that people may need personalized support for a long period of time.[133] Ultimately, the result of this paradigm shift was the abandonment of linear continuum models and the birth of housing first and permanent supportive housing (PSH)—that is, housing that is offered for a lifetime (rather than for a transitional period) and that is equipped with on-site, opt-in support services.[131,132]

The shift to prioritizing housing first over treatment marks a fundamental change in treatment philosophy.[133,140] The linear continuum model was modeled after biomedical strategies while HF is shaped by values of human rights.[140] Intrinsic to this philosophical change is a shift in the expectations of program participants. Rather than requiring treatment adherence and recovery, HF programs are defined by high levels of consumer choice with low demands regarding services or abstinence.[140] Rather than seeking to treat and cure patients, HF models are looking to provide stability and improve quality of life and have low demands on participants. It is a harm reduction approach to its core.[141]

Looking critically at Housing First

Since the HF movement has gained steam across the country, research on its benefits has increased dramatically. Studies have confirmed that even people with severe mental illness and co-occurring substance misuse can maintain stable housing if they are provided with adequate support services.[142] This housing model has also been shown to increase housing tenure[123,143–148] as well as reduce costs to the system[144,145,149] by decreasing health care utilization rates.[145,150–154] Moreover, Housing First programs have done this while also appearing to improve tenant satisfaction related to autonomy and greater perceived choice.[146,155]

The apparent "win-win" nature of housing first programs for the chronically homeless has ignited campaigns to expand supportive housing opportunities across the country. Programs like the nation-wide 100,000 Homes Campaign and extraordinary local efforts, like those in Utah with Santa Clara, California, are leading the way in this effort. Nine years ago, Utah's Homelessness Task Force made the goal to end chronic homelessness by 2015 and have since reduced homelessness by almost three-quarters.[156] However, the blazing momentum of the Housing First movement may lead rushed or insufficient examinations of the literature examining its effects. As Kertesz et al emphasize in a 2009 article looking critically at HF programs, "[t]he extraordinatry rollout of plans to end chronic homelessness, coupled with the excitement for Housing First, makes this a prudent moment to review the data supporting it".[134] This leads to the question of the following section: Does housing work?

I. Does housing work?

A few studies have directly compared HF models to linear models (continuum of care).[134] These studies found that participants in HF models spent less time homeless, less time in psychiatric hospitals, and were overall less expensive than participants in treatment/abstinence-contingent housing models.[145] One study also found significant reductions in substance misuse in HF programs when compared with continuum of care models,[157] while many others have found no difference.[145,158–160]

Some researchers question the efficacy of a harm-reduction, non-abstinence model for promoting long term recovery.[134,161] Milby et al (2005) demonstrated that people who moved into abstinence-contingent housing were significantly more successful in maintaining abstinence than people in non-abstinent contingent housing (a defining feature of HF programs).[147] Moreover, this randomized study found no significant differences in abstinence maintenance between people in non-abstinent contingent housing and those without any housing. While studies comparing HF and TF models are inconclusive around the effects on addiction and substance use, these studies remain important for emphasizing that people with mental illness and co-occurring substance use can maintain housing in HF models. However, these studies do not answer questions about the effects of supportive housing compared to no housing.

To date, five rigorous studies have examined the effects of supportive housing as compared to homelessness.[149,152,162–164] On the whole, these studies show that housing combined with supportive services can reduce costs to the system while improving housing outcomes and some health outcomes[vii] for homeless people who are the most intensive users of the health care system.[149,162,164] While these results are promising, they are to be interpreted cautiously. Below is an examination of each of these major studies, with explanations of their strengths and weaknesses.

Larimer et al (2009) examined the effects on health care use, health care costs, and alcohol use of a "Housing First" program targeted towards chronically homeless adults with severe alcohol problems.[149] Their study participants were selected from a ranked list of people who had incurred the highest total costs in 2004 for use of alcohol-related hospital emergency services, the sobering center, and King County jail in Seattle, Washington. Researchers did not employ a randomized model due to ethical concerns and instead used a "first-found, first assigned" model. People found later in the study were placed on the waitlist and served as the control group. In the end, 95 participants were included in the treatment arm and 39 wait-list participants served as the control group. Researchers evaluated cost reduction by comparing average cost-per-month before housing with average cost-per-month after the intervention. Despite

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[vii] One study found improvements in alcohol use while two others, which focused specifically on people living with HIV/AIDS, found reduced viral load and improved mortality.

having a relatively small comparison group, this study found significantly greater cost savings in the treatment group as compared to controls at the 6-month follow-up. They found that housed participants had $3569 less costs per month compared to control participants. Additionally, the researchers used an “intent to treat” mode of analysis, in which changes in housing status throughout the study period (that is, control participants found housing or treatment participants lost housing), were not adjusted for, which could have diluted the statistical analyses. Thus their results may be underestimating the effects of housing on service cost reduction in this population.

Larimer et al also found that treatment participants demonstrated a steady decrease in alcohol consumption after housing. They measured consumption from a year prior to the intervention and then re-evaluated it at 6, 9 and 12 months into housing. Researchers did not evaluate alcohol consumption in the control groups so analyses only examined within-group effects.

While this study shows promising results for cost and substance use reductions after housing, it has several important limitations. First, participants in both arms of this study demonstrated an “extremely high” use of publicly funded services prior to housing and, moreover, the treatment participants had incurred significantly greater cost than the controls. Thus, the varying effects seen between groups could be due, in part, to regression to the mean. That is, a number that is extreme to begin with will naturally move towards the average. The difference in incurred cost between treatment and control groups suggests that people who were found first (and therefore included in the treatment arm) were inherently different than the people who were harder to find and thus added to the waitlist. Moreover, while the cost reduction among the treatment group was dramatic ($4066 per month prior to housing to $1492 per month afterwards), at the six-month follow-up period the control group only had slightly higher average monthly costs ($1932) than the treatment arm. The results of the cost comparison would be stronger with a randomized model and with a greater length of follow-up period to evaluate time effects.

While this study has a number of limitations, its results on cost savings have been found in several other studies. [144,145,149,164,165] Indeed, cost savings are one of the most commonly documented benefits of supportive housing. Research has shown that cost savings are particularly prominent when housing is provided to chronically homeless adults who have high public service utilization rates. The growing media coverage on the HF movement has understandably highlighted this outcome.[166–168]

The next study reviewed here focused on the effects of housing on the *health* of chronically homeless adults living with HIV/AIDS.[163] Buchanan et al (2009) conducted a randomized trial in which 248 study participants were recruited from a local county hospital. These subjects were randomized to treatment (housing plus case management, n=120) or usual care (normal discharge planning with social worker, n=128). In an effort to objectively analyze the effects of housing on health, the researchers decided to hone in HIV/AIDS specifically, as it was the most common diagnosis among study participants and could be tracked with lab values (CD4 counts and HIV viral load). Researchers measured CD4 counts and viral loads one year after housing and compared results between treatment and control groups. They found that significantly more people in the treatment group survived the study period with intact immunity (defined as CD4 ≥ 200 and viral load <100,000, *P*=0.04) compared to controls. This result remained significant even after researchers applied less stringent definitions of "intact immunity". They did not find significant changes in mortality or CD4 counts between groups, but found that viral load was lower among treatment participants.

With a randomized model and a standardized measure of health, this study is stronger than most with regards to evaluating health outcomes. However, while the findings of this study demonstrated a difference between treatment and control groups, these differences could have been due to differences between the study groups at baseline. The researchers did not collect baseline labs and, as a result, they could not determine if treatment and control participants had similar immunity at the beginning of the study. Moreover, the study sample was not stratified based on CD4 count or viral load before randomization, contributing to uncertainty about differences in the baseline measures between study groups. For the analysis, the researchers only compared final lab values between groups instead of comparing *changes* in lab values over time. A between-group comparison of changes would have been stronger than this cross-sectional comparison. The authors caution that their results must be confirmed through additional studies.

Two other studies have examined the effects of housing on the health of HIV-infected homeless adults. One, by Wolitski et al (2010), also employed a randomized model to measure changes in physical and mental health, housing status, health care utilization, and sexual behavior in homeless adults living with HIV/AIDS (total N=665, treatment=315, control= 315). With an intent-to-treat analysis this study found that housing improved self-perceived mental health and housing outcomes among the treatment group. However, these researchers not find any statistically significant changes in CD4 counts or viral loads between treatment and control groups. This analysis also found no differences between groups in the areas of self-perceived physical health, health utilization costs or sexual behavior. However, several control participants found housing during the study period thus diluting the statistical power of this analysis. When the authors conducted an "as treated" analysis, significant results appeared with respect to detectable viral loads. That is, homelessness was significantly associated with a detectable viral load (a mark of HIV progression).

One additional study explored the effects of housing on health outcomes in homeless people living with HIV/AIDS (PLWHA). Schwarcz et al (2009) conducted a retrospective longitudinal study examining mortality in housed and homeless PLWHA in San Francisco.[169] Researchers cross-referenced two databases to identify PLWHA who were homeless at the time of their HIV diagnosis and then subsequently found housing through a Housing First program in San Francisco called Direct Access to Housing (DAH). Treatment participants were those who were housed through DAH after their diagnosis and control participants were people who did not secure housing during that time. This study showed a dramatic reduction in mortality in the housed versus homeless population, but had several methodological limitations. First, treatment and control groups were not randomized. Therefore the people who sought and secured housing may have been more likely to survive than the study participants who remained homeless. Second, housing status was determined through medical records, which, as the authors point out, did not accurately capture homelessness. Taken together, these three studies suggest that housing may improve health outcomes and reduce mortality in homeless individuals living with HIV/AIDS, although all have some methodological weaknesses.

The final two studies reviewed below support literature showing that supportive housing reduces hospitalizations and decreases time spent homeless. The first, published by Sadowski et al (2009), examined the effects of supportive housing on health and utilization rates among homeless adults with chronic illnesses.[164] Researchers offered housing to eligible people as they were getting discharged from the hospital. Over 200 people were assigned to the treatment arm, which included housing plus case management (n=116) or solely continued case management (n=165). Meanwhile, another 200 individuals were randomized to the control group, which included normal hospital discharge procedures with a social worker (n=206). The findings demonstrated that the intervention reduced hospitalizations and emergency department visits, but produced no improvements in health and no significant changes in mortality when compared to controls. This study benefited from a large control group that allowed for rigorous statistical analyses. However, less than half of the treatment arm received supportive housing as a part of the intervention, so the demonstrated benefits of the intervention cannot be isolated to the effects of housing. In fact, previous literature has shown that case management alone can reduce utilization rates.[170]

The final major trial reviewed here is the Chez Soi/“At Home” study from Canada.[162] Between October 2009 and July 2011 researchers in this study identified close to 1,200 participants and randomized 689 to housing and 509 to treatment as usual (TAU). The intervention was scattered-site housing with off-site intensive case management. Housing sites were spread across four Canadian cities. Usual care participants were drawn from the same cities as the housing sites. TAU participants had access to housing and support services through established agencies in their communities, but did not receive additional assistance from study staff. In the analyses, treatment participants were compared to controls in their respective cities.

The cohorts were followed for 24 months and several outcomes were evaluated. The primary outcome of the study was housing stability, defined as the percentage of days stably housed. The secondary outcome was generic quality of life, which was measured through a 5-item questionnaire administered every 6 months. Other exploratory outcomes evaluated throughout the study included self-rated physical and mental health, degree of psychiatric symptoms, quality of life, community functioning[viii] and integration, recovery, substance use, arrests, and emergency department use.

[viii] Defined by the Multnomah Community Ability Scale

The results showed that, throughout the course of the study, percentage of days stably housed were higher among the intervention group than the usual care group. They did not find statistically significant differences in generic quality of life among groups, but on further analysis found that some domains of quality of life improved over the study, including items relating to leisure, living situation, and safety. The results of the other exploratory outcomes showed that community functioning was higher in the treatment group compared to controls at 18 months, but this result was not significant at 24 months. Researchers did not find any significant differences in other exploratory outcomes. Notably, this means that housing in the Chez Soi study did not produce significant changes in physical or mental health, nor did it affect recovery.

However, one of the most challenging (and revealing) components of the Chez Soi study was variation in outcomes across study sites. Several outcomes were significant at one site, but not at another. For example, hospitalization rates varied by site, as did the family domain of quality of life. The primary outcome—housing stability—also varied. Adjusted mean differences between treatment and control groups for housing stability (the differences in the percentage of days stably housed) ranged from 33.0% to 49.5%. These differences could be due to variations in implementation or perhaps differences in the availability of services in the surrounding communities. Moreover, differences existed across sites in? separate qualitative analyses[171,172] of the intervention, with better outcomes being associated with programs that had greater fidelity to the "core aspects" of HF models.[172] The question then becomes, what are they key components of a HF supportive housing program? Moreover, how should studies of HF programs be interpreted when such variation can exist?

The Chez Soi final report[172] outlines five key HF principles: (1) immediate access to housing with no housing readiness conditions, (2) consumer choice and self-determination, (3) recovery orientation, (4) individualized and person-driven supports, and (5) social and community integration.[172] However, a 2013 study of HF principles that involved interviews with both consumers and on-site staff across 4 "successful" HF programs identified five slightly different key ingredients: (1) low-threshold admissions policies, (2) harm reduction, (3) eviction prevention, (4) reduced service requirements, and (5) separation of housing and services.[140] While the guiding principles are not yet consistent in the literature, a few themes can be identified. Successful Housing First programs are low-threshold and help people to move in quickly and without contingencies. Second, the consumer is the driver of service engagement, but on-site staff are present and willing to help tenants move towards their individualized goals through harm-reduction models. As the Chez Soi study highlights, variations will exist across different housing sites, as no programs will be implemented identically. As a result, comparisons of results across programs should be made cautiously.

While model clarity has not been entirely reached, studies *have* demonstrated that access to services, including mental health services, outpatient counseling, and general support from on-site staff all improve outcomes in housing.[129,141,173] In fact, of the central components of true supportive housing models is the presence of on-site support staff—it is one of the most commonly reported-on elements of supported housing models.[129,132] As the Housing First model expands, on-site staff at supportive housing buildings will have an increasing responsibility to facilitate positive changes in the tenants. Ultimately, as is emphasized in the final Chez Soi report, "it is Housing First, but not Housing Only".[172]

Ultimately, the answer to the question "Does housing work?" depends on the definition of "work". Studies suggest that Housing First programs are effective in improving housing stability and keeping people out of homelessness. These programs also work to reduce costs to the system and may improve some mental and physical health outcomes in select populations, although these results are not consistent across the literature. However, if the question is, "Does housing work to improve quality of life or health outcomes in the general homeless population?", then the answer remains unclear. Moreover, as the previous critiques highlight, interpretations of the demonstrated effects of housing ought to be conservative, as these studies have several limitations and methodological weaknesses. Given that multiple studies have yet to find significant results in their expected outcomes, it will be important for future studies to explore *unexpected* outcomes in housing, such as decompensation or increased illness. Across the board, more rigorous, long-term studies that employ a randomized model are needed.[134,161,174]

II. Side effects of housing: Facts and speculations

While some of the initial results regarding Housing First programs are promising, it is important to recognize that housing is not a silver bullet and that it may produce negative outcomes in some individuals. Research has demonstrated that some people may follow unexpected trajectories after move in, yet little research has been done investigating these outcomes.[175] Negative outcomes that have been described include isolation, potential increases in substance misuse, heightened feelings of self-stigma and segregation, and increased stress due to higher frequency of disruptive behavior among tenants with mental health issues.[147,155,161,175–178]

The Chez Soi project in Canada, described previously, investigated the circumstances that led to negative outcomes in their intervention, which included scattered site housing with off-site case management services, through qualitative interviews. The results were described in a final report.[172] Based on interviews with participants, the researchers classified participants' stories into one of three "life courses" after moving into an HF program: positive, negative or mixed/neutral. They examined these trajectories in both the housed and treatment-as-usual (TAU) groups to compare the effects of housing on life course. The interviews revealed that unstable housing, negative social contacts, isolation, increased or continued heavy substance use, as well as hopelessness were all factors that contributed to negative life courses. The majority of these factors existed in both housed and TAU groups, but isolation was more associated with the housed group while unstable housing was predictably more common in the TAU group.[172] Additional factors associated with a mixed/neutral life course[ix] included perceived failures and disappointments. These individuals made attempts at changes once in housing and were discouraged when they were unable to follow through or faced other setbacks, expecting things to be different in housing.[162,172] As a comparison, factors related to positive life courses included taking on new social roles, supportive social contacts, and reduced substance use.

Overall, approximately 40% of people in housing in the Chez Soi study had negative or mixed/neutral trajectories, compared with over 70% in the TAU population. This suggests that housing may reduce the chances that person follows a negative life course, but still four out of ten people moving into housing may experience mixed or negative outcomes. Moreover, an earlier study of Chez Soi participants found that up to a third of their housed individuals experienced difficulties in community integration, mental health symptoms and substance use, community functioning[x] as well as quality of life.[175]

In fact, studies of quality of life (QoL) in supportive housing are unclear about the effects of housing on general wellbeing. The Chez Soi study found no significant differences in the generic QoL of participants after housing when compared with the TAU population.[162] However, there were significant improvements in specific components of QoL. Residents were more satisfied with their safety, living situation, and leisure activities than were the TAU group. These findings are consistent those of a study of QoL in Housing First participants in Philadelphia. This study, conducted by Henwood et al (2014) found no change in overall QoL after a year of follow-up, but did document changes in certain domains of QoL, like housing tenure, finances, and family relationships.[179] Domains that were not significant include satisfaction with daily activities, social relations, personal safety, and health.[179] Negative outcomes in housing and unclear changes in QoL call for more research to be done on why, where, and to whom these outcomes occur. Moreover, research must begin to understand which component of housing may lead to negative outcomes.

III. Risky transitions?

Recognizing the transition from homelessness to housing as a major event, several researchers have begun to hone in on this time period. An ethnographic study conducted in Washington evaluated both tenant and resident perspectives about living in a Housing First program, with some emphasis on the transition into housing. This study did not identify any unidimensional challenges faced by

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[ix] The mixed/neutral life course category was used to describe tenants who experience roughly equal positive and negative gains in their progress from baseline.

[x] Community functioning is defined and measured by the Multnomah Community Ability Scale. In that scale, community functioning is conceptually described as, “as an overall outcome with four sub-dimensions: Interference with Functioning (cognitive and physical factors), Adjustment to Living in the Community, Social Competence and Behavioral Problems.” [235]

staff or residents; that is, individuals faced unique challenges that were specific to their personal experiences. However, researchers did notice an increased fear of mortality among tenants. Residents were concerned about "drinking themselves to death". One commented, "Alcohol is serious. You got to talk to somebody, you got to have some friends, you got to have people who genuinely care for you. When you're on your own, you drink yourself to death. You're going to end up in trouble." (10).[180]

Another study entitled, "From Homeless to Housed: Caring for People in Transition" looked at the transition into private for-profit Single Room Occupancy (SRO) hotels.[181] The SRO hotels in the study did not have on-site support staff or any wrap-around services available. However the author, Lin Drury, makes a poignant concluding point that may apply to analyses of transitions into Housing-First programs:

> "[The clients'] transition from the street was incomplete and their acculturation to homelessness continued because their fundamental situation remained unchanged. They were impoverished; mentally ill; often substance-dependent, and/or chronically physically ill; and living in a society that stigmatized people with even one of these problems." (100)

The point that Drury makes here is critical. As was emphasized earlier, homelessness is the result of a lifetime of exposures. Moreover, many of the risk factors for homelessness, like adverse childhood experiences, are also associated with increased morbidity and mortality. In other words, a lifetime of adverse exposures leads simultaneously to chronic disease and chronic homelessness, which then interact synergistically to drive a person deeper into hardship and illness. This lifecourse perspective on homelessness and ill health suggests that providing an intervention in adulthood, while important for preventing further exposures, cannot erase previous experiences, reverse their effects, or fundamentally shift as person's place in society. However, Drury also points out that housing provides an opportunity to connect individuals to care and emphasizes the importance of relationships with service providers to make those connections. In other words, this ethnographic study highlights some strengths of housing, while providing a sober perspective on the reality of the lives of clients making this transition.[181]

A 2013 study done by Henwood et al gathered perspectives from people about to move into a Housing First (HF) program in the Skid Row area of Los Angeles. The researchers interviewed 38 people who had been accepted into a housing program, but who had *not yet* moved in. All participants were extremely optimistic about their imminent move indoors. One participant said that housing was "giving [him] an opportunity to join the human race again." (50). Other expectations and emotions about housing varied. Some participants expressed a "some things stay the same" sentiment and anticipated little change in their daily lives, including their utilization of service providers. Conversely, some saw housing as a way for them to take control of their daily lives. Other participants saw it as an opportunity to develop new relationships, while still others saw it as an opportunity to isolate themselves from the outside world. Almost all of the participants alluded to the importance of place: Some were frustrated by remaining in a neighborhood defined by homelessness while others took pride in surviving in that neighborhood and were confident in their resilience.[182] This study importantly emphasizes the need for managing expectations during the transition into housing. In the best scenario, this positivity could be used as an impetus for change but, alternatively, it could represent an idealization of housing that is not borne out in reality.

While research has begun to explore the challenges of the transition into housing, much of the discussion still remains anecdotal. On-site service providers across the country talk about tenants who "decompensate" in housing or those who "self-sabotage" after moving in. While not reflected in the academic literature, these more dramatic descriptions of negative outcomes appear in a supportive housing training manual for staff released by the U.S Department of Housing and Urban Development titled, "Issues in the First year". This manual prepares staff to recognize and respond to "psychiatric decompensation" (among other things) and lists several behaviors to expect from tenants including drug relapse, isolation, hostility, hoarding, or other self-destructive behaviors.[183]

Some on-site staff even report increased death during the early stages of new housing. This was the experience at several buildings operated by San Francisco's Direct Access to Housing Program. For example, a newly renovated building in the Tenderloin neighborhood of San Francisco was opened to new tenants in the winter of 2012 after a nine million dollar renovation. From December 2012-April 2013 public health researchers housed 50 individuals at this building as part of a randomized control trial looking at the benefits of supportive housing. Almost 10% of the group receiving the intervention (a permanent room at the building) passed away within the first six months of housing, compared with 2% in the control group, who did not receive any additional housing assistance. The size of this study is *not sufficient* to make any causality arguments, but researchers and staff became concerned about the potential for housing-associated early death. The mortality rate among the housed cohort was around 70 people per thousand person-years, which is over twice the rate of those found by studies looking at death among street homeless adults.[103] This difference may have been due to random chance, but may alternatively allude to the notion that there are people for whom the transition into housing could be dangerous or could precipitate death.

Two of the randomized studies described in the previous section (Stergiopoulis et al and Sadowski et al) did not find changes in mortality between their research groups.[162,164] However, studies focusing specifically on people living with HIV/AIDS (Buchanan et al and Schwarcz et al) have promising initial results for decreases in mortality among this population.[163,169] The study done by Larimer et al did not analyze changes in mortality in their study, however their paper reported that 9 out of 95 treatment participants died during the course of study while 0 out of 39 of the control participants passed away.[149]

Other literature documenting mortality in unstably housed populations includes a separate study out of Canada that examined mortality rates of people living in shelters, hotels, and rooming houses from 1999-2001. These researchers found that people living in shelters, rooming houses or hotels still had mortality rates substantially higher than those in the poorest income bracket of the housed population. However, the researchers did not compare rates between different types of homelessness, for example comparing mortality rates in shelters versus hotels.[184] A separate study looking at the effects of housing on alcohol consumption claimed that mortality rates in housing among this group compared to rates of the larger population of chronically homeless individuals with alcohol problems, although they did not publish specific numbers.[185] The literature is still unclear regarding the effect of housing on mortality, particularly permanent supportive housing provided through a Housing First model.

Research outside the housing field has found increases in mortality during major life transitions. A retrospective study of former inmates in Washington measured mortality rates during incarceration and the weeks following release. The researchers found dramatically higher mortality rates during the two weeks after release than at any other time. In fact, the mortality rates were over three times higher after release than they were during incarceration and still over 2.5 times the mortality rate in weeks 3-4 after release.[186] Risk of death due to suicide has also been shown to increase during major life transitions, like during the re-entry into civilian life after military service or after the loss of a job or relationship.[187–189] Other studies have observed and attempted to prevent suicide after psychiatric crises.[190]

The difficulties of transitioning indoors are largely undescribed in the literature, but exist in training manuals and from anecdotal accounts from staff. It appears that the literature has focused predominantly on evaluating the benefits of housing without fully engaging with the difficult experiences of moving indoors. Given that transitioning from homelessness to housing is a major life event, research is needed to explore the effects of this experience on morbidity and mortality.

Conclusions

I. Summary

So far this review has made five key points:

1. Homelessness is a continuing problem across the United States, particularly in urban cities of California.
2. The causes of homelessness are complex. Some researchers contend that the root causes of homelessness are structural conditions, such as lack of affordable housing, poverty, and inequality, which effectively turn individual vulnerabilities (like mental illness, substance use or family turmoil) into lost housing.
3. Once homeless, a person is at risk for decreased life chances through decreased material wealth, increased victimization, and increased morbidity and mortality. In other words, homelessness is a barrier to economic, social, and medical recovery.

4. Supportive housing provided through Housing First models is a good and increasingly popular intervention for people experiencing homelessness. It has been shown to reduce health care costs, improve housing outcomes, and improve the health of people experiencing HIV/AIDS.
5. Housing is a human right and the Housing First movement is making strides to provide that right to people experiencing homelessness. However, there is research that points to some negative outcomes in housing, including increased isolation. Concern about mortality and other negative outcomes remain purely anecdotal. Other literature around increased mortality during high-risk transitions merits a deeper examination of mortality during the early stages of supportive housing.

II. Introduction to study design

In light of these points, the following research is aiming to fill a research gap by studying mortality in supportive housing. Specifically, the research will be answering the following questions:

1. What are the mortality rates over time in supportive housing? Is there increased mortality during the first year compared to later years?

2. From the perspective of on-site staff, what are the factors that contribute to early mortality in housing?

3. From the perspective of on-site staff, what were the circumstances that led to the death of previous participants of the Direct Access to Housing program?

The first question will be answered by conducting a quantitative analysis of mortality for all participants of a Housing First program called Direct Access to Housing (DAH), a program operated by the San Francisco Department of Public Health. Data on all of their participants (people who were housed through their program from 1999-2014) will be cross-referenced with data from the National Death Index to calculate mortality rates in housing. The study hypothesis is that there will be an increased risk of mortality during the first year of housing as compared to later years.

The quantitative analysis will use survival curves to model mortality patterns in housing. Because so little research has been conducted explicitly analyzing mortality in this setting, this study is seeking to add to the literature by providing descriptive statistics for a Housing First program in San Francisco. The rates calculated by researchers here can then be used as a point of comparison for future studies. Additionally, researchers will be analyzing to see if mortality rates are higher during the early stages of housing as compared to later stages. “Early” and “late” stage definitions will be determined as the analysis proceeds. Researchers will also calculate the mortality rates for specific causes of death. This will be important for understanding if suicides or overdoses occur at higher rates early in housing, as literature suggests that these outcomes may increase during times of life transition.[186,189]

The second and third questions will be answered through in-depth interviews conducted with on-site staff at four DAH buildings in San Francisco. The interviews will illuminate trajectories or typologies of mortality in supportive housing and will shed light on the role that on-site providers play in tenants' life before death.

Researchers chose to employ in-depth interviews with on-site staff, versus with clients, for three reasons: First, as was mentioned above, on-site supportive staff are an important component of the Housing First model. While services are voluntary, support staff are a key part of the "treatment" of housing. As was emphasized in the report on the Chez Soi study, Housing First does not mean housing only. Interviews with staff will begin to illuminate the nature of staff-tenant relationships in the context of tenant death to understand the role they played in helping to connect tenants to services during this vulnerable time period. Second, this study chose to interview staff in lieu of tenants because this is a preliminary study that is seeking to identify themes and patterns in an area that has not yet been explored. The findings of these interviews can then be used to create informed and sensitive interview guides that can be applied to interviews with tenants or potentially members of the social networks of deceased clients. Lastly, this research is seeking to understand the circumstances that lead to death in housing. On-site support staff at the study sites have worked with multiple people who have passed away in housing and are uniquely positioned to notice themes and patterns in death among their previous tenants.

III. Looking Forward

Housing First (HF) programs are growing in number and popularity. Indeed, the HF model has been recognized by both private and public agencies as a core strategy to end homelessness.[18,45] While providing low-barrier, inclusive supportive housing is an essential intervention, it is equally important to understand the effects of that intervention. Through combining the quantitative and qualitative results of this study, the researchers hope to piece together a better picture of the transition from homelessness to supportive housing through the lens of mortality. Rather than seeking to make causal arguments, this study will be describing a phenomenon that has not been previously explained.

The goal of this study is to provide useful information to Housing First programs about the conditions that lead to death of tenants after moving from homelessness to housing. Ideally, these results will inform future programming that supports clients through this transition in a way that maximizes their overall wellbeing.

Narratives of death: A qualitative study of a Housing First program in San Francisco

Introduction

The Housing First movement (HFM) is making strides to end homelessness by prioritizing the most vulnerable people experiencing homelessness for rapid placement in permanent supportive housing.[129] Introduced in the 1990s, the HFM was designed to serve chronically homeless adults suffering from severe mental illness and substance use disorders by offering permanent housing combined with consumer-driven services provided through assertive community treatment (ACT) or intensive case management (ICM) programs. Treatment teams are comprised of people who are trained in the philosophies of the HFM.[191] These philosophies include prioritization of consumer choice and core principles of recovery and psychiatric rehabilitation.[192–194] The HFM's commitment to consumer choice marked a dramatic philosophical shift in the provision of housing away from provider-centered interventions and towards a more client-centered approach.[133,134] In contrast to its predecessor, the treatment firs model, the HFM recognizes that housing should be the first step towards healing and recovery rather than the reward for achieving those ends.[130,131]

While housing offered through the HFM has many measured benefits, some health-related outcomes remain unclear. Notably, one preliminary study and widespread non-systematic observations have found higher rates of mortality in HF programs compared to the general homeless population.[195] While conducting previous HF research, the first author of this paper witnessed a phenomenon of perceived high rates of early death at an HF site in San Francisco. This experience served as motivation to understand the circumstances leading to death in this setting.

I. *Shift from Treatment First to Housing First Programs*

The housing paradigm that preceded Housing First was called the "linear continuum model". In the literature it is also referred to as "linear residential treatment", "continuum-of-care", or, more colloquially, "treatment first" (TF).[191] This graduated model has been described as a staircase[xi] of services (see Figure 1), wherein the least restrictive options are offered first. A person can then progress up the "staircase" towards more autonomous housing as they demonstrate treatment compliance, psychiatric stability, and continued abstinence.[129,133,191] A person only "graduates" to independent living when he or she is deemed "housing ready".[196] Conversely, relapse, regression, or worsening psychiatric symptoms were seen as a lack of "housing readiness" or "housing worthiness".[191] In these cases the offending person was ushered back down the staircase towards less autonomous settings.

[xi] The analogy of the staircase first appeared in Sahlin, 1998, and then was propagated by Dr. Tsemberis.

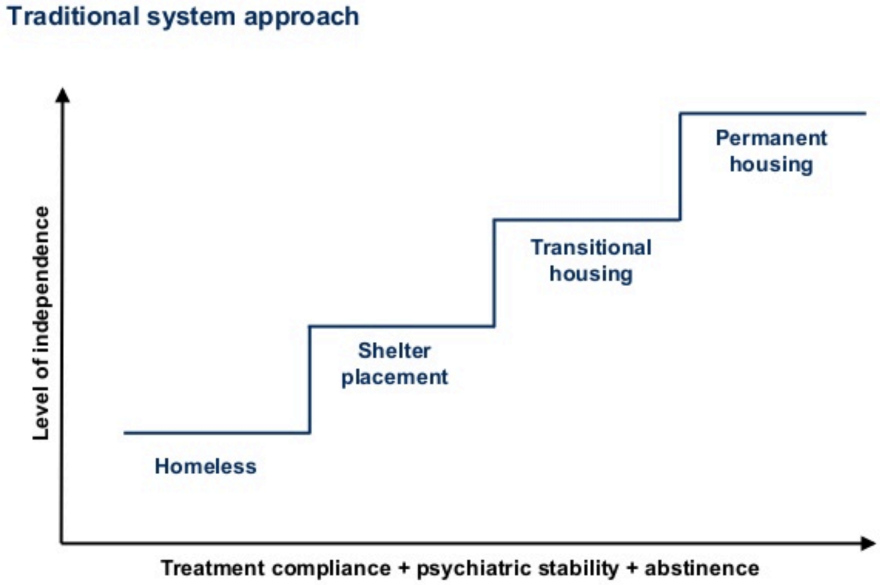

Figure 1. Taken from a presentation by Dr. Benjamin Henwood at the 2014 National Alliance to End Homelessness Annual Conference.[237]

The linear continuum paradigm began in the 1970s. It was created, in part, as an alternative to the institutional model of mental health care that had been dismantled over the previous two decades.[10] The philosophy and design of this program aligned with the broader American sentiment towards homelessness at the time, which held that poverty was the fault of the impoverished—a person became homeless through poor decisions, avoidable circumstances, and personal bad luck.[101,191] Stemming from this narrative, TF models were based on the idea that someone could only overcome their poverty and illness through the expert guidance of providers, like case managers, social workers, and psychiatrists.[196]

The implementation of TF models varied from state to state, but examples of programs included in the continuum were quarterway houses, halfway houses, supervised apartments, and independent living. Other models featured institutional home-like settings, hospitals, nursing facilities, group homes, or board-and-care centers.[136] Over the years that this model was implemented, no conceptual clarity was reached nor did standardized models emerge. Limitations of the model included a lack of client choice, stress resulting from multiple moves, the lengthy process of reaching independent housing, and the destabilization that was created when housing was contingent on treatment compliance.[129,131,133] Moreover, the focus on compliance to treatment rather than access to independent living led to a persistent dearth of housing facilities. Given that so few people reached the final stages, there was no demand to expand the supply of independent low-income housing. This continued lack of independent housing resulted in increased length of inpatient stays and increased demand for acute inpatient and emergency services as hospitals took the place of housing for people with no alternative and who did not meet the standards to progress through the linear model.[138] Ultimately, the model failed to adequately address the needs of the people it was trying to serve.[137] HF researchers Deborah Padgett and Benjamin Henwood describe the linear continuum as "a cruel and costly circle of futility".[191(p8)]

Consumers, advocates and program planners recognized the weaknesses of the linear model as well as the dire need for more affordable, independent housing.[129,133] Taking action, these stakeholders joined together to create a new model, which led to the birth of the HFM.[197] This change marked a paradigm shift that was defined by re-prioritizing client choice, creating "homes" not "treatment settings", and recognizing people as community members rather than patients.[132,133] The focus was to provide housing first (hence the birth of the movement name; see Figure 2) and then to work on the skills necessary for each person to work towards their own recovery goals, with individualization as a central tenet.[133] Rather than requiring treatment adherence and recovery, HF programs are defined by high levels of consumer choice with low demands regarding services or abstinence.[140] Rather than seeking to treat and cure patients, the goal of HF models is to provide housing stability and improve quality of life. The HFM is a harm reduction approach to its core.[141]

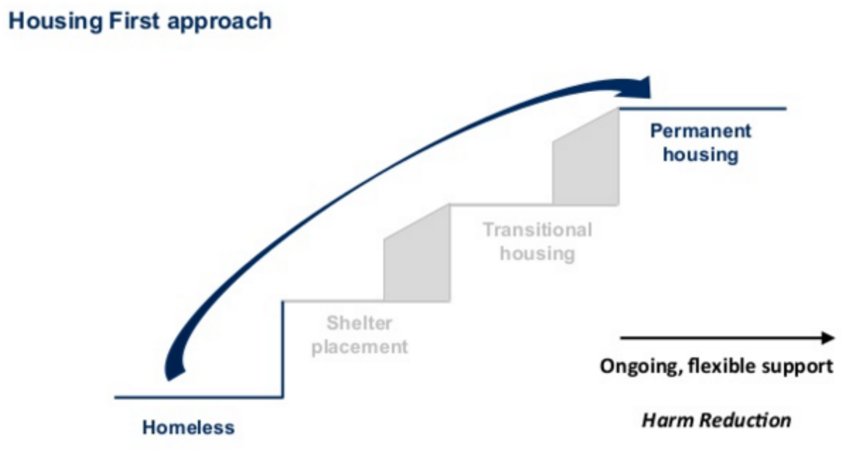

Figure 2. Taken from a presentation by Dr. Benjamin Henwood at the 2014 National Alliance to End Homelessness Annual Conference [237].

The shift from TF to HF marked an important philosophical shift from paternalism to autonomy and human rights [191]. Paternalism is a concept within medical ethics that holds that a provider can encroach on the autonomy or liberty of a patient/client if the intentions are to protect the patients' welfare.[198] Soft paternalism involves helping people act on their own values to serve their welfare, as for example in encouraging teens to attend a support group to improve their self-care. Hard paternalism involves overriding the patient's own autonomy or consent to protect their welfare, as in hospitalizing a person who is considered an immediate danger to him or herself.[198] Many paternalistic interventions fall between these two extremes.[199] The mandatory treatment requirements in the TF program are one example of a paternalistic policy. On the other hand, the HFM promotes autonomy by allowing program participants to dictate their own treatment plan. One of the founders of the HFM elaborates on this philosophical difference:

> Most traditional supportive housing programs are highly structured and permit only a narrow range of client choices. By limiting choice, these highly structured programs discourage autonomy, and they erode the very skills recovering people need to function effectively in the community. In sharp contrast to such programs, client-determination drives the PHF [Pathways to Housing First] philosophy. [130(p29)]

This philosophical shift (and the accompanying system changes) involved weighing the trade-offs between the emphasis on client-choice and on implementing mandatory policies that promoted engagement with treatment. Ultimately, the HFM retained some paternalistic nuances or, as one of the founders describes, some "non-negotiable requirements" [130]. These requirements include mandatory meetings with on-site staff and a commitment to communication, especially in times of relapse or crisis. Tsemberis explains that care teams must be particularly assertive during mental health crises[xii] because it is often then that clients are most in need of help and least likely to seek it.[130] In these situations, professional intervention is allowed to impinge on client choice.

The mandatory requirements in the HFM led some researchers to critique the notion of full "client choice" in HF programs. Löfstrand and Juhila (2012) suggest that the choices are actually the result of negotiations between clients and providers, somewhat like guided autonomous decision making. In light of the protocols in place that encourage clients to consult and listen to case managers in times of crisis, Löfstrand and Juhila assert that the original housing first model is more accurately promoting "informed choice".[200(p64)] In summary, while HF programs represent a significant swing towards autonomy and away from paternalism, the original HF model (further described below) retains some paternalistic policies that are designed to support participants in their new homes, thus demonstrating a balance of these two philosophies.

II. Expansion of the model and challenges with fidelity

The first and enduring "gold-standard" of the housing first model is titled Pathways to Housing, also known as Pathways to Housing First (PHF) or "Pathways".[129,191,201] Dr. Sam Tsemberis, one of the founders of the PHF model, describes it as a complex clinical program with three major components:

[xii] It could be argued that in times of mental health crises, a person is not acting autonomously given that their *capacity* is diminished. In that case, policies are not explicitly violating a person's autonomy (perhaps their liberty if they become institutionalized).

> (1) Program philosophy and practice values emphasizing consumer choice; (2) community-based, mobile support services; and (3) permanent scatter[ed]-site[xiii] housing.[191(p3)]

He further adds that because treatment adherence is not required, PHF models must employ harm reduction tactics to help reduce the risk of behaviors associated with mental illness or substance use.[191]

The PHF model was originally developed in New York City, but has since spread throughout the United States and internationally. It has risen as the leading model in the battle to end homelessness. The United States Interagency Council on Homelessness (USICH), the federal agency charged with coordinating the Federal response to homelessness, has called the HFM the "clear solution" and the "central antidote" to homelessness.[202] The widespread growth of HF programs has naturally led to variations from the original PHF model. Indeed, the founders of PHF were concerned that replicas and adaptations may adopt the name without adhering to the core principles.[191,192] To bring clarity and consistency to the growing field and to help engender consistency across the literature, PHF researchers created a fidelity measure.[192] Additionally, Tsemberis has recommended that the term "Pathways to Housing" only be used for high-fidelity models while "Housing First" can be applied to other variations.

The fidelity measure identified five guiding principles, which overlap with the three major components described above:

> (a) [E]liminating barriers to housing access and retention (i.e., no housing readiness), (b) creating a sense of home by separating housing and services, (c) facilitating community integration and minimizing stigma, (d) utilization a harm-reduction approach, and (e) adhering to consumer choice and providing individualized consumer-driven services that promote recovery.[192(p252)]

Stemming from these principles, researchers then derived 38 "potential ingredients" to help with the implementation of high-fidelity models.[192(p252)]

HF models across the country have varying degrees of fidelity to the original. During the early years of expansion, the model evolved to accommodate different urban settings, then to later to suburban and rural environments as well. One of the major variations that arose was the development of single-site models. The single-site design offers housing in a single building, where participants choose to receive centrally delivered on-site services. Single-site housing combined with elective on-site support is termed "supportive" housing, although there is some inconsistency in the literature regarding this name.[132] In contrast, scattered-site models allow participants to select from housing units located throughout the community. Support services are then offered through an assertive community outreach, whereby the providers visit the clients on a weekly basis. The original philosophy behind scattered-site housing models was to allow people to have a "normalized" housing experience. Single-site models, on the other hand, risked "recreating the institutionalization that undermines

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[xiii] Scatter-site aka "scattered-site" housing is a model in which clients are placed in buildings in which no more than 20% of the units are filled by HF participants.

social integration and independent living".[191(p4)] So far, studies have shown that single-site models have similar positive outcomes to scattered-site models.[160,203]

III. The research on Housing First

Importantly, HF programs have been shown to successfully keep people housed. Several studies have shown better housing retention for people in HF programs when compared to a treatment first design.[146,159] One study found that over 80% of HF participants were still housed 20 months after receiving the intervention.[204] In addition to improving housing retention, HF programs have been shown to reduce emergency shelter use, hospitalizations, and incarcerations, while improving some quality of life domains and reducing time spent homeless when compared to usual care groups.[144,154,155,169,179,205,206] The HFM has also been shown to as reduce costs to the health care system,[144,145,149] largely by decreasing hospital utilization rates.[145,150–154] Qualitative research has found that the housing provided gives participants a deep sense of safety and security. These benefits, referred to as "ontological security", capture the feeling of well-being that come from having a 'sense of constancy' in one's social and material environment.[207]

However, housing is not a silver bullet. While housing is essential for the protection of human rights, its effects on morbidity, mortality and overall quality of life among formerly homeless adults remain unclear.[117,134,143,164,174,179,208] One qualitative study found that approximately one-third of HF participants followed "unexpected trajectories" after move-in.[175] This group experienced difficulties in community integration, mental health symptoms and substance use, community functioning[xiv] and quality of life.[175] Other negative outcomes described in the literature include isolation, potential increases in substance misuse, heightened feelings of self-stigma and segregation, and increased stress due to higher frequency of disruptive behavior among tenants with mental health issues.[147,155,161,175–178] Anecdotal accounts from on-site support staff report incidences of psychiatric decompensation and even suspicions of increased mortality in housing.[209]

Suspicions of excess mortality in HF settings are supported by a recent study exploring mortality in a scattered-site HF setting in Philadelphia.[195] In this study, Henwood et al, found that adverse health outcomes associated with homelessness continue to affect health outcomes in housing settings. Moreover, their data showed higher mortality rates in HF settings compared with previously published literature of mortality rates of the general homeless population, suggesting that HF populations may experience excess mortality.[195] The authors speculated that this additional mortality burden may be due to a selection bias,

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[xiv] Community functioning is defined and measured by the Multnomah Community Ability Scale. In that scale, community functioning is conceptually described as, "as an overall outcome with four sub-dimensions: Interference with Functioning (cognitive and physical factors), Adjustment to Living in the Community, Social Competence and Behavioral Problems." [235]

as the individuals who are at highest-risk for death are typically selected for housing. They stressed that more research needs to be done to assess the impact of HF on mortality.[195] Specifically, do housing first populations indeed suffer excess mortality? And if so, is it due to selection bias for entry into housing or other factors? What *are* the factors contributing to death in HF settings?

IV. Current Study Aims

The HFM continues to gain momentum across the world. In the spirit of continuous quality improvement and transparency, this research seeks to understand the aspects of Housing First that may hinder improvement in the health of participants in a single-site HF program in San Francisco. To date, little research has been published evaluating San Francisco's HF program. San Francisco's program has notable deviations from the original PHF model, including increased rent requirements, (50% of income versus 30%), single-site congregate living, no requirements for weekly face-to-face meetings, services that are contingent on housing (lost housing means lost connection with support staff), services that are on-site rather than separated from the home setting, and a higher than suggested participant to staff ratio (PHF recommends ≤10:1, the buildings in this study ranged from 18:1 to 24:1). However, the San Francisco HF program adheres strongly to the tenets of reduced barriers to housing, client choice, and harm reduction. Anecdotally, on-site support staff from the buildings reported high levels of tenant mortality. These observations contributed to the impetus to explore health outcomes in this HF model.

As described above, the research on morbidity and mortality in housing is both limited and equivocal. Given the anecdotal concerns about death in the SF model, researchers sought to understand the effects on health of HF settings through the lens of mortality, with a focus on death occurring shortly after move-in. The early time frame was included in order to capture vulnerabilities inherent to the transition into housing and the months immediately following move-in. Literature suggests that transitional periods are a high-risk time,[187–189,210] particularly for this population.[124,181]

Researchers opted to interview on-site staff members, as they were seen as key-informants on the processes that lead to death in the building. Moreover, because the topic was mortality, the participants themselves could not be interviewed. This research is intended as a first step towards understanding the health-related challenges of HF programs and will inform necessary future research with participants themselves or their social networks. Our research questions were:

- How do on-site service providers at the San Francisco HF program explain the factors that generally contribute to participant mortality? What were the situations and circumstances leading to specific participant death?
- What do on-site providers perceive as the major challenges that new residents face in housing that could lead to death?

Through on-site providers' perspectives on the narratives of death of HF participants, the researchers hoped to understand the aspects of housing that can contribute to health deterioration. Moreover, as Tsemberis and other Pathways researchers have noted, Housing First is not a panacea and therefore, like all public health interventions, will not work for every client.[191] Another goal of this research is to begin to identify the people for whom this model is not an ideal fit from the majority who appear to benefit to date.

Methods

I. Population, setting, and recruitment

Participants were on-site staff members working in Direct Access to Housing (DAH) sites. DAH is a Housing First program of the San Francisco Department of Public Health. The program has 36 housing sites, which together provide units for over 1,700 formerly homeless adults. Each building has a unique combination of support staff that range from social workers, licensed clinical social workers, nurses, health workers, case managers, and property management. All housing sites have some degree of case management and 7 have on-site nursing services. The three buildings selected for this study had comparably robust on-site support services, including MSWs, LCSWs, health workers, and nurses. All three building sites selected for inclusion had similar on-site support teams and also had high rates of tenant death. Table 1 includes basic information about each of the study sites.

	Site A	**Site B**	**Site C**
Neighborhood	Tenderloin	Hayes Valley	Tenderloin
Number of residents	175 residents	120 residents	90 residents
On-site staff	6 social workers, 1 nurse, 1 health worker	4 social workers, 1 nurse	4 social workers, 1 nurse

Table 1. Description of study sites, including neighborhood, number of residents, and make-up of on-site staff.

All study sites were within 1 mile of each other. Two out of three sites were in the Tenderloin, a San Francisco neighborhood characterized by high-dense poverty, violence and thriving open-air drug markets.[211,212] Site B is situated half a mile west of the Tenderloin neighborhood, providing a small buffer from the intensity of substance use of the Tenderloin.

II. *Data collection*

Semi-structured interviews were completed from the fall of 2014 through the summer of 2015. The first author (ED), a non-Hispanic white female in her late 20s, collected the interview data. The interviewer is a graduate student in a joint MD/MS program who had three years' experience with homeless adults in San Francisco and who received prior training in qualitative research methods. She had previously worked in a position housing people at one of the study sites as a part of another HF research project As a result, she is familiar with the program and its policies. She received continuous guidance from the last author (CA), who has extensive experience with qualitative research with people experiencing homelessness and their providers.

To recruit participants, the second author (JB) introduced the student researcher (ED) to the lead member of each building's support service team. The student researcher visited each site to meet with each building's support services team prior to interviews to explain the project and answer questions. After this initial meeting, the student researcher recruited staff members over email. Ultimately, all staff members at each housing site consented to participate (n=16). Two staff members who had previously worked at one of the housing sites, but whom had recently left, were also recruited (n=2). A final key informant, the person responsible for selecting and placing participants into units for the city of San Francisco, was recruited for the study (n=1). Thus, nineteen interviews were conducted. Given that English language fluency is required for employment at program sites, there was no exclusion criterion based on language.

Interviews ranged from 30 to 70 minutes in length and were conducted in the participants' private work settings. The interview questions were focused on learning more about the processes surrounding death of the HF participants who died more quickly in the housing setting. Interviews were digitally recorded and transcribed by an outside service. After transcription, all audio recordings were destroyed. The interviewer wrote memos following every interview. All memos and transcripts were de-identified to maintain the confidentiality of staff and residents. The protocol for this study was approved by the San Francisco Department of Public Health as well as the University of California at San Francisco's (UCSF) Institutional Review Board.

III. Data analysis

The data analysis approach was informed by both grounded theory and an interpretivist epistemology. Grounded theory is a qualitative research method that is intended for exploratory research of social processes that are not yet well understood.[213-215] Grounded theory is characterized by an iterative research approach in which researchers are collecting and analyzing data simultaneously, allowing for an opportunity to return to the field to test developing hypotheses. The iterative process also applies to the process of code generation and theme-building, as initial codes are generated, applied, re-adjusted and re-applied until they are finalized.[214,215] Data analysis was further informed by an interpretivist epistemology, which holds that meaning is created through interactions between the researcher and the environment and that researchers' values and background experience inherently affect the research process.[216,217]

Interview transcripts and researcher memos were managed and coded in Dedoose, a cloud-based mixed methods research program.[218] Two authors (ED and CA) coded data into categories based on similar content and emerging categories were compared with previous ones using the constant comparative method of analysis.[213,219] Constant comparative methods allow researchers to find similarities and differences at each analytical level of the work. For this research, comparisons of statements or incidents were made within the same interview and between different interviews. These comparisons were used to establish analytic distinctions,[213,219] which later developed into analytic categories and themes. After the initial coding phase, researchers pooled common codes and themes to create a preliminary codebook. They then undertook a second round of independent coding of a subset of interviews using the preliminary codebook. After this second phase, researchers came back together to refine the codebook by removing or collapsing redundant codes. All transcripts were then re-coded by the first author. After the final coding phase, reports from codes were generated and examined by both ED and CA to explore emerging themes, which were captured in memos. Emerging themes were tested in the final few interviews. Once a preliminary analytic schema was produced, the findings were brought back to the three study sites and to a group of nurses for the housing program for feedback and triangulation. Final adjustments were made to best capture the perspectives of study participants, resulting in the final model.

Results

The data revealed multiple layers of health-related challenges that contributed to client health deterioration and death in HF settings. Staff talked about their clients facing unique challenges at different time periods during the transition into housing, which accumulated over time to create a total risk burden. The three layers, introduced chronologically, are: (1) pre-housing vulnerabilities, (2) risks inherent to the transition, and (3) risks that appear in or are amplified by life in single-site HF programs, referred to as longitudinal challenges. These challenges are not self-limited—they are interrelated and intensified by cyclical feedback mechanisms. Figure 3 illustrates the layering and compounding nature of these risks.

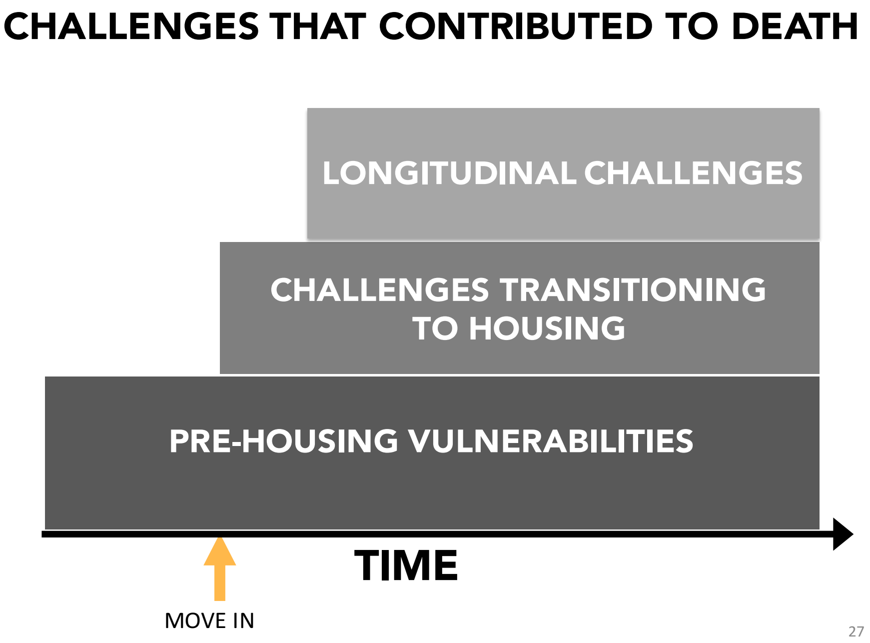

Figure 3. Staff described their clients facing different health-related challenges that were both unique in time and cumulative. This diagram captures the progressive accumulation of challenges as clients transitioned from homelessness to housing.

These three “layers” of risk will be discussed in sections II-IV of the results. Prior to these sections, the authors have included an explanation of our assumptions and other important framing for the results (section I). A final section (section V) will explore the challenges that staff described when attempting to help their clients navigate the challenges of housing. This final section will illustrate some of the philosophical tensions that arose among staff members when thinking about how to protect client choice—a central HF value—while also attempting to help clients in crisis.

I. Assumptions and Framing

An assumption of this research is that housing is a fundamental human right. This sentiment was echoed in the data. Staff members emphasized the intrinsic value of housing as a basic human right. One person said, “I really view housing as something that is ... It's like giving somebody food, it's giving somebody air… It's a basic need.” (P14) Once this basic need is met, clients had an opportunity to re-direct their attention towards other activities and goals. In contrast to homelessness, housing provided the bare minimum people needed to direct their efforts to work toward recovery, “When you are housed you can direct attention at other things, good and bad, right? But when you are not housed, you cannot direct attention at good.” (P10)

As will be shown below, staff described their clients moving into housing with profound medical and social vulnerabilities. Once indoors, clients began to engage differently with those vulnerabilities. Staff described some clients for whom housing was the missing piece that, once attained, allowed them to take steps towards stabilization and recovery. For these people, “all they needed was housing” (P14). A staff person described the hopeful recovery of a particularly vulnerable client who had moved indoors after many years outside:

> [H]e was still drinking like 9 pints of vodka a night… He looked horrible. He'd show up in my office and he'd have like drool coming out of his mouth. The whole time, he was saying, "I want to stop. I want to stop." Then he just started getting so much better. I feel like if he was still on the street, he would just drink himself to death. (P17)

Importantly, staff were clear that many clients do well in housing. They also explained that not all people follow this trajectory of stabilization. They noted that some new residents simply “maintain” (P10) while others “decompensate” (P08). Those who died early after move-in tended to be those who either maintain or deteriorate once they moved into housing. When asked about different client trajectories, one staff person described how some people are resistant to services when they move indoors, which can, in turn, affect health outcomes:

> It can go either way. Some people get [housing] right at the right moment and they can just kind of hold on and thrive… Then I see other people that are just like, they just can't even fathom the idea of what just happened. ‘Oh, I have a roof over my head. What do I do now?’… People are kind of burned sometimes once they finally get housing and they get very resistant. This is a small blip, right? In this whole life that they had. ‘How are you going to help me? I've been doing this for 40 years.’ There is a lot of resistance. For those folks, sometimes they don't participate in a plan. They end up, oftentimes, passing away more quickly. (P14)

In other words, housing worked well for some and for others it was not sufficient to alter their pre-housing trajectory.

The final point of framing for this project is that both researchers and study participants did not frame death as a necessarily negative outcome. As one person commented,

> I do step back and I reflect and say this is someone who a year ago did not have the opportunity to pass away at home and I am full of gratitude that someone was able to pass away being fully housed and that's just my perspective on things and I need that to continue doing the work we do because we have folks that before would have passed without a home of their own, without a place to call their own. I think that’ something. (P16)

While describing the stories of client decline, staff often focused on the challenging components of housing that may have contributed to this health deterioration. However, throughout the narratives of death and dying there was also an undertone of appreciation for the dignity that was added to the end of clients’ lives, as they were able to die indoors in a place they could call their own. Another staff person remarked that staff focused on, “just improving their [clients’] quality of life, letting them die with dignity. Like, if you're going to die, at least die and have a good last few months, get to feel human.” (P18)

In summary, this research has three assumptions important for framing the following results. First, housing is a basic right and is necessary for stabilization and recovery. Second, most people do well in housing, but there are some people who do not follow the expected trajectory and who may even decompensate after move-in. And, finally, while mortality is the focus of this research, it is not assumed that death is an inherently negative outcome. Staff emphasized that much of the death in the buildings was expected and that they were grateful that their clients were housed at the end of their lives.

II. Pre-housing vulnerabilities

Interviews revealed that the health-related risk factors used during the selection process for housing continued to be a challenge for clients once they moved indoors and that these risk factors often contributed to early death. The student researcher interviewed the clinical placement specialist to understand how clients were selected for housing. In that conversation, the placement specialist explained that clients were evaluated for housing based upon an application submitted by their community case manager. This application included a wide range of information from demographics, to medical history, to housing history. The placement specialist (historically a nurse practitioner) was then responsible for reviewing applications and choosing individuals to move into housing based upon their risk factors, which were combined to determine an “acuity score” for applicants. A higher score increases the likelihood of a housing placement, up to a point. Factors contributing to the vulnerability score included health care utilization, age, the presence of mental health diagnoses, substance abuse, mobility issues, cognitive impairment, current living conditions and certain medical diagnoses like HIV, cirrhosis, and end-stage renal disease. All new clients selected for housing had a combination of these risk factors. Indeed, when talking about the narratives of death, on-site staff emphasized the role of medical acuity, mental illness, substance use, and a history of trauma as major factors in the deterioration of client health. Each of these four risks will be discussed here.

a. “He was really, really sick”

The narratives of death from on-site providers emphasized that medical acuity predictably played a major role in tenant death. In many cases, providers described tenant death as “expected” or “unsurprising” in light of the dramatic medical illness that preceded their housing experience: “We knew he was going to pass away” (P08). In fact, some providers perceived that clients were placed into housing in order to die indoors.

> I had 2 tenants who moved in, and were brought in with the knowledge that they are very sick, and they will not live very long. I think they may

> have been like, ‘We want this person to die housed’, which is why they were moved along in the process... (P03)

Indeed, staff described how tenants moving into housing with high medical acuity often died shortly after moving indoors, which truncated their housing experience: “He was someone who was very, very ill when he moved in. I think he died within the first month…He barely had a chance to adjust to his home or anything.” (P09)

It became clear to staff that some clients moving into housing were beyond the point of recovery, which led a few staff members to re-conceptualize the broader role of as a palliative care service. This allowed these staff members to feel grounded in what they were doing: “[M]y supervisor has said, ‘We are a palliative care program for the active drug user’ and I think it creates a nice framework for understanding what we're doing.” (P15)

b. “Really severe mental health issues”

In addition to medical acuity, mental illness played a major role in the deaths of clients in housing. Tenants with severe mental illness often had impaired insight and thus “wrestled with the reality of [their] illness” (P06). Delusional systems, paranoia, and other forms of psychosis were cited as precipitating factors in client death. In more than one narrative, mental illness prevented clients from “conceptualizing” (P14) their illnesses, precluding health interventions that may have helped.

> She was so paranoid…paranoid schizophrenic…It was really undiagnosed because she was afraid to go to the doctors but she was urinating a lot and had a lot of incontinence all of a sudden. I was just like, ‘Ms. Thomas, I really think you need to go see your doctor. I think you have an infection and your kidneys might fail and you could die… She's like, ‘No, somebody is peeing on me.’…I found her deceased in the bathroom…[S]he would say, "My body hurts," or different things like that. I think people with mental health issues, they can't conceptualize what is pain or what is hurt. All these things that are hard to figure out. Is this the voices? Is this something this? Is this a hallucination? They can't figure it out. She passed away. I think that was directly related to her mental health issues. (P14)

In addition to impeding insight and judgment, staff described the negative effect of mental illness on clients’ *medical* illnesses and on their substance use.

> She was someone who you looked at her and you still got that essence of this very successful, vivacious person who was just completely decompensated and completely disorganized… I think that she was definitely using substances and addicted to her pain medications and mismanaging stuff, but that was all due to her mental health issues. (P09)

Finally, staff explained that mental illness led to death by deteriorating clients’ sense of self-worth, thus undermining their ability to hope for a healthier future. Specifically, they observed that severe depression would lead tenants to low points where they were not motivated to seek care, stop using drugs, or take any steps towards their own recovery.

> He's going to lose his arm. He's going to lose both of them possibly. He already lost a leg. He's in a wheelchair... He's just so depressed, so depressed. I feel like he would just care a little bit more about himself…if he could get somebody, some help. (P14)

Again, people were selected for housing on the basis of certain vulnerabilities, including mental illness. Staff observed that clients' untreated mental illness continued to be a major risk factor for tenant death in the buildings, particularly when in combination with other risk factors, such as substance abuse and medical acuity. Substance use, in particular, was a major vulnerability and contributed to health decline.

c. *"Complete, dependent addiction…"*

The inclusiveness of housing first models ensures that people with extended histories of substance use still have access to housing opportunities. Staff were clear that this inclusiveness was important, but they also added that, as a result, substance use was pervasive in the buildings. One staff member noted, "clients all the time told me, 'I've never seen such substance use or such drugs use as I have [in Building B]. This is worse than the Tenderloin.'"(P09) The Tenderloin, described above, is a high-poverty neighborhood in San Francisco suffers from the highest rate of substance use-related health problems in the city.[220] A staff member from a separate building observed that, "The use that we're talking about at [Building C] is just complete dependent addiction—that's total addictive drug users who have been using 20-30-40 years." Severe, all-consuming drug use was implicated in several narratives of tenant death, both directly (e.g., overdose) and indirectly:

> I've noticed that almost all the deaths we've had are substance abuse related. Which doesn't mean they're overdose, but they're people who are so caught in their addiction and become so physically ill and aren't able to stop and it leads to their death. (P02)

While some death was due to chronic use, several staff members described instances of overdose as well. As one staff person said when describing one of her clients, "he did a lot of drugs… He'd probably been doing it for a long time. That's how he ended up here. That was just the night that he had too much. (P17) Fatal overdoses were described as "surprising" or "unexpected" because these clients often did not have other comorbid medical vulnerabilities. Meanwhile, chronic substance use visibly and predictably led to client death.

Oftentimes, tenants who died from substance-related deaths were described as having complicated relationships with their substance use. One staff member reflected on the story of her client:

> [H]e used a lot of alcohol… he was going to kill his liver. A lot of our work was around trying to get him into [a program] to sober up a little bit. He

> expressed some interest in that. He was dependent on alcohol. That was a need for him.
>
> He really didn’t like what this did to him, didn’t like the way he looked, didn’t like the way other people looked at him. At the same time, it was an addiction. He couldn’t really stop. (P03)

Both client ambivalence and internal conflict related to substance use were mentioned frequently. When unpacking the circumstances leading to one client’s death, a staff person described how the tension between health and substance use was difficult for this client:

> Interviewer: Did you get a sense if he wanted to keep living?
>
> P16: …[H]e really wanted to continue using… [Living and using] were very interconnected and complicated for him. (P16)

Interviewees consistently described how many HF participants were placed into housing with extended histories of substance use. They described how this substance use had often already eroded clients’ health and continued to contribute to health deterioration in housing.

d. Trauma and poverty

The final pre-housing vulnerability that was frequently implicated in health decline was a history of trauma and poverty. When thinking about characteristics common among all HF clients, one staff emphasized that, above all else, “everyone was poor…just like really, really poor” (P10). As the frequent companion to poverty, a history of trauma was also prevalent among HF participants and continued to impact health outcomes once clients moved indoors. Staff explained that this history of trauma ranged from physical violence, emotional abuse, to abandonment and loss. They also described how many clients’ experiences of trauma often as early as birth and often led to homelessness in clients’ adult lives:

> [I]t's not just having been homeless for a long time, which had its own set of extreme traumas. Almost everybody here had trauma since they were born which is why they ended up on the street anyway. That doesn't go away because they're housed and so supportive services are so important and ongoing basically forever. (P02)

Another staff member reiterated this point by noting that the most important intervention may be early prevention in order to give people hope for a future. This staff person suggested, “Instead of building more of these buildings to accommodate people 20 years from now, let's try to get in a little earlier and give people something to live for.” (P17)

Staff also described the longitudinal effects of early experiences of trauma. In fact, one staff member implicated trauma as the fundamental cause of protracted substance use, which she framed as “passive suicide”.

> Well, I see substance use as a passive suicide…People don't want to actively die, or commit suicide, or take their life, but they're just doing it passively by using drugs because there's a risk every time and they know there's a risk every time. They don't really want to die, but it's that piece of

> them that tells them they're not worth anything, their lives aren't worth anything as human beings. I wouldn't say anybody felt like they wanted to die, or were actively suicidal, or depressed. I think it's just from the history of trauma. (P02)

Given these observations, staff acknowledged the limitations of housing to reverse the effects of a lifetime of trauma: "[A] month of housing isn't going to make up for 25 years of homelessness." (P06)

In summary, staff described four sets of pre-housing vulnerabilities that impacted the health and mortality of clients in the San Francisco Housing First setting. Staff reported that their clients moved in with severe medical and mental health morbidities, which unsurprisingly continued to affect client health outcomes indoors. In fact, many staff had the perception that their clients were moved into housing *because* of their extreme health vulnerabilities. The clinical placement specialist's description of the selection process for housing corroborated this suspicion. Moreover, concurrent and very high levels of substance abuse complicated clients' medical and mental health morbidities. Staff described the role of substance abuse in nearly every narrative they shared of client death. People without substance use disorders were frequently described as the exception to the norm. Finally, staff observed that clients' extensive histories of trauma impacted their health outcomes in the building, primarily by inhibiting their ability to hope for a healthier future, and thus undermining their ability to work towards recovery.

III. Challenges of the transition

In addition to the vulnerabilities that clients brought into housing, staff observed challenges that were specific to the transition period from homelessness to a life indoors. Staff described how the transition into housing was smooth for some and difficult for others. The transition-specific risks that came up in this research included emotionally jarring cultural changes (and consequent mental health dysregulation), physical health decompensation and the negative health effects of a lack of independent living skills.

a. "Whoa, oh my god. I'm housed."

Staff described a vulnerable period immediately after move-in, during which people are "a lot of risk to themselves" (P08). This transition period was described as "inherently chaotic" and sometimes "triggering" (P18) for clients. One staff person remembered her client saying that moving in, "is really rough. [I] don't have any of my supports here" (P09). During this chaotic transitional period, some staff observed their clients mentally decompensate, which put them at risk for negative health outcomes.

> It's almost inevitable that people decompensate that first few months and then we see people stabilize again after they've adjusted…We had all those deaths at first and I think some of those were people

> decompensating…We'd have people stuck up in the sun roof stuff, up there getting all mingled into things. A lot of people are really vulnerable in the community that just don't lock their doors, walk around naked, have their money out, have whatever kinds of things out… Definitely massive amounts of substance use and then there's just really an emotional dysregulation…(P08)

Staff described how this emotional dysregulation was made more difficult by new cultural expectations and challenges with socialization. As one person said, "…there are certain rules that I think are present out there, that aren't appropriate for indoor living…" (P06).

Staff explained how clients sometimes reverted to survival behaviors that may have been necessary for a life outdoors, but were not useful—and often maladaptive—indoors. Some of the behaviors staff described were a "get yours first" mentality, hoarding behaviors, or unhealthy ways of asking for help. Another staff person described these behaviors as follows:

> Like scarcity complex. People will keep, hoard food here. I know that's just a long history of not having any food. I'm just like, 'You're going to have food…You'll be fed.' Getting people out of the survival mode and trying to just reassure them that this can be stable if they want it. There's a couple things you need to do to keep this stable. That's like keeping your room up and clean. You taking a shower and a bath. Hygienic pieces and those sorts of things to avoid an infection. (P14)

Lack of hygiene came up frequently as a risky behavior. It was not uncommon for residents to die of an infection and, as a result, staff were careful to help people maintain "basic living conditions" (P14). Another health-related effect of street coping behavior described by staff was a dangerous expectation that, "when I need help, it just happens" (P17). This staff person explained,

> People who have learned that lifestyle, that, 'I'm going to pass out and somebody [on the street] is going to take care of me.' You might still be thinking that, when you move in, like, 'Oh, well if I pass out or if I overdose or something, somebody is going to take care of me,' when, really, you're going to get a knock on your door for the entire week, but that's it, and then people are just going to find you dead. (P17)

In short, the emotional demands of transitioning indoors combined with the pressures of new social and cultural expectations led to mental health dysregulation and, at times, an exacerbation of psychiatric symptoms.

b. "The fight is over"

Staff even speculated that transitioning to housing from homelessness accelerates death as a person finally "lets go"(P04) or "stop[s] fighting" (P06). This hypothesized physiologic let-down was described as the result of shifting from hypervigilance to safety and relaxation, as if stepping back from survival mode precipitated a health decline. Some staff speculated that this deterioration was a "hormonal thing" (P08). One person said, "when people can take a breather for a minute and stop and they die." (P08) Other staff hypothesized that this physical decompensation was emotionally rooted:

> It feels like sometimes people move in from the street and then they expire pretty quickly and I think that there's something to the perception of they've been fighting and struggling day to day just to exist and then they're housed and then they get a moment to relax and then that fight is over. Maybe there's a flood of other feelings and other memories and everything they've been trying to keep at bay or ... I don't know. (P15)

c. *"Literally, you're independent. It's independent living…"*

Immediately upon moving into housing clients are faced with the responsibilities of independent living. Several staff emphasized that this expectation for *independent* living often posed significant health risks to their clients. Expectations after move-in, like cooking, cleaning, and neighborliness were challenges for many who either were too acutely ill to address their own needs or did not have previous experiences of self-care to draw from. As one staff person said, "there's a group of people that just don't know how to live indoors, because either they haven't in a really long time, or they just were not taught those skills" (P04).

Clients at particular risk for health deterioration as a result of a lack of independent living skills were those transitioning into housing from a higher level of care, typically a board and care facility or other rehab center. A staff person described the trauma that one of her clients faced after transitioning into housing from a long-term care facility. This same client died within a year of moving indoors.

> [Josephine is] just that example of someone, she came in from [long-term care] and she was clean and sober…She was super overwhelmed by living independently when she moved in. She was really scared and she would show up like half dressed and screaming and just wheel herself down and, you know, just really freaking out because she would come from this really high level of care and then all of a sudden… her workers wouldn't arrive in the morning. She would be stuck in bed and she would yell, 'I'm pissing and shitting all over myself!' (P10)

This same social worker believed that Josephine should not have moved back to the building given her risks, highlighting the importance of tenant fit. In fact, this notion of "fit" came up several times in the data. Providers often described attempting to support clients whom they believed to be too medically acute to be living in an independent setting—clients who lacked the basic capacity to meet their own needs.

> One of the things that we're looking for are really that people are set up properly to come in here. I can tell that two of the more recent move-ins, very similar profile, three years in a board-and-care out of county…It's a big leap. I think people don't really appreciate how big of a leap it is, from all of your meals being provided, all of your medications being provided

> …Then immediately they can't manage independent living without a huge amount of support. Even though we're staffed, social workers have caseloads of thirty-five—it's not intensive case management. We need outside support to come in and help with that stuff. (P01)

Several staff members described the medical risk associated with the process of moving clients in who have complicated health needs, but who lack the individual skills to address them. The quote above demonstrates the degree to which staff feel under-resourced to fully support clients. Another staff person described how these situations are exacerbated when clients are not connected to services before moving indoors:

> We end up with clients who have a long history of being dependent on others to provide care for them, and then all of the sudden they're thrown in here. When they come in here they're not linked to any services, they're not linked to the most basic of stuff like meal deliveries…If they're not, you're setting them up for disaster. Lack of preparation doesn't give people a fair shot. (P07)

In summary, the transition into housing was described by staff as a chaotic and often stressful time. Some clients were described as experiencing an emotional dysregulation that, at times, led to health consequences. Staff also speculated that the transition out of a life of survival mode and into housing could precipitate a health decline, as it appeared that a handful of clients passed away shortly after moving in. Finally, the transition into housing was a moment where other vulnerabilities were revealed. Namely, the health effects of a lack of independent living skills or competency for self-care were brought to the forefront during this liminal period, particularly when clients were moving in from a higher level of care.

IV. Longitudinal challenges in housing

While many challenges came up during the transition, other health challenges manifested later and continued over time. These longitudinal effects were most often described as the result of the social dynamics in the buildings. Given that the San Francisco HF model deviated from the original PHF model by having a single-site design, the effects of social dynamics are particularly important. On the whole, tenant communities were framed in both a positive and negative light by staff interviewees, "I think that sometimes that social, that very social thing can be very positive and then other times it can be very negative" (P15), stated one staff member. Residents often looked out for and helped to care for each other. Moreover, through engaging with the building community, staff brought up how clients developed a positive sense of belonging. One staff person described a conversation she had with two of her clients when she discussed alternate housing options that may be a better fit for their needs:

> The woman that doesn't use drugs, I've asked her to move out of [Building C] and put her in a nicer building because she's aging in place and she's just an odd mix…She's like, 'No, I love it here. I want to stay.'

> …There's something very warm and comforting about [Building C]... There's another gentleman that I have that's in his 80s and would do really well [in a different building]. He's like, 'Nope. I don't want to go. I feel comfortable here. I don't want something different. I like it here.' (P15)

However, staff also described significant negative consequences of social pressures in the building. Most notably, staff observed social dynamics perpetuating substance use and, at times, contributing to resident relapse. Staff also described violent or otherwise manipulative dynamics occurring between residents. In contrast, residents who were considered to be "high functioning" were often noted as "not hanging out in the community around here" (P14). The effects of social networks on substance abuse and violence are discussed below.

a. "I will never stop using if I stay in this building"

When staff talked about the challenges of housing that led to death, substance abuse was a major—if not the primary—factor in many cases. On-site staff described complicated dynamics within the social networks that had significant effects on substance use. Similar to social networks among homeless communities, tenant communities continued to form around drug use. One staff member talked about group substance use as a form of harm reduction—using together allowed clients to use more safely.

> [T]hey would be using on the outside anyway. It's not that the community is creating that. In a way maybe they're offering some support to each other and maybe even some safety in that if something happens to somebody there's other people there. (P02)

Yet most staff framed this dynamic as a double-edged sword, noting that there are both supportive and harmful dynamics at play. Clients may look out for each other and share camaraderie, but the intertwining of friendship with drug use meant reducing or stopping use was extraordinarily challenging.

Staff described how clients' motivation to cut back on substance use was complicated by the positive effects of having fellowship among neighbors. To stop using drugs was to sacrifice friendships and a sense of belonging.

> It was interesting because he had a huge support system of friends who were attached to his relationship with drugs. These guys were in the house helping care for him, but they were also supplying him with methamphetamine. You never would have been able to separate those issues. He would have lost his entire social support system if he decided not to use methamphetamine. (P01)

In particular, people working on becoming sober were characterized as being at high risk for relapse in this setting. Notably, there are no housing options within the San Francisco HF program that are explicitly designed to support people with goals of sobriety. One staff member observed,

> When thinking about people who have substance abuse disorders and who are trying to do something different or want something different,

> putting them back into the setting is really difficult, but when you're looking at the portfolio, there aren't a lot of options... (P15)

As a result, people face significant barriers to recovery and tenants early in their sobriety are at high risk of relapse after move-in.

> I will say that I may not notice it on my own, but people tell me, 'I was as addict before I moved here, but, now that I'm here, I need help, because there's always somebody knocking on your door.' Like, 'Hey, I got this. Let's do this.' I've had many people come to me and just say, 'I don't know if I can stay in this building. I can't. I will never stop using if stay in this building. I can't get away from it.' (P17)

The negative effects of substance use in the buildings are perpetuated by the dynamics of the drug economy and the activity of "community entrepreneurs" (P16). The juxtaposition of people with cognitive vulnerabilities with people who are entrenched in the economy of substance use can lead to "predatory behaviors" (P01). Multiple staff described these exploitative relationships:

> Well because if you look at the building, there are people who have cognitive deficits or like dementia. They're just declining. Then you have people who are in the height of their substance abuse and they're trying to manipulate, they're trying to figure out any way to get what they want. You put those two groups together, and you have like the targets and you have the, whatever word, people who are taking advantage of the targets. (P17)

Some staff hesitantly mentioned that in an ideal world they would "select out" people dealing substances, but recognized the ethical and logistical challenges that stem from refusing housing to someone based on economic survival tactics. Meanwhile, other staff believed that everyone should be given an opportunity to be housed:

> [Drug dealers are] here for the same reason as everybody else. Like there's one individual in particular—that's what he does. I'm sure it hurts a lot of people, but this guy is here for the same reason as everybody else…if he wasn't doing this, there's 50 other people outside the front door that would be doing the same thing. (P17)

Indeed, the networks immediately outside neighborhood also had an effect on the intractability of the substance-using culture. This was particularly pronounced in building A, which is situated on one of the most highly trafficked drug sale areas in the city:

> I think it's a really challenging neighborhood… Why would you take these folks of this population and … put them right down in the center of the hot-bed?...[I]n the perfect world, that wouldn't be the case, but it's just where we have. (P06)

In summary, multiple forces impeded tenants' ability to become sober. First, the overwhelming ubiquity of drugs made them readily accessible, if not simply unavoidable. Second, tenant social communities were defined by substance use, thus introducing intense peer pressure and also tethering a sense of belonging to substance use. Additionally, the exploitative activity of community entrepreneurs put fellow residents, some of whom suffered from cognitive deficits, at particularly high risk for relapse and continued use. Finally, the social networks in the neighborhoods surrounding the buildings made it even more difficult for clients to find a respite from high levels of drug activity. In fact, some staff were so disillusioned by the intractability of substance abuse in the buildings that they believed their clients with goals of sobriety were better off not living in the building at all:

> I feel because of the location it's really hard and I find that with that particular client the fact that he was trying to stop drinking and maybe using and having so much access to it made it really hard for him to quit. I feel like in the end he ended up losing his housing and to be honest with you I feel it was the best thing for him to leave here, not be here. Because he chooses…he begin engaging with everyone, risky behaviors and you know all these things and I feel like in the end he was probably a little worse than when he came in. (P13)

These sections have demonstrated the multiple layers of challenges that Housing First participants face when moving into new housing settings that can potentially impact health outcomes. As was described in section II, clients moved into the buildings with profound vulnerabilities that predisposed them to health decline. On top of these vulnerabilities, clients were then faced with new challenges of independent living, which were reviewed in section III. These new challenges included expectations to maintain a baseline standard of living, to take care of their own medical needs, and to behave in accordance with building rules and new social norms. Staff believed that the transition to living in this new environment was often mentally or physically destabilizing for clients. Finally, staff described how clients faced longitudinal challenges related to the social pressures in the building. Most notably, staff explained how these social dynamics made it extremely challenging for their clients to work towards recovery or sobriety. While the communities in the buildings were sometimes beneficial and supportive, at other times they were harmful or contributed to persistent substance use. These dynamics were reviewed in section IV. The final section below will discuss how staff related to their client's vulnerabilities and will touch on some philosophical tensions that came up during the discussion of the protection of client choice in the buildings.

V. How staff address lack of self-care among tenants

When discussing mortality in the buildings, providers also reflected on the role that they played (or did not play) in the events leading up to resident death. While this research was not originally intended to explore the duties of on-site staff in relation to resident health, it became clear that staff members grappled with what their role ought to be in helping tenants get access to potentially life-saving interventions. Some staff mentioned that there were times they wished mandatory engagement with services was allowed, while others believed that respecting client autonomy was paramount, no matter the consequences. Staff members also varied in their styles of care, including how aggressively they recruited clients and how often they touched base with clients on their caseload. The different staff beliefs regarding mandatory practices will be discussed here.

a. *"People should do whatever they want to do"*

Some staff felt that clients ought to be supported in all their decisions, regardless of medical or psychological consequences. These providers emphasized that clients are "experts in their own lives" and have the right to make decisions that are in line with their goals and values.

> The only thing you can say is, at the end of the day, Pablo, or Roberto, or whoever, they're an expert in their own lives, and their own experiences. If a medication that he's supposed to take is giving him side effects that he really doesn't want and he knows that without that medication he's going to die… He's going to die anyway, and he decides, "I don't want to live with those side effects. I would rather have a shorter, side effect free life." As long as he understands that that's what he's doing, then that's his choice. (P03)

This social worker was firmly of the mind that clients should be able to make their own decisions, regardless of the consequences. In turn, this belief may have allowed this social worker to look at death with a different perspective. In response to a comment about the difficulty of having two clients pass away around the same time, this staff member reflected that it was "slightly" hard and that ultimately she is "pretty okay with people making the choices that they want to make" (P03). In other words, some staff who were committed to protecting autonomy did not project the feelings of helplessness that other staff members portrayed and were, at times, less disturbed when clients passed away as a consequence of their decisions.

Additionally, some members staff felt that the protecting of autonomy was inherently healing. In response to the question about the possibility of implementing mandatory services, one staff responded with a resounding "no" and emphasized that staff should focus on bearing witness to their clients' lives and, in that way, provide support and meaning. This staff person said,

> These are their lives. I think the best thing we can do and pretty much the only thing we can do is just bear witness to it. I think that's healing in itself…I think that that's providing people with a level of dignity that they've never had…I don't believe in mandating anything… There's this new law, Laura's Law[xv]. I have a lot of issues with it…I'm on the range of 'people

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[xv] Laura's Law is a California state law that allows for court-ordered assisted outpatient treatment if a court finds a person to meet several criteria. These criteria include, but are not limited to, being a person that is 18 years or older with a mental illness who has been hospitalized or institutionalized twice within the last 36 months due to a mental illness *or* whose mental illness

> should do whatever the fuck they want to do'. I mean, honestly, people should be able to do whatever they want to do. (P14)

Laura's law is a California state law that allows for court-ordered assisted mental health outpatient treatment in certain cases when people have been institutionalized multiple times due to their mental illness or in situations where people become a harm to themselves or others. The protection of autonomy in people with mental illness is an enormously complicated area of research. This excerpt demonstrates how one staff member does not think mandatory treatment is appropriate for HF clients.

b. *"People are falling through the cracks"*

In contrast to the staff with pro-autonomy sentiments above, other staff expressed frustration, resignation or despair when reflecting on the outcomes of their patients who died in the buildings. These sentiments typically came up when staff were discussing their clients with disabling physical or mental illness. A comment from a nurse emphasized the complexities of providing care for this population:

> There's some people that are here who need more than what is provided here. There needs to be another level too…There's people that are living here and are expected to live independently… they aren't thriving and would do much better in a more supportive environment. That doesn't really exist. When we've looked into board and care for people we're told that there aren't any in the city.... There's a lot of people here who are slipping through the cracks also by not getting as much care as they need. Sometimes that care may need to be mandated. (P02)

This quote demonstrates a few points worth emphasizing. First, the frustration that this staff member was feeling was due to the lack of options available for people who are severely ill and without resources. Thus, the solution of mandated care is not necessarily to combat decisions being made by the client, but rather to fill a void in the provision of services. Second, this nurse notes how the nature of the HF facilities is not sufficient to meet this client's medical needs.

In addition to medical needs, mental health acuity among clients also affected staff's feelings about mandated care and the notion of autonomous decision-making in the acutely ill. One person described,

> [W]e've got a handful of severely mentally ill people. All of them at some point have been conserved, not presently conserved, no path to mandating medication. One guy, Graham, he was just at the [hospital] for four weeks… When he's combative he stays in seclusion most of the time. They gave him an injection, and then he was due for an injection a week after he got back here, won't touch it. He pulls the fire alarm and turns on the sprinklers, just completely psychotic. Eventually he gets arrested in the

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has resulted in serious and violent behavior towards themselves or others. Other criteria include that the person's condition is deteriorating, that they would likely benefit from outpatient treatment, and that they have a history of noncompliance. [236]

> community usually for not paying a restaurant bill or something like that. He becomes very combative with police whenever he has police contact. We keep hoping that Laura's Law will somehow apply to him. (P01)

In contrast to the staff member above with “issues” regarding Laura’s Law, this staff person saw it as a potential answer to one clients’ struggles in cycling through hospitalizations, the legal system and housing.

A staff member from a different building describes a client moving in with both medical and mental vulnerabilities. While this staff person doesn’t explicitly call for mandated care, she calls into question the notion of “freedom of choice” in housing.

> She'd been in a higher level of care. They'd tried to step her down various times and it was difficult, but I remember I did her screening. It was at the very beginning when I first got the job and I just remember knowing, ‘This woman, just no way. There's no way she's going to make it.’ I was fresh and green enough I wouldn't have said that to anyone. Now I would…[She] was just absolutely not able to take care of herself. She just was not able to be independent… She would get raped often out in the community and she would come back just really confused and just keep drinking and lose her money and her ID and all this stuff… She's just one that I actually think about as that bad match that shouldn't be here. It's a difficult thing. I remember her referring case manager really caring about her a lot and I remember her being, having this hope for her to be able to have this life of self, what's the word? ‘Freedom of choice’, I don't know… (P08)

This staff member describes losing her early idealism as she saw clients deteriorate in housing. She also reflects on ‘freedom of choice’ with some skepticism. Throughout the interview, she focused on the importance of tenant fit and articulated that due to the lack of other housing options in San Francisco, many tenants had higher levels of need than what the building was equipped to offer. In these circumstances, she believed that extra or mandated support was appropriate. After being asked if she thought client outcomes would improve with mandatory service requirements, she responded, “Totally. Yeah. I don’t know if I would have thought that when I first started working here but now I’m like, I would shout it to the world” (P08). The notion of fit and appropriateness came up often in the interviews, with staff commenting how the one-size-fits-all model with no required care or individualized components puts increased onus on clients to take steps towards their own recovery. The tension then arose when clients were not able to step up the plate, leaving staff with the question of how much to push clients to action or when to intervene when they regress.

c. “Walking the tightrope”

Not all staff fell clearly on one side or the other, many described having “mixed feelings” (P04). One staff person described having to traverse the “tightrope” between these perspectives on a daily basis. He attempted to balance helping people learn to “see the value in things” with not treating the residents like children (P18).

Other staff handled the tensions between protecting client choice and encroaching on autonomy in other ways, much of which centered on drawing boundaries for staff that delineate when staff should intervene when a client was decompensating, missing, or in crisis. For example, one social worker implemented policy changes that helped colleagues refer to formal rules to determine how to act in certain situations:

> [W]e were asked to do wellness checks with people a lot. Now we have a general policy. It's a case-by-case basis because we take into account how fragile people's health is, but in general, if we haven't seen someone for a day or 2 days, it's not cause to break into their room and then invade their privacy. We really have to have a reason, a really reasonable suspicion, or it needs to a long enough amount of time that we know that it's important to do that. That's a lot of work too, because if you were going to be doing wellness checks daily on all of your clients who are in fragile health, then you'd basically be doing it on most of the building, which we were doing. That can become a full-time job. (P09)

Having a formal protocol helped staff avoid encroaching on tenant privacy, while also protected staff time and sanity. This quote suggests that without these boundaries, staff grappling with the burden of having to be vigilant about wellness checks and saving clients in crisis could be as risk for burnout.

While some staff implemented policies, many other staff members resigned themselves to an “I can’t make them do it” viewpoint:

> He will come to me crying and he will ask for help like begging me to help him. Just like a little kid and he felt like I was going to fix his world. I would tell him, ‘Listen hey Norman if you don’t do your part I can tell you and put things in place for you and do whatever. If you don’t follow through with anything there is nothing I can do.’ He was so fearful of death…Even that Friday before I left he was crying and he was like, ‘Alicia I don’t what to die, Alicia help me, Alicia,’ and it was just quite hard. Because you put all this effort, all this energy. We know eventually you are like, ‘if you don’t change what you are doing right now you are going to die.’ (P08)

This was a commonly held position among staff across all study sites.

Finally, many people suggested alternative models for HF that could help to avoid some of the most difficult moments of crisis. One person suggested,

> It would be nice to be able to have graduated floors or something; you can move to the fifth floor once you've had some stability in here, with people who are more mature, stable residents. Just try and have a level system for people to move into, and then a place that people could go if they really want to be sober. (P01)

These staff members felt that having a graduated system of housing that was designed to support people with higher medical needs would minimize the frequency of tenant crises and would allow staff members to focus on helping people stabilize, rather than spending time grappling with how to intervene (or not) in client crises. One staff person described her view of the current situation by saying,

> [I]deally we should get in residents that were interested in [this housing]. [Clients who say], 'I'm working on getting clean,' or 'I'm working on lessening these symptoms that I have'…I think there's enough people in the city that probably would be a good match for housing that I think ideally that's who we would move in here. I don't think that's what's happening. I think what's happening is they're looking to save money and they're moving people from a higher level of care or they're moving in people who are really high emergency users and housing cuts down on emergency use… Lots of them are just a mess when they come in and it's like, 'What did you think was going to happen?' (P08)

In her view, this type of client buy-in to housing would allow her relationship with clients to be more productive, as they would already be positioned to work towards certain goals.

Another theme in staff suggestions was to offer more robust mental health services on site, in order to be better able to help clients in moments of crisis and potentially to avert future crises.

Discussion

This research found that participants entering housing sometimes accrued additional layers of health-related risks over time that culminated in an increased total risk burden for early death. Many of the risk factors that contributed to death in the San Francisco HF setting were risks associated with experiencing homelessness that were "carried" with HF participants into housing. These risks included medical co-morbidities, severe mental illness, substance use, and an extensive history of trauma. In addition to these risks, participants experienced additional challenges during the transition into housing and continuously during their tenancy. Transitional risks included physical and mental health decompensation and challenges of independent daily living. Additionally, longitudinal risks in housing were frequently framed by the context of social networks. Staff described residents having both positive and negative social experiences. Some positive experiences included a sense of community and camaraderie and the protective effects of having a watchful community of friends. However, negative experiences were also described. Residents were faced with extreme social pressure to use substances and experienced violence and manipulation.

Finally, this research described a conflicting discourse among providers regarding the appropriate philosophy for care in HF settings. Some supported the protection of client autonomy, no matter the outcomes, while others felt that some mandatory requirements would be appropriate and effective in HF settings. This latter sentiment was tied to frustration in the lack of services across the city to meet the needs of people moving in the this setting.

I. Limitations

The limitations of this study include a small sample size, and results that are representative only of the San Francisco Housing First program, specifically the single-site buildings that feature on-site support services. Secondly, researchers interviewed key informants who observed, but did not experience, the social phenomenon being studied. Researchers also did not reach out to the other personal social contacts of the people who died in the buildings. Finally, as the staff served as key informants, researchers are not capturing the narratives of clients who did *not* engage with these services, who may have been facing different challenges than clients who did engage with services.

II. Risks for death

The paper by Henwood et al (2015), in the only previous study exploring mortality in HF settings, finding that HF participants may experience excess mortality compared to the general homeless population.[195] As was mentioned earlier, they speculated that this increase in death could be due to the fact that people selected for housing chosen for their greater risk for mortality. The results presented suggest that this may be the case for the San Francisco HF program. Multiple staff reported that their clients were suffering from severe medical co-morbidities when they moved indoors. Moreover, the Clinical Placement Specialist confirmed that people were selected from the waitlist based upon their medical acuity, with applicants of higher acuity and multiple diagnoses receiving priority status for housing.

Henwood et al also found that HF participants faced *different* mortality-related risks compared to people currently experiencing homelessness. More specifically, they found that circulatory system disease was the leading cause of death among members of their HF study cohort (30% of deaths), followed by cancer (22%). Notably, drugs or alcohol only accounted for 10% of deaths in their study. As a comparison, a 2013 paper studying mortality among the currently homeless population found that the leading cause of death was drug overdose (17% of deaths), followed closely by cancer and heart disease (16% respectively).[108] The research presented here suggests that the reported causes of death found in vital statistics data or in other medical record documentation of the deaths occurring in single-site HF settings may underrepresent the impact of certain more proximal causes of death. For example, nursing staff described how substance abuse contributed to nearly *all* of the deaths in the building and other staff confirmed that substance abuse was one of the primary health issues facing HF participants. Notably, study participants explained that substance-abuse contributed to death not only through overdose and the physical effects of chronic use, but also as a result of clients neglecting their health while consumed in the throes of addiction.

In addition to substance abuse, mental illness played a major role in the deterioration and eventual death of clients in the San Francisco HF program. However, quantitative research regarding the causes of death both in HF settings and in the general homeless population does not capture the effects that disabling mental illness can have on mortality outcomes.[103,108,221] Despite the lack of data reflecting the role of mental health in the death of people experiencing homelessness, one social worker interviewed for this research shared a belief that mental illness was the greatest barrier to the health improvement of her clients, as delusions, paranoia, and psychosis prevented HF clients from understanding their medical illnesses and was also a barrier to seeking care.

Finally, this research suggests that in addition to individual medical and mental health morbidities, there may be additional risks to client health associated with the housing process and structure. First, the process of transitioning from homelessness to housing may lead to mental or physical health decompensation after move-in as clients are faced with the emotional turmoil that results from shifting from life of hypervigilance to one of increased introspection and new external expectations associated with being a renter. These findings are consistent with a qualitative analysis of a single-site housing first site in Seattle conducted by Collins et al (2012) also pointed out challenges in certain “transitional phases” of the housing experience.[180] These phases included moving in, community building, managing the day-to-day, and transitions out of housing, noting both strengths and weaknesses at each stage. Authors interviewed both clients and staff to reach their conclusions. In their results they described the move-in phase as “disorienting” for HF participants.[180(p6)]

In addition to the procedural risk intrinsic to the transition to housing, this research uncovered potential risks that were inherent to the design of the single-site HF program. Specifically, staff described the resident social networks as potentially having both positive and negative effects on health. The following section will discuss this finding.

a. *Potential health risks of the single-site model*

The San Francisco model deviated from the original PHF model in several ways, with the single-site design representing the most prominent change. Literature on variations to the original HFM have suggested that single-site buildings may demonstrate similar beneficial effects to scattered-site models.[191,203] However, the results presented here suggest that the social dynamics of single-site buildings may affect health outcomes of HF participants in single-site settings. Staff described how social networks in the buildings had both positive and negative effects on resident health outcomes. Protective effects came from residents looking out for one another. Staff recalled being notified by residents to check in on their neighbors and, in general, staff felt that residents helped to keep “a pulse” on the building. Moreover, the results here suggest that single-site settings give tenants an opportunity to feel like a part of a community. Negative effects, however, came up in the context of substance use and violence.

Other qualitative research of the single-site HF programs have uncovered similar dual effects of relationships.[180] The researchers from Seattle, described above, reported that residents felt a sense of solidarity with their neighbors that engendered "pride in the uniqueness of the project community".[180(p6)] In addition, those researchers described tenants supporting and helping one another with health-related tasks like retrieving others' wheelchairs or calling for help of another ill resident. On the other hand, that study also mentioned clients experiencing frequent physical and verbal altercations with their neighbors.

In contrast to the Seattle research, findings here suggest a more pronounced negative effect of social network in HF settings in the context of substance abuse. Staff comments suggested that social networks may have perpetuated substance use and contributed to relapse. This happened through peer pressure, persistent and aggressive solicitations for drug sale, and through the complicated interweaving of camaraderie and substance abuse. Indeed, research regarding social networks in the homeless population has found that an individual is more likely to increase their substance use if their social network is characterized by high levels of substance abuse.[222] A study of interventions to address substance use in the homeless population stressed that effective measures must frame substance use as a social problem as well as an individual problem.[223] In short, the results presented here are consistent with broader literature that suggests that social networks defined by substance abuse can make it particularly difficult for a person to move towards recovery. On the other hand, some research suggests that positive social networks in housing settings may help reduce substance use for some people.[224]

III. Ethical considerations: 'Client choice' in HF settings

HF models are structured to focus on client choice and to elevate the strengths of program participants. These programs are based on the belief that the protection of autonomy is, itself, the best way to respect people's interests. Respecting autonomy, per the founders of HR, "empowers clients to make choices, develop self-determination, and begin their individual journey toward recovery and community integration".[130(p2)] In San Francisco, the HF program prioritized autonomy to an even greater degree than the original model by eliminating the requirement for weekly meetings with case managers or social workers. Interviews revealed some discomfort among staff, many of whom noted that this protection of client autonomy at times *conflicted* with client wellbeing. For example, protracted and relapsing substance use led to painful, rapid, health deterioration. In other cases severe mental illness prevented clients from grasping the reality of an illness, let alone seeking care. The potentially negative flip-side of a firm protection of autonomy is the abandonment of people who need, but refuse, care, perhaps at the times when they need it most [225]. Some critiques of strict autonomy-protective models go as far as to ironically assert that protecting autonomy allows people to "die with their rights on".[226] The tensions brought up in the interviews were particularly pronounced when on-site providers believed that client behaviors did not align with the clients' own values or long-term goals. This potential misalignment of behaviors and values begs the question, are these HF clients making fully autonomous decisions? The authors of this paper propose that constraints inherent to the HF structure and environment can affect clients' autonomy. Two levels of influence will be considered here: (1) The individual and (2) the community/system. First, we will review the foundations for autonomy.

a. Autonomy

The definition of autonomous decision-making in the context of a patient-provider scenario is complex and varies across the literature. It becomes even more complicated when applied to people with addiction disorders or severe mental illness.[225,227] On one hand, autonomy can be understood as a negative right because it sets limits for providers—it tells the provider what they are not allowed to do.[228] Alternatively, autonomy can be conceived in a positive sense, as the capacity to make decisions through a process that is reflective and consistent with a person's identity and values.[225,229] This process includes the ability to distinguish between short-term impulsive desires and long term goals; in other words, a person must be able to separate first order and second order desires, where second order desires refers to what the person wants to be motivated by when she reflects on it and is free from coercion.[229–231] Acting on short-term desires is, thus, only deemed autonomous when these actions reflect the person's values or longer term goals, or have been subject to sufficient critical reflection.[225,230] Within this theory, someone suffering from a substance use disorder or an acute episode of a severe mental illness would not be considered fully autonomous, as it is common to succumb to immediate desires or impulses to the detriment of more important values or long-term goals.[225,227]

Another way to frame the discussion about autonomy in the HF setting is to consider the requirements for informed consent. If it is clear that clients are giving informed consent to waive treatment, then arguments for mandatory or compulsory intervention are weakened. The pillars of informed consent, per Beauchamp and Childress (2001), are disclosure, understanding, competence, voluntariness, and consent. *Disclosure* requires that patients be given all the information needed to make a decision and are additionally given an opportunity to ask questions and reach full *understanding* of the consequences of their actions.[198] The *competence* criterion requires that patients have intact decision-making capacity, which may require lengthy medical and legal evaluation. *Voluntariness* requires that patients make decisions free from manipulation or coercion from others or from their own addictions or mental illness—no outside sources should be unduly influencing the decision, nor should they be hijacked by irresistible fears or desires. Finally, after these criteria are met, patients must actually give their *consent*.

Regardless of the framework used to explore autonomy in the provider-patient interaction, what remains central to the protection of autonomy is a strong provider-client relationship. A longitudinal dialogue that is defined by trust and openness gives patients the opportunity to convey the issues that are important to them as well as their values or second-order desires.[225] Through connection and openness, a provider can more astutely evaluate patients and even help prevent relapse or deterioration.

b. *Evaluating 'client choice' at the individual level*

It is generally agreed upon that people with severe mental illness who are acutely psychotic do not meet the competence criteria for informed consent.[227] This is the basis of laws that allow people to be admitted to psychiatric hospitals against their will. Literature around the care for patients with severe, disabling substance use disorders enters a hazier ethical area that will not be fully covered here. Summarized briefly, people with severe substance use disorders may, at times, not fulfill the competency requirements to provide informed consent.[225] In the San Francisco HF settings, providers described multiple scenarios where clients were gripped with mental illness or substance use that had fatal consequences. In such cases, it is problematic to consider the person to have made an informed choice to refuse treatment.

However, whether or not such choices are informed, perhaps the strongest case that can be made for *not* intervening paternalistically in such cases is to argue that these housing clients are not medical patients but housing clients. This seems to fit what some of the social workers believe when they argue for a dignity-centered perspective through which clients were allowed to die on their own terms in safe place that they could call their own—a death that was dignified and defined by independence. Further, given that HF participants are considered community members, rather than patients, the notions of "informed consent" may not fully apply.[232] On the other hand, these deaths could be examples of "dying with your rights on", the critique mentioned above.[226] The tensions between these two perspectives became particularly salient during times of crises— in "to kick-in or not to kick-in the door" scenarios. HF programs may be able to address some staff concern by creating very clear policies that outline when certain tactics are merited and when they are not. One participant described implementing such policies in her new workplace, which reduced the workload and mental stress on her staff. This further suggests that boundary-setting policies can help decrease stress and prevent burnout among staff.

c. The community and the greater system

As was described above, the research presented here suggests that social networks in the buildings may have a significant negative effect on HF participants and also may prevent recovery. Statements from clients relayed by staff members suggest that the pressure to use in the building was so overwhelming that recovery felt impossible. This pressure could be seen as a form of manipulation that alters the decision-making processes for clients in a way that may impede their ability to act on their long-term goals. When considered in the context of informed consent, this pressure would be affecting the ‘voluntariness’ criterion for informed consent. Some providers emphasized that while they knew people living in the buildings were negatively affecting other tenants, they felt strongly about protecting *all* peoples’ rights to permanent housing. However, protecting the autonomy of individuals who perpetuated the drug use in the building potentially impinged on the autonomy of other tenants who then faced additional barriers to recovery and thus were, to an extent, manipulated to continue using. Not only were the social dynamics within the building perpetuating substance use, but also the neighborhoods surrounding the buildings, thus further constraining participants’ ability to find environments that were conducive to sobriety or recovery. Literature in the field of social epidemiology, particularly the work of Emile Durkheim, has shown similar effects of communities and neighborhoods to predict health outcomes.[233] More specifically, this literature has suggest that an individual’s risk for negative health outcomes are tied to the experiences and conditions of the social group from which they came.[234]

Finally, several staff members spoke broadly about the lack of housing options in the city to meet the needs of their clients. A lack of options within the system as a whole led to negative outcomes resulting from a mismatch between the goals and values of residents and the realities in the buildings. In the context of substance abuse, several providers mentioned how San Francisco is a “harm reduction city” (P01) and did not have appropriate housing options for people early in their sobriety. Thus, the *system* was constraining the potential outcomes on clients. Further, by not having more medically supportive settings, other clients were left ill-equipped to manage their health care needs in the HF setting. In reaction to this, many staff members suggested that some HF programs include hospice-level services for participants.

Finally, a dearth of accessible, affordable mental health care meant that clients’ mental health issues often remained under treated. All of these considerations are important to consider when discussing “client choice” in housing because, as staff members described, the choices *available* to clients are inherently limited. In this way, the system could be seen as manipulating client decision-making. The healthy decisions are not the easy decisions.

Conclusion

This research has implications for both the future implementation of and evaluation of Housing First (HF) programs. First and most broadly, the findings suggest that the structure of social services in San Francisco is such that the San Francisco HF program is filling a service gap that it is not yet equipped to fill. The lack of appropriate care options for this low-income population with complex social, medical and psychiatric needs leaves supportive housing as one of the only places to safely house some of the city’s most complex, highest utilizing (i.e., expensive) residents experiencing homelessness. As a result, on-site staff felt that they were, at times, not equipped to support the needs of their clients. This structure not only puts staff at risk for burnout, but may also be failing to meet the health-related needs of HF participants. Several staff either suggested that intermediate service options be offered prior to independent living to support them in their transition indoors or that the HF program offer a building that is designed and equipped to address the complex medical needs of acutely ill new residents. Not only could this better meet the needs of clients, but it could also give on-site staff the time and energy to implement or bolster other supportive programming in the buildings, like community-building events or job training programs. Moreover, given that many clients are moved indoors near the end of their life, it would be appropriate to have buildings equipped to offer end-of-life care for this population.

On the whole, the “one-size-fits-all” model of San Francisco HF program was a major point of critique among staff. This call for more diversity in the types of housing services was not solely to address clients’ complex medical needs; staff also emphasized the need for buildings that are designed to support people working towards sobriety. By offering buildings with different types of support regarding substance use, the HF program could better protect the choices and goals of all HF participants, not just those who continue to use indoors. These alternate buildings could create social environments that are centered on recovery and could potentially support the development of friendships based upon activities other than substance use.

Another consideration for future HF programs are the differential health effects of employing a scattered-site versus single-site model. This research cannot make claims about the relative benefits and weaknesses of each, but it can shine light on some of the challenges of a single-site design previously unrecognized in the literature. Namely, the research suggests that the social dynamics of a single-site building may perpetuate the dominant social norms of its residents. This reiterates the need to consider *which* social norms are being protected or promoted in a single-site setting and calls for a re-consideration of the strengths of a scattered-site design for people looking to have a clean slate, so to speak, for their recovery. The single-site design appears to be susceptible to influence by previously existing community norms among its residents.

Regarding the future evaluation of health outcomes in HF settings, this research suggests that there may be unique challenges to the transition indoors and that the vulnerabilities used to select people for housing will continue to be major predictive factors for health outcomes once people are housed. Moreover, several more distal influences on health outcomes and death, such as trauma, mental illness and substance use, are generally not explicitly included in vital statistics and, thus, may be underestimated as risk factors for death.

These pre-existing vulnerabilities also help to put health outcomes research in HF settings into perspective. Literature has confirmed that poverty and the experience of homelessness predicts negative health outcomes and increases mortality.[22,103] For many people moving into HF settings with histories of both, housing is one of the final “treatments” they will receive and may not be impactful enough to change their health trajectories. Thus, research on "outcomes" in this setting should stop to consider which outcomes to evaluate and prioritize. Perhaps looking at health in isolation does not capture some of the most positive things about receiving housing, such as having a home for one's final days. Perhaps dignity or a positive sense of self-worth are more fitting outcomes on which to focus. In conclusion, it may be most important to recognize that the San Francisco Housing First program is offering a fundamental service to thousands of people, allowing them to live out the remainder of their lives in a safe place to call their own, fulfilling a right and need that, for many, would otherwise never have been fulfilled.

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