Homelessness and Public Health in Los Angeles

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A note on the 2019 Coronavirus pandemic

This report was written in Summer 2019 for an anticipated Fall 2019 release. Throughout the fall, we engaged in an exhaustive process of review with stakeholders throughout LA County and beyond. While we believed strongly in our conclusions, we took a circuitous path to release in part to weigh the potential political implications of our report. We had just targeted a March 31 release date when the process of statewide and nationwide lockdown began.

The 2019 Coronavirus pandemic has upended both the lives of LA's homeless population and many aspects of the homelessness response. It is estimated that the US homeless population could see as many as 21,000 hospitalizations and 3,000 deaths due to COVID-19, with the potential for 2,600 hospitalizations and 400 fatalities in LA County alone. The US Congress responded by including $4 billion in federal support for homelessness response in the Coronavirus Aid, Relief and Economic Security (CARES) Act. Efforts are currently in motion to transition thousands of homeless individuals into hotels or other low-density emergency accommodations. Service agencies including the LA Homeless Services Authority have moved quickly to engage in remote outreach by phone and internet, and to collect more timely screening and testing data. These rapid innovations hold the promise not just of protecting thousands from harm, but also of building a more resilient homelessness response growing forward.

Because our report anticipates so many critical efforts during the crisis, it may offer a roadmap through the challenging road ahead. The unprecedented mobilization currently underway carries both transformative potential and devastating risks. One risk is that we fail to mobilize and protect our most vulnerable population. Another risk is that homeless people are brought in from the cold during a pandemic only to be cast out as soon as the emergency is over.

You can find continuing updates on COVID-19's effects on the homeless population and the unfolding response in future versions of the Culhane report and in the associated visualization tool.

- Randall Kuhn, March 31, 2020

Executive Summary

Los Angeles faces a housing crisis of unprecedented scale. After years of underinvestment, in 2016/2017 LA County voters approved Measures H and HHH, which provided an infusion of resources for homeless services, permanent housing, and integrated outreach through the LA County Homeless Initiative (HI). An estimated 58,936 individuals in LA County remain homeless as of January 2019, 75% of them unsheltered and living on streets, in tents, or encampments. Our best estimates suggest that the homeless population has grown since 2017.

HI takes a Housing First approach to homelessness, with the largest amount of total funds allocated to housing solutions. However, rehousing is often subject to delays in construction and case management. These delays, combined with persistent market forces driving new homelessness, have left the county well short of its targets. While no forecasts were issued, the initial gap analysis for HI had assumed a 34% reduction in the total homeless count from 2016 to 2019. The count has in fact increased by 26% over that period, meaning 28,000 more homeless clients than anticipated on any night. Whereas cities with comparable homeless crises such as New York have focused on increasing the availability of emergency shelters and safe havens in addition to permanent housing, LA County's relatively low investment in transitional options has resulted in persistent levels of unsheltered homelessness.

Research has shown that homelessness has severe health consequences. Homeless individuals have a high risk of mortality, with a recent LA County Medical Examiner report finding an average age of death of 48 for women and 51 for men. Homeless individuals have much higher risks of mental illness, substance abuse, infectious disease, chronic illness, violence, and reproductive health risks than the general population. Much less is known about the health burdens associated with being unsheltered, but most evidence points to substantially greater health risks given the more intense exposures to violence, weather, pollution, poor sanitation, and behavioral risk. Research is just beginning to quantify the burdens of living on the streets.

Our analysis of the LA County homelessness response drew on expert interviews, data analysis, and document review. Beyond the growing numerical gap between HI's targets and actual trends, we identified five critical service gaps that require immediate attention:

1) **Taking a person-centered approach** that recognizes both the diversity of client needs and the limitations of existing resources, yet honors the principle that everyone deserves housing;
2) **Improving access to emergency shelters** by reducing legal and political barriers to construction and adopting "low barrier shelters" that facilitate entry;
3) **Delivering comprehensive street medicine and other services** to unsheltered homeless populations using evidence-based models that support the path to housing and recovery
4) **Adopting more extensive outreach models** that engage citizens, empower homeless clients and leverage mobile technology so that case workers can focus on clients most in need;
5) **Strengthening data collection and research methods** to understand the consequences of unsheltered homelessness, pilot new service models, and evaluate rehousing efforts.

Introduction

From 2011 to 2017, LA County experienced an unprecedented spike in its homeless population, specifically in its unsheltered population. In January 2017, LA County was estimated to have 55,048 homeless individuals on a single night, with 73% of them lacking shelter.[1] Homelessness disproportionately affects the African-American community, who account for 40% of the homeless population, due to a legacy of exclusion from housing, employment and health care opportunities.[2] This unfolding public health emergency was unexpected in that it occurred in the midst of an ongoing economic recovery. Yet cities throughout the US have seen rising levels of homelessness due in large part to rising rents.[3] In 2017, the total budget of the Los Angeles Homeless Services Agency (LAHSA) was 1/15th the budget of the New York City Department of Homeless Services, even though the cities had equivalent homeless populations.[4]

In 2016 and 2017, LA County voters passed an unprecedented series of ballot measures aimed at tackling the homelessness crisis, with Measure H providing $360 million in annual sales tax to finance new services and Measure HHH providing a $1.2 billion bond to finance Permanent Supportive Housing (PSH). The core unifying principle of the new LA County Homeless Initiative (HI) was "Housing First." The Housing First (HF) model recognizes that housing is a human right, a critical driver of health, and a necessary precondition for recovery. Funds allocated for immediate needs went towards rehousing, emergency shelters, and services to individuals remaining homeless while long-term strategies focused on durable ways to create permanent housing and prevent homelessness.

The ensuing two years have seen considerable activity and progress, along with persistent struggles against the forces driving the housing crisis. Progress includes impressive growth in the construction of new housing, the incorporation of thousands of new clients in a Coordinated Entry System, and the placement of thousands of individuals into permanent housing.[5] The City of LA's A Bridge Home program has committed to building at least 200 emergency bridge housing units in each of LA's 15 city council districts.[6] At the same time, the single-night estimate of LA's homeless population, a crude measure that draws considerable political and media scrutiny, has risen slightly.[7] A crisis that was years in the making may take years to show visible signs of success. Against this backdrop, we have seen rising concern about the public health and safety consequences of homelessness and a number of recent attacks against homeless individuals.[8–10]

Report methodology

The goal of this report is to take stock of homelessness and public health in LA County. Our goal is neither to evaluate HI's progress toward achieving its stated goals nor to criticize those goals, but rather to reflect on where we are, where we are heading, and what more we can do. We build on the excellent Health Impact Assessment of Measure H/HHH carried out by the LA County Department of Public Health in the run-up to the Measure H election.[11] Whereas that report assessed the likely impacts of key efforts funded under Measure H, we take a broader view of the landscape by exploring actions not emphasized under Measure H.

Our results draw on analysis of existing data, literature review, and interviews with key informants. Our review of existing data on homelessness in LA served to highlight the unique dimension of homelessness in LA County, specifically the unusually high share of the homeless population who are unsheltered: individuals who sleep on the street, in tents, or in vehicles rather than in homeless shelters. We then present a systematic literature review of evidence on homelessness and health, with an emphasis on studies from LA and the few studies that specifically address the health concerns of unsheltered homeless populations.

Our gap analysis draws both on the literature review, on a review of the documents and media reports cited subsequently, and on 10 interviews with key informants working in the area of health and homelessness. Informants include experts in medicine, mental health, nursing, program evaluation, social work, and public health. We also draw on dozens of informal conversations and feedback from 15 reviewers of earlier drafts, including all informants along with leading homelessness researchers in the fields of social work, medicine, and sociology.

For the remainder of this report, we use the term *LA* primarily to refer to Los Angeles County, where homeless services are administered by LAHSA, a joint powers authority of the City and County of LA. We maintain this unity of focus to simplify our presentation. Although many forces affecting homelessness are under the jurisdictions of the 88 cites of LA County, most notably housing construction and zoning, we focus on the county at large. We note that even those solutions that are indeed under municipal jurisdiction depend in many cases on regional authorities and are subject to state law and a range of federal regulations and funding sources.

Causes of Homelessness

Homelessness exists at the intersection of poverty, systemic racism, bad luck, and societal neglect.[12] Structural and individual factors interact to cause homelessness.[13,14] The most critical structural determinant of homelessness is an inadequate supply of low-cost housing and high housing costs.[3,13] Other structural factors include a lack of available jobs, particularly for low-skilled workers, policies that restrict access to disability, health, and pension benefits among vulnerable populations,[13,15] and structural racism in systems such as housing, criminal justice, employment and social services. Individual risk factors include mental health and substance abuse problems, adverse early childhood experiences, limited social support, poverty, personal or parental history of incarceration, and exposure to combat.[13,15–17]

The causes and consequences of homelessness vary by life stage. Youth homelessness (aged 18 or younger) is associated with disruptions in family life and unstable housing, including leaving home voluntarily or involuntarily and a history of juvenile detention.[18,19] Childhood experiences of housing instability are associated with poor physical and academic outcomes.[20] A study examining the impact of negative childhood experiences on adult homelessness suggests that this population is between 2.5 and 8.1 times more likely to have experienced homelessness as children compared to the general population.[21] Persistent homelessness from youth into adulthood is associated with traumatic childhood experiences, including family violence, substance abuse, institutionalization, and physical/sexual abuse.[22]

Previously independent adults may become homeless due to adverse life events such as unemployment, death of a parent/partner, divorce, and/or separation.[18] Substance abuse and mental illness can also exacerbate adverse life events and may precipitate homelessness, yet many areas with very high rates of substance abuse do not have high rates of homelessness.[18,22] Adults who become homeless before 50 are more likely to have a history of incarceration, mental health conditions, and substance abuse problems.[23]

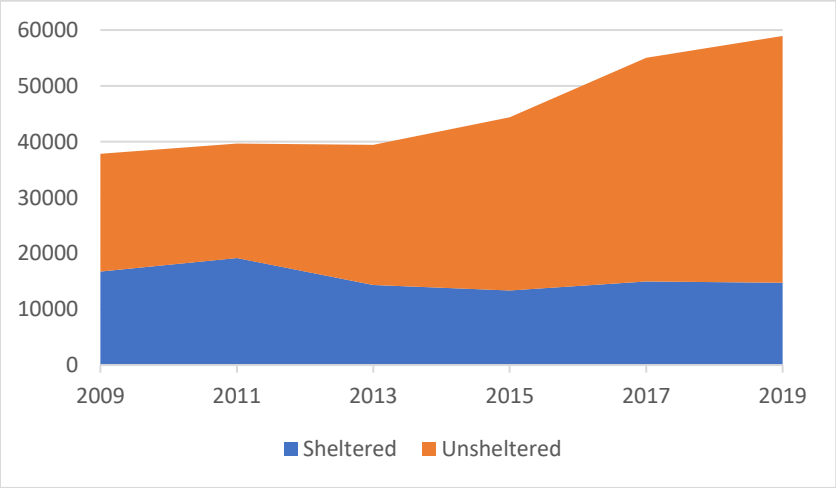
The adult homeless population is often divided into relatively distinct chronic and transitionally homeless populations with often equally distinct service needs. [24,25] A relatively small share of chronically homeless clients may nonetheless account for a disproportionate share of shelter utilization and health burdens. The vast majority of clients in most settings are transitionally homeless clients who remain homeless for only a matter of days or weeks, yet failure to reach clients with emergency support can lead very quickly to long-term homelessness.

There is increasing concern about homelessness among adults over age 50, including the elderly.[15] The late Baby Boom cohort, born roughly 1955 to 1964, has faced consistently high levels of homeless for decades.[26] This population has now persisted into old age, pointing to a likely tripling of the over-65 homeless population in LA by 2030.[27] A recent study of older homeless clients in Oakland found that 43% were homeless for the first time after age 50.[23]

Homelessness in Los Angeles

The crisis of homelessness in LA could justifiably be called a crisis of *unsheltered homelessness.* Figure 1 illustrates the rise of the LA County homeless population from 2013 to 2017. This growth came exclusively among the unsheltered population. There was extensive media coverage of the incremental 4% decline in the homeless count from 2017 to 2018 and even more coverage of the 13% increase from 2018 to 2019. Yet given the limitations of the point-in-time homeless counts that generate these data (See Box 1), a simpler story might be that growth was slower from 2017 to 2019 than in the previous five years.

Figure 1: Estimated sheltered and unsheltered homeless population, Los Angeles Continuum of Care Point-in-Time Count, 2009-2019



A comparison of LA and New York City (NYC) highlights the uniquely unsheltered nature of LA's homelessness landscape. Like most other cities facing high levels of homelessness, both LA and NYC have a high share of households who meet the U.S. Department of Housing and Urban Development's classification as cost-burdened or severely cost-burdened. Poverty rates are also similar between the two cities. The homelessness rate in NYC is actually slightly higher than LA's. However, what makes LA truly distinct is that whereas just 6% of those included in NYC's most recent homeless count were unsheltered, in LA it was 75%, although the true share was probably quite a bit higher.

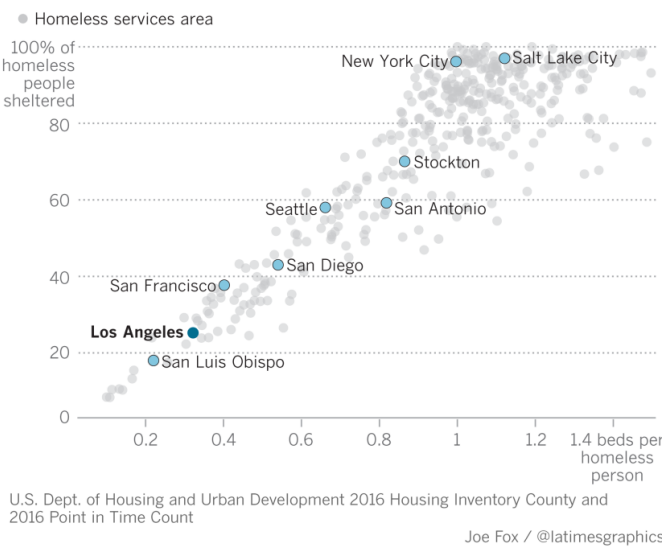
Table 1: A Tale of Two Cities: Housing, poverty, and homelessness in LA and NYC

	Los Angeles	New York
		
Housing cost burdened	46%	42%
Severely cost burdened	24%	22%
Poverty rate	18%	20%
% Homeless	0.6%	0.7%
% of homeless unsheltered	75%	6%

The phenomenon of unsheltered homelessness is now common throughout the Western United States, though there is considerable variation across jurisdiction, as shown in Figure 2. The causes of unsheltered homelessness are a source of confusion and misunderstanding. Past studies have highlighted the importance of weather and climate in making it feasible to live outside, yet beyond basic feasibility, it is unclear if weather drives unsheltered homelessness, or if weather simply allows authorities not to provide shelter.[28] Figure 2 presents the relationship between the availability of emergency shelters and the frequency of unsheltered homelessness. Put simply, areas with more shelter beds will have a lower share of their homeless be unsheltered. Indeed, NYC had much higher rates of unsheltered homelessness in the 1990s, which were reduced as a result of a massive effort to build shelters and encourage their use.

Legal restrictions also matter. In LA, the spike in unsheltered homelessness was more or less preceded by three legal rulings that overturned LA City or County ordinances banning public sleeping, banning sleeping in vehicles, and allowing seizure of property left on streets.[4] In the most impactful of these rulings, *Edward Jones et al. v. City of Los Angeles,* the U.S. 9th Circuit Court of Appeals did not strike down laws against sleeping in public, but rather prohibited enforcement of these laws as long as the homeless population outstripped the number of shelter beds.[4] In other words, just as homelessness was a nearly inevitable consequence of the housing crisis, so was unsheltered homelessness inevitable given the lack of shelter.

Figure 2: Relationship of homelessness shelter bed inventory to unsheltered homelessness, U.S. Continuums of Care, 2016



Source: Los Angeles Times, February 1, 2018 [29]

Box 1: The disturbing lack of data on homeless populations

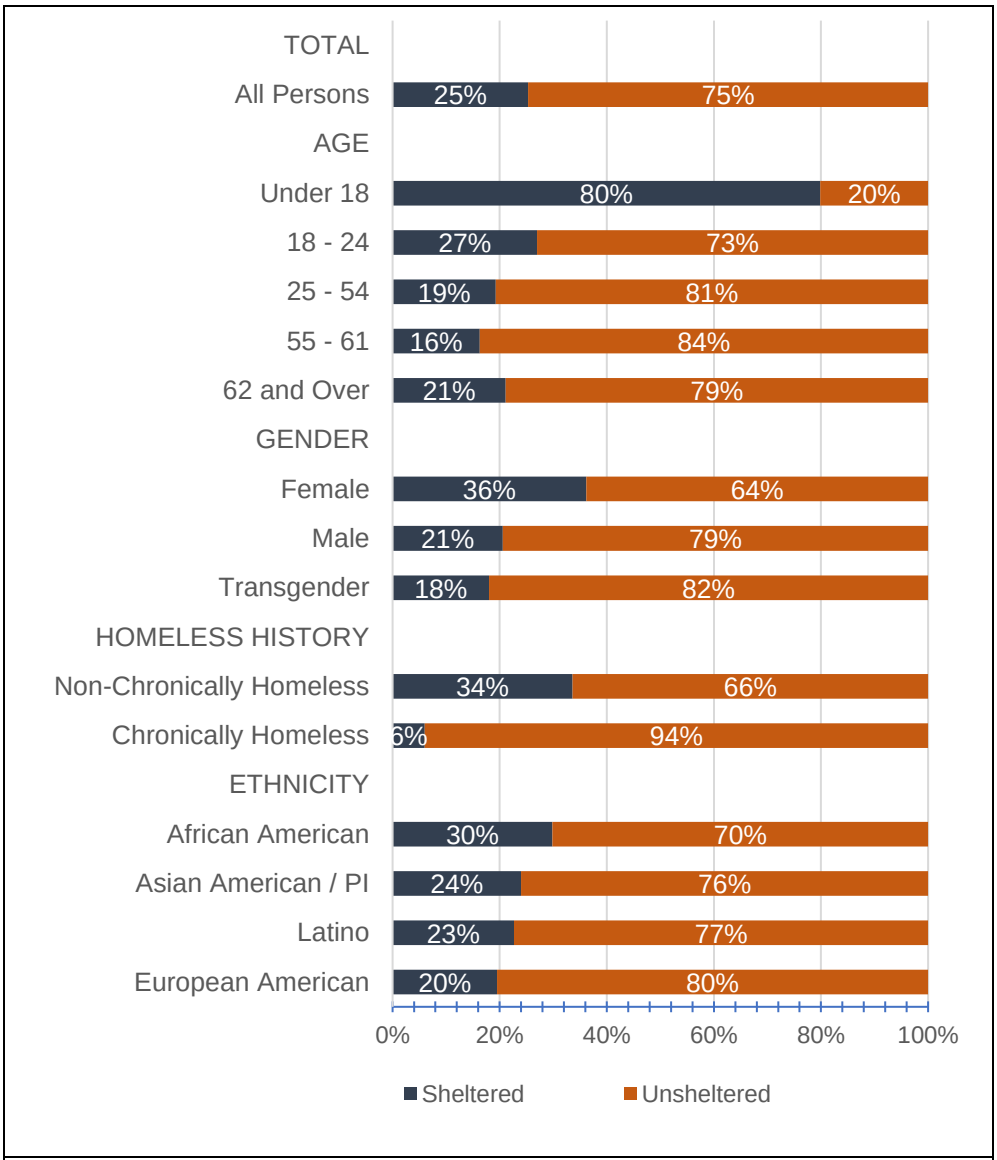
To better explain what we know about homelessness in LA, it is useful to address the overwhelming lack of data that is fit for the purpose of understanding the homeless population. Starting in 2004, the U.S. Department of Housing and Urban Development tied funding for homelessness programs to basic data collection and reporting functions. Shelters and other service providers were required to register clients in Homeless Management Information Systems (HMIS), which collect detailed client-level data and daily case histories that have proven invaluable for understanding population needs and conducting evaluations. Unfortunately, however, HMIS systems provide poor coverage of unsheltered populations.

The other mandated source of data was an annual Point-in-Time count ("PIT Count") of the total homeless population on a single night. This count, scheduled for the fourth week of January, combines an electronic census of the sheltered population from the HMIS with a visual street count of the unsheltered population. The street count is an imperfect exercise to say the least, with concerns about error and systematic bias due to sampling decisions, volunteer effort, and training.[30] A recent study estimated that street counts underestimate the unsheltered homeless population by 30% on average, with a margin of error of ±10-15% and high sensitivity to improvements in effort or sudden changes in methodology.[3,31] In a place like NYC, where the vast majority of the homeless population live in shelters covered by HMIS, counts are far less prone to error and more is known about the homeless population.

Much of what we know about unsheltered homelessness is instead drawn from small one-time studies of convenience samples like the clients of a particular clinic.

Figure 3 shows that the unsheltered nature of homelessness in LA is pervasive across nearly all subpopulations.[32] Men are somewhat more likely to be unsheltered than women, but still 64% of women are unsheltered. We observe little variation by race. With the exception of under 18s, there is no variation by age, with 79% of over-62 homeless individuals being unsheltered. Among those under 18, just 20% are unsheltered, which is still quite high given the potentially devastating consequences of youth homelessness. Members of the chronically homeless population, those who have been homeless for a year or more, are more likely to be unsheltered (94%), yet 66% are unsheltered even among the recently homeless.

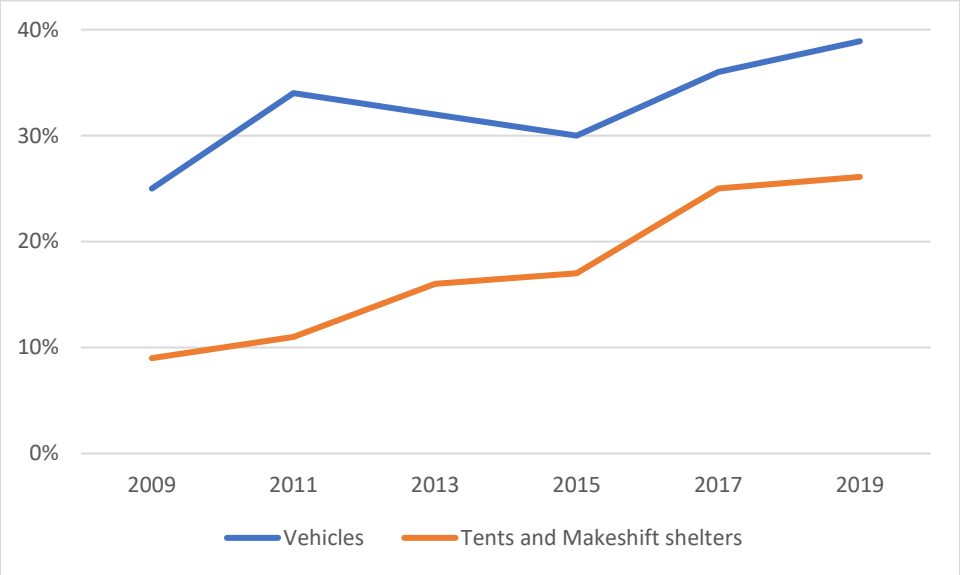
Figure 3: Comparison of sheltered and unsheltered homeless populations, 2017



Source: Flaming et al. (2010). "Escape Routes: Meta-Analysis of Homelessness in LA. Economic Roundtable using data from LA Housing Services Authority (LAHSA) (2017): Greater Los Angeles Homeless Count [32]

A further complication is the sheer diversity of the unsheltered population, both in terms of where they live and in what has brought them to the streets. Figure 4 shows that much of the growth in the unsheltered population has been among individuals living in vehicles, tents, and informal shelters, as opposed to those living in the open. Living in vehicles or tents may be less damaging to health than living in the open air, but no research yet exists to assess this hypothesis. Many people living in tents reside in organized encampments, but most do not, and encampments themselves run the gamut from highly organized, intentional communities to simply a cluster of people who happen to be in the same place.[33] Yet even the relative security or safety of a tent or vehicle may be lost with increasing duration if vehicles are impounded or tents stolen or seized, or if reinstated restrictions on sleeping in vehicles are enforced.[34]

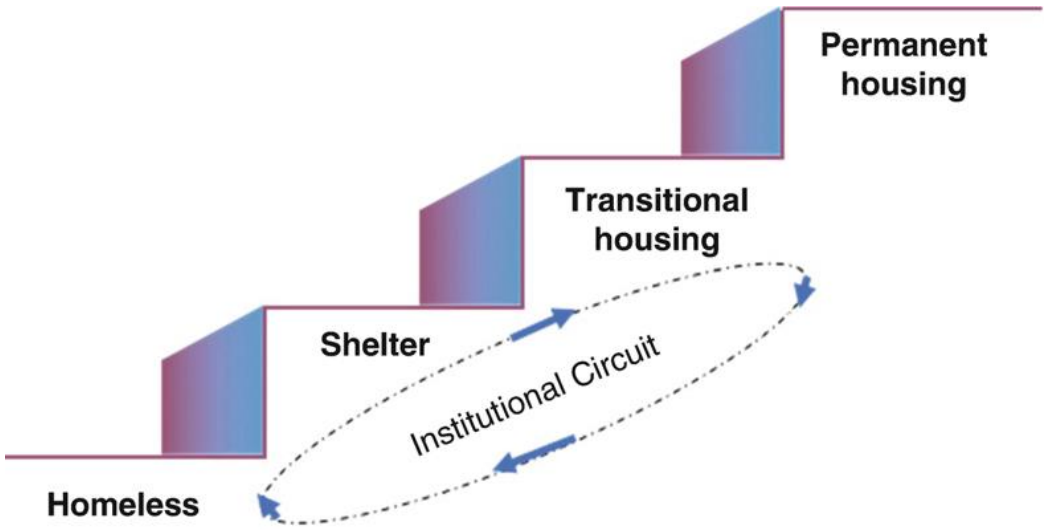
Figure 4: Share of unsheltered populations in vehicles or tents, 2009-2019



The Housing First Model

HI applies the Housing First model to addressing homelessness. Housing First emerged in NYC in 1992 from the growing recognition that housing was a critical precondition for recovery. A recent comparison of homelessness approaches in LA and NYC described the previous dominance of a "staircase approach," in which clients gradually progressed from homelessness to emergency shelter, transitional housing, and permanent housing as they demonstrated their readiness to take the next step towards recovery. [35] Henwood and Padgett argued persuasively that the staircase model has had limited effectiveness. Rather than gradually becoming ready, most clients become trapped in an "'institutional circuit' of going from streets to jails to hospitals to shelters for years at a time." Building on these insights and the identification of distinct chronic and transitionally homeless populations, HF emphasizes PSH for chronic populations and rapid rehousing or prevention for transitional populations.

Figure 5: The Staircase approach to homelessness



Source: Henwood and Padgett 2019 [35]

In LA the focus has been on PSH, envisioned as service-rich housing facilities that would lay the groundwork for recovery. Evidence from other settings finds that PSH improves housing stability and residents have fewer hospitalizations and visits to the emergency department.[36] A study of chronically homeless mentally ill individuals found that PSH residents spent less time hospitalized compared to those placed in housing that required sobriety and psychiatric treatment.[37] Studies have also found improvements in social functioning associated with PSH placement.[38] However, many studies have found more limited improvements in mental health and substance use recovery.[36,39]

PSH alone was never intended to be the full solution to homelessness, but instead was meant to be part of an effort to match the right intensity of support to a client's needs. PSH is costly, and most homeless clients need a much smaller amount of assistance to return to housing. A recent study looked at variation across all jurisdictions in the U.S. and found that for every 100 clients placed in PSH, the overall homeless population would only be reduced by 10.[40] This finding is not an indictment of PSH, but merely a recognition that PSH programs are not designed to reduce large-scale homelessness, and instead are intended to provide a durable solution for those with the greatest needs.

In NYC, where PSH began, the focus has been on moving people from unsheltered to sheltered situations, establishing PSH options for the 10% who are chronically homeless and creating ample shelter space to accommodate the thousands of individuals and families displaced by the competitive housing market. While this approach has succeeded in reducing the proportion of unsheltered homeless, NY has seen an overall increase in homelessness, and its large, expensive shelter system may be neither replicable nor desirable in California.

Box 2: Housing = Health?

One of the questions we used to get to know key informants was whether they saw themselves as approaching housing and health with one of three viewpoints.

- Housing *is* health
- Housing *as* health
- Housing *and* health

Everyone agrees that both housing and health are important, and that housing is an important driver of health. However, we observed quite a bit of variation in whether respondents viewed housing as a necessary precondition for health improvement and in how an individual approaches this question on both philosophical and practical levels. In one interview, we did not prompt the informant with these choices, but merely asked how she approached the issue. She replied, "Housing is health. Exclamation point. It is absolutely essential to health." In spite of her belief, the rest of her interview focused on the many ways that she and other practitioners can improve health on the street, including basics like substance abuse treatment and unexpected interventions like helping terminally ill clients prepare wills and advance directives. Her viewpoint and her practices are not inconsistent with each other. Each and every informant balanced a strong philosophical belief in the importance of housing and a practical need to support the homeless in every way possible.

Under HI, we have seen a much sharper focus on PSH, with a secondary emphasis on homelessness prevention and rapid rehousing for transitionally homeless clients. Construction of PSH beds and even placements into PSH have progressed significantly[5], in spite of many persistent concerns (see Gap Analysis, presented subsequently). But the stock of shelter beds has increased only slightly since the passage of Measure H, following years of decline. The focus on permanent and durable housing solutions meets some of the ideals of the HF model. It may also fit with several historical undercurrents in LA, namely the fact that there is no right to shelter and that it has proven notoriously difficult to site emergency shelters. However, this approach may leave thousands of individuals without shelter for years, including many individuals going directly into unsheltered homelessness. What do we know about the consequences of homelessness and particularly unsheltered homelessness for health?

The Health of the Homeless - Literature Review

Individuals experiencing homelessness face economic and social conditions that make them more vulnerable to health inequities. Poor health can lead to homelessness and homelessness can worsen health.[41] A recent audit of streets deaths in California found that the average age of mortality was 48 for women and 51 for men, a striking contrast to the life expectancy of Californian women and men, which is 83 and 79 years respectively.[42] Overall mortality rates are highest for individuals living on the street, followed by those in shelters, and lowest among housed individuals.[43] During the last five years, mortality rates have increased by 76% among homeless adults in LA. Although the majority are men (80%), the number of homeless women dying has more than doubled. [42] When it comes to more specific health and disease outcomes,

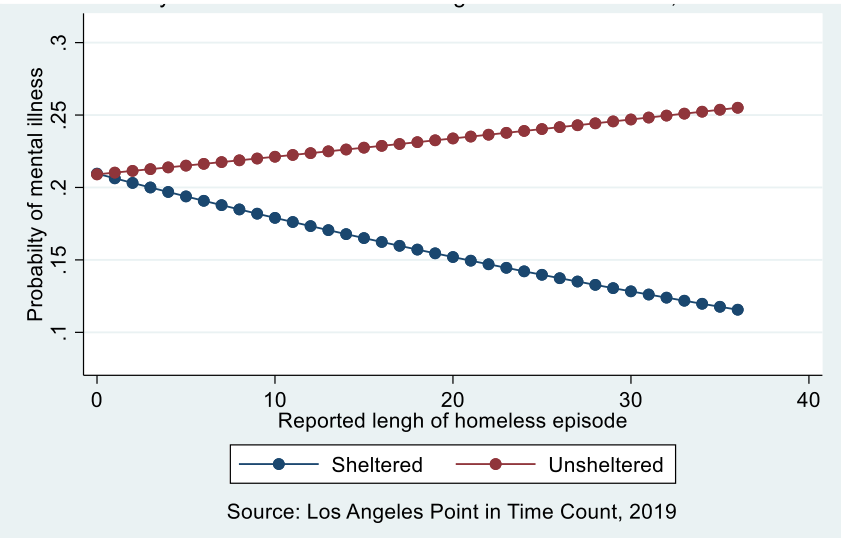
there is growing evidence on the health burdens of the homeless population as a whole, but few rigorous studies that look specifically at the unsheltered, particularly in LA.

Mental health

Rates of mental illness are higher in the homeless population than the general population.[44] A meta-analysis approximates that up to 40% of homeless adults have major depression.[45] Estimates suggest that 23% of homeless adults in LA have a serious mental illness.[46] Among the homeless, the chronically homeless have a higher prevalence of serious mental illness compared to new entrants.[32] Figure 6 captures the statistical relationship between mental health and unsheltered status over time among individuals in the LA 2019 PIT count. Sheltered and unsheltered individuals do not differ upon initial entry to homelessness, but over time the gap widens such that after three years, the unsheltered are more than twice as likely to report mental illness. Mental illness often coincides with substance abuse, and estimates suggest that over 50% of chronically homeless adults experience both.[47] Although few studies have directly compared unsheltered and sheltered homeless populations, a study of homeless women in LA in 2000 found that unsheltered women had a 12 times greater risk of experiencing mental illness than sheltered women.[48]

Few studies have addressed the question of whether people become unsheltered because they are mentally ill or if they become mentally ill because they are on the street. A study of homeless adults in LA compared pathways into homelessness among mentally ill homeless people, non-mentally ill homeless people, and housed mentally ill people. The results illustrate that those who become homeless prior to becoming mentally ill had the highest rates of childhood poverty and disruption and were more likely to have been homeless as children.[49] Among this group, mental illness did not appear to be a sufficient risk factor for homelessness, but rather reflects a pattern of ongoing deprivation. In comparison, those who become homeless after becoming mentally ill had a higher prevalence of substance dependence.[49]

Figure 6: Predicted probability of self-reported mental illness by unsheltered status and length of time homeless, 2019



Substance abuse

Substance abuse is more prevalent among the homeless than among their housed counterparts.[44] Researchers estimate that in the U.S., the lifetime prevalence of alcohol use among homeless adults is between 29-63%; drug use disorders are found among 20-59% of the homeless adult population [50], with higher rates among the chronically homeless.[25] Substance abuse contributes to premature mortality. Compared to the general population, deaths attributed to substance use are significantly greater for the homeless on a magnitude of up to five times higher for tobacco related deaths, 10 times higher for alcohol related deaths, and 17 times higher for drug related deaths.[50] Within LA, estimates from the 2019 PIT count indicate that 13% of homeless adults have a substance use disorder, with higher rates among unsheltered (16%) than sheltered populations (6%).[46] However, these rates seem unreasonably low given higher estimates in other cities and given LA's high rate of chronic homelessness.

Patterns of drug abuse can vary widely between and within cities, making it difficult to establish simple responses to drug abuse. A random sample of emergency department users found that homeless patients were more likely to have used nearly all categories of drugs in the prior year, with the exception of prescription stimulants. Among drugs used, heroin and cocaine/crack caused the greatest difficulty.[51] Although opioid abuse is a national public health crisis, a recent study of high risk youth found that whereas those in NYC were more likely to abuse heroin, oxycodone, and cocaine, those in LA had higher rates of codeine, marijuana, and methamphetamine misuse.[52] Homeless service providers note that in the past few years, methamphetamine has surpassed cocaine as the drug of choice for homeless adults in LA.[53]

Infectious disease

Poor living conditions and limited access to health care utilization leave individuals experiencing homelessness vulnerable to numerous communicable infections.[54] Behaviors associated with homelessness such as high-risk sex behaviors (e.g., multiple partners, sex work) as well as sharing syringes or other drug paraphernalia further increases vulnerability to infectious disease.[54] For unsheltered homeless populations, the spread of communicable diseases can be intensified by the lack of clean and accessible toilets, sinks, and showers.[55] A 2017 audit of public toilet availability on Skid Row found that at any given time only 10 to 23% of resident toilet needs are met as per United Nations standards for public toilets in long-term refugee camps.[56] On a given night, only nine toilets were available for the 1,777 unsheltered homeless people living on Skid Row.[56] In LA, exposure to outdoor air pollution stemming from living in proximity to freeways may also have contributed to increased prevalence of tuberculosis among the homeless population.[57–59] Furthermore, weather pattern shifts resulting from climate change can also lead to spikes in infectious diseases among this population.[60] For the sheltered homeless population, overcrowding and inadequate attention to preventive environmental measures (e.g., ventilation systems, sanitation, and ultraviolet light fixtures) in shelters can contribute to the spread of infectious diseases such as tuberculosis.[61]

Table 2 presents prevalence estimates for infectious diseases commonly studied in homeless populations. As the wide range in prevalence estimates for studies examining homeless populations in high-income countries suggests, differing data sources and methodologies fail to

provide consistent data. Similarly, the prevalence estimates shown for LA vary in terms of timing of data collection and data sources. Again, these findings underscore the need for better research to understand the health concerns of homeless populations. Recent outbreaks of typhus and hepatitis A among the homeless population in Southern California have been linked to unsanitary living conditions.[55,62] Though these outbreaks have been concentrated among the homeless, at least one non-homeless city employee also contracted typhus.[62]

Table 2: Estimated prevalence rates of infectious disease among the homeless and U.S. General population

	U.S. General Population	Homeless in LA	Homeless in High Income Countries
HIV infection	0.39% [63]	3-4% [46,64]	0.3%–21.1% [65]
Hepatitis C virus infection	1.7% [66]	26.7% [64]	3.9%–36.2% [65]
Active Tuberculosis	0.002% [67]	1.5-4% [68,69]	0.2%–7.7% [65]
Hepatitis B virus infection	10.8% [70]	30% [71]	17%–30% [54,72]
Bartonella infection	0.77 - 0.86 [73]	17.5% [74]	2%–30% [75,76]

Chronic disease

Accelerated aging due to exposure while homeless leads to geriatric conditions occurring decades sooner than in housed older adults.[23] Environmental exposure and high rates of cigarette smoking can also worsen existing chronic health conditions and increase the risk of respiratory infections, which may lead to obstructive lung disease.[50,77,78] Compared to their housed peers, homeless adults have higher rates of emphysema, chronic bronchitis, and asthma.[78] Reduced lung function can compromise cardiovascular functioning and is linked to cardiovascular mortality.[79] Rates of diabetes and hypertension among US homeless adults are similar to the general population, yet rates of uncontrolled hypertension are higher among hypertensive homeless adults.[80,81] Homeless individuals lack safe spaces to store and refrigerate medication, which can exacerbate chronic illnesses like diabetes and hypertension.[82] In addition to having higher rates of female reproductive and respiratory cancers, homeless adults also have poorer survival rates.[83] Older homeless experience mental and physical conditions that make daily activities difficult, including dementia, arthritis, and dental disease.[17,77] Younger homeless adults also suffer prematurely as a result of living conditions and experience poorer musculoskeletal health, which makes physical disability more likely.[84]

Violence and unintentional injury

Traumatic injuries are a leading cause of morbidity and emergency room visits among homeless individuals.[85,86] Compared to low income housed individuals, homeless individuals experience higher odds of incurring unintentional injuries (falls, burns, cold/heat exposure related injury, and poisoning) as well as intentional injuries (assault and self-inflicted), even after adjusting for age and gender.[85] Traumatic injury also contributes to mortality among homeless. A 2007 report found that trauma was the fourth leading cause of mortality among homeless individuals in LA County.[87] Living unsheltered or in precarious housing increases exposure to environmental conditions that elevate homeless individuals' risk for unintentional injury.

Victimization in the form of physical and sexual assault is also a precipitating factor in rates of injuries among the homeless. Prevalence estimates range from 27-52% of homeless individuals reporting physical and sexual assault in the previous twelve months.[13,88] Female and transgender homeless individuals report higher rates of sexual assault relative to men.[88–90] Marginalization within the homeless population (e.g., having health problems, engaging in sex work, experiencing traumatic events) is associated with higher rates of violent victimization.[88,91] Similarly, being unsheltered may also increase risk of violent victimization. One study of sheltered and unsheltered women in LA found that unsheltered women reported significantly higher rates of physical assault.[48] Raw estimates from the 2019 LA PIT count reinforce this risk, with 43% of unsheltered reporting ever having experienced domestic violence compared to a still-high 15% of sheltered homeless individuals.

Reproductive health

Homeless individuals commonly report engaging in high-risk sexual behaviors including unprotected intercourse, having multiple sexual partners, engaging in sex work, paying for sex, as well as engaging in survival sex (i.e., the consensual or nonconsensual exchange of sex for money, food, shelter, drugs, and/or alcohol).[92] Some research suggests that these behaviors may be more common among the unsheltered population.[48] Condoms are the most commonly used contraceptive method; [93,94] however, those experiencing homelessness often report inconsistent use of condoms during sexual encounters.[95–97] An estimated 40-70% of homeless youth report recent engagement in sex without a condom.[98,99] Stigma from health care providers with respect to gender identity, sexuality, and the realities of sex among this population may complicate homeless individuals access to reproductive health services. Homeless men and women frequently report overtly negative interactions and experiences with healthcare providers in their attempts to access reproductive healthcare.[89,94,95,100]

Pregnancy, childbirth, and infant health

Homeless women report higher rates of pregnancy as compared to the housed population. One nationally representative study of homeless youth found that unsheltered youth had the highest rates of lifetime pregnancy (48%) compared to sheltered youth (33%) and housed youth (<10%).[101] However, it is unclear how many pregnant women remain unsheltered because pregnancy may facilitate shelter utilization.[102] Previous studies on the topic have consisted of small non-representative samples of homeless women or taken place on the East Coast where shelter use is much more prevalent.

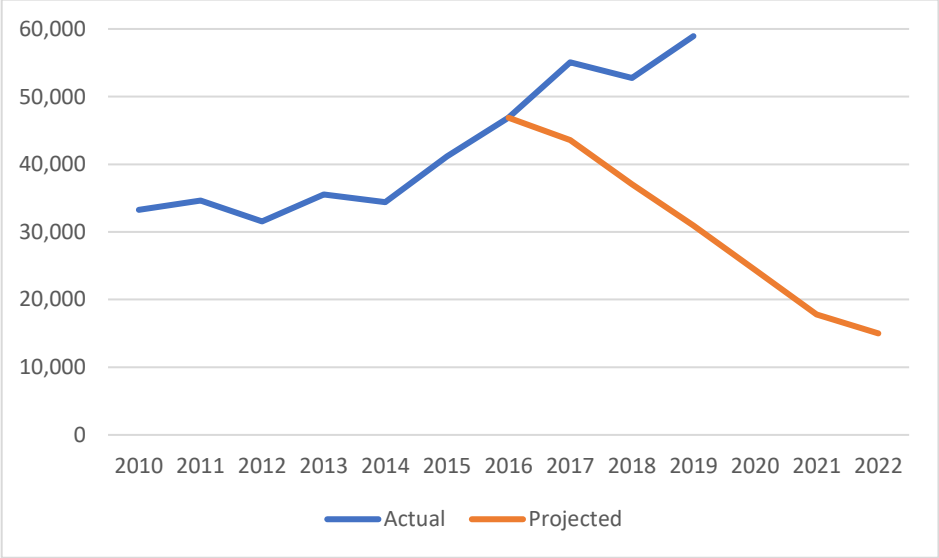
Homeless women may experience difficulties engaging in healthy prenatal behaviors such optimal dietary intake and accessing prenatal care.[100,103,104] Among the barriers that homeless women face in utilizing health services during pregnancy (e.g., cost, transportation), they also report concerns that seeking prenatal care may put them at risk for losing custody of their children.[105] Women experiencing homelessness during pregnancy have higher rates of adverse birth outcomes including preterm birth and hemorrhaging, which persist when controlling for behavioral health disorders.[106] Additionally, infants born during a period of unstable housing have higher rates of low birth weight, respiratory problems, fever, injuries, developmental disorders, longer neonatal intensive care unit stays, and more emergency department

visits.[104,107] Given the difficult conditions associated with unsheltered living, we may expect worse health outcomes for unsheltered pregnant women.

Gap Analysis

Before focusing on exploring specific gaps in qualitative detail, we begin by simply quantifying the magnitude of the gap between where we are today and where we hoped to be. In 2017, just before the passage of Measure H, LAHSA published a housing gap analysis. The analysis identified the exact numbers of PSH, Rapid Rehousing and emergency shelter beds needed to bring the LA nightly homeless count down to 15,000 by January 2022 under the best case scenario. Figure 7 plots these projections against the actual point in time counts for the ensuing three years. By 2019, the best case scenario anticipated a 34% reduction in the nightly count relative to 2016, down to 31,000.[108] In reality, the number has increased by 26% over this period to 58,936, or nearly double the best case. We now have 28,000 additional homeless clients relative to the best case scenario.

Figure 7: Quantifying the Gap: LA County point-in-time count results compared to Measure H best case forecasts



Some of the reasons for this gap are addressed in the Year 2 evaluation of HI, which highlights continued progress in PSH and Rapid Rehousing placements, yet also reports increased caseload (due in large part to out-of-control housing market forces), a slower pace of rehousing than anticipated in best case forecasts, longer-than-anticipated waiting periods for rehousing, and a larger number of returns to homelessness than expected.[5] These individual gaps multiply to produce a large aggregate gap. While most of these factors may be expected to follow a continued trajectory of improvement from FY2017-18 to FY2018-19, none of these changes is likely to produce a dramatic reversal of the overall homelessness trend. If the 2020 homeless count remained unchanged from 2019, the gap would be approaching 35,000, with the vast majority unsheltered.

Given the health consequences of homelessness and the persistence of homelessness in LA, new approaches are needed to address both immediate and long-term concerns. While acknowledging that HI contains many components, including shelter and service provision, key informants expressed concerns about an over-emphasis on PSH, noting that thousands of individuals who do not need PSH—or will not receive PSH anytime soon—have few options to help them move off the streets or to obtain health and social services while living on the streets. Our analysis therefore focuses on critical gaps in providing emergency shelter, providing health services while people remain unsheltered, improving outreach, and improving data and research.

Permanent Supportive Housing: The Current Approach

LA's PSH efforts have proven successful both in constructing units and in moving a large number of people into housing. However, informants raised overwhelming concerns that PSH alone was not enough for many clients. One expert on PSH put it this way:

> *When it comes to providing permanent supportive housing, there is a lack of attention to once people transition into PSH, to providing enough support and care for people to thrive in those settings. I think that the field is aware of this, but there hasn't been enough attention to it. So especially here in LA, everyone's scrambling to get people into housing, and they think that assigning a case manager means they're done. From talking to participants who are being placed into these units, there's just a huge variation in their level of support that they need to thrive, and the models to date that are being employed here don't really provide the level of support needed for people to thrive.*

In particular, informants pointed to the need for more services relating to physical health as well as mental health, more resources that support full recovery (including worker training and employment services), and increased social support. Several identified the social challenges of moving into PSH, which, for many, can lead to loneliness and isolation. For others, the move into PSH can create opportunities for new risks such as unsafe sex.[109]

Respondents identified strategic measures that attend to the spectrum of need among homeless individuals, some of whom require more intensive services than PSH can provide. For example, homeless individuals with serious mental illness (SMI) or substance use disorders have medical needs that cannot be addressed exclusively by PSH. Yet clients may be placed into PSH because hospitalization or rehabilitation is not an option. One psychiatrist argued for better addressing the needs of individuals with SMI or substance abuse disorders:

> *This is not acknowledged that there is probably a population that would not benefit from Housing First. When it comes to mental health and quality of life, we're so focused on housing that we don't focus on quality of life, neighborhood quality, life skills, work, etc. When you talk to people who fall out of housing, they say "why didn't someone tell me case manager to take my meds or why didn't someone test me."*

Alternatively, populations with communicable diseases, like HIV and hepatitis C, require closely monitored months-long treatment protocols and rigorous treatment regimens. In this case,

clients don't need direct clinical oversight as much as they need regular medication reminders, steady medication supply, and social support for adherence. PSH may not necessarily provide these necessary supports, and they may be better delivered outside a residential setting.

Some informants were also concerned that thousands of individuals who don't need or want intensive services in PSH were nevertheless placed into PSH, in part because few other resources were available:

> *PSH is an evidence-based model for people with serious health conditions. We don't know so much about how well it works for people who don't have serious health conditions... Certainly there needs to be a range of services provided. I know LA County is doing that with their 51 initiatives to end homelessness, but right now we don't know the science behind that, how to assess people and figure out what level of housing support they need and making sure people get that level.*

The focus on PSH as a one-size-fits-all solution combines with the slow process of adding more units, leaving many people who need PSH waiting for long periods of time

> *And another huge issue is the lack of affordable housing. Even though they're identified, they're eligible, they're motivated to get housed… they're spending an average of 4 months in transitional housing before they get placed in PSH. That's not housing first.*

According to outreach workers, the most frustrating and solvable source of these delays relate to the recovery of lost birth certificates, social security cards and other documentation.

The general conclusion drawn by all the informants is that all options must be on the table, including shelters, a wider array of housing options for patients needing both more and less than PSH, and better outreach and coordination across the whole system. One informant who is deeply engaged in efforts to provide broad-spectrum services to clients with the greatest needs put it succinctly:

> *At this point given how bad the situation is, we need to have a diverse portfolio of solutions. I don't think we should look at one thing.*

Emergency Shelter

One option that informants raised with great hesitation was the need for emergency shelter. Given the gradual pace of rehousing chronically homeless individuals and the continued flow of new clients, key informants pointed to the need for increased focus on emergency shelter. As proponents of HF, informants did not reach this conclusion easily:

> *We need a push towards transitional housing to get people off the streets and get triaged by level of need.*
>
> *(Interviewer) Do you mean shelters?*

In an ideal world, I wouldn't mean shelters but in reality, I do mean shelters. I think we need something where there is some sort of rudimentary case management support so we can triage them into different places.

Emergency shelter beds are scarce in LA, and efforts to construct new facilities have been interrupted by health and safety concerns as well as complaints from local communities. A public health expert suggested that shelters were not being built in places where they could be built or were being closed due to public health concerns relating to sanitation and air pollution. These concerns may need to be weighed against the damage caused by living on the streets. This informant discussed the irony that people were often sleeping outside and directly next to the very freeway that was being used as the reason not to build a shelter. In September 2019, the State of California took one important step by passing Assembly Bill 1197, which exempts certain shelter and housing projects from environmental review until 2025. However, there remains a clear need to bring all concerned parties to the table—planners, experts, builders, neighborhoods–in order to come up with new approaches to providing shelter to those who need it most.

Box 3: Low Barrier Shelters
The National Alliance to End Homelessness has developed a learning module on new approaches to "low barrier shelters," or shelters that apply the right-based principles of Housing First to temporary shelter. This does not mean shelters without rules, but it does mean shelters that address key client needs and provide dignity and safety.
• Screening people in, not out • Shelter is open 24/7 • People do not have to line up for a bed each night • People don't have to leave early in the morning • No drug and alcohol testing to get in • No criminal background checks to get in • Income not required to get in • "Housing-readiness" not required to get in • Allowing people, pets and possessions
Source: The keys to effective low barrier emergency shelters, NAEH [108]

Informants were equally clear that building shelters alone would not be enough. Most acknowledged the deliberate avoidance of shelters by eligible clients due to concerns about safety, privacy, or personal autonomy. Getting people into shelter also requires outreach, case management, mobilization of appropriate community resources, and efforts to build trust in the shelter system.

Health on the streets

Whatever progress is made on improving shelter, the short-term reality is that many people will remain unhoused *and* unsheltered, raising questions about providing health and sanitation services to people who are unsheltered. Perhaps no subject is more fraught for practitioners

and the LA community than the issue of providing services to people living on the streets. In a recent review, economist Brendan O'Flaherty described the situation:

> *Policy discussions about treatment of unsheltered homelessness have ricocheted erratically between extremes, from installing portable toilets and dedicated parking lots, to confiscating possessions, and it is not clear how much of any policy was actually implemented.*[4]

The need to develop a coherent and consistent policy around unsheltered populations is more urgent in light of the high likelihood that thousands may remain on the streets for years to come. In LA, lack of sanitation in homeless encampments has been linked to recent outbreaks of typhus and hepatitis A.[55] Although LA County and City have recently begun a more aggressive effort to provide regular cleanups in encampments,[110] such cleanups often include a police presence, which can undermine community health workers' efforts to build trust with homeless populations and typically have little impact on homeless individuals who live outside of encampments. Providing toilets, shower facilities, and mobile phones may promote healthier living conditions and greater connection to services; however, these facilities require strong self-governance and oversight.[111] It would be reasonable to ask whether we want to create these governance systems or simply focus on getting people into shelters.

An even bigger challenge lies with offering medical treatment to unsheltered clients. Most unsheltered homeless people receive medical services through mobile clinics, public clinics, and costly emergency room visits.[112,113] Not knowing a client's housing status can affect providers' decisions regarding whether to provide medical interventions that require long-term follow-up and adherence. Informants identified follow-up is a constant problem even for homeless clients who are deeply committed to getting better. Medications can be lost, stolen, spoiled, or sold; those requiring strict administration schedules can be taken at the wrong time or in an incorrect sequence, rendering them ineffective or counterproductive.

Respondents pointed to several models that aim to connect unsheltered clients to the medical services they need. Assertive Community Treatment (ACT) mobilizes multidisciplinary team members to provide mental health services to individuals with serious mental illness and is associated with reduced rates of hospitalization and improved housing stability.[114] An integral feature of ACT is person-centered care, which supports an equal and nonjudgmental dynamic where patients are treated as partners rather than clients.[115] ACT programs have been piloted across LA County, including some efforts to integrate primary health care into mental health service provision.[116,117] The Veterans Administration has successfully employed its own patient-centered mobile care—known as Homeless Patient Aligned Care Teams (HPACTs)—to treat 8,000 homeless veterans with complex needs, including treatment for AIDS, hepatitis C virus, and opioid addiction. A recent study on the use of HPACTs with homeless veterans needing hepatitis C virus care in LA found 100% treatment adherence among veterans referred for treatment.[118] To reduce barriers to accessing critical medical care, some shelters have provided medications directly to clients. Midnight Missions, a homeless shelter in downtown LA, provides hepatitis C medications that clients would otherwise obtain from specialists.[119] This

approach both eliminates the need to locate and travel to providers and facilitates medication adherence by allowing residents to store medications in a single, secure location.

Box 4: Aging on the streets

Most informants highlighted the difficult challenge of meeting the complex health needs of the rapidly growing number of aged homeless clients. Many experience geriatric conditions in their 50s and 60s that would normally affect people far older. These challenges are exacerbated by the rapid closure of many Board and Care facilities that offer the services of a nursing home in a residential setting. During our interviews, we shadowed the rounds of a doctor working in a multidisciplinary outreach team. Surprisingly, the doctor identified movement disorders like Parkinson's, Multiple Sclerosis (MS) and Huntington's Disease as the single greatest day-to-day challenge. These diseases require refrigerated medicines, and thus can't be treated without housing or shelter. While on rounds, we encountered a client named Don, a 60 year-old suffering from Multiple Sclerosis. He had been living in a Board and Care facility, but had to leave. Now he was living next to a popular tourist destination, spending his days sitting in a wheelchair, mostly motionless. He said that he sits there all day, watching the looks of the passersby. He said he scares them with the way he looks at them, but his condition prevents him from moving his eyes. The doctor said that many clients face stigma, discrimination and abuse by people who mistake tics, lack of eye contact, or speech difficulties that are the normal consequences of movement disorders as signs of psychosis or addiction. For most people, these difficulties would be mere symptoms of the disorder, but living in the streets means having strangers observe your every word and action.

After a few calls, the multidisciplinary team was able to arrange temporary shelter and an appointment in the clinic. The team members were cautiously optimistic, but noted that their reach only goes so far. If a client enters the hospital or housing, they are supposed to hand the client off to a different system. Case managers try as much as they can keep track of these clients even after they are housed, for example by asking hospitals to call them if they are about to release a client into the street. But it is difficult to simultaneously track a full load of current clients while also keeping track of those that were supposed to be housed.

Treating substance abuse on the streets may prove more difficult, however. Given the high risk of drug related deaths, training has been provided in LA for injection drug users in overdose prevention and response. A study conducted with injection drug users from the Homeless Health Care Los Angeles Center for Harm Reduction found significant increases in knowledge related to overdosing and in recommended responses to an overdose, including administering naloxone.[120] Although knowledge and response outcomes were not stratified by housing status, nearly 80% of participants reported living predominantly on the streets; in a hotel, motel, or single residency occupancy; in a shelter; or in someone else's home. Yet another LA study of adherence to extended-release naltrexone among heroin and non-heroin opioid users suggests that homeless is predictive of poorer retention for treatment.[121]

Nevertheless, few models for health service provision or sanitation in an unsheltered context have been subject to systematic evaluation, suggesting a need for pilot projects and further evaluations.[4] To achieve any impact at scale, successful pilots must also pass the test of being integrated into existing outreach systems.

Outreach

Every aspect of rehousing and health service provision will require more extensive and effective outreach efforts. Informants emphasized the amount of effort needed to reach even one client, particularly a client who has lost faith in the system. An informant from the Department of Public Health stated:

> *The real opportunity is developing personal relationships with people as a bridge to getting people into housing. The first two or three times you meet people is just about building trust.*

Informants also expressed concerns with the outreach methods. In reference to a recent audit by the LA Controller, which found that street outreach was yielding housing placement for only 4% of clients assessed instead of a hoped-for 10%,[122] informants cautioned that outreach was bound to take more time and effort than originally proposed. Another informant argued that the best way to engage clients was to provide meaningful help at the first meeting, perhaps by including physicians or nurses on outreach teams to provide necessary care. Equally important was knowing the homeless population by collecting systematic and relevant data that could be used to identify client needs and create relationship continuity from encounter to encounter. Informants pointed to the potential for mobilizing a mix of skilled personnel, community health workers, and community members, especially currently and formerly homeless individuals who may bring unique outreach skills and credibility.

Although not mentioned specifically by informants, mobile phone technology presents another outreach opportunity by allowing clients to connect themselves to desired services. Homeless clients are uniquely dependent on information technology to gain access to essential social contact and services in ways that housed people cannot imagine.[123,124] In addition to connecting clients directly to services, mobile data platforms could allow clients to maintain contact with service providers, support their peers, and receive simple but powerful assistance, such as transit credit to attend a medical appointment. A recent study found high rates of mobile phone utilization and increasing smartphone ownership among homeless clients. [125] One recent study found that text-message appointment reminders for homeless veterans is associated with a significant reduction in emergency department visits and hospitalizations, as well as with high levels of client satisfaction.[126] Further research is needed to identify successful outreach opportunities for homeless clients with substance use disorders, serious mental illness, and other complex care needs.

Some informants identified citizen response as a final and essential piece of the outreach puzzle. Thankfully, for every homeless Angeleno there are 100 housed Angelenos, many of whom are seeking ways to help. Some campaigns have been developed to directly involve citizens in homeless service outreach. The United Way's Everyone In campaign provides a still-

nascent platform for storytelling and mobilizing neighborhoods to find solutions. Communities like Encino have organized a coordinated response to homelessness and even conducted their own homeless counts.[127] However, most individual citizens and even many communities do not know what they can do and approach the homeless with a mix of concern and some reasonable fears. The LA Homeless Service Authority created the LA Homelessness Outreach Portal (LA-HOP) as a simple portal and mobile app that allows citizens to submit an outreach request to help homeless neighbors in need. Unfortunately, public awareness and utilization is low, and one recent report found that the average response time was 16 days. [128] Nevertheless, these initiatives may provide a platform for further citizen mobilization.

Box 5: How has New York City made progress on unsheltered homelessness?

The National Alliance to End Homelessness published a report on the lessons from New York's successful drive to reduce unsheltered homelessness starting in 2016. Although shelters were important, most of the success was due to outreach. Some key features included:

Effort

- Partnering with community-based organizations
- Doubling outreach staff at partner organizations
- Ensuring outreach occurs 24/7, year-round
- Providing outreach on the city's transit system
- Involving city staff—police, parks, and transit agencies—in outreach activities

Relevance

- Outreach teams that include licensed clinical social workers
- Providing expanded mobile and voluntary psychiatric and medical assessments
- Using drop-in centers to provide basic needs to people on the street
- Partnering with hospitals to reach unsheltered users of emergency room care

Data

- Developing a new data management system to better track unsheltered individuals
- Using a "by-name" list of all unsheltered individuals to improve coordination
- Monitoring the outcomes of outreach services

Source: National Alliance to End Homelessness [129]

Research

The lack of data on unsheltered homeless populations in LA has limited researchers' and policy makers' ability to accurately assess the risks and long-term consequences of unsheltered homelessness. To our knowledge, no existing studies adequately disentangle whether the many health issues that have been documented among the unsheltered are the problems that brought them to the streets or consequences of living on the streets. A number of studies have developed algorithms to use existing data to assess a patient's level of need, but these tools have not yet made their way to the field.[130] Further, evaluations of programs designed to address the specific needs of individuals with serious mental illness, substance use disorders, or

health concerns related to age or shelter status are needed to identify best practices for integrating health and housing services. Finally, more studies are needed to understand the drivers of an alarming increase in homeless deaths.[131] Improving research approaches—including standardizing data collection methods, linking diverse data sources, and promoting collaboration across academic, health, and community settings—will enhance the accuracy and potential impact of research findings.

Several subpopulation were identified as priorities. Informants raised concerns about the rising burden of homelessness among college and K-12 students, an issue that has gained increasing national attention and that may require a more nuanced understanding of homelessness that includes inadequate housing, unstable housing and sporadic loss of housing.[132] Other concerns related to the rise of homelessness among Latino populations,[133] driven in part by new federal limits on access to emergency relief services for documented and undocumented immigrants. Finally, there is a need for more research on the unique burdens facing unsheltered homeless women, some of which were highlighted in a recent women's needs assessment published by the Downtown Women's Center that found that 44% of homeless women had experienced a crime and 27% had experienced sexual assault in the last 12 months.[134]

Another glaring research gap lies in understanding the consequences of widespread homelessness for housed citizens. Over 2 million Angelenos face severe housing cost burdens that leave them exposed to a number of health risks, including homelessness. Key informants were also concerned about the effects of homelessness, and particularly unsheltered homelessness, on the mental health, morale, and self-perception of LA citizens. Misconceptions about the causes of homelessness and a perceived lack of effective solutions can lead to inaction, apathy, and hostility—including violent attacks on homeless encampments, with fatal consequences.[8–10] A better understanding of how the housing crisis impacts Angelenos may be an impactful leverage point for motivating greater collective action and kindness.

Conclusions and Next Steps

This report highlights the gaps between LA County's current approach to homelessness and health and the current state of our homelessness crisis. The LA homelessness crisis is predominantly a crisis of unsheltered homelessness. This is deeply concerning in light of the available research on the severe consequences of homelessness on health. Homelessness contributes to early mortality, increased risk of chronic and infectious disease, as well as higher rates of disability. [13] Existing evidence suggests that health outcomes may be even worse for unsheltered homeless populations, yet the lack of available research on this group makes it difficult to articulate how much worse unsheltered homelessness is for health.

The slow progress of the Homelessness Initiative, combined with the structural factors pushing individuals into homelessness, has resulted in a substantial gap between plans and reality. Relative to initial expectations of declining homelessness, the 26% increase in homelessness from 2016 to 2019 amounts to an additional 28,000 individuals facing homelessness on any given night whose basic needs are not included in any existing plans or budgets.

Our interviews raise the need to enhance our current application of the **Housing First approach** towards a more broadly **person-centered approach** that is not as heavily focused on PSH**.** Such an approach would focus not merely on housing as a key to recovery, but on recovery as the goal in itself and housing as one critical means to that end. The most immediate practical argument in support of this shift is the simple lack of available housing, and that allowing individuals to remain unsheltered and untreated while they await housing constitutes an unacceptable burden on the affected population and on public health. Our analysis also points to the benefits of a whole-person approach for addressing the needs of those who do get housed, but we begin our recommendations with those relevant to the unhoused.

First, we cannot avoid the need for more emergency shelter, safe haven, transitional housing and other short-term options. We do not make this recommendation lightly given both the benefits of permanent housing and the potential drawbacks of a large-scale shelter system. We also recognize the ongoing conversations at local and state level aimed at creating a right to shelter, removing barriers to shelter construction, and expediting construction or conversion projects. But such efforts, at least as currently construed, would likely generate 5,000 shelter beds against an unsheltered homeless population numbering more than 40,000. We recommend convening a rapid task force aimed at rethinking emergency shelter in order to address well-known barriers relating to shelter zoning and construction, community resistance to construction, and clients' concerns about shelter quality. Shelter should be viewed strictly as a transitional option, with provisions to sunset or convert new shelters into permanent housing.

With the large number of individuals who will remain unsheltered over any time horizon, we also recommend more aggressive effort to explore new models for providing health and sanitation services to unsheltered populations. New models exist for delivery of high impact treatments for HIV, Hepatitis C and substance abuse among homeless populations, with some evidence that treatment can speed up the transition to housing. Yet few of these models have been evaluated, much less rolled out on a large scale. Most also carry ethical and sustainability concerns that must be addressed. We recommend a rapid research network and a well-funded Grand Challenge program that can provide a fast track from program design to pilot to rollout.

Efforts for improving housing, shelter, and services must be accompanied by an outreach campaign that conveys the scope of the crisis without increasing stigma. Street outreach efforts can be refashioned into a full spectrum outreach effort, including street teams, volunteers, and citizens working 24 hours a day, 7 days a week, armed with better technological tools and more patient-centered approaches aimed at building trust. We can also focus more clearly on mobile health technologies that connect directly to the client, potentially addressing needs more quickly and at lower cost, freeing outreach workers to focus on more difficult tasks. Finally, we have more than 100 housed citizens for every homeless citizen. More serious efforts to engage citizens in the outreach effort can drastically enhance outreach coverage and public buy-in for new approaches to addressing the homelessness in LA. Such outreach may also eventually break down widespread public resistance to the construction of shelters and new housing.

A person-centered approach focused on recovery can also help to address expert concerns for those clients who are currently being housed. Many clients placed into PSH or nursing care need more extensive services or else they risk returning to homelessness and facing even worse health consequences. When housing does fall through, it remains difficult to track the client's status in spite of the best efforts of outreach workers. The potential for clients bouncing between housing, hospital, shelter and other facilities is especially troubling given that housing transitions are often the moment of greatest risk of mental illness and substance abuse.

Solutions to these problems begin with research and an evidence-based approach to case management and recovery. The LA County Department of Public Health Whole Person Care program offers one model for active "wraparound" case management for high-need clients, but currently only serves 1,000 clients at high case management cost. The technological innovations of HI's coordinated entry and outreach operations create the possibility of meeting the needs of a large number of clients in near-real-time across housing, health and social services. But developing a person-centered approach to care would require unprecedented levels of data integration between housing, health and social services. It would also require the use of technologies such as mobile and citizen outreach to enhance the reach and reduce the cost of outreach, drawing on public and private sector capabilities. Finally, efforts at identify needs and evaluating impacts will require surveys capable of measuring trajectories of homelessness and recovery among a representative panel of homeless individuals throughout the county. While such efforts would be both difficult and costly, the same technologies of engagement, intervention and followup could be applied to the ultimate goal of homelessness prevention.

The LA County Homeless Initiative has had a turbulent first two years. We have seen extraordinary efforts to kick start action, along with delays and inefficiencies. We have witnessed a daily litany of coverage of the ups and downs of this process. We have seen an outpouring of empathy and effort from communities trying to find solutions, along with rising frustration and anger that the raw numbers have not budged. Although public leaders must counsel patience, our findings suggest that they must also reassess priorities. Without a new approach, the strategies taken under HI will likely preserve the unsheltered nature of LA County homelessness going forward into the future. Considerable opportunities exist to unite Angelenos in a collective campaign toward equitable health and housing practices. Bringing an end to LA's unique housing crisis will require solutions as diverse and creative as Angelenos themselves. Now is the time to take advantage of these unprecedented opportunities for innovation, collaboration, and solidarity.

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