Health Impact Evaluation Center

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Measure H: Preventing and Reducing Homelessness in Los Angeles County

Health Impact Assessment

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Summary

Background, Purpose and Approach

Measure H is an initiative on the March 2017 ballot that would increase the Los Angeles (LA) County sales tax by one-quarter of one cent for a period of ten years, generating approximately \$350 million in annual revenues to fund a set of strategies identified by the LA County Homeless Initiative. These strategies aim to prevent homelessness, increase income, subsidize housing costs, provide case management and other services, increase access to affordable housing, and create a coordinated delivery system. In December 2016, an office of the LA County Board of Supervisors (Board) requested a Health Impact Assessment (HIA) of Measure H from the LA County Department of Public Health (DPH).

HIAs use qualitative and quantitative methods to assess the potential health impacts of pending polices or programs outside of the traditional health sector. The purpose of this HIA is to educate the voting public about the health-related evidence behind the strategies in Measure H and to inform decision making regarding the implementation of Measure H, if it passes.

This HIA applies a public health lens to efforts to address homelessness. We organize the Measure H strategies according to a three-level conception of prevention foundational to the public health field. **Primary prevention** seeks to prevent the onset of health conditions before they occur. **Secondary prevention** seeks to detect health conditions in their earliest stages in order to slow or stop their progression. **Tertiary prevention** seeks to minimize the consequences of established health conditions through recovery and rehabilitation. In addition to addressing each of these levels of homelessness prevention, **Measure H also contains strategies that cut across all three levels.**

Potential Health Impacts of Measure H in LA County

Primary Prevention

There are approximately 300,000 renter households in LA County that are extremely low income *and* pay more than 50% of their income on rent, putting them at risk of homelessness. Those who are at risk of homelessness are significantly more likely to face barriers to health care, report poor or fair health status, have health related activity limitations and have a diagnosis of depression.

Homelessness primary prevention programs typically include limited financial assistance for rental arrears, benefits advocacy, eviction mediation and employment assistance. Rigorous evaluative research has shown that these programs effectively reduce homelessness. While this research has not explicitly measured health outcomes, the risk factors that primary prevention programs screen for, and the services they provide, all target known social determinants of health (e.g., housing stability, employment, access to health services, food security, and exposure to homelessness—see Figure 1). Thus, evidence that homelessness primary prevention programs work suggests that they have health benefits. The biggest challenge is that only 10-15% of households at risk of homelessness will actually become homeless.

Researchers have developed data-driven screening tools to help target scarce prevention resources to those at highest risk.

Key Findings:

- Primary prevention addresses key social determinants of health and is an effective strategy for preventing homelessness from occurring in the first place.
- Primary prevention is an important component of Measure H's overall approach to reducing homelessness, but given the challenge of targeting services to those who need them most, an overreliance on this strategy would not be prudent.
- Two particularly promising primary prevention strategies are: 1) assistance with mediation in housing courts to prevent eviction; and 2) temporary financial assistance for rental arrears and utility payments.
- The population at risk of homelessness in LA County has documented income and mental health service needs and could benefit from linkages to mainstream services in these areas.
- Housing instability in LA County is about the same for households with and without children, suggesting that both would benefit from Measure H's primary prevention strategies.
- Evidence suggests that collaboration across multiple LA County Departments as part of a system-wide approach to homelessness prevention bodes well for the success of this Measure H strategy.

Secondary Prevention

Of the approximately 47,000 homeless people LA County in 2016, 69% were considered non-chronically homeless (see glossary for definition). Most of these people have been homeless for less than a year and can thus be considered the target population for secondary prevention programs. However, about one-third have been homeless for a year or more and thus may have different needs. While not as burdened with health related problems as the chronically homeless, the non-chronic population still has rates of mental illness, substance abuse, and experiences of violence higher that the general population. Measure H features two main approaches to secondary prevention: providing rapid re-housing and addressing transitions out of institutions.

Rapid-rehousing is designed to move homeless people with low to moderate housing barriers into permanent housing as quickly as possible and help them remain stably housed. Rigorous evaluative research has shown that rapid re-housing is a cost-effective strategy for reducing homelessness that may also have mental health benefits for adults and children. However, especially in tight rental markets like LA, many will have difficulty remaining stably housed. Jail inreach targets homeless inmates with mental health and/or substance use problems with services that start in jail and continue in the community when inmates are released. Evaluations have shown that jail inreach reduces rearrests and days in jail and certain program elements increase continuity of mental health services; but securing permanent housing can still be challenging. Recovery housing and medical respite care are "bridge" housing strategies that provide supervised, short-term housing to homeless people exiting health care and other

treatment institutions who are still too ill to live independently. Research has shown that both of these models help people to ultimately secure permanent housing while also improving health outcomes.

Key Findings:

- While rapid re-housing is effective at moving homeless people more quickly out of shelters and into permanent housing, some will have difficulty remaining stably housed once they are placed. Measure H includes a number of additional strategies to address these potential challenges including: 1) leveraging local city funds to increase flexibility of temporary financial assistance; 2) the Criminal Records Clearing Project; 3) preserving existing and developing new affordable housing for the homeless; 4) employment services; and 5) facilitating the use of federal housing subsidies.
- Measure H's jail inreach strategy provides an opportunity to build on what is already known about effective collaboration across the criminal justice and mental health/substance abuse systems. Promising aspects of this strategy include: 1) early start and expanded scope of inreach services; 2) the Criminal Records Clearing Project; 3) use of intensive case management services model; and 4) inclusion of homeless focus in LA County's Regional Integrated Reentry Network.
- Particularly in the face of reduced federal funding for transitional housing, Measure H's targeting of funds to a variety of evidence-based short-term "bridge" housing programs (e.g., medical respite care, recovery housing) will likely increase rates of permanent housing and improve other health-related outcomes among homeless people exiting institutions.

Tertiary Prevention

Approximately 15,000 (31%) of LA County's homeless population is considered chronically homeless (see glossary for definition). While LA County contains only 3% of the nation's population, it is home to 17% of the nation's chronically homeless. Approximately sixty three percent of the chronically homeless in LA County have a mental illness, 49% have a substance abuse disorder, and 40% have a physical disability. Thirty six percent of homeless women have been victims of intimate partner violence.

Permanent Supportive Housing (PSH) is a housing and health intervention for homeless people who are unable to live independently without on-demand access to supportive health and social services. PSH takes a "Housing First" approach in that it seeks first and foremost to establish a permanent "place of one's own" that can then be used as a platform for pursuing social, health and other recovery goals. PSH has been subjected to rigorous evaluative research and, although effects on health outcomes have not yet been detected, it has been shown to effectively reduce homelessness, promote long term housing stability and reduce hospitalizations and emergency room use. While PSH is a widely recommended model, much less is known about how different program elements may be related to different outcomes, and whether different sub-populations may be better served by different levels of service intensity.

Key Findings:

- PSH, the primary strategy in Measure H for combatting chronic homelessness, has been shown to effectively reduce homelessness, promote long term housing stability and reduce expensive emergency room and hospital stays.
- By funding PSH services, Measure H would complement the recently passed LA City Initiative (HHH) which provides capital funding for the construction of 10,000 new PSH units.
- Through Measure H, LA County would have the opportunity build on what we already know about the health impacts of PSH so that it becomes an integral part of our County's efforts to promote health equity for all of our residents.

Cross Cutting Strategies

Rent Subsidies and Affordable Housing

Tenant-based rental assistance programs provide vouchers or direct cash assistance to low income families, the disabled and elderly persons, which they can use toward rent for housing in the private market. In 2001, the U.S. Community Preventive Services Taskforce recommended the use of rental subsidies, based on evidence that they significantly improve neighborhood safety and reduce exposure to violence. Federal funds for housing vouchers have been decreasing and in LA's tight housing market landlords are reluctant to accept them. Measure H addresses these challenges at multiple levels of prevention by: 1) providing financial incentives for landlords to accept housing vouchers; and 2) preserving current affordable housing and developing new affordable housing for the homeless.

Employment Services and Supports

Income is one of the largest drivers of health inequities worldwide. In the U.S., the gap in life expectancy by income is increasing. Researchers and other experts agree that the employment market is one of the primary structural determinants of homelessness. Two of the most widely researched strategies for increasing income among the homeless are the **Individual Placement and Support (IPS) model of supported employment** and **subsidized employment programs**. IPS specifically targets people with severe mental illness and a number of randomized controlled trials have shown that it effectively secures and maintains employment for this population. Early evidence show IPS to be a promising model for PSH clients as well. Forty years of rigorous research on subsidized employment programs for people with barriers to employment has shown that these programs successfully increase earnings and employment, as well as having non-vocational benefits, including improved educational outcomes and psychological well-being. An evaluation focused specifically on subsidized employment for the homeless population will be releasing findings within the next year. **Measure H has strong income-focused components that target subsidized employment and social enterprise, either of which could include IPS.**

SSI Benefits, Advocacy and Enrollment

Supplemental Security Income (SSI) is a cash assistance program of the Social Security Administration for people with disabilities, a group highly represented among the homeless.

Homeless veterans newly awarded SSI benefits had better housing outcomes over a four year period than those without SSI. Despite the known benefits of SSI for the homeless, this population has high rates of those "eligible but not enrolled," and approval rates for first time applicants among the homeless were recently as low as 10%. This can largely be explained by conditions of homelessness, which makes the lengthy and intensive eligibility determination process more challenging. Measure H has a multi-pronged strategy for increasing income through SSI among disabled adults who are homeless or at risk for homelessness. It includes a countywide SSI advocacy program and targeted SSI advocacy for inmates. The SSI advocacy program is modeled after the SSI Outreach Access and Recovery program (SOAR), an evidenced-based model that improves application success rates.

Homeless Service System Coordination

Accumulated research evidence and practical experience is fostering a transformation in the homeless services field. The theme of this transformation runs through all three levels of prevention reviewed in this HIA and is aptly described as a primary goal in Opening Doors, the Federal Strategic Plan to Prevent and End Homelessness: **Transform homeless services into a crisis response system that prevents homelessness and rapidly returns people who experience homelessness to stable housing.** This goal of system transformation is based on the principle of "Housing First". It is not only about creating better tools to streamline services and track progress toward outcomes, but also about changing the system's end game based on the lived experiences of the consumer. Drawing inspiration from this vision, Measure H includes a strong focus on system transformation including: 1) strengthening system components, including outreach and engagement, emergency shelter and services for transition age youth; and 2) an enhanced Coordinated Entry System (CES) to operationalize the crisis response model. A recent evaluation of early CES implementation in LA County found that it is already characterized by: 1) low barriers to assistance; 2) client choice; 3) accessibility of entry points; 4) standardized access and assessments; 5) links to street outreach; and 6) full coverage of the service area—all key elements in the Department of Housing and Urban Development's guidelines for coordinated entry.

Key Findings

- Measure H contains several strategies that address all three levels of homelessness prevention, making them potentially more impactful for health.
- In addition to being evidence based, Measure H's rental subsidy strategy is highly leveraged because it helps draw down federal subsidy dollars and it links to Permanent Supportive Housing.
- By augmenting affordable housing dollars, Measure H contributes to the supply of affordable housing, through the preservation and construction of homeless housing.
- Measure H's subsidized employment strategy is evidence-based and would address a primary social determinant of health (i.e., income).
- Measure H's targeting of SSI advocacy and enrollment is a highly leveraged strategy that uses evidence-based enrollment techniques to boost income among the homeless by drawing down federal dollars to help prevent and reduce homelessness.
- By supporting system coordination, Measure H would help to transform LA County's homeless services into a *crisis response system* that prevents homelessness and rapidly returns people who experience homelessness to stable housing.

Recommendations

Based on the findings of this HIA, the following are recommendations regarding the implementation of Measure H if it passes. The recommendations are organized according the public health prevention framework that informs the structure of this report and are designed to maximize the health impacts of Measure H.

Primary Prevention

Recommendation P1: Develop clear screening criteria to target primary prevention services to those who need them the most.

Recommendation P2: Provide direct assistance with housing court mediation and rental/utility arrears.

Recommendation P3: Provide assistance to both family and non-family member households.

Secondary Prevention

Recommendation S1: Link the rapid rehousing model with cross-cutting strategies to maximize impact.

Recommendation S2: Build a Jail Inreach Project on what we know about effectiveness.

Recommendation S3: Be both selective and flexible in the types of bridge housing models supported.

Tertiary Prevention

Recommendation T1: Build on what we know about Permanent Supportive Housing by tailoring service according to need and striving for measurable health improvements.

Cross-Cutting Strategies

Recommendation C1: Tailor subsidized employment strategies to the needs of different sectors.

Recommendation C2: Design system coordination strategies in service of Emergency Response System goals.

Recommendation C3: Study the contingencies and relationships across all Measure H strategies to maximize the efficiency and effectiveness of investments in each.

Section 1. Introduction

Background and Purpose

Rising rates of homelessness in Los Angeles (LA) County are subjecting an alarming number of people of all ages to severely reduced life chances while simultaneously testing the limits of our social safety net. In response to what has become a nation-wide crisis, dedicated practitioners and researchers have worked determinedly to develop, test and evaluate strategies for effectively preventing and reducing homelessness. Some of these strategies may work across jurisdictions, while others may need more tailoring to match local systems and circumstances. They must also balance the need to secure stable housing with the need to address the behavioral and structural factors that put individuals and families at risk for becoming or remaining homeless.

In August 2015, the LA County Board of Supervisors (Board) launched the Homeless Initiative to prevent and reduce homelessness in LA County. As a critical first step, the County conducted a comprehensive planning process which brought together 25 County departments, 30 cities and other public agencies and over 100 community partners and stakeholders to identify a set of 47 priority strategies for LA County. These strategies were approved by the Board in February 2016. Some of the strategies could be implemented with no new funding, others received one-time funding, and others would require ongoing funding. LA County Measure H (Measure H—see insert below) was approved by the Board for the March 2017 ballot in order to create an ongoing source of funds for this last group of strategies, along with four new strategies.

Interested in gaining an independent analysis of the potential health impacts of Measure H, one of the Board offices requested a Health Impact Assessment (HIA) of the Measure from the LA County Department of Public Health's (DPH) Health Impact Evaluation Center (HIEC). DPH and the public health field in general have taken a keen interest in housing and homelessness as social determinants of health.* HIA is a public health tool used to assess the potential health impacts of a wide range of social polices outside of the traditional health sector, with the ultimate goal of accelerating improvements in population health and health equity.

Stable housing is an essential platform upon which individuals, families and communities can build healthy lives. The purpose of this HIA is to review evidence of the links between homelessness and health and to assess the potential impacts of Measure H on health through its more immediate effects on the prevalence and consequences of homelessness.

Overview of the Report

The remainder of this report is divided into six sections. Section two describes the methods used for the HIA, including the conceptual framework, guiding research questions and data sources. Sections three through six contain our findings on the potential health impacts of

^{*} Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Measure H. These sections are organized according to the four categories of prevention strategies outlined in the conceptual framework. Each section begins with a description of the health profile of the relevant sub-population, followed by a review of evidence linking Measure H strategies to health determinants and health outcomes. Each section ends with a set of conclusions about how Measure H could impact health in LA County through its effects on social determinants of health. The final section provides recommendations for those charged with implementing Measure H if it passes. The recommendations are organized according to the levels of prevention described in the methods section below and are designed to maximize the health impacts of Measure H.

Summary of Measure H

Measure H would increase the retail sales tax in LA County by one-quarter of one cent per dollar for a period of ten years, generating approximately \$350 million in revenues annually. Revenues generated by the tax would be expended according to annual expenditure plans, approved by the Board. Expenditure plans would target the following homelessness prevention and reduction strategies, developed as part of the LA County Homeless Initiative planning process and approved by the Board:

- Provide homeless prevention services for individuals and families.
- Facilitate use of federal <u>housing subsidies</u>, and provide local housing subsidies for: 1) homeless
 disabled individuals seeking Supplemental Security Income (SSI); 2) rapid re-housing of
 individuals and families with low-to-moderate housing barriers; 3) homeless families with
 children in the child welfare system seeking reunification; and 4) individuals exiting institutions
 who need interim/bridge housing.
- <u>Increase income</u> of homeless individuals to cover housing expenses by: 1) supporting social enterprise and subsidizing employment for homeless individuals who are able to work; and 2) establishing a countywide advocacy programs for homeless individuals who are eligible for SSI and/or Veterans benefits, including targeted SSI advocacy for inmates.
- Provide <u>case management and support services</u>, including: 1) services and rental subsidies for permanent supportive housing clients; 2) expansion of jail inreach services for homeless inmates; 3) enhanced focus on homelessness as part of a Regional Re-entry Network for inmates leaving jail/prison; and 4) criminal record clearing services for ex-offenders.
- Create a <u>coordinated system</u> of homeless services, including: 1) a countywide homeless outreach and engagement network; 2) a strengthened Coordinated Entry System (CES) to streamline homeless services workflow, training and client tracking; 3) an enhanced emergency shelter system; and 4) an enhanced service system for transition age youth.
- Preserve existing <u>affordable housing</u> and promote the development of affordable housing for homeless families and individuals.

The measure also establishes a <u>Citizens' Oversight Advisory Board</u> to: 1) publish a complete public accounting of expenditures each year; 2) conduct semi-annual reviews of expenditures; and 3) engage in evaluation and monitoring activities to ensure accountability for results.

Section 2: Methods

Supports (C2, C7)

Conceptual Model of Health Impacts

Policy Components* Health Outcomes Health Determinants Infectious Diseases **Cross-Cutting Strategies Primary Prevention** 1. SSI/VA **Metabolic Diseases** Income/Employment Homelessness **Benefits** Advocacy and **Prevention Programs** Cardiovascular **Housing Stability** (A1, A5) Enrollment Diseases (B1, C4-6) **Food Security Mental Health** Secondary 2. Homeless Prevention **Disorders** Service System Access to Health 1. Rapid Re-housing Coordination (B3, B6) Services Substance Use (E6-8, E14) 2. Supporting **Disorders** 3. Rent Transitions out of **Exposure to** Subsidies and Institutions **Child Development Homelessness** (D2, D4, D6, B7) Affordable Housing Physical (B4, F7, D7, B3, Exposure to violence Trauma/Injuries **Tertiary Prevention** A1,5) **Substance Dependence** Age-Related 4. Employment Supportive Housing **Conditions** Services and

Figure 1: Measure H Pathways to Health
A Preventive Approach to Reducing Homelessness in LA County

Mortality

Figure 1 presents the conceptual model for this HIA. The orange boxes on the left depict the *policy components* of Measure H. The blue box represent *social determinants health* that could be effected by Measure H and that research has shown to be linked to health outcomes. The purple box on the right depicts the longer term *health outcomes* that could be impacted by Measure H.

Levels of Homelessness Prevention: A Public Health Perspective

For the purposes of this HIA, we have organized Measure H's policy strategies in **Figure 1** according to a foundational three-level conception of prevention in the field of public health. We suggest that this conception is implicit in the strategies laid out for Measure H and that making it more explicit not only provides a useful organizing principal for this report, but also helps to highlight the coherence of Measure H's approach to addressing homelessness and the connections among the various strategies targeted by the measure.

In public health theory and practice, *Primary prevention* seeks to prevent the onset of health conditions before they occur. For homeless policy, this would equate to strategies for preventing homelessness among those not currently homeless. *Secondary prevention* seeks to

^{*} The number and letter codes beneath each policy component correspond to the subset of 17 strategies in the Board approved Strategies to Combat Homelessness (http://priorities.lacounty.gov/wp-content/uploads/2016/03/HI-Report-Approved2.pdf) and four new strategies that were included in the Board motion to place Measure H on the ballot.

detect health conditions in their early stages, before symptoms appear, in order to slow or stop progression. For homeless policy, this would equate to strategies for identifying people who have recently become homeless, or who have experienced intermittent periods of homelessness, and re-housing them in order to minimize the negative long-term consequences of homelessness. *Tertiary prevention* seeks to minimize the consequences of established health conditions through rehabilitation. For homeless policy, this would equate to strategies for matching chronically homeless individuals with permanent housing and supportive services that can help them to recover from the hardships of long-term homelessness.

While preventive health measures typically address only one of the three levels of prevention, a potential strength of the strategies proposed by Measure H is that many of them can be considered "cross-cutting" in that they can support more than one level of prevention. For example, temporary housing subsidies can be provided to families at risk of losing their homes in order to prevent them from becoming homeless. They can also be secured for people who have recently become homeless as part of a rapid-rehousing strategy. Chronically homeless individuals can qualify for housing subsidies to help them afford Permanent Supportive Housing (PSH). Similarly, employment services and supports can help prevent people from losing their homes, assist those recently homeless in securing permanent housing, and provide work opportunities for those requiring PSH. Finally, by integrating many of these cross-cutting strategies, efforts to coordinate homeless service systems can be designed to serve people in need of all three levels of prevention.

Primary Research Questions

Based on the health pathways depicted in **Figure 1** and in collaboration with our HIA Community Advisory Group, we identified four primary research questions to guide our assessment of the health impacts of Measure H:

- Research Question #1: How would efforts to prevent homelessness impact social determinants of health and health outcomes in LA County?
- Research Question #2: How would efforts to rapidly re-house those recently homeless and find housing solutions for those transitioning out of institutions impact social determinants of health and health outcomes in LA County?
- Research Question #3: How would Permanent Supportive Housing for the chronically homeless impact social determinants of health and health outcomes in LA County?
- Research Question #4: How would cross-cutting strategies targeting primary, secondary and tertiary prevention of homelessness impact social determinants of health and health outcomes in LA County?

Data Sources

HIAs typically use a variety of qualitative and quantitative data and methods for predicting potential health impacts of pending policies. Because this HIA had to be completed very rapidly in order for findings and recommendations to be available in advance of the March 7th election date, we had to limit the scope of data used in the assessment phase. We relied on descriptive analyses of existing quantitative data, reviews of research literature linking Measure H strategies to health determinants and health outcomes and discussions with key stakeholders.

Our assessment method was largely qualitative in nature, in that we drew general conclusions about the magnitude and direction of potential health impacts of Measure H strategies based on our reviews of the research literature and consultation with experts. We did not attempt to predict quantitative changes in housing and health-related outcomes due to Measure H strategies. This was due not only to the short timeline for completion of the HIA, but also to the fact that Measure H is not specific about how much funding each strategy would receive.

Secondary Data Analysis

We conducted secondary analyses of existing local data sets to provide descriptive statistics on current demographic and health conditions in LA County among those homeless and at risk for homelessness. We also report relevant descriptive analyses conducted by others. Data sources included LA County DPH (LA County Health Survey), the Los Angeles Homeless Services Authority (LAHSA) (Annual Point in Time Homeless Count), and the American Community Survey of the United States Census Bureau.

Literature Reviews

To address each of the research questions we conducted a review of the literature on the housing and health-related effects of primary, secondary and tertiary homelessness prevention strategies. We also reviewed relevant literature on health-related factors associated with homelessness and with the duration and recurrence of homelessness.

Key Informants

In accordance with standards of practice for HIA, we convened a Community Advisory Group (CAG) to inform the scope, methods and recommendations of the HIA (see list of members on page 44). This group included representatives from the LA County Homeless Initiative team, leaders in the homeless services field in LA County, key representative from multiple County departments that serve the homeless, and academic experts. Given the rapid timeline for completion, we were only able to convene the group once in person, and detailed notes from that meeting were a primary data source for this HIA. We were also able to conduct individual interviews with several members of the CAG and had helpful e-mail exchanges with several others. The CAG was also given the opportunity to comment on the final draft of the HIA report. This HIA greatly benefited from the wisdom and support of all CAG members.

Section 3: Health Impacts of Primary Prevention Strategies in Measure H

In this section we begin by describing current demographic and health conditions with respect to those at risk of homelessness in LA County. We then review the research literature on the housing and health-related effects of homelessness prevention strategies. Finally, we draw conclusions about the potential health impacts of primary prevention strategies in Measure H.

Health Profile of the Population at Risk of Homelessness

Risk factors for homelessness include a combination of structural and individual factors, as well as interactions between the two.¹ Structural factors include the absence of low-cost housing, living wage jobs and a strong social safety net. At the individual level, risk factors include poverty, early childhood adverse experiences, mental health problems, alcohol and substance misuse, a history of violence and criminal justice system involvement. For youth, risk factors include family victimization, involvement with the child welfare system and non-heterosexual sexual identity.² Structural risk factors interact with individual factors such that, when the safety net is weaker, it takes fewer individual risk factors to put someone at risk of homelessness.¹

Estimates of populations at risk of homelessness are typically based on a combination of household income and housing cost burden data.³ In 2015, 31% of LA County renter households were severely rent burdened (>50% of income spent on rent). Of these households, 56% were extremely low income (<\$20,000 annual income), representing approximately 300,000 LA County households (approximately 17% of all renter households) that would be considered at risk for homelessness (**Table 1**).*

Table 1: Rent Burden by Renter Household Income in LA County, 2015				
Annual Income	Number (%) Rent Burdened	Number (%) Severely Rent		
	(>30% of Income on Rent)	Burdened		
		(>50% of Income on Rent)		
<\$20,000	344,770 (94%)	300,643 (82%)		
\$20,000-\$34,999	304,382 (91%)	168,818 (51%)		
\$35,000-\$49,000	191,901 (72%)	47,170 (18%)		
\$50,000-\$74,000	123,348 (42%)	15,331 (5%)		
\$75,000+	46,688 (13%)	2,498 (1%)		

Source: American Community Survey, 2015 one-year estimates

Another source of data on those at risk of homelessness in LA County is the LA County Health Survey (LACHS) which, in 2011, asked adult respondents whether, in the past 2 years, there was any month when they were unable to pay or delayed paying the rent or mortgage.

^{*} Our estimate assumes that all LA County households earning <\$20,000 per year are extremely low income (ELI). However, this was the U.S. Department of Housing and Urban Development (HUD) ELI threshold for a 2 person household in 2015. Since the average household size in LA County is 3, ours is a conservative estimate of the number of households at risk of homelessness.

Approximately 17% of all respondents experienced a high housing cost burden by this measure; the rate among renters was 22%.

The LACHS allow us to examine the health profile of this group of residents at risk of homelessness (**Table 2**). People who had experienced high housing cost burdens were almost three times more likely to be food insecure, a risk factor for obesity (also higher among the housing cost burdened) and related metabolic disorders. Rates of smoking and misuse of prescription drugs were also higher among those with housing cost burdens. Those with housing cost burdens had reduced access to health care, including two times more difficulty accessing medical care and three times more difficulty affording prescription drugs. In terms of overall health status, those with housing cost burdens had a higher percentage of unhealthy days and of days with activity limitations in the past month, and were more likely to rate themselves in fair or poor health. Finally, people with housing cost burdens suffered from significantly more mental health-related problems, including depression risk and diagnosis and lack of social and emotional support.

Table 2: Health-Related Correlates of Housing Affordability in LA County, 2015					
Health Indicator	Housing Cost Burden (95% CI)	No Housing Cost Burden	LA County (95% CI)		
	(22772)	(95% CI)	(2211.2)		
Food Insecurity	56.9% (52.4-61.4)	20.8% (18.7-22.8)	29.0% (27.0-30.9)		
Obesity	33.8% (30.1-37.6)	21.6% (20.2-23.0)	23.6% (22.3-24.9)		
Marijuana Use	9.6% (7.2-12.1)	8.1% (7.1-9.1)	8.5% (7.6-9.4)		
Current Smoking	17.6% (14.5-20.8)	12.1% (10.9-13.3)	13.1% (12.0-14.2)		
Prescription Drug Misuse (past year)	8.4% (6.0-10.7)	4.6% (3.8-5.4)	5.2% (4.5-6.0)		
Difficulty Accessing Medical Care	50.9% (46.9-54.9)	27.6% (25.9-29.2)	31.7% (30.1-33.2)		
Unable to Afford Prescriptions (past year)	35.1% (31.3-38.9)	11.2% (10.1-12.4)	15.4% (14.2-16.5)		
Fair/Poor Health Status	30.9% (27.3-34.5)	18.7% (17.5-20.0)	20.7% (19.5-21.9)		
% Unhealthy Days (in past month)	8.6% (7.7-9.5)	4.8% (4.5-5.1)	5.4% (5.2-5.7)		
% Activity Limitation Days (in past month)	3.5% (2.9-4.1)	1.8% (1.6-2.0)	2.1% (1.9-2.3)		
At Risk for Depression	18.1% (15.0-21.2)	8.9% (7.9-9.9)	10.4% (9.4-11.4)		
Depression (ever diagnosed)	20.8% (17.8-23.9)	10.6% (9.6-11.5)	12.2% (11.2-13.1)		
Receive Needed Social and Emotional Support	50.4% (39.0-61.8)	67.9% (63.2-72.7)	64.0% (59.5-68.5)		

Source: Los Angeles County Health Survey, 2011. The housing cost burden question was not asked in the 2015 survey.

The LACHS also asks about housing instability, defined as ever being homeless or not having one's own place to live or sleep during the past 5 years. People who have had one episode of homelessness are at higher risk of recurrent homelessness. In 2015, 6.4% of LA County

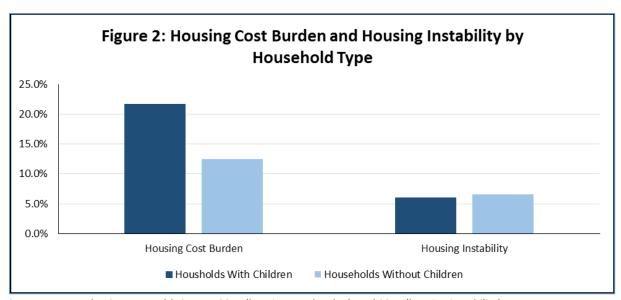
households had experienced housing instability. Examining the health profile of this group helps us understand the potential health impacts of efforts to prevent homelessness (**Table 3**).

Like those with high housing cost burdens, the unstably housed had higher health-related vulnerabilities than the comparison group. However, the disparity was even greater for smoking and mental health. Thirty-four percent of those unstably housed were smokers—almost three times the rate of those stably housed. Thirty percent had been diagnosed with depression—also almost three times the rate of those stably housed. The 2015 survey also included questions about intimate partner physical and sexual violence. Unstably housed females were three to four times more likely to be victims of these types of violence than their stably housed counterparts.

Table 3: Health-Related Correlates of Housing Instability in LA County, 2015						
Health Indicator	Unstable Housing (95% CI)	Stable Housing (95% CI)	LA County (95% CI)			
Food Insecurity	57.7% (50.4-64.9)	23.6% (21.8-25.5)	26.0% (24.2-27.8)			
Obesity	29.7% (23.5-35.9)	23.3% (21.9-24.6)	23.5% (22.2-24.9)			
Marijuana Use	28.4% (22.2-34.6)	10.7% (9.7-11.7)	11.6% (10.5-12.6)			
Current Smoking	33.9% (27.5-40.3)	12.2% (11.0.13.3)	13.3% (12.1-14.4)			
Prescription Drug Misuse (past year)	9.1% (4.9-13.3)	5.3% (4.5-6.0)	5.5% (4.7-6.2)			
Difficulty Accessing Medical Care	43.7% (36.8-50.5)	22.5% (21.124.0)	23.6% (22.2-25.0)			
Fair/Poor Health Status	32.0% (25.8-38.2)	21.0% (19.7-22.3)	21.5% (20.2-22.7)			
% Unhealthy Days (in past month)	9.9% (8.4-11.3)	5.7% (5.4-6.0)	5.9% (5.6-6.2)			
% Activity Limitation Days (in past month)	5.1% (4.0-6.3)	2.2% (2.0-2.4)	2.3% (2.1-2.5)			
At Risk for Depression	28.5% (22.4-34.6)	10.9% (9.9-12.0)	11.8% (10.7-12.8)			
Depression (ever diagnosed)	30.0% (24.2-35.8)	12.2% (11.2-13.1)	13.0% (12.1-14.0)			
Receive Needed Social and Emotional Support	46.3% (39.5-53.1)	64.9% (63.3-66.5)	64.0% (62.5-65.6)			
Intimate Partner Violence (Females)	42.5% (33.2-51.8)	13.7% (12.3-15.1)	14.8% (13.4-16.2)			
Intimate Partner Unwanted Sex (Females)	27.4% (18.7-36.1)	6.2% (5.2-7.1)	7.0% (6.0-8.0)			

Source: Los Angeles County Health Survey, 2015.

Finally, homelessness prevention and reduction programs often distinguish between families and individuals so it is helpful to compare these two indicators of risk of homelessness by household type (**Figure 2**). While households with children (i.e., the way a family is defined by homeless service providers) were almost two times more likely to report housing cost burdens, they did not differ from households without children on their reporting of housing instability.



Source: Los Angeles County Health Survey, 2011 (housing cost burden), and 2015 (housing instability).

Impacts of Homelessness Prevention Strategies

Researchers have estimated that 10-20% of people in the US who have one episode of homelessness will go on to become chronically homeless. ^{5,6} Due to the multiple adverse health effects associated with housing instability (**Table 3**) and homelessness (**Table 5** below), the primary prevention of homelessness holds much promise for improving health and health equity. Local authorities have confronted two interrelated challenges associated with primary prevention strategies. The first is effectiveness: does the intervention prevent people from becoming homeless? The second is efficiency: does the program target people who would have become homeless without the intervention?

Given the enormous size of the population at risk of homelessness, efficiency is crucial. A poorly targeted program can yield a false appearance of effectiveness among those served. While the screening of potential enrollees has typically been based on professional wisdom, studies have found that data-driven risk models can increase the efficiency of homelessness prevention services. Using four years of risk factor data from applicants for a New York-based community prevention program called Homebase, researchers developed a screening model that, in an evaluative simulation, increased the rate of enrollment of clients who would have become homeless by 26% and reduced the rate of enrollment of those who would not have become homeless by two-thirds. Factors most predictive of future homelessness among applicants included: currently receiving public assistance, involvement with child protective services, being served an eviction notice, multiple moves, ever having been in a shelter as an adult, and number of adverse childhood experiences. This screening model has been adopted by the New York program on which it is based. The researchers recommend that, where feasible, the development of similar screening tools in other jurisdictions should be based on an analysis of local program data to account for variation in local context.

Determining the effectiveness of primary prevention of homelessness is also challenging. The first attempt to gather national case study data on the effectiveness of homelessness prevention services found only six communities with sufficient data to study effectiveness. In a larger cross-section of communities with prevention programs, the researchers found that the most common primary prevention services offered included counseling and advocacy to help clients connect to resources and housing, in-kind emergency services, and temporary cash assistance for rental arears or utility payments. The primary prevention services for which the researchers found evidence of effectiveness included mediation in housing courts, and temporary cash assistance for rent or mortgage arrears. The study also found that, regardless of specific prevention service offered, successful targeting of scarce prevention resources was driven largely by the level of community-wide engagement in the effort. This type of engagement included: 1) information and data sharing; 2) standardized eligibility screening; 3) policy or statutory commitment to combatting homelessness and a strategic plan of action; 4) collaboration across public and private agencies to maximize and leverage resources; and 5) the commitment of public non-housing agencies to address the housing needs of their clients.

The New York homelessness prevention program that implemented the targeted screening model described above was also part of the first randomized control trial to test the impact of homelessness prevention services on subsequent homelessness. The Homebase community prevention program offers customized service plans to eligible families at risk of homelessness. Services include benefits advocacy, eviction mediation, employment assistance, legal referrals and limited financial assistance. The study found that those enrolled in the program spent an average of 23 less days in a homeless shelter (9.6 vs. 32.2 days) during the 2-year follow-up period, and were slightly more than half as likely to have spent at least one night in shelter (8% vs. 14.5%). This latter finding also points to the challenge of targeting prevention services to those most in need. Among those determined eligible (i.e., at high risk of homelessness) that did not receive any prevention services, only 14.5% spent a night in a shelter during the 2-year follow-up period. Importantly, the study also found that, over the study period, the average savings per treatment group member due to fewer shelter days was \$2,375, while the average program cost per participant was \$2,235.9 These savings were calculated prior to the implementation of the previously described risk screening tool, which likely improved the costeffectiveness of the program.

Researchers interested in the impact of homelessness prevention efforts in Chicago created a natural experiment based on their determination that the month-to-month volatility of funding availability through the Chicago Homelessness Prevention Call Center created random variation in the allocation of prevention resources to those seeking assistance. Those calling when funding was available were 76% less likely to enter a homeless shelter during a six month follow-up period. The researchers estimated the program cost to be about \$720 per caller referred but about \$10,300 per homeless spell averted, although they found the latter could be reduced by 35% by targeting assistance to the lowest income households that apply.¹⁰

How Could Measure H Homelessness Prevention Strategies Impact Health and Health Determinants in LA County?

While research to date on the primary prevention of homelessness has not explicitly measured health outcomes, the risk factors that these programs screen for include an array of known social determinants of health (see **Figure 1**). Thus, the evidence that primary prevention programs can measurably reduce homelessness among those served and can effectively increase the efficiency of program targeting suggests that they have health benefits. Nevertheless, the impact that these programs can have on the population at risk of homelessness is modest, due largely to the fact that they cannot feasibly reach all of those who would benefit from them. Even if only 10% of the 300,000 households at risk of homelessness in LA County will become homeless, prevention programs would need to target 30,000 households per year that would become homeless without assistance. Even with the most sophisticated targeting method, at least twice that number of at risk households would need to be served in order to have a sizable impact on the incidence of homelessness in the population.

That said, the standard used to judge the effectiveness of community prevention programs in public health, exemplified by the most comprehensive effort to judge such programs in the US,* depends in part on the level of prevention targeted. In contrast to secondary and tertiary prevention, primary prevention strategies require a lower effect size threshold to be recommended for broader implementation.** This is because primary prevention strategies target larger and more diverse populations that are more difficult to reach and influence and because of the relatively greater long-term societal benefit of preventing poor health before it happens. Conversely, the health-related costs of failing to prevent someone from starting down a path toward chronic homelessness are substantial.

Conclusions

- Approximately 300,000 renter households in LA County are at risk of homelessness, meaning that they have extremely low incomes and pay more than 50% of that income on rent.
- Primary prevention addresses key social determinants of health and is an effective strategy for preventing homelessness from occurring in the first place.
- Primary prevention is an important component of Measure H's overall approach to reducing homelessness but given the challenge of targeting services to those who would have become homeless without them, an overreliance on this strategy would not be prudent.
- Two particularly promising primary prevention strategies are assistance with mediation in housing courts to prevent eviction and temporary financial assistance for rental arrears and utility payments.
- While there is no specific evidence for the effect of employment or mental health services as part of primary homelessness prevention, the population at risk of

^{*} See www.thecommuntivguide.org

^{**}Note: Effect size should not be confused with statistical significance. All evaluated programs must meet a standard threshold of statistical significance in order to be considered effective.

- homelessness in LA County has documented income and mental health service needs and could benefit from linkages to mainstream services in these areas.
- While most evidence of the impact of primary prevention services comes from studies among homeless families with children, housing instability in LA County is about the same for households with and without children, suggesting that both would benefit from Measure H's primary prevention strategies.
- Evidence suggests that collaboration across multiple LA County Departments as part of a system-wide approach to homelessness prevention bodes well for the success of this Measure H strategy.

Section 4: Health Impacts of Secondary Prevention Strategies in Measure H

In this section we begin by describing demographic and health conditions in LA County with respect to those who are homeless but not chronically homeless. We supplement the latter with data from the research literature. We then review research on the housing and health-related effects of secondary prevention strategies designed to rapidly re-house those recently homeless and find housing solutions for those exiting institutions. Finally, we draw conclusions about the potential health impacts of the secondary prevention strategies in Measure H.

Health profile of the Non-Chronically Homeless Population

Among people who become homeless for the first time, the majority will not remain so for long durations of time. Many will reestablish themselves in stable housing after a relatively short period of homelessness, while others will experience recurrent short-term bouts of homelessness.⁶ The latter group has a higher likelihood of becoming chronically homeless. Given that chronic homelessness is associated with worse health outcomes,² it is important to identify and assist homeless people early in order minimize the health-related impacts of prolonged exposure to homelessness. This is the essence of secondary prevention.

According to the 2016 annual point-in-time homeless count, there were approximately 47,000 homeless people in Los Angeles County.* Sixty-nine percent were not chronically homeless, although LAHSA estimates that about one-third of those had been homeless for at least a year but were not classified as chronic because they did not have an eligible disabling condition.** The overall number of homeless people increased by 7% from 2015 to 2016. Despite a decrease in homeless family members, homelessness increased among individuals. The number and percent of non-chronically homeless people also increased (**Table 4**).¹¹

^{*} Note: Tables 4 and 5 report data for all of LA County except the cities of Long Beach, Pasadena and Glendale, which have their own homeless services authorities. Together, these three cities accounted for approximately 6% of the total homeless population in LA County in 2016. The total LA County homeless count in 2016 was 46,874. We use the term "Greater Los Angeles" in Tables 4 and 5 to denote LA County minus Long Beach, Glendale and Pasadena.

^{**} Special tabulation of 2016 LAHSA homeless count demographic survey data. See Glossary for U.S. Department of Housing and Urban Development (HUD) definition of chronic homelessness.

Measure H: Preventing and Reducing Homelessness in Los Angeles County – Health Impact Assessment

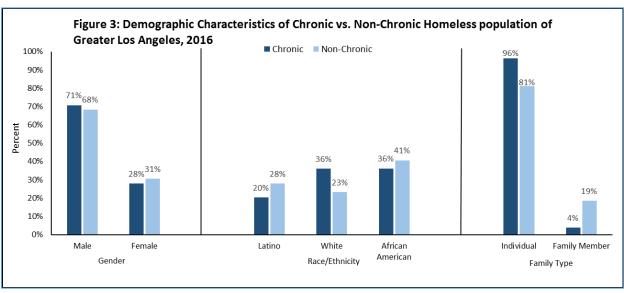
Table 4: Greater LA Homeless Population, 2015-16				
	2015		20)16
	Count	Percent	Count	Percent
Total Homeless Population	41,174	100%	43,854	100%
Male	27,309	66%	28,913	66%
Female	13,643	33%	14,461	33%
Transgender	222	0.5%	480	1%
Latino	11,082	27%	11,861	27%
White	10,306	25%	11,354	26%
African American	15,887	39%	17,188	39%
Asian	657	2%	464	1%
Native American	1,163	3%	903	2%
Sheltered	12,226	30%	11,073	26%
Unsheltered	28,948	70%	32,781	74%
Chronic	14,173	34%	13,468	31%
Non-Chronic	27,001	66%	30,386	69%
Individuals	33,389	81%	37,601	86%
Family Members	7,505	18%	6,128	14%
Children in Families	3,925	10%	3,490	8%
Unaccompanied Minors	280	0.7%	125	0.3%
Age <18	4,205	10%	3,615	8%
Age 18-24	3,089	8%	3,447	8%
Age 25-54	23,467	57%	26,219	60%
Age 55+	10,413	25%	10,573	25%

Source: LAHSA Homeless Count for Los Angles Continuum of Care, January 2016. Excludes Long Beach, Pasadena and Glendale. Percentages do not always add up to 100 due to rounding.

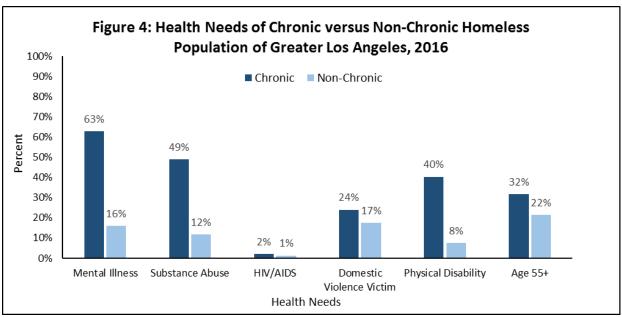
Table 5 and Figures 3 & 4 provide some demographic and health comparisons between the chronically and non-chronically homeless populations in greater Los Angeles. While males are three times more likely to be homeless than females, there is very little gender difference by chronic/non-chronic status. Homeless family members are five times more likely to be nonchronically than chronically homeless, although 81% of the non-chronically homeless population is made up of individuals not in families. Compared to the overall population in LA County, African-Americans are overrepresented in both homeless sub-groups, while whites and Latinos are underrepresented. Whites are more highly represented among the chronically homeless, likely due to the fact that mental illness varies less by race than the socio-economic factors that drive more temporary forms of homelessness. The chronically homeless are four times more likely to have mental illness and substance abuse problems, although these problems are still prevalent among a subset of the non-chronically homeless. Rates of domestic violence victimization in Table 5 mask large disparities by gender. Thirty-six percent of all homeless women in 2016 were victims of domestic violence. Finally, the chronically homeless are more likely to be over 55 years old, and are thus more likely to suffer from age-related conditions which are accelerated by the conditions of homelessness.¹²

Table 5: Greater LA Homeless Population by Chronic Status, 2016						
	Total (43,854)		Chronic (13,468)		Non-Chronic (30,386)	
	Count	Percent	Count	Percent	Count	Percent
Male	28.913	66.0%	9,517	70.7%	20,772	68.4%
Female	14,461	33.0%	3,758	27.9%	9,307	30.6%
Transgender	480	1.1%	193	1.4%	307	1.0%
Latino	11,861	27%	2,741	20.4%	8,491	27.9%
White	11,354	26%	4,854	36.0%	7,066	23.3%
African American	17,188	39%	4,869	36.2%	12,337	40.6%
Asian	464	2%	73	0.5%	411	1.4%
Native American	903	3%	75	0.6%	176	0.6%
Individual	37,601	86%	12,970	96.3%	24,631	81.1%
Family Member	6,128	14%	498	3.7%	5630	18.5%
Child family member	3,490	8%	296	2.2%	3194	10.5%
Unaccompanied Minor	125	0.3%	0	0	125	0.4%
Mental Illness	13,006	32.3%	8,275	62.8%	4,322	16.0%
Substance Abuse	9,941	24.7%	6,442	48.9%	3,175	11.7%
HIV/AIDS	629	1.56%	269	2.0%	342	1.3%
Domestic Violence Victim	7,868	19.6%	3,163	24.0%	4,700	17.4%
Physical Disability	7,401	18.4%	5,303	40.3%	2,039	7.5%
Chronic Health Issue	2,820	7.0%	1,059	8.0%	1,726	6.4%
Brain Injury	3002	7.5%	1,063	8.1%	1,839	6.8%
Developmental Disability	1483	3.7%	628	4.8%	825	3.1%
Age 55+	10,573	24.1%	4,263	31.7%	6,530	21.5%

Source: LAHSA 2016 point in time data on Los Angeles Continuum of Care (excludes Long Beach, Pasadena and Glendale)



Source: LAHSA 2016 point in time data on Los Angeles Continuum of Care (excludes Long Beach, Pasadena and Glendale)



Source: LAHSA 2016 point in time data on Los Angeles Continuum of Care (excludes Long Beach, Pasadena and Glendale)

While most research on the health status of homeless people has focused on the chronically homeless, there are a few exceptions that can add to our understanding of the health of those who have been homeless for shorter periods of time. Researchers at the New York City Department of Health conducted an analysis of mortality rates and other health indicators in the population of homeless families in New York, virtually all of whom are in shelters. 13 They found that while overall and cause-specific mortality rates among adults in homeless families were higher than among the general population, they did not differ from rates among adults in low-income neighborhoods, with the exception of mortality related to substance abuse. Another study of the health of the non-chronically homeless focused on single adults who were first time users of the New York homeless shelter system.⁵ The study enrolled equal numbers of men and women (from single sex shelters) and followed them for 18 months to track their health and housing status. At baseline, participants had rates of diabetes, hypertension, asthma, depression and substance use disorders that were not different from those found among similarly aged people below the poverty line in the National Health Interview Survey. After 18 month of follow-up none of these conditions worsened for either those who found housing or those who did not. Both studies concluded that homelessness among the nonchronic population is more closely linked to poverty conditions than to mental health and substance use disorders. Thus, the same community-based health and social services that serve low-income residents can serve to improve health outcomes among those who experience short term or episodic homelessness.

There is a more robust literature on the health of homeless children and the effects of homelessness on child health. Homelessness is particularly damaging to children due to their developmental vulnerability. ¹⁴ Studies of homeless children in Los Angeles found that 78% had a psychiatric, behavioral or academic problem. Thirty seven percent screened positive for symptoms consistent with depression and 45% met criteria for special education, although only

22% were referred for a special education evaluation.¹⁵ A recent systematic review and meta-analysis of research on the prevalence of mental illness among homeless children found that homeless school age children were significantly more likely to exhibit internalizing (e.g., social withdrawal, sadness) and externalizing (e.g., physical aggression, vandalism) problems than housed children in poverty. Across the studies reviewed, 24% to 40% of homeless school-age children had mental health issues requiring clinical evaluation—2 to 4 times higher than the rate for children below the federal poverty level in the National Survey of America's Families.¹⁶

Impacts of efforts to rapidly re-house the non-chronically homeless and find housing solutions for homeless people exiting institutions

Two promising innovations have emerged among recent efforts to break the cycle of homelessness among families and individuals before it becomes chronic and debilitating. One focuses on rapid re-housing in community settings and the other targets transitions out of institutions. Measure H has embraced them both so a review of their history, successes and challenges is warranted.

Rapid Re-Housing

Put simply, rapid re-housing is designed to move homeless people with low to moderate housing barriers into permanent housing as quickly as possible and then help them remain stably housed. Programs target and attempt to eliminate the most common barriers to housing through housing location services and temporary rental assistance. Two forces are driving a recent rise in rapid re-housing. First, evaluations of the largest ever federal homelessness prevention grant program (in response to the Great Recession) highlighted the challenges of targeting primary prevention strategies discussed above. While some of those grant funds went to fledgling rapid-rehousing programs, the United States Department of Housing and Urban Development (HUD) made a conscious shift in funding toward rapid rehousing starting in 2013.¹⁷ Second, a major change in the philosophy and structure of housing programs for the more chronically homeless—referred to as "housing first"—was gaining traction throughout the homeless services field, largely due to some robust findings from experimental studies. 18-21 The housing first model grew out of a recognition that consumer preference should be a key driver of efforts to house the homeless. Rather than putting the homeless into transitional housing until they are deemed "ready" for permanent housing, housing first responds to the fundamental desire among the homeless for a place of one's own as a platform for achieving other life and health goals. This intuitive and now evidence-based notion had a logical corollary in the area of housing for recently homeless families, which was the population first targeted by rapid re-housing programs.

While rapid re-housing's goal of shortening the amount of time people remain homeless aligns with Public Health's secondary prevention goal of minimizing risk exposure among those already homeless, the U.S. Interagency Council on Homelessness has stated that "Rapid rehousing is not designed to comprehensively address a recipient's overall service needs or poverty". Given the temporary nature of the intervention, the success of rapid-rehousing depends on how well it connects recipients to mainstream social, economic and health services

once they are housed. Early research showed that the length of family participation in rapid rehousing ranged anywhere from 3-24 months. Prior to any controlled studies with comparison groups, studies reported that housing placements were high (82-84%) and rates of return to homelessness within one year were low (4-14%). However, one study found that returns to homelessness were higher in tight housing markets with low vacancy rates. Another finding was that residential instability remained high, with 76% of families moving at least once in the year after exiting homelessness. Finally, not all programs required employment at program entry or soon thereafter and those that tracked income found only modest gains.¹⁷

The first randomized control study of rapid re-housing recently released its 3-year impact results.²² The rapid rehousing program studied provided up to 18 months of rental assistance, paired with housing focused services designed to help families find and rent market-rate housing. The study design allowed for pairwise comparisons among rapid-rehousing recipients and three other intervention groups as follows: 1) those prioritized to receiving a permanent housing subsidy (usually a federal housing choice voucher) and some assistance to find housing; 2) those placed in transitional housing units with intensive support services; and 3) those receiving "usual care", meaning that they had no priority access to any specific program and were on their own to choose whatever programs for which they were eligible. In addition to housing outcomes, the study also measured a number of health-related outcomes, including family preservation, adult well-being, child well-being, and economic self-sufficiency.

Three years post enrollment, the permanent housing subsidy group did significantly better than all three other groups on all of the housing-related outcomes. People in the housing subsidy group also did better than both the usual care and transitional housing group on several health-related indicators including food security and child behavior problems. Those in the subsidy group also had less psychological distress and intimate partner violence than those in the usual care group and fewer child separations than the transitional housing group. More than one-third of families across all four groups managed to get a permanent housing subsidy by year three, but families in the subsidy group got it more quickly.²²

Those in the rapid re-housing group fared neither better nor worse on any of the housing outcomes compared to the usual care and transitional housing group, although they did better than both groups on child behavior problems. They also did better than the transitional housing group on food insecurity, psychological distress and alcohol or drug abuse. There was no evidence that any of the interventions worked better for families facing more acute difficulties.

In summary, rapid-rehousing, which did not guarantee struggling families connections to permanent housing subsidies, did not perform as well on housing outcomes in a head to head comparison with the program that did. However, rapid re-housing was at least as good as transitional housing and usual care on housing-related outcomes and performed better than the latter on several health-related outcomes. This was despite the fact that rapid re-housing cost considerably less—per family and overall—than all three of the other interventions.²²

Transitions out of Institutions

Since the 1980s, the US has seen a rapid and continuous rise in incarceration. This rise can largely be attributed to the "war on drugs" which has disproportionately affected low-income men of color, who are over 13 times more likely to be imprisoned for drug charges despite using drugs at roughly the same rate as whites.²³ This situation has led to a prison and jail population with health risks and health problems that mirror those of the disadvantaged and medically underserved communities from which they come, only to be exacerbated by the paucity of medical care within the prison system. This large and unhealthy prison and jail population generates proportionally large numbers of formerly incarcerated individuals reentering low-income communities, where health and housing resources are insufficient to meet their needs.²⁴ Since incarceration and homelessness share similar risk factors, many inmates were homeless before entering prisons and jails and many homeless people have a recent history of incarceration. Inmates with mental health problems are particularly likely to have been homeless prior to incarceration.²⁵

We focus our review on transitions out of jail and prison because most of the Measure H strategies in this category focus on the criminal justice system. We consider preventing a return to homelessness after incarceration to be a secondary prevention strategy. However, we recognize that some of the homeless individuals that would benefit from this strategy are already chronically homeless and would thus also require tertiary prevention (described below).*

One of the most widely used strategies for improving transitions out of institutions is discharge planning, first developed by hospitals to ensure continuity of care and reduce the frequency of readmissions.²⁶ While it is challenging to isolate the effects of discharge planning on hospital readmissions among the homeless²⁷ and many structural barriers exist,²⁸ researchers have called for hospital discharge planning efforts tailored to the homeless population.²⁹ ** In the criminal justice context, discharge planning has been shown to increase Medicaid coverage³⁰ and continuity of care³¹ post release. However, the unique health care needs of prisoners with mental health and substance use problems, coupled with the more challenging goal of preventing release into homelessness, requires a more comprehensive approach. One such approach—jail inreach—was first documented in the U.S. in Houston, Texas. Houston's Jail Inreach Project includes mental health and substance abuse case management provided to homeless inmates while they are in jail, a specialized discharge plan, sharing of inmate patient medical records with a patient-centered behavioral health care home in the community and connection to community mental health and substance use care upon release.³² Evaluations of the program have shown decreases in arrests, criminal charges and days in jail among program participants. Effects on mental health outcomes have not been assessed, but continuation of care, post release, was higher among those who chose daytime release with a physical escort to a clinic in the community.³³ Outcomes were also better among inmates who had a longer-term

 $\label{thm:local_equive} \mbox{Homeless Initiative, although not a strategy that would require funding through Measure H.}$

^{*} In fact, one of the institutional transition strategies in Measure H (bridge housing) specifically targets those exiting institutions who may eventually need permanent supportive housing (PSH)—a tertiary prevention strategy. ** Discharge planning guidelines—across all types of institutions—is a specific strategy included in LA County's

relationship with their case manager. Qualitative data indicated that a lack of short term housing options in the community, along with wait lists and strict admission requirements for longer term housing, made it difficult to house participants immediately upon release.³³ Prison inreach programs for the mentally ill have also shown some promising results in the United Kingdom.^{34,35}

In response to the recognized needs of the re-entry population described above, a number of jurisdictions have attempted to bridge the gap between the criminal justice and behavioral health systems for people with mental health and substance abuse problems, with varying areas of focus, outcomes of interest, and collaborative structures.³⁶ A few specific interventions with relevance to this population have a recognized evidence base. Critical Time Intervention (CTI) was originally developed to help mentally ill individuals transition from homeless shelters to permanent housing and has recently been adapted for those leaving psychiatric hospitals. CTI has two primary components: 1) strengthening long-term ties to services, families and friends through skill building and motivational coaching; and 2) providing time-limited (up to 9 months) emotional and practical support and advocacy during the critical period of transition. CTI has been shown to effectively reduce homelessness.³⁷ Effects were sustained over time and the program was cost-effective. Importantly, CTI is grounded in the evidence-base for psychiatric, substance abuse and psychosocial interventions that controlled studies have shown to improve mental health and substance use outcomes. 38,39 Researchers have called for the adaptation of CTI to the prison re-entry population,³⁷ and a recent pilot randomized controlled trial showed that in this population the intervention was associated with better continuity of care post release as well as increased connections with general practitioners and increased use of medication.40

Recovery housing and medical respite care are both types of bridge housing services that provide supervised, short-term housing to homeless people exiting health care institutions after acute in-patient stays. The goal is to increase stability, improve functioning and help the resident move toward independent living in the community by supporting recovery and/or abstinence. While transitional housing models for most homeless individuals are less effective and more costly than rapid-rehousing, 22 a sub-set of homeless people, particularly those with acute health conditions exiting treatment facilities, are more likely to achieve positive employment, housing, substance use and readmission outcomes if they step down to recovery/respite care before attempting to live independently. 41,42 Recovery housing typically includes some form of case management, therapeutic recreational activities, and/or peer coaching or support. Other more intensive therapeutic interventions can be provided in the context of recovery housing, but even absent these more intensive interventions (some of which have their own evidence base), recovery housing has demonstrated a moderate level of evidence of effectiveness. 41 In addition to producing positive health and housing outcomes, respite care may also reduce health care costs. 42 Cost savings are likely to be greater when respite care is integrated with PSH, as is the case with the LA County Department of Health Services Housing for Health Program.*

^{*} https://dhs.lacounty.gov/wps/portal/dhs/housingforhealth

How Could Measure H Strategies for Rapid Re-Housing and Transitions out of Institutions Impact Heath and Health Determinants in LA County?

In the absence of an increase in federal dollars for subsidized housing vouchers, rapid rehousing is a promising and inexpensive strategy for moving homeless people out of shelters and into permanent housing as quickly as possible. However, recurrence of homelessness and ongoing housing instability will continue to be a problem for many recipients, suggesting the need for careful attention to program design. Limited research to date on the health effects of rapid-rehousing suggests that it may improve adult and child behavioral health when compared to transitional housing, ²² but further study is needed. Another strand of research that could inform efforts to improve rapid re-housing examines the social and health-related factors associated with recurrent homelessness among people who have recently become homeless. ^{5,43,44} The most consistent finding across these studies is that substance use and arrest history are impediments to stable housing after an initial episode of homelessness. A challenge for rapid-rehousing in Los Angeles County is the extremely competitive rental market and lack of affordable housing, both of which can make finding longer term housing solutions more difficult.

The period of transition out of institutions is a particularly vulnerable time for those who were homeless prior to entering and is an opportune time to purposefully intervene to prevent the cycle of homelessness from repeating itself. Jail inreach programs for mentally ill inmates can help improve mental health service continuity and reduce recidivism, but achieving permanent housing and health improvements post-release remains challenging. CTI is an intervention with particular promise for helping former inmates achieve housing and mental health stability post release. However, those with more severe mental health and substance uses disorders may need recovery housing or respite care as a bridge to more permanent housing.

Conclusions

- The majority of LA County's homeless population is not chronically homeless. Measure H recognizes this by including a strong focus on secondary prevention.
- There is a substantial subset of the HUD defined non-chronically homeless population in LA County that has been homeless for a year or longer but does not have a disabling condition. This sub-population may have needs that differ from those of the more recently homeless.
- Measure H's rapid re-housing strategy is a more cost-effective approach than transitional housing for those more recently homeless, and there is some evidence that it compares favorably to the latter on measures of child well-being and adult mental health and substance use.
- While rapid re-housing is effective at moving homeless people more quickly out of shelters and into permanent housing, some will have difficulty remaining stably housed once they are placed.
- Measure H has a number of provisions that address these potential challenges of rapidrehousing in LA County, including:

- Partnering with LA County's 88 cities to co-fund temporary financial assistance associated with rapid-rehousing so that the duration of assistance allows homeless people enough time to become stably housed.
- The Criminal Record Clearing Project, which can help homeless individuals and families overcome barriers to long-term housing stability due to arrest and conviction history.
- Preserving currently affordable housing and promoting the development of new affordable housing for the homeless (see cross-cutting strategies below).
- o Increasing employment for homeless adults through social enterprise and subsidized employment (see cross-cutting strategies below).
- Facilitating the use of federal housing subsidies for homeless people seeking housing (see cross cutting strategies below).
- Measure H's jail inreach strategy provides an opportunity to build on what is already known about effective collaboration across the criminal justice and mental health/substance abuse systems. Several aspects of the Measure H strategy in this area bode well for its potential success in improving health and social care outcomes, including:
 - Commitment to providing inreach services from the beginning of incarceration, thus strengthening the client-case manager relationship.
 - The expansion of inreach services beyond a narrow focus on mental health and substance use issues to include a variety of other instrumental supports such as housing location and employment services.
 - The Criminal Record Clearing Project which can help the homeless reentry population overcome barriers to long-term housing stability due to arrest and conviction history.
 - The reference to Housing for Health's Intensive Case Management Program as a potential model of case management for transitioning inmates. This model shares many of the same evidence-based principles as Critical Time Intervention.
 - The inclusion of a homeless focus in LA County's Regional Integrated Reentry Network, which has already begun to strengthen linkages between jails and community service systems for mental health, substance use, housing and other social services.
- Particularly in the face of reduced federal funding for transitional housing, Measure H's
 targeting of funds to a variety of evidence-based short-term "bridge" housing programs
 (e.g., medical respite care, recovery housing) will likely increase rates of permanent
 housing and improve other health-related outcomes among homeless people exiting
 institutions.

Section 5: Health Impacts of Tertiary Prevention Strategies in Measure H

In this section we begin by describing demographic and health conditions in Los Angeles County with respect to those who are chronically homeless. We supplement the latter with data from the research literature. We then review research on the housing and health-related effects of PSH. Finally, we draw conclusions about the potential health impacts of the tertiary prevention strategies in Measure H.

Health Profile of the Chronically Homeless Population

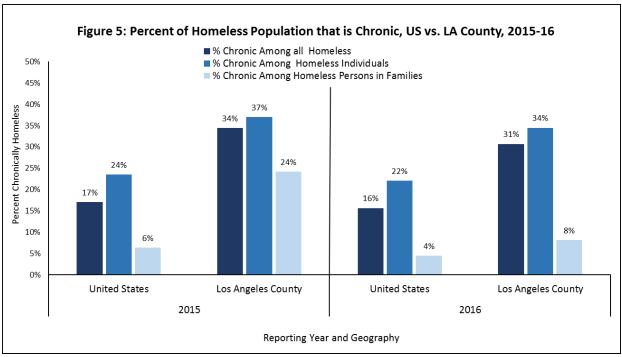
HUD defines the chronically homelessness as those with a disability who have been literally homeless for at least 12 months.* According to the 2016 Greater Los Angeles Homeless Count, there were approximately 15,000 chronically homeless people in Los Angeles County. This represents 31% of the total homeless population and 42% of the unsheltered homeless population. Virtually all (96%) of the chronically homeless are unsheltered. The percent of chronically homeless people in Los Angeles County decreased slightly from 34% in 2015, due largely to the sizable decrease in chronically homeless families, but the chronically homeless in LA County still represented twice the portion of total homelessness in the nation as a whole (31% vs. 16%) (**Figure 5**). Seventeen percent of the nation's chronically homeless population is in Los Angeles County.** As described in the previous section, this population does not include people who have been homeless for a year or more but who do not have a disabling condition.

Health problems are more prevalent among the chronically homeless. In Los Angeles County almost two-thirds of the chronically homeless have a mental illness, about half have substance use disorders and 40% have a physical disability (Table 5). A study of homeless individuals in Los Angeles found that only 20% of those with either mental illness or substance abuse disorders had received any treatment within the last 60 days. 45 There is also evidence that among substance abusing adults, those who are chronically homeless have worse mental health outcomes over time than those who are not.⁴⁶ Rates of infectious diseases among the homeless are also a serious concern, with estimates as high as 36% for hepatitis C—over 15 times higher than the general population; 8% for tuberculosis—over 40 times higher than the general population; and 21% for HIV—also over 40 times higher than the general population.⁴⁷ Homeless people acquire age-related functional impairments much earlier in life, prompting researchers in the field to recommend that the minimum age of eligibility for certain health care programs for the elderly be adjusted downward for the homeless. 12 The homeless population is aging nationwide and about one third of the chronically homeless in Los Angeles are over age 55. Hypertension and diabetes are more likely to be poorly controlled among the homeless. Injury and violence are more common among the homeless, with studies reporting between 27%-52% of homeless individuals being physically or sexually assaulted within the previous year. In the U.S., 68-88% of homeless people are current smokers—four times the rate

^{*} Either continuously or over at least four separate occasions during the past three years (see glossary for full definition).

^{**} LA County is home to only about 3% of the nation's total population.

of the overall population—and smoking related diseases are highly prevalent among the homeless.²



Source: Department of Housing & Urban Development Data Exchange, 2015 & 2016 Homeless Populations and Subpopulations Report for All States, Territories Puerto Rico and DC. Department of Housing & Urban Development Data Exchange, 2015 & 2016 Homeless Populations and Subpopulations Report for Los Angeles.

Housing and Health Impacts of Permanent Supportive Housing

Current high rates of chronic homelessness have roots that can be traced back, in part, to the failure of the community mental health movement of the 1960s to create a truly coordinated system of community-based mental health services that could adequately serve those with serious mental illness. The deinstitutionalization of the mentally ill began placing serious strains on the fledgling networks of Community Mental Health Centers, which suffered a final blow with the passage of the Omnibus Budget Reconciliation Act of 1981. The latter consolidated a greatly reduced federal allocation for mental health services into a single state block grant and repealed most of the provisions of the Mental Health Systems Act, thereby reversing two decades of increasing federal involvement in mental health.⁴⁸ A recent historical analysis of the emergence of research on the growing homeless population in the 1980s found that the political tenor of the time led to a focus on individual pathology and behavior as the root cause of homelessness and a disregard for structural issues of poverty, lack of employment and affordable housing.⁴⁹

This orientation toward the individual has had far reaching effects on the homeless services field. Until the turn of the 21st century, the vast majority of programs for the chronically homeless adhered to a continuum or stepladder approach predicated on the notion that

homelessness was a behavioral condition rooted in the individual. Thus, the best way to treat the homeless was to reward them incrementally as they moved up the ladder toward personal responsibility, sobriety, and readiness for the ultimate, but not always attainable, goal of permanent housing.

A paradigm-shifting challenge to this model began to emerge in the 1990's in New York City, beginning with a process of purposeful dialogue with consumers of homeless services and a systematic inquiry into their preferences. 50 This process revealed that consumers were averse to transitional housing arrangements with strict rules on sobriety, curfews and other standards of conduct. Requiring passage through this step in the continuum in order to qualify for permanent housing imposed significant barriers to self-sufficiency. Even the PSH facilities at the end of the continuum were viewed as undesirable, because they were single-site facilities that carried the stigma of being designated for mentally ill residents, with health and social services on site and a lack of privacy that normally comes with independent living. Consumers were looking for an affordable place they could call their own with services available off-site, as needed.⁵⁰ The Pathways Housing First (PHF) program model was developed to meet these consumer preferences through: 1) permanent, scattered-site housing; and 2) voluntary community-based mobile support services with a harm reduction orientation. While the term "Permanent Supportive Housing" technically predated the emergence of PHF, it took on a new meaning and prominence once evidence of PHF's effectiveness began to emerge. So, while not all recent PSH programs adhere to the original PHF model, most of them have adopted the term "housing first" as their stated approach, thus embracing the notion that permanent housing should be the first step and a platform on which to build a healthy life. Conversely, reviews of this new generation of PSH programs now typically include PHF as a type of PSH program.*

As a new generation of PSH programs emerged in the late 1990s and early 2000s, one of the first challenges was to attempt to define a set of measurable model elements that would allow for more nuanced evaluations.⁵¹ In 2010 the US Department of Health and Humans Services Substance Abuse and Mental Health Services Administrations (SAMHSA) published a set of key elements of PSH (see box below).

This list of elements guided the most recent systematic review of PSH programs. The review authors recommended, based on a moderate level of evidence, that PSH be included as a covered service for individuals with mental health and substance use disorders. The review included twelve experimental and quasi-experimental studies and found evidence that PSH reduced homelessness, increased housing tenure over time, reduced hospitalizations and emergency room use and increased consumer satisfaction. The studies reviewed also measured mental health symptoms and alcohol and drug use, but there was insufficient evidence for any PSH effects on these health outcomes. The authors also noted a lack of consistency in comparison groups, outcomes measured, and definitions and implementation of program elements. This lack of consistency limited their ability to draw conclusions about how different program elements may be related to different outcomes. Also, the lack of clear

^{*} Housing First advocates emphasize that Housing First is a whole systems orientation and not simply a program, a point that will be discussed further in the section below on homeless service system coordination.

inclusion and exclusion criteria for various housing models made it difficult to determine if certain sub-populations may be better served by different levels of service intensity. There is variation in the types and levels of support services that accompany PSH, and a growing literature on models of case management for homeless people can inform this aspect of PSH. 53-55

Key Elements of PSH⁵²

- Tenants have full rights of tenancy, including a lease in their name; the lease does not have any provisions that would not be found in leases held by someone without a mental disorder.
- Housing is not contingent on service participation.
- Tenants are asked about their housing preference and provided the same range of choices as are available to others without a mental disorder.
- Housing is affordable, with tenants paying no more than 30% of their income toward rent and utilities.
- Housing is integrated; tenants live in scatter-site units located throughout the community or in buildings in which a majority of units are not reserved for individuals with mental health disorders.
- House rules are similar to those found in housing for people without mental disorders.
- Housing is not time limited, so the option to renew leases is with the tenants and owners.
- Tenants can choose from a range of services based on their needs and preferences; the services are adjusted if their needs change over time.

How Could Measure H Strategies for Housing the Chronically Homeless Impact Heath and Health Determinants in LA County?

PSH is unique among the strategies included in Measure H, in that it is explicitly a health intervention. Through its adoption of Housing First principles, PSH aims to help chronically homeless people achieve health and wellness by providing them with a stable platform from which they can connect to the types of health-related services and supports that they need and want. By helping the chronically homeless embark on a process of recovery and rehabilitation from the addictions and disabling mental and physical conditions that have befallen them, PSH is tertiary prevention in the truest sense of the term. While most research on the health effects of PSH have focused on substance use and psychological symptoms, there is reason to believe that its impacts on both mental and physical health could be mediated by a number of factors, including access to comprehensive primary care, quality indoor environments, and aspects of the neighborhood and built environment.

In recognition of the evidence base behind PSH, Measure H proposes to target a portion of funds to PSH services for the chronically homeless. This would be a critical complement to the capital funds made available by LA City Measure HHH to build 10,000 units of PSH in the City of Los Angeles.

Conclusions

- While the majority of the homeless in LA County are not chronically homeless, LA
 County has a disproportionality high rate of chronic homelessness compared to the rest
 of the U.S. Thus, addressing chronic homelessness is a critical component of Measure H.
- PSH, the primary strategy in Measure H for combatting chronic homelessness, has been shown to effectively reduce homelessness, promote long term housing stability and reduce expensive emergency room and hospital stays.
- By funding PSH services, Measure H would complement the recently passed LA City Initiative (HHH) which provides capital funding for the construction of 10,000 new PSH units.
- Through Measure H, LA County would have the opportunity build on what we already know about the health impacts of PSH so that it becomes an integral part of our County's efforts to promote health equity for all of our residents.

Section 6: Health Impacts of Cross-Cutting Prevention Strategies in Measure H

This section reviews the evidence for those Measure H strategies that simultaneously support the primary, secondary and tertiary strategies described in the previous three sections. We refer to these strategies as "cross-cutting" because they work at multiple levels of prevention. Since we have already described the demographic and health characteristics of sub-populations most likely to benefit from Measure H strategies at each level of prevention, this final section focusses on the evidence supporting these strategies. In our conclusions we make the case that these cross-cutting strategies are, by their nature, high-leverage strategies. Thus, a more concerted effort should be made to build the evidence-base for those cross-cutting strategies that have been less researched.

Rent Subsidies and Affordable Housing

Tenant-based rental assistance programs provide vouchers or direct cash assistance to low-income families, the disabled, and elderly persons, which they can use toward rent for housing that already exists in the private market. By far the largest rental voucher program was established by the federal government in 1974—called the Section 8 Existing Housing Program. The program took the basic shape that it retains today in 1983, when it established the standard that recipients would receive assistance equal to the difference between 30% of household income and the actual cost of rent, up to a maximum allowable standard based on the local market. In 1998 the program was renamed the Housing Choice Voucher program. Funding for the program increased rapidly over time. By 2009 vouchers assisted more that 2.2 million households nationwide.⁵⁷ In 2014 almost two thirds of HUD assisted households in California received Housing Choice Vouchers.⁵⁸

In 2001, the Community Preventive Services Taskforce recommended the use of rental subsidy programs for low income families. This was based on a systematic review of the evidence base and the determination that these program significantly improved neighborhood safety and reduced violent victimization among household members.⁵⁹ A recent randomized control study found that housing vouchers are more effective at reducing homelessness than any other housing assistance program targeting homeless families.²²

There are two recent trends in the voucher program that pose barriers to achieving these health-related benefits on a wider scale in LA County: 1) declines in federal spending on the Housing Choice Voucher program; and 2) low rates of voucher acceptance by landlords. The federal sequestration process has led to a sizeable reduction in Housing Choice Vouchers for California since 2012, and even before sequestration the base rate of section 8 vouchers relative to eligible households was very low. While the 2016 budget restored some of the losses, the outlook under the new administration is highly uncertain. Meanwhile, the supply of vouchers is not keeping pace with the rise in severely rent burdened households who are at risk of homelessness in the absence of assistance. Statewide, the period from 2007 to 2013 saw a

6% increase in families receiving vouchers, but a 28% increase in severely rent burdened households.⁵⁸ Historically, Los Angeles has had lower voucher success rates* than the nation as a whole due to the tightness of the rental market in Southern California.⁵⁷ When vacancy rates are low and there is stiff competition for rental units, landlords are less likely to rent to tenants with vouchers.

Measure H addresses these barriers at multiple levels of prevention. The measure targets funds to three specific financial incentive strategies that would encourage landlords to accept tenants with vouchers: 1) vacancy payments to hold units; 2) funds to cover damage mitigation and property compliance with HUD standards, and 3) security deposit assistance. These incentives would facilitate the use of vouchers among both the chronically and non-chronically homeless.

The barrier of reductions in federal funding for Housing Choice Vouchers is more difficult to overcome, but Measure H includes strategies in this regard as well. By using a portion of funds to both preserve current affordable housing and develop new affordable housing for the homeless, Measure H would add modestly to the supply of affordable housing in LA County and prevent a modest amount of currently affordable housing from becoming redeveloped into high end properties out of reach of those currently homeless. These two strategies, coupled with others like inclusionary/incentive zoning, linkage fees and use of public land for homeless housing,** are all key to increasing the availability of affordable housing for the homeless.⁶⁰

Employment Services and Supports

In the robust literature on the social determinants of health, income has been shown consistently to be one of the largest drivers of health inequities worldwide. ⁶¹ In addition to absolute income, there is also some evidence that income inequality is associated with poor health outcomes. ⁶² A recent study of income and life expectancy in the US found that, between 2001 and 2014, the gap in life expectancy across income groups increased over time. There was some variation by geography and one of the few factors significantly associated with higher life expectancy among low income residents was per capita levels of local government expenditures. ⁶³

Researchers and other experts agree that the employment market is one of the primary structural determinants of homelessness.¹ But short of changing macro-economic trends, there are some targeted micro-level strategies with the potential to help the homeless find work. The strategy with the most promise for helping the chronically homeless is the Individual Placement and Support (IPS) model of supported employment for people with serious mental illness.⁶⁴ IPS provides a package of client-centered services including coaching, resume development, interview training and on the job support. A number of randomized controlled trials have shown this model to be effective at securing and maintaining employment for those with

^{*} The proportion of households with voucher who successfully use them.

^{**} These other strategies are also among the LA County Homeless Initiative strategies that would not require Measure H funds.

mental illness and the Supreme Court's Olmstead decision has led to its recent proliferation nationwide. Research on the application of this model specifically to the homeless is somewhat scarcer. A quasi-experimental study of this model among homeless veterans found that it improved employment and housing outcomes, although it did not affect non-vocational outcomes including psychiatric symptoms. The only randomized controlled trial of IPS among Housing First clients found that it significantly improved employment outcomes compared to the control group. However, while the vast majority of Housing First clients interviewed expressed a desire for paid employment, only slightly more than half of that group agreed to take part in the IPS trial. The half that declined had worse employment outcomes at 24 months. The authors concluded that since these Housing First clients were unable to obtain employment on their own they would likely benefit from IPS services. Additional qualitative data revealed some barriers to employment in this population that could help IPS providers overcome barriers to program entry. Provides of the providers overcome barriers to program entry.

For the roughly two-thirds of LA County's homeless population that are not mentally ill, a broader category of employment services, collectively referred to as subsidized employment, may be more appropriate. These programs target populations with significant barriers to employment, although subsidized employment programs specifically targeting the homeless have only recently been subject to rigorous evaluation, with findings forthcoming. Nevertheless, given the similar health profiles of non-chronically homeless adults and low-income housed adults, since research on subsidized employment programs for the latter population are still quite relevant to policy makers in the homeless arena. Subsidized employment programs vary in terms of subsidy depth and duration and whether placements are explicitly transitional or can become permanent once the subsidy ends. The size and sector of participating employers also varies as does the specific target population served. The non-profit sector is a willing partner but is often challenged by a limited ability to expand payroll with permanent positions or to help workers develop transferable skills. 1

While acknowledging that this variation among subsidized employment programs makes broad conclusions challenging, a recent comprehensive review of 40 years of subsidized employment programs in the US found evidence that these programs successfully raised earnings and employment and also had non-employment benefits—including reduced dependence on public benefits, improved educational outcomes for children and improved psychological well-being. Seven of the 15 rigorously evaluated programs were also found to have social benefits that outweighed their costs. The most consistent program characteristic correlated with success was the duration of the subsidy, with longer duration increase success rates. Of particular interest was the finding that none of the four programs that specifically targeted the prison reentry population were found to be effective. However, these four programs were among the six programs with the shortest subsidy duration.⁷¹

A new generation of subsidized employment programs are currently under way and twelve of them are being rigorously evaluated. Of those twelve, seven target people formerly incarcerated—a population with many similarities to the homeless population—and one specifically targets those formerly homeless and/or incarcerated. Several of those evaluations

are releasing impact reports as this HIA is being completed, so their findings could not be incorporated here. 71

The County Homeless Initiative has prioritized income and employment as a homelessness prevention and reduction strategy by devoting an entire category of strategies to increasing income. Two strategies—subsidized employment and social enterprise—are targeted for funding through Measure H revenues. While Measure H does not specify supported employment for homeless people with mental illness, IPS could be subsumed under either of the proposed strategies.

SSI/VA Benefits, Advocacy and Enrollment

Another income related strategy for reducing and preventing homelessness is ensuring that all those who are eligible for Supplemental Security Income (SSI) and Veterans (VA) benefits are receiving them. SSI is a cash assistance program of the Social Security Administration for people with disabilities, a group highly represented among the homeless. Homeless veterans newly awarded SSI benefits had better housing outcomes over a four year period than those without SSI, and they were not any more likely to use drugs or alcohol.⁷² Despite the known benefits of SSI for the homeless, this population has higher rates of those eligible but not enrolled and approval rates for first time applicants among the homeless were recently as low as 10%.⁷³ This is largely because the conditions of homelessness (e.g., not having an address, phone or place to maintain important medical records) makes the lengthy and intensive eligibility determination process more challenging. In 2005, SAMHSA began awarding SSI Outreach, Access and Recovery (SOAR) technical assistance grants to states to help them enroll adults with disabilities who are homeless or at risk for homelessness. By 2009, all states were participating. A 2011 report showed that 73% of applications assisted by SOAR were approved.⁷³ Later, an evaluation of SOAR found that applications were two times more likely to be approved among SOAR trainees than among all homeless applicants, although local social service staff not dedicated to SOAR found it difficult to carve out time to follow SOAR principles and only 13% of trainees completed an application with the SOAR process.⁷⁴

Measure H has a multi-pronged strategy for increasing income through SSI among disabled adults who are homeless or at risk for homelessness. It includes a countywide SSI advocacy program, and targeted SSI advocacy for inmates. The SSI advocacy program is modeled after the Department of Health Services' Benefits Entitlement Services Team (BEST) model, which trains designated team members in the application process, in accordance with SOAR. Measure H would also provide subsidies to cover rent payments for applicants during the application process, since being housed increases the likelihood of SSI approval. Once approved, the County would be entitled to recoup the costs of the subsidy payment and could use the funds for additional applicants. This is a highly leveraged strategy that can be used across all three levels of prevention.

Homeless Service System Coordination

In 2001, a seminal report by the Institute of Medicine highlighted significant gaps in the quality of care provided by the U.S. health care system and the need for transformative change. There was a recognition that we were not getting enough health for our precious health care dollars. Furthermore, the problem was not a lack of scientific knowledge or skill, but was largely a lack of attention to the *system* aspects of our health care system. Not only did we need better ways of improving the quality and reducing the costs of care, but we also needed to improve the consumer experience of care and, perhaps most importantly, we needed to make improving the health of our populations the ultimate goal of the system. These three goals became the so-called "triple-aim" of the health care system, a systems transformation framework explicitly embodied in the Affordable Care Act (ACA).*

Although the homeless care system budget is dwarfed by that of the health care system, its mission is no less lofty or important. Accumulated evidence about how we have addressed and how we can address homelessness is fostering a parallel transformation in the homeless services field. The theme of this transformation runs through all of the primary, secondary and tertiary prevention strategies discussed above and is clearly stated in Opening Doors, ⁷⁷ the prior administration's strategic plan to prevent and end homelessness. That plan contains a bold systems change goal: to *transform homeless services into a crisis response system that prevents homelessness and rapidly returns people who experience homelessness to stable housing*. This goal is not only about creating better tools to track our progress but also about changing the system's end game based on the preferences of the consumer.

Drawing inspiration from this vision, the LA County Homeless Initiative, and Measure H in particular, include a strong focus on improving systems so that the three levels of homelessness prevention can work in concert toward the overall goal of helping people achieve housing stability as quickly as is feasible, so that they can go on to pursue their other life and health goals.

The specific systems strategies in Measure H address various system components, including outreach and engagement, emergency shelters, and services for Transition Age Youth. Importantly, Measure H would also provide vital support for the Coordinated Entry System (CES). The CES helps LA County prioritize assistance based on vulnerability and severity of service needs to ensure timely service to those who need it most. The CES also includes a data management system that can be used to plan more effectively, identify gaps, and make needed improvements based on current performance. A recent evaluation report of lessons learned from early CES implementation in LA County documents the significant strides that LA County has already made in implementing this new vision for a crisis response system and contains a rich array of useful and actionable findings. Among other things, the report highlights that LA County's CES is characterized by: 1) low barriers to assistance; 2) client choice; 3) accessibility of

^{*} Beyond its important insurance coverage provisions, the ACA contains extensive provisions and funding mechanisms designed to improve the way the Health Care System delivers care.

entry points; 4) standardized access and assessments; 5) links to street outreach; and 6) full coverage of the service area—all key elements in HUD's guidelines for coordinated entry.⁷⁸

Conclusions

- Measure H contains several strategies that address all three levels of homelessness prevention, making them potentially the most impactful for health: 1) Rental subsidies and affordable housing for the homeless; 2) Employment services and supports; 3) SSI/VA benefits advocacy and enrollment; and 4) Homeless Service System Coordination.
- In addition to being evidence based, Measure H's rental subsidy strategy is highly leveraged because it helps draw down federal subsidy dollars and it links to PSH.
- By augmenting affordable housing dollars, Measure H contributes to the supply of affordable housing, through the preservation and construction of homeless housing.
- Measure H's subsidized employment strategy is evidence based and would address a primary social determinant of health (i.e., income) among those who are currently homeless.
- Measure H's targeting of SSI advocacy and enrollment is a highly leveraged strategy that
 uses evidence-based enrollment techniques to boost income among the homeless by
 drawing down federal dollars to help prevent and reduce homelessness.
- By supporting system coordination, Measure H would help to transform LA County's homeless services into a *crisis response system* that prevents homelessness and rapidly returns people who experience homelessness to stable housing.

Section 7: Recommendations

Based on the findings of this HIA, the following are recommendations regarding the implementation of Measure H if it passes. The recommendations are organized according the public health prevention framework that has informed the structure of this report and are designed to maximize the health impacts of Measure H.

Primary Prevention

Recommendation P1: Develop clear screening criteria to target primary prevention services to those who need them the most.

While there is good evidence that primary prevention works, targeting resources to those who would have become homeless without them is challenging. Developing and faithfully implementing clear and precise eligibility criteria based on factors that put individuals and families at elevated risk of homelessness can measurably improve targeting efficiency. If no local data are available to develop risk-based screening criteria, adoption of screening tools developed by other similar Continuums of Care should be considered.

Recommendation P2: Provide direct assistance with housing court mediation and rental/utility arrears.

While there is incomplete information on the specific components of primary prevention programs that work best, housing court mediation and cash assistance for rent arrears show particular promise and should be included in the menu of services provided to prevent homelessness. Even after a landlord has filed for an eviction, the vast majority of cases can be settled without eviction through mediation assistance.

Recommendation P3: Provide assistance to both family and non-family member households.

Primary prevention services tend to be targeted to families with children due to the heightened vulnerability of children to the effects of homelessness. However, there is some evidence that in LA County, households without children are at equal risk of homelessness despite experiencing less severe rent burden. Also, individuals far outnumber families with children among the non-chronically homeless. Families and individuals should both be targeted by primary prevention services.

Secondary Prevention

Recommendation S1: Link the rapid rehousing model with cross-cutting strategies to maximize impact

While rapid re-housing is effective at moving homeless people more quickly out of shelters and into permanent housing, some will have difficulty remaining stably housed once they are placed. Measure H would provide an opportunity for LA County to build on what we know about rapid re-housing to make it more effective. One way to accomplish this is to purposefully connect rapid-rehousing clients to all of the cross-cutting strategies identified in this report. For

example, an enhanced Coordinated Entry System (CES) could determine level of need and connect clients with subsidized employment, federal voucher facilitation, and/or SSI benefits, depending on their profile.

Recommendation S2: Build a Jail Inreach Project on what we know about effectiveness Jail inreach is a widely used strategy for bridging correctional and mental health systems to better meet the needs of homeless inmates. Through Measure H, LA County has the opportunity to expand and enhance its jail inreach program in a manner which strengthens the client-case manager relationship and increases the chances of successful housing placement by starting inreach early, adopting evidence-based models like Critical Time Intervention and connecting inmates to the Criminal Records Clearing Project and the Integrated Reentry Network.

Recommendation S3: Be both selective and flexible in the types of bridge housing models supported

There are a number of bridge housing models for homeless people exiting institutions who are still too vulnerable for shelter or permanent placement. Certain models have an established evidence-base (e.g., recovery housing and medical respite care) and some models may work better for certain types of clients. Through Measure H, LA County has the opportunity to customize its bridges to maximize housing permanence after institutional exit.

Tertiary Prevention

Recommendation T1: Build on what we know about Permanent Supportive Housing by tailoring service according to need and striving for measurable health improvements

Permanent Supportive Housing (PSH) has reached a turning point in its evolution whereby its Housing First orientation has gained wide acceptance and its general effectiveness is not disputed. LA County should use Measure H to begin to differentiate the PSH model so that it meets different clients' needs in the most efficient way possible. Other opportunities include connecting PSH to supported employment programs to increase income and primary health care programs to improve physical and mental health.

Cross-Cutting Strategies

Recommendation C1: Tailor subsidized employment strategies to the needs of different sectors

Subsidized employment programs effectively help low income people enter or reenter the labor market. The vast majority of homeless people want to work. The non-profit sector is eager to help the homeless become gainfully employed, while the for-profit sector may have more permanent placements available to qualified applicants. With Measure H funds, LA County could develop creative partnerships with both sectors to establish subsidy programs that help the homeless develop marketable skills for public and private sector jobs, particularly through temporary work in the non-profit sector.

Recommendation C2: Design system coordination strategies in service of Emergency Response System goals

In addition to enhancing key system components, like outreach and engagement, emergency shelter and services for transition age youth, Measure H seeks to strengthen the Coordinated Entry System (CES). In developing a common core CES training curriculum for outreach workers, housing locators, case managers and all other key system staff, Measure H implementers should create clear and compelling message points about what a crisis response system is and how an effective crisis response system depends on the integration of critical functions carried out by each system member. Effort should also be made to closely link CES data management and workflow enhancements to these system wide goals and to clearly communicate the connections between data quality and system performance in order to promote buy-in and expand participation.

Recommendation C3: Study the contingencies and relationships across all Measure H strategies to maximize the efficiency and effectiveness of investments in each

While this HIA has shown that all Measure H strategies have merit based on rigorous research or promising reports from field experience, the ultimate success of Measure H and the broader Homeless Initiative will depend, in part, on how well they work together. The conceptual model for this HIA provides a starting point for exploring the interrelationships among groups of strategies, but a more detailed analysis of the contingencies is warranted. Aided by projections of how investments in each strategy would affect other related strategies, decisions makers could target levels and timing of funding to maximize desired outcomes.

Glossary

Continuum of Care (CoC): A Continuum of Care (CoC) is a regional or local planning body that coordinates Federal housing and services funding for homeless families and individuals, including a community plan to organize and deliver housing services to move them to stable housing and maximize self-sufficiency. It includes action steps to end homelessness and prevent a return to homelessness.

Chronically Homeless (HUD definition): A homeless individual with a disability who lives in a place not meant for human habitation, a safe haven, or in an emergency shelter; and has been homeless (as described above) continuously for at least 12 months or on at least 4 separate occasions in the last 3 years where the combined occasions must total at least 12 months. Occasions separated by stays in institution for fewer than 90 days do not constitute a break.

Critical Time Intervention (CTI): Critical Time Intervention (CTI) is a time-limited evidence-based practice that mobilizes support for society's most vulnerable individuals during periods of transition. It facilitates community integration and continuity of care by ensuring that a person has enduring ties to their community and support systems during these critical periods.

Displacement: Displacement refers to the involuntary movement of residents out of neighborhoods where they once lived. Researchers have identified a number of ways that displacement can occur, both directly and indirectly. Displacement is a potential negative consequence of gentrification.

Gentrification: Gentrification is the term commonly used to describe a change process through which a once low-income or neglected neighborhood becomes more affluent as a result of public and/or private investment and/or the in-migration of wealthier residents.

Health Inequity: Health inequities are inequalities in health status or the determinants of health across groups that are rooted in an unfair distribution of health promoting resources and are thus avoidable through public action.

Housing Cost Burden: Residents who spend more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care. Those who spend more than 50% on housing are considered severely cost burdened.

Inclusionary Housing Policy: Inclusionary Housing Policies include a broad range of policies that promote the inclusion of affordable housing units (rented and/or owned) in new market-rate housing developments. The policies can be voluntary or mandatory and they vary across jurisdictions in terms of the levels of affordability required and the way that the stipulations can be met. Inclusionary Zoning is a term often used to describe a policy of mandatory inclusionary housing (i.e., required for all new market-rate housing developments).

Jail In-Reach: Provides supportive services for homeless inmates with mental health and/or substance use problems while they are in custody and connects them to community based services in the community upon release. It aims to help individuals obtain permanent housing and well-being by bridging the correctional and community social and health systems.

Medical Respite Care: Medical respite care provides a bridge to homeless people exiting institutions who are too sick to be on the street or in a traditional homeless shelter, but are not sick enough to warrant inpatient hospitalization. The goal is to prepare homeless individuals for a more permanent independent living arrangement.

No-Net-Loss: No-net-loss refers to a clause included in land use policies to mitigate the effects of development on existing affordable and/or rent-stabilized housing units. No-net-loss requires that all such existing units that are destroyed during the development process be replaced on a one-for-one basis as part of the new development.

Non-Chronically Homeless: Any homeless person that does not meet the HUD definition for chronically homeless (see above).

Permanent Supportive Housing (PSH): PSH is a model that combines low-barrier affordable housing, health care, and supportive services to help the chronically homeless achieve stability and well-being. PSH typically targets those who experience multiple barriers to permanent housing, and are unable to maintain housing stability without supportive services.

Primary Prevention: Aims to prevent disease or injury before it ever occurs. This is done by preventing exposures to hazards that cause disease or injury, altering unhealthy or unsafe behaviors that can lead to disease or injury, and increasing resistance to disease or injury should exposure occur.

Rapid Re-Housing: Rapid re-housing is an intervention—informed by a Housing First approach—that is a critical part of a community's homeless crisis response system. Rapid re-housing rapidly connects families and individuals experiencing homelessness to permanent housing through a tailored package of assistance that may include the use of time-limited financial assistance and targeted supportive services. A fundamental goal of rapid rehousing is to reduce the amount of time a person is homeless.

Recovery (Bridge) Housing: Recovery housing is a direct service with multiple components that provides supervised, short-term housing to individuals with substance use disorders or co-occurring mental and substance use disorders. It is commonly used after inpatient or residential treatment. Recovery housing is not a formal treatment; rather, it is a service that supports recovery during or after treatment.

Secondary Prevention: Aims to reduce the impact of a disease or injury that has already occurred. This is done by detecting and treating disease or injury as soon as possible to halt or slow its progress, encouraging personal strategies to prevent re-injury or recurrence, and

implementing programs to return people to their original health and function to prevent long-term problems.

Social Determinant of Health: Social Determinants of Health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health and quality-of-life outcomes. Some examples include: 1) access to resources like housing, education, health care, employment, parks and healthy food 2) exposure to violence, discrimination, blight and stressful home and neighborhood conditions, and 3) social support, collective efficacy, and social capital.

Tertiary Prevention: Aims to lessen the impact of an established illness or injury by helping people manage their condition through rehabilitation and other treatments in order to improve their ability to function, their quality of life and their life expectancy.

References

- 1. Burt MA, L.; Lee, E. Helping America's Homeless: Emergency Shelter or Affordable Housing? Washington, DC.: The Urban Institute Press; 2001.
- 2. Fazel S, Geddes JR, Kushel M. The health of homeless people in high-income countries: descriptive epidemiology, health consequences, and clinical and policy recommendations. *Lancet*. 2014;384(9953):1529-1540.
- 3. National Alliance to End Homelessness. The State of Homelessness in America. 2015.
- 4. Franklin B, Jones A, Love D, Puckett S, Macklin J, White-Means S. Exploring mediators of food insecurity and obesity: a review of recent literature. *J Community Health*. 2012;37(1):253-264.
- 5. Caton CL, Dominguez B, Schanzer B, et al. Risk factors for long-term homelessness: findings from a longitudinal study of first-time homeless single adults. *Am J Public Health*. 2005;95(10):1753-1759.
- 6. Kuhn RC, DP. Applying Cluster Analysis to test a typology of homelessness by pattern of shelter utilization: Results from the Analysis of Administrative Data. *Am J Community Psychol.* 1998;26:207-232.
- 7. Shinn M, Greer AL, Bainbridge J, Kwon J, Zuiderveen S. Efficient targeting of homelessness prevention services for families. *Am J Public Health*. 2013;103 Suppl 2:S324-330.
- 8. Burt M, et.al. *Strategies for Preventing Homelessness.* U.S. Department of Housing and Urban Development Office of Policy Development and Research; May 2005 2005.
- 9. Rolston H, et.al. *Evaluation of the Homebase Community Prevention Program.* NYC Department of Homeless Services; June 6, 2013 2013.
- 10. Evans WN, Sullivan JX, Wallskog M. The impact of homelessness prevention programs on homelessness. *Science*. 2016;353(6300):694-699.
- 11. Authority LAHS. Greater Los Angeles Homeless Count Report 2016. 2016.
- 12. Brown RT, Kiely DK, Bharel M, Mitchell SL. Geriatric syndromes in older homeless adults. *J Gen Intern Med.* 2012;27(1):16-22.
- 13. Kerker BD, Bainbridge J, Kennedy J, et al. A population-based assessment of the health of homeless families in New York City, 2001-2003. *Am J Public Health*. 2011;101(3):546-553.
- 14. Grant R, Gracy D, Goldsmith G, Shapiro A, Redlener IE. Twenty-five years of child and family homelessness: where are we now? *Am J Public Health*. 2013;103 Suppl 2:e1-10.
- 15. Zima BT, Wells KB, Freeman HE. Emotional and behavioral problems and severe academic delays among sheltered homeless children in Los Angeles County. *Am J Public Health*. 1994;84(2):260-264.
- 16. Bassuk EL, Richard MK, Tsertsvadze A. The prevalence of mental illness in homeless children: a systematic review and meta-analysis. *J Am Acad Child Adolesc Psychiatry*. 2015;54(2):86-96 e82.
- 17. Cunningham MK GS, Anderson J. *Rapid Re-housing: What the Research Says.* Washington, D.C.: Urban Institute;2015.
- 18. Greenwood RM, Schaefer-McDaniel NJ, Winkel G, Tsemberis SJ. Decreasing psychiatric symptoms by increasing choice in services for adults with histories of homelessness. *Am J Community Psychol.* 2005;36(3-4):223-238.
- 19. Tsemberis S, Eisenberg RF. Pathways to housing: supported housing for street-dwelling homeless individuals with psychiatric disabilities. *Psychiatr Serv.* 2000;51(4):487-493.
- 20. Tsemberis S, Gulcur L, Nakae M. Housing First, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. *Am J Public Health*. 2004;94(4):651-656.
- 21. Larimer ME, Malone DK, Garner MD, et al. Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA*. 2009;301(13):1349-1357.

- 22. Abt Associates. Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families. US Department of Housing and Urban Development: Office of Policy Development and Research; 2016.
- 23. Dumont DM, Brockmann B, Dickman S, Alexander N, Rich JD. Public health and the epidemic of incarceration. *Annu Rev Public Health*. 2012;33:325-339.
- 24. Davis LM WM, DeRose KP, Steinberg P, Nicosia N, Overton A, Miyashiro L, Turner S, Fain T, and Williams E III. *Understanding the Public Health Implications of Prisoner Reentry in California: State-of-the-State Report.* Santa Monica, Calif.: RAND Corporation;2011.
- 25. Kushel MB, Hahn JA, Evans JL, Bangsberg DR, Moss AR. Revolving doors: imprisonment among the homeless and marginally housed population. *Am J Public Health*. 2005;95(10):1747-1752.
- 26. Backer TE, Howard EA, Moran GE. The role of effective discharge planning in preventing homelessness. *J Prim Prev.* 2007;28(3-4):229-243.
- 27. Moran GS, R; Quinn, E., Noftsinger, R; Koenig, T; . *Evaluability Assessment of Discharge Planning and the Prevention of Homelessness: Final Report.* Washington D.C.: U.S. Department of Health and Human Services; 2005.
- 28. Herbst JL. *Permanent Patients: Hospital Discharge Planning Meets Housing Insecurity.* Hastings Center;2017.
- 29. Ku BS, Fields JM, Santana A, Wasserman D, Borman L, Scott KC. The urban homeless: super-users of the emergency department. *Popul Health Manag.* 2014;17(6):366-371.
- 30. Wenzlow AT, Ireys HT, Mann B, Irvin C, Teich JL. Effects of a discharge planning program on Medicaid coverage of state prisoners with serious mental illness. *Psychiatr Serv.* 2011;62(1):73-78.
- 31. Wohl DA, Scheyett A, Golin CE, et al. Intensive case management before and after prison release is no more effective than comprehensive pre-release discharge planning in linking HIV-infected prisoners to care: a randomized trial. *AIDS Behav.* 2011;15(2):356-364.
- 32. Buck DS, Brown CA, Hickey JS. The Jail Inreach Project: linking homeless inmates who have mental illness with community health services. *Psychiatr Serv.* 2011;62(2):120-122.
- 33. Brown CA, Hickey JS, Buck DS. Shaping the Jail Inreach Project: program evaluation as a quality improvement measure to inform programmatic decision making and improve outcomes. *J Health Care Poor Underserved*. 2013;24(2):435-443.
- 34. Forrester A, Singh J, Slade K, Exworthy T, Sen P. Mental health in-reach in an urban UK remand prison. *Int J Prison Health*. 2014;10(3):155-163.
- 35. Steel J, Thornicroft G, Birmingham L, et al. Prison mental health inreach services. *Br J Psychiatry*. 2007;190:373-374.
- 36. Wilson AB, Draine J. Collaborations Between Criminal Justice and Mental Health Systems for Prisoner Reentry. *Psychiatric Services*. 2006;57(6):875-878.
- 37. Draine J, Herman DB. Critical time intervention for reentry from prison for persons with mental illness. *Psychiatr Serv.* 2007;58(12):1577-1581.
- 38. Mueser KT, Corrigan PW, Hilton DW, et al. Illness management and recovery: a review of the research. *Psychiatr Serv.* 2002;53(10):1272-1284.
- 39. Drake RE, Mueser KT, Brunette MF, McHugo GJ. A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatr Rehabil J.* 2004;27(4):360-374.
- 40. Jarrett M, Thornicroft G, Forrester A, et al. Continuity of care for recently released prisoners with mental illness: a pilot randomised controlled trial testing the feasibility of a Critical Time Intervention. *Epidemiol Psychiatr Sci.* 2012;21(2):187-193.
- 41. Reif S, George P, Braude L, et al. Recovery housing: assessing the evidence. *Psychiatr Serv.* 2014;65(3):295-300.
- 42. Doran KM, Ragins KT, Gross CP, Zerger S. Medical respite programs for homeless patients: a systematic review. *J Health Care Poor Underserved*. 2013;24(2):499-524.

- 43. McQuistion HL, Gorroochurn P, Hsu E, Caton CL. Risk factors associated with recurrent homelessness after a first homeless episode. *Community Ment Health J.* 2014;50(5):505-513.
- 44. Duchesne AT, Rothwell DW. What leads to homeless shelter re-entry? An exploration of the psychosocial, health, contextual and demographic factors. *Can J Public Health*. 2016;107(1):e94-99.
- 45. Koegel P, Sullivan, G., Burnam, A., Morton, S.C., & Wenzel, S. Utilization of mental health and substance abuse services among homeless adults in Los Angeles. *Med Care*. 1999;37(3):306-317.
- 46. Kertesz SG, Larson MJ, Horton NJ, Winter M, Saitz R, Samet JH. Homeless chronicity and health-related quality of life trajectories among adults with addictions. *Med Care*. 2005;43(6):574-585.
- 47. Beijer U, Wolf A, Fazel S. Prevalence of tuberculosis, hepatitis C virus, and HIV in homeless people: a systematic review and meta-analysis. *Lancet Infect Dis.* 2012;12(11):859-870.
- 48. Grob G. *The Mad Among Us: A History of the Care of America's Mentally III.* Cambridge, MA: Harvard University Press; 1994.
- 49. Jones MM. Creating a science of homelessness during the Reagan era. *Milbank Q.* 2015;93(1):139-178.
- 50. Padgett DKH, B.F.; Tsemberis, S.J. *Housing First: Ending Homelessness, Transforming Systems, and Changing Lives.* Oxford: Oxford University Press; 2016.
- 51. Tabol C, Drebing C, Rosenheck R. Studies of "supported" and "supportive" housing: a comprehensive review of model descriptions and measurement. *Eval Program Plann*. 2010;33(4):446-456.
- 52. Rog DJ, Marshall T, Dougherty RH, et al. Permanent supportive housing: assessing the evidence. *Psychiatr Serv.* 2014;65(3):287-294.
- 53. Tsai J, Rosenheck RA. Outcomes of a group intensive peer-support model of case management for supported housing. *Psychiatr Serv.* 2012;63(12):1186-1194.
- 54. Hwang SW, Burns T. Health interventions for people who are homeless. *Lancet*. 2014;384(9953):1541-1547.
- 55. de Vet R, van Luijtelaar MJ, Brilleslijper-Kater SN, Vanderplasschen W, Beijersbergen MD, Wolf JR. Effectiveness of case management for homeless persons: a systematic review. *Am J Public Health*. 2013;103(10):e13-26.
- 56. Henwood BF, Cabassa LJ, Craig CM, Padgett DK. Permanent supportive housing: addressing homelessness and health disparities? *Am J Public Health*. 2013;103 Suppl 2:S188-192.
- 57. Schwartz A. Housing Policy in the United States. New York: Routledge; 2015.
- 58. Rice DD, E; Mazzara, A. *How Housing Vouchers Can Help Address California's Rental Crisis.* Washington, DC: Center on Budget and Policy Priorities;2016.
- 59. Services TFoCP. Recommendations to Promote Healthy Social Environments. *American Journal of Preventive Medicine*. 2003;24(3S):S47-67.
- 60. Zuk MC, K. *Housing Production, Filtering and Displacement: Untangling the Relationships.* UC Berkeley: Institute of Government Studies, UC Berkeley;2016.
- 61. Marmot M. *The Health Gap: The Challenge of an Unequal World.* New York: Bloomsbury Press; 2015.
- 62. Wilkinson RP, K. *The Spirit Level*. New York: Bloomsbury Press; 2009.
- 63. Chetty R, Stepner M, Abraham S, et al. The Association Between Income and Life Expectancy in the United States, 2001-2014. *JAMA*. 2016;315(16):1750-1766.
- 64. Mueser KT, Drake RE, Bond GR. Recent advances in supported employment for people with serious mental illness. *Curr Opin Psychiatry.* 2016;29(3):196-201.
- 65. Johnson-Kwochka A, Bond GR, Becker DR, Drake RE, Greene MA. Prevalence and Quality of Individual Placement and Support (IPS) Supported Employment in the United States. *Adm Policy Ment Health*. 2017.

- 66. Rosenheck RA, Mares AS. Implementation of supported employment for homeless veterans with psychiatric or addiction disorders: two-year outcomes. *Psychiatr Serv.* 2007;58(3):325-333.
- 67. Poremski D, Rabouin D, Latimer E. A Randomised Controlled Trial of Evidence Based Supported Employment for People Who have Recently been Homeless and have a Mental Illness. *Adm Policy Ment Health*. 2015.
- 68. Poremski D, Hwang SW. Willingness of Housing First Participants to Consider Supported-Employment Services. *Psychiatr Serv.* 2016;67(6):667-670.
- 69. Poremski D, Woodhall-Melnik J, Lemieux AJ, Stergiopoulos V. Persisting Barriers to Employment for Recently Housed Adults with Mental Illness Who Were Homeless. *J Urban Health*. 2016;93(1):96-108.
- 70. Poremski D, Whitley R, Latimer E. Building trust with people receiving supported employment and housing first services. *Psychiatr Rehabil J.* 2016;39(1):20-26.
- 71. Dutta-Gupta IG, K; Eckel, M; Edelman, P. Lessons Learned from 40 Years of Subsidized Employment Programs. Washington, DC: Georgetown Law School Center on Poverty and Inequality;2016.
- 72. Rosen MI, McMahon TJ, Lin H, Rosenheck RA. Effect of Social Security payments on substance abuse in a homeless mentally ill cohort. *Health Serv Res.* 2006;41(1):173-191.
- 73. Dennis D, Lassiter M, Connelly WH, Lupfer KS. Helping adults who are homeless gain disability benefits: the SSI/SSDI Outreach, Access, and Recovery (SOAR) program. *Psychiatr Serv.* 2011;62(11):1373-1376.
- 74. Kauff JF, Clary E, Lupfer KS, Fischer PJ. An Evaluation of SOAR: Implementation and Outcomes of an Effort to Improve Access to SSI and SSDI. *Psychiatr Serv.* 2016;67(10):1098-1102.
- 75. National Academy of Sciences. *Crossing the Quality Chasm.* Washington DC: National Academy Press; 2000.
- 76. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759-769.
- 77. U.S. Interagency Council on Homelessness. Opening Doors Federal Strategic Plan to Prevent and End Homelessness. In: Homelessness USICo, ed. Washington, D.C.2015.
- 78. Abt Associates. A Coordinated Entry System for Los Angeles: Lessons from Early Implementation, Evaluation of the Conrad N. Hilton Foundation Chronic Homelessness Initiative. The Conrad N. Hilton Foundation; May 15, 2015 2015.

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