Integrating Housing Strategies with Health

An Opportunity to Advance Whole-Person Care in California

June 2015

Prepared by JSI Research & Training Institute, Inc.

This work was made possible with generous support from Blue Shield of California Foundation

This White Paper was authored by:

Jeremy Cantor, MPH
Rachel Tobey, MPA
Eliana Greenberg, BA

JSI Research & Training Institute is a public health research and consulting firm dedicated to promoting and improving public health in California, the United States, and across the globe. Our mission is to improve the health and well-being of underserved and vulnerable people and communities. JSI works across a full range of public and community health areas, strengthening health systems to improve services—and ultimately, people's health.

JSI San Francisco
260 California Street
Suite 500
San Francisco, CA 94111
415-400-0020

www.jsi.com

Table of Contents

Acknowledgments

Our gratitude goes to Blue Shield of California Foundation for supporting this work, and to the key informants listed here who were generous with their time and wisdom.

Key Informants

- Joshua Bamberger, MD, MPH, Medical Director for Housing and Urban Health, San Francisco Department of Public Health; Associate Clinical Professor Family and Community Medicine, UCSF
- Damon Francis, MD, Medical Director, Alameda Health Care for the Homeless
- Robert Ratner, MD, MPH, Housing Services Director, Alameda County Behavioral Health Care Services
- Steven Henry, CFA, Director, Treasury Investment Management, UnitedHealth Group
- Heather Hood, MA, MCP, Director of Programs, Northern California, Enterprise Community Partners
- Jennifer Loving, MS, Executive Director of Destination: Home, a program of The Health Trust
- Nancy Oswald, PhD, Managing Director, California Health Care Safety Net Institute
- Amanda Clarke, MPH, Senior Program Associate, California Health Care Safety Net Institute
- Jackie Bender, MPP, Director of Policy, California Association of Public Hospitals and Health Systems
- Sharon Rapport, JD, Associate Director, California Policy, Corporation for Supportive Housing
- Steven Shum, MCP, Senior Program Manager, Corporation for Supportive Housing
- Susan Lee, MBA, Senior Program Manager, Corporation for Supportive Housing
- Doug Shoemaker, President, Mercy Housing California
- Marc Stevenson, MSW, Director, Project 25
- Kris Kuntz, MA, Program Analyst, Project 25
- Marc Trotz, Director, Housing for Health, Los Angeles County Department of Health Services
- Carol Wilkins, MPP, Consultant

Introduction

Homeless individuals and those with unstable housing pose a unique challenge for the health sector due to the complexity and severity of their health and behavioral health issues and the role that non-clinical social issues play in determining health cost and quality outcomes. Healthcare payers have traditionally viewed housing as outside their purview, at least in part because policy and regulation have systematically discouraged allocating publicly funded health resources to directly support housing. Yet for many of the individuals with the highest rates of healthcare utilization, lack of stable housing is a primary driver of poor health outcomes and high cost. From a broader public-sector perspective, the costs of unstable housing and homelessness extend beyond health care to include multiple other systems including criminal justice, social services, and emergency response.

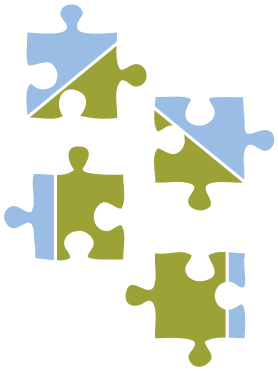
"From a large county health system perspective, we either could have waited for the whole world to change and have more Section 8 funding, HUD funding, CMS funding, but that is not going to happen in a time frame that is going to meet the obvious and glaring issues that we are confronted with: thousands of extremely low-income and vulnerable people cycling through the system, and we can't do anything for them with all of our other medical and behavioral health tools while they are still homeless. We are just throwing good money after bad, treating them repeatedly in the emergency room and acute hospital beds."

– Marc Trotz, Director of Housing for Health, Los Angeles County Department of Health Services

Increased coordination and integration of housing and health is gaining momentum due to:

- coverage expansion that has brought homeless and housing insecure individuals into Medicaid in larger numbers than ever before;
- payment reforms that are leading health systems to assume additional financial risk;
- actual and under-discussion changes to Medicaid policy through 1115 waivers, state requests for Health Home funding through Section 2703 of the Affordable Care Act, and other modifications to State Plans;
- and growing focus on addressing whole-person needs as a strategy for achieving the Triple Aim (reduced per capita cost, improved experience of care, and improved population health).[1]

The health sector has a vital role to play in initiating and expanding health–housing integration efforts, and stands to realize substantial financial and population-health results. Achieving such results will require a comprehensive approach that is strategically phased in over time in order to align resources, services, partners, and data to respond to the needs of high-risk individuals.



Purpose of this paper

In two prior papers, prepared as part of this Blue Shield of California Foundation project, JSI Research & Training Institute (JSI) and partners at the California Association of Public Hospitals and Health Systems (CAPH) and the Safety-Net Institute proposed a whole-person care (WPC) framework to respond to the challenges of addressing vulnerable individuals' health, behavioral health, and social needs in concert rather than in isolation.[2,3] The concept of WPC has gained traction both in state policy proceedings (e.g., a Whole-Person Care Pilot program is a component of California's 1115 Medicaid waiver proposal) and practical discussions of safety-net transformation (e.g., a special session at the CAPH 2014 conference).

This paper builds on that prior work by exploring housing and health integration as a key interest area among California county stakeholders and focusing the WPC framework on a specific population. In order to provide information and ideas that compel local leaders from health and other sectors to consider innovative approaches to advance housing as a health strategy, this paper includes the following sections:

- Background:
  - A range of housing strategies being considered by the health sector
  - Data on the impacts of homelessness on health and the evidence for supportive housing as a solution for chronically homeless individuals
- A framework for developing successful housing–health initiatives:
  - Findings organized by Whole-Person Care dimensions
  - A phased approach to implementation
- Case examples of current innovative approaches in California communities:
  - Project 25 in San Diego
  - Housing for Health in Los Angeles County
  - Housing 1000 in Santa Clara County

Local efforts exist within a larger policy, regulatory, and economic environment, and there are federal and state policy changes that would facilitate adoption of the approaches that are discussed herein. For example, California's 1115 waiver proposal submitted in March 2015 includes expanded services and supports for housing as a key initiative. This paper is intended to illustrate opportunities for California counties to take action integrating housing and health at a local level, independent of state and federal policy changes.

Methodology

Between October 2014 and March 2015, JSI reviewed national peer-reviewed and grey literature and conducted in-depth discussions with key informants involved in innovative work at the intersection of the health and housing fields. JSI qualitatively analyzed the literature and interviews to identify key themes and opportunities to advance whole-person care through housing in California, with a focus on a key target population of high-utilizing chronically homeless individuals.

Background

"This is a perfect time to approach the housing authorities... Housing Authority directors have been hearing from HUD that they ought to be establishing these types of preferences and these types of partnerships. It requires a structure where a Housing Authority adopts a preference, and the healthcare system—possibly the public hospital in partnership with a homeless service provider—says we are going to take highly vulnerable chronically homeless people who are frequent users in our hospital system, that qualify for your preference, and we are going to give them lots and lots of handholding and support, we are going to help them find apartments and use the vouchers, and we are going to do whatever it takes to be successful."

– Carol Wilkins, Consultant

Housing and health are linked through multiple pathways. Public policy, such as the Tenement House Act, has consistently acknowledged that poor-quality housing may result in exposure to hazards, toxins, and infectious disease. Housing in high-crime buildings or neighborhoods can increase risk of trauma and toxic stress.[4,5] Housing insecurity resulting in overcrowding and frequent moves has also been associated with mental health conditions, substance abuse, and higher rates of chronic and infectious disease.[6] Growing recognition of the impact of social determinants of health on patterns of illness, injury, and health expenditures combined with expanded Medicaid coverage through the Affordable Care Act have resulted in a robust interest in better integration between health and housing.

Range of Housing Approaches

Health systems have begun to employ a range of housing strategies to address the poor health outcomes and high costs associated with individuals suffering from health and/or behavioral health issues coupled with housing insecurity or homelessness. Table 1 describes major categories of housing approaches that are relevant for individuals whose utilization of multiple systems and health outcomes are influenced by their housing status. This is not an exhaustive list of potential approaches, nor does it represent a sequential pathway as many homeless individuals cycle repeatedly between the street, shelter, and short-term housing.[7,8,9] The table does, however, illustrate a wide range of short-term and long-term approaches that can incorporate both health and housing components in a single initiative.

Table 1. A Range of Housing Approaches Being Employed by Health Systems and Counties

	Goal	Timeframe	Examples of health–housing integration
Homelessness Prevention	Identify individuals and families at immediate risk of losing stable housing and provide the necessary short-term resources to maintain their housing	Short-term by design, intended to fill a gap rather than provide permanent support	Hennepin County, MN has a homelessness prevention program that provides funds and legal assistance to individuals at risk of becoming homeless as part of a comprehensive approach to reducing homelessness.[10]
Emergency Shelter	Provide a safe, secure, temporary place for individuals and families to get off the street and, in many cases, have access to primary care health services	Usually very short term (i.e., 1-3 days), occasionally up to 90 days, and in some places, for much longer periods	Santa Barbara County operates three health centers located within homeless shelters and has placed public health nurses in 13 shelters.
Treatment/ Rehab/Skilled Nursing Facilities	Create a high-service, controlled environment in which individuals can stabilize and recover from a specific health, mental health, or substance abuse condition	Usually short-term, dependent upon specific treatment goal	Commonwealth Care Alliance (MA) has leased and renovated a hospital floor and house to provide community-based crisis stabilization for individuals with serious mental illness (some of whom are homeless).[11]
Transitional Housing	Offer interim housing with some built-in services for persons or households who are leaving a clinical or institutional setting or cannot access permanent housing due to lack of supply or eligibility	Limited to 24 months under federal regulations, often significantly shorter	New York State's recently approved 1115 Medicaid waiver includes a transitional supportive housing initiative focused on reducing readmissions through services focused on stabilization and self-efficacy.[12]
Medical Respite Programs	Provide homeless individuals who are leaving the hospital with short-term housing and on-site medical care in order to avoid readmissions	Usually short-term, based on recovery from surgery or completion of treatment plan	Recuperative Care Centers in Southern California has placed over 1,500 homeless patients referred from hospitals in motel rooms and provided on-site medical and social services. The daily cost is roughly one-tenth the cost of staying in a hospital bed.[13]
Rapid Re-Housing	Connect homeless individuals and families with the supports and services necessary to get into permanent housing quickly	Short-term, generally have a goal of getting individuals into housing within ~30 days	In Lancaster, PA the Shelter to Independent Living Program has documented success addressing barriers to finding and keeping permanent housing for clients through assessment/intake, financial management, and landlord outreach.[14]
Permanent Supportive Housing	Provide long-term, stable, affordable housing linked to case management and services designed to meet the needs of high-need individuals	Long-term, case management and service intensity may decrease over time with increasing stability	The San Francisco Health Plan has partnered with the Tenderloin Neighborhood Development Corporation to renovate a building and provide housing to 122 chronically ill, high-utilizing homeless individuals.[15]

The Chronically Homeless: A Priority Target Population for California Counties

While health systems and payers are experimenting with a range of housing approaches for populations whose costs and outcomes are influenced by their housing status, initial interest often lies in housing–health initiatives for high-utilizing chronically homeless individuals. Economic impact analyses, such as the one from Los Angeles County in Figure 1, illustrate the financial "pain point" that the chronically homeless population represents across multiple publicly financed sectors.

Los Angeles is not alone. Other counties are also focusing on chronically homeless individuals based on documented high costs across sectors, moral and clinical imperatives to serve the population more effectively, and the potential to achieve results in relatively short time frames. Based on all of the aforementioned factors, this paper will focus primarily on housing–health initiatives targeting chronically homeless individuals. However, many of the findings apply to collaboration between the housing and health sectors for the benefit of other housing-insecure populations.

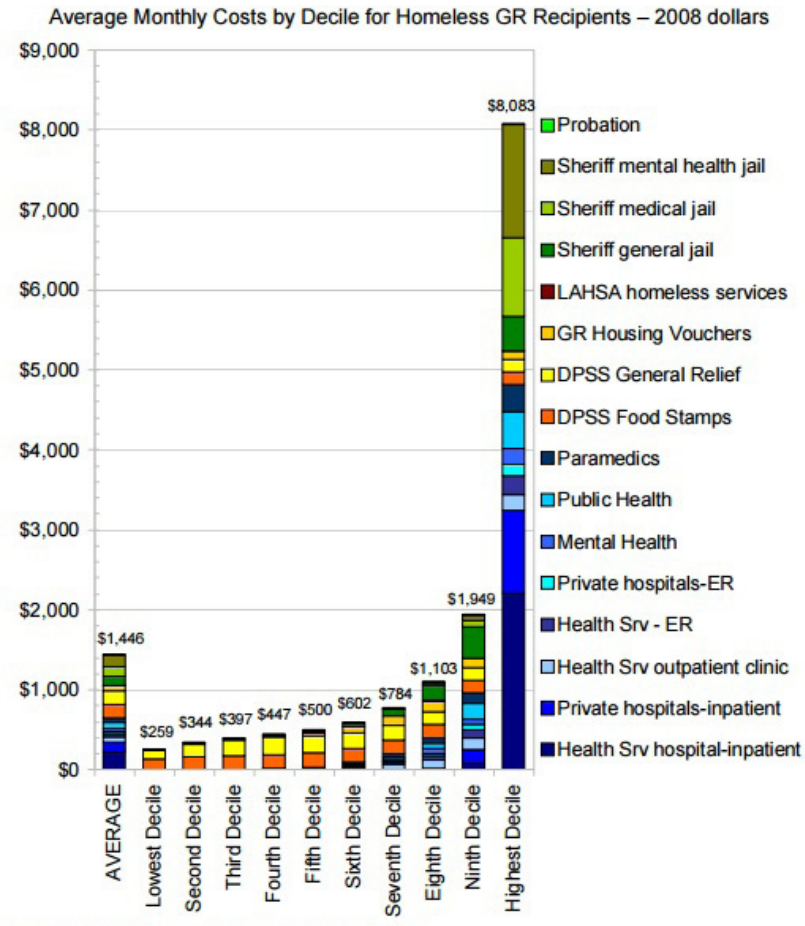


Figure 1: Monthly costs of homelessness in Los Angeles by sector and utilization decile in 2008 dollars.

Source: Flaming D, Burns P, et al. Where We Sleep: Costs when Homeless and Housed in Los Angeles. Economic Roundtable; 2009

Impact and Evidence

Over 390,000 California residents experience homelessness in a year on average, and 27% meet the definition of chronically homeless,[a] which is the third-highest rate nationally.[16,17] California's rates of unemployment, poverty, and foreclosure, as well as increasingly high rental housing costs, are cited as contributing to the continual high rates of homelessness across the state.[18] For homeless individuals, treating immediate health crises without addressing the underlying issues has been termed a "band-aid" approach and almost guarantees regular clinical and hospital visits.[18] There is voluminous data on the landscape and impact of homelessness; below is a snapshot of the issue from a health perspective.

"These individuals are likely to die on the street, 25-30 years younger than people who are housed – it is a health crisis. There is an immediate health need that hasn't been fully recognized yet in the State of California."

– Sharon Rapport, Associate Director, California Policy, Corporation for Supportive Housing

Health Outcomes

The chronically homeless suffer significantly poorer health outcomes and shortened life expectancies. For example, compared with the population average:

- Homeless individuals die 25-30 years younger (at roughly 50 years old)[19]
- Homeless men are 40-50% more likely to die of heart disease[20]
- Homeless individuals are 46 times more likely to suffer from tuberculosis[21]
- Homeless individuals are four times more likely to suffer from Hepatitis C[21]

Poor outcomes are frequently due to a complex interaction of issues including mental illness, substance abuse disorders, and chronic diseases such as diabetes. Thirty percent of the chronically homeless population in the United States is estimated to suffer from at least one form of severe mental illness (SMI), compared with six percent of the general population, and half suffer from substance abuse and dependence.[22,23] Poor health outcomes for the homeless are exacerbated by lack of access to food, shelter, heat, transportation, and social supports as well as uncoordinated services, limited access to care, and challenges maintaining recommended treatment protocols.[24]

Cost Impacts

In 2006, Malcolm Gladwell wrote an influential article in the New Yorker describing a Reno, Nevada native he dubbed "Million-dollar Murray."[25] Murray was a homeless alcoholic who ended up in ambulances, hospitals, and jails multiple times every month. His moniker came from a back-of-the-envelope estimate of his cost to public systems over a decade. Gladwell's thesis was that it "might be cheaper to solve the problem than manage it." Other reporters have discovered individuals in California who incurred utilization costs over a million dollars in much less than a decade.[26] In reality there are hundreds of Murrays across California, the super-utilizers, the top 1%: chronically homeless, suffering multiple health conditions, not recovering, and placing an extreme, constant strain on health and other public systems. Moreover, there are thousands of homeless individuals with health, mental health, and substance use conditions who are not super-utilizers but who have significant unmet needs and use significant resources (see Figure 1).

a Federal agencies have agreed upon the following definition for chronically homeless: "either (1) an unaccompanied homeless individual with a disabling condition who has been continuously homeless for a year or more, OR (2) an unaccompanied individual with a disabling condition who has had at least four episodes of homelessness in the past three years."

Estimates of the annual public sector costs of an "average" high-utilizing homeless individual are as high as $150,000 but vary depending on population criteria and methodology (e.g., are costs to libraries of adding extra staff to respond to the needs of homeless individuals included?). Well over half of these costs are consistently determined to be incurred by health systems.[27] For instance, a recent study of homelessness in Santa Clara County estimated that among the chronically homeless population, the most frequent users of public and medical services (the top 5%), had average annual costs of over $100,000 per individual.[28] Furthermore, evidence shows that there is no regression to the mean: high-cost individuals do not become lower cost over time if they remain homeless.[29] Figure 2 illustrates the relative low cost of permanent supportive housing in comparison with other services that are used frequently by chronically homeless individuals.

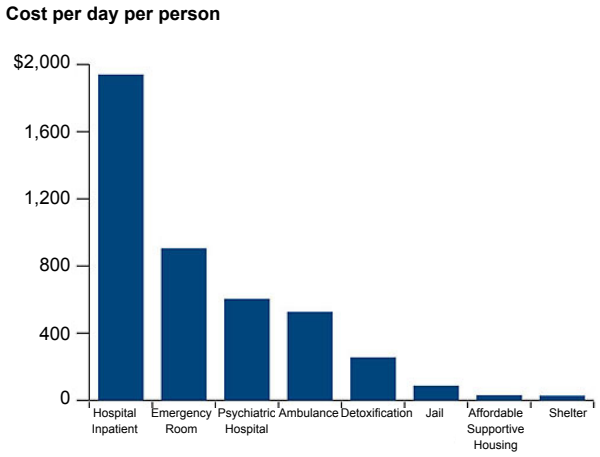


Figure 2: Cost of Serving the Homeless Declines in Permanent Supportive Housing (2005-2008)

Source: Opening Doors: Federal Strategic Plan to Prevent and End Homelessness, 2010.

Improving Health and Reducing Costs through Permanent Supportive Housing (PSH)

There is no "one size fits all" approach to improving health for homeless and housing-insecure populations. Different strategies will be most effective for different people depending on social circumstances (e.g., individual or family, educational and employment status, etc.) and health and behavioral health conditions (e.g., chronic disease, serious and persistent mental illness, etc.). However, for chronically homeless individuals, permanent supportive housing[b]—rental housing paired with intensive case management services and provided in alignment with the principles of Housing First[c]—has an unparalleled evidence base for improved health outcomes and reduced utilization of health care and other systems.[31] Unlike most shelter and other short-term housing efforts, supportive housing focuses on breaking long-term cycles of homelessness and addressing underlying physical and behavioral health issues. The United States Interagency Council on Homelessness describes supportive housing as, "a proven, effective means of reintegrating chronically homeless and other highly vulnerable homeless families and individuals with psychiatric disabilities or chronic health challenges into the community by addressing their basic needs for housing and providing ongoing support."[30]

b The terms "permanent supportive housing" (PSH) and "supportive housing" are generally used interchangeably. "Permanent" indicates that the length of stay is determined by the housed individual or family, with no time limitation: Tenants may remain in their homes as long as they meet the basic obligations of tenancy.[30]

c The Housing First approach focuses on getting individuals into stable housing as quickly as possible without requiring achievement of "housing readiness." This is in contrast to approaches that emphasize addressing issues, such as substance abuse, that lead to homelessness prior to placement in long-term, non-institutional housing.

More than 30 recent studies illustrate the potential for PSH to both reduce costs and improve health and quality of life for high-need homeless populations.[24] Figure 3 shows results from five states. Additional evidence includes:

- The Chicago Housing for Health Partnership found that every 100 chronically homeless individuals housed translated annually to 49 fewer hospitalizations, 270 fewer hospital days, and 116 fewer visits to emergency departments.[32]
- A 2014 study from Charlotte, North Carolina found that during the first year of supportive housing, tenants experienced a 70% reduction in hospital and emergency room use, and average annual hospital bills per tenant dropped from $41,542 to $12,472.[33]
- Hennepin Health, an Accountable Care Organization in Hennepin County, Minnesota, has housed over 200 high-utilizing individuals. Initial data indicates a 79% reduction in hospitalization costs and 52% reduction in ER costs and significant net savings after accounting for housing and administration costs.[34]

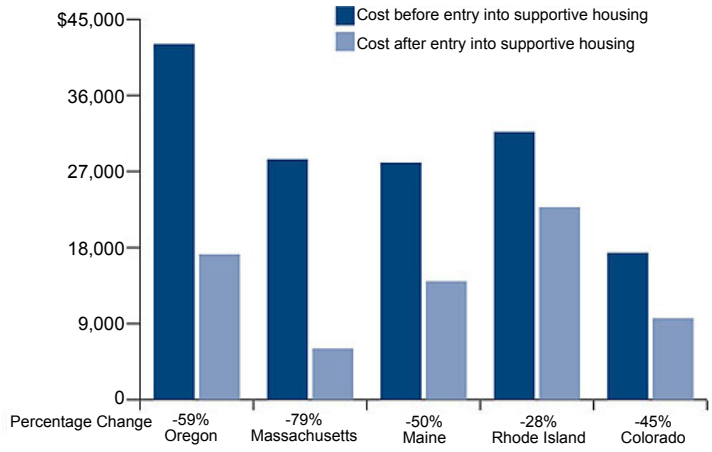


Figure 3: Cost of Serving the Homeless Declines in Permanent Supportive Housing (2005-2008)

Source: Opening Doors: Federal Strategic Plan to Prevent and End Homelessness, 2010.

Approaches to PSH vary significantly in terms of expected timeframe for participation, type of housing provided (e.g., a dedicated and financed building, subsidies for scattered site rentals, etc.), services offered, and sources of funding for those services. The following sections outline common elements of successful efforts and a framework for advancing PSH for chronically homeless high-utilizing populations though integration of housing and health.

A Framework for Successful Housing–Health Integration

Dimensions of Whole-Person Care

The six dimensions of whole-person care provide a useful outline for the findings from our research on PSH initiatives. See Appendix B for detailed definitions of the dimensions.

Figure 4. Dimensions of Whole-Person Care

Based on our research, we have identified two complementary elements of a framework to integrate health and housing efforts: the dimensions of whole-person care, and a strategic phased approach to scaling up an initiative. Table 3 at the end of this section lays out how the two elements can be used together to provide guidance for organizing efforts over time in order to increase integration and establish high-functioning collaboration. The discussion that follows is focused on PSH for chronically homeless high-utilizing individuals, but the framework and many of the specific findings would be relevant for a range of initiatives that involve collaboration between health and housing sectors, such as those in Table 1 above.

Target Population: Match resources with attainable goals

In order to develop the most appropriate and effective partnerships and portfolio of services, initiatives should adopt as specific a target-population definition as possible. Selecting a specific target population does not necessarily mean focusing on a very small number of people—the target population could be every homeless individual or family in the region. However, initiative leaders should consider whether existing resources are commensurate with the size and complexity of the population. As discussed below in the Phases section, starting with a narrowly defined population can provide an opportunity to prove the concept and build the capacities and relationships necessary for larger-scale efforts. Regardless of the target population, methods of outreach and enrollment should take into account the population's needs in order to maximize participation. Potential criteria for target populations include: utilization of services from multiple systems; enrollment with a specific health plan; health status (e.g., multiple chronic illnesses, serious mental illness, substance abuse, disability); and eligibility for public benefits such as Section 8 vouchers and veterans housing support (see Appendix A for descriptions). A number of initiatives also use vulnerability index surveys and vulnerability assessment tools to identify high-need individuals for program participation.[35,36]

In addition to providing internal structure to a collaboration, selecting a target population allows initiative leaders to publicly state goals about intended outcomes in order to draw attention and resources. In Los Angeles, Housing for Health has set a goal of securing 10,000 housing units linked to the health system. Utah's Task Force on Homelessness set a 10-year goal of ending homelessness in the state and is over 70% of the way to that goal after 9 years, with chronic homelessness among veterans having been effectively eliminated.[37] In both cases, the initiatives have successfully aligned existing resources from multiple sectors and agencies and secured new philanthropic funding to achieve results for the identified target population.

Collaborative Leadership: Secure high-level commitment to a new approach

It takes influence and commitment to move from siloed "business as usual" to an innovative, integrated approach. An effective champion can facilitate a "health in all policies" perspective by encouraging multiple sectors to the table to collectively identify opportunities for win-win solutions and to build the trust necessary to share resources. As mentioned above, Utah has a remarkable track record of reducing chronic homelessness. That effort was initiated after the head of the Task Force on Homelessness brought together "all of the dogs in the fight" and convinced them, "sometimes against their judgment," to back a supportive housing initiative for 25 chronically homeless individuals in Salt Lake City. The success of that initiative paved the way for the broader effort to house 2,000 individuals.[38] There are numerous models for leadership, ranging from a single champion to a group of organizations who collectively have the capacity and influence to lead. For example, in San Diego, Project 25 was initiated through a partnership between the United Way, St. Vincent de Paul, and the county. In both San Francisco and Los Angeles, Dr. Mitch Katz has been hailed for using his leadership position to bring multiple stakeholders together to address housing and health in innovative ways. The key is to engage leadership that matches necessary influence with motivation to make the integration of health and housing a priority over an extended period of time.

Financial Flexibility: Braid and blend funding[d]

In order to be successful, PSH initiatives will need to bring together resources from multiple sources and sectors to fund services including case management and care coordination, housing subsidies and navigation, and administration of the program. Existing resources for clinical and behavioral health services and existing housing subsidies can be braided to meet part of the need (see Appendix A for a description of potential funding sources). However, given limits on how Medicaid dollars can be spent and finite dollars in the public sector available for housing subsidies, more flexible, blendable funds are necessary to create a comprehensive, integrated approach to housing and health. Health-system-led initiatives have established such flexible funding through a few different strategies. In Los Angeles, the Department of Health Services got approval from the Board of Supervisors to use a portion of their budget, derived from local tax revenue, to fund the Flexible Housing Subsidy Pool. In Minnesota, Hennepin Health used reinvestment dollars, derived from health care savings, to rent eight

d Braiding funds means aligning existing funding streams to pay for something (e.g., services, projects, and infrastructure) that could not be supported by any single stream while maintaining accounting for spending and outcomes by stream. Blending funds means putting resources in a collective "pool" from which they are generally spent based on the judgment of a body that manages that pool without tracking specific spending to specific funding sources.

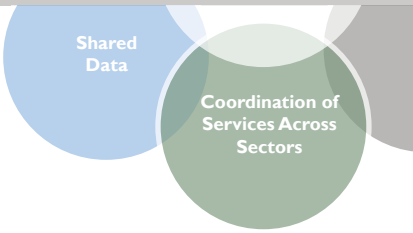
housing units for use by patients. Even with those health system resources, additional philanthropic grants were necessary to support the range of necessary activity. Santa Clara County is also exploring Social Impact Bonds as a method for securing up-front private-capital investment tied to prospective savings (see Appendix A for a description of Social Impact Bonds). It is likely that initiatives will need to utilize four key funding sources—healthcare and behavioral health reimbursements, housing subsidies and credits, flexible health system dollars, and philanthropic or hospital community benefit grants—in order to have the necessary stability and flexibility.

A number of our interviewees remarked on the critical need to engage health plans as payers given that improvements in health and reduced utilization will result in savings to plans. The challenges to health plan investment in housing initiatives are twofold: 1) Medicaid dollars cannot be used to reimburse housing expenses, and 2) reductions in health system utilization are likely to result in rate reductions in future health plan rate-setting processes. Inspiring widespread investment in housing initiatives by health plans likely requires state and/or federal policy change. Two options include allowing plans to include costs of housing initiatives as allowable costs in future rate setting and allowing plans to keep/reinvest the savings resulting from housing initiative investments. Recent 1115 Medicaid Waiver proposals in California and other states include provisions for both of these options. Even absent policy change, interviewees acknowledged that plans may still be compelled by the immediate benefit of contributing financially to a housing initiative, even if it means using reserve capital, to reduce costs for very high-cost members. Given the changing healthcare landscape, many interviewees stated the importance of having plans as key stakeholders while a housing–health initiative is forming and generating early results. The planning process can illuminate potential ways health funds could pay for case management or other supportive services and can set the stage for additional potential investment. All three of the initiatives profiled in the case examples section below have engaged health plans in their housing–health initiatives, and Project 25 has established agreements with plans to pay for services for referred patients.

Shared Data: Tell a population story

Accurate data on health status and service utilization across systems can be a vital tool for bringing a complex picture into focus. Data can make the case for housing–health integration efforts by facilitating the monitoring of progress and savings over time. Yet, frequently, homeless individuals interact with multiple systems that each track interactions in separate, closed data systems. As a result, it is possible to get an aggregate view of cost for each system but difficult to identify duplication of effort, understand the total costs associated with individual patients/clients across systems, or tell a coherent story about how a defined population is interacting with multiple systems.

Multiple counties have designed data sharing efforts to focus on high utilizers of multiple systems. High utilizers of multiple systems can provide an ideal focal population for developing an effective data sharing strategy due to their relatively small number, involvement with multiple agencies and providers, and the potential savings from better coordination and case management. Adaptable data warehousing platforms for integrating data from health and other sectors are under development and emerging.[39] For example, San Francisco's Department of Public Health started



their Coordinated Case Management System (CCMS) in order to understand and track high utilizers across multiple agencies, departments, and sub-programs, and now has records for over 600,000 adult patients. Rather than creating a new comprehensive data system and requiring multiple agencies to use it, either replacing existing systems or functioning in parallel (requiring that data enterers duplicate work), CCMS is set up as a warehouse in which data that has already been entered into multiple systems is transferred and merged, and information on individuals matched.[40] Hennepin Health has adopted a similar data warehouse strategy on a much smaller scale, integrating data from the four partners of their ACO, with seamless integration with electronic medical records.[41] The synthesized data from such systems can serve to inform policy and decision makers and to guide the implementation of cross-system strategies.

Coordination Across Sectors: Form a housing–health collaborative

The housing and health sectors share many high-level aspirations for the individuals they serve (e.g., living in healthy safe environments and overall wellbeing and productivity), and evidence of the link between housing and health outcomes is well-documented.[42] Yet the sectors have separate funding streams, professional training, and departmental authorities, leading to virtual silos even when activities are focused on the same geography and population. There are numerous efforts underway to bridge that divide. For example, San Francisco was the first county in the state to create a housing office within its health department.

"The healthcare sector is primarily focused on enrolled patients, the client in front of me. The housing sector is focused on community residents and buildings. To the extent that health care moves towards thinking about populations and communities, there will be a better match with the housing sector."

– Robert Ratner, Housing Services Director, Alameda County Behavioral Health Care Services

With regard to PSH, it is clear that strong partnership between the health and housing sectors is vital to success. However, as Doug Shoemaker from Mercy Housing put it, "We're confident the numbers can make sense, but it won't work if we don't have a shared understanding about whom we're serving, the portal for entry and referral, and the timeframe." Three key components for successful partnerships emerged in our research: structured coordination, defined roles, and clear understandings of each other's needs and measures of success.

- **Structured coordination:** Health and housing professionals need to be in regular contact and conversation in order to develop trust and familiarity and solve problems together. Los Angeles DHS has co-located health and housing staff in their offices in their recently opened Star Apartments on Skid Row. This sort of regular contact will help in developing a shared understanding of the needs of chronically homeless individuals and also provide an opportunity to troubleshoot issues such as how to identify members of the target population while maintaining compliance with HIPAA.

- **Defined roles:** Unfortunately, housing organization staff frequently end up interfacing about urgent health needs with clients who have been placed in housing, and hospital staff are often left trying to figure out where to refer homeless patients prior to discharge. Setting up systems so that the needs of patients are quickly met by someone with appropriate training is a key attribute of successful initiatives in California and other states.

Public agencies may not be equipped to play all roles in an initiative successfully, in which case other organizations should be engaged as partners. This may be true on the health side, as there may be organizations who have capacity and success with the target population (such as St. Vincent de Paul in San Diego), or on the housing side where there may be an intermediary organization that is better suited to identify and secure housing units (such as Brilliant Corners in Los Angeles and the San Francisco Bay Area).

- **Understanding needs:** For the most part, housing and health need the same things from each other but with differences in language and specifics. Table 2 provides a composite sketch, based on our research, of how leaders in the housing and health sectors may perceive similar needs from distinct perspectives.

Table 2. Hypothetical Housing and Health Perspectives

Need	Sample Perspectives	
	Housing	Health
Commitment to provide services	"I need a long-term commitment in order to make this attractive to landlords and developers."	"I want to set an ambitious target for the number of units we are going to secure in order to be at a scale that justifies significant staff and capacity building."
Point of contact/ trusted troubleshooter	"Who do I call in the middle of the night when a resident needs support?"	"Who do I call when I need to get someone into housing immediately to avoid sending them back out to the street?"
Agreed upon referral process	"I need people who meet certain criteria in order to draw down resources, and I need to know when they will be referred."	"I need the initiative to be able to focus on individuals with the greatest need and the highest utilization rates."
Commitment to pool some resources and agreement about who should get priority	"I'm under pressure because homelessness is such a big political and financial issue, but I don't have enough funding to house everyone who needs it."	"I'm under pressure because homelessness is such a big health and financial issue, but I don't have enough funding to provide support services to everyone who needs them."
Data on positive outcomes	"I need data demonstrating positive health and social impacts in order to report to funders that their investments are having broad impacts."	"I need quantitative and qualitative data demonstrating that PSH provides housing quickly and that people stay housed in order to reassure funders and decision makers that this is a good use of health resources."

"A lot of [our work with health plans] to date has been educating about the service needs for chronically homeless, complex individuals and getting on the same page, understanding the same acronyms. This is a new population for them…their approach to case management doesn't necessarily work for this population … It is a process, and that is something to keep in mind in bringing supportive housing and health care together."

– Susan Lee, Senior Program Manager, Corporation for Supportive Housing

Patient-Centered Care: Design support to fit the individual

Individuals who have a history of chronic homelessness will require a range of services tailored to their needs in order to successfully secure and maintain housing and improve their health (see Table 3). The intensity of need is likely to be highest during initial contact, while individuals are often still on the streets, and during transition and stabilization periods. Flexibility to provide assistance and guidance regardless of the nature of the issue ("whatever it takes"), even if it is not a billable encounter, is essential.

Adequate flexibility to provide coordination poses a significant challenge, yet some counties and health systems are finding ways to bridge the gaps. Strategies include braiding and blending funding and bringing multiple providers together with clear roles and accountability, and in some cases providing a monthly "case rate" for services without requiring billing on a per-encounter basis. Housing coordination requires a different set of skills and relationships and is essential to ensure availability and connection to housing. For instance, responding to the needs of property owners by providing a trusted point of contact is critical for increasing landlord willingness to rent units for PSH. Table 3 describes the types of person-centered services that successful PSH initiatives have delivered, as well as considerations for addressing funding challenges.

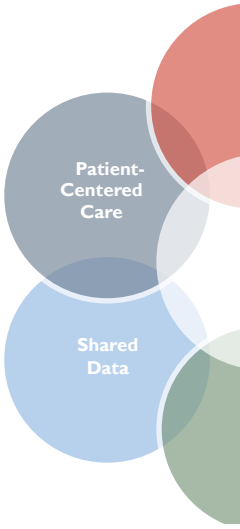


Table 3. Services Necessary for Effective Patient-Centered Care in Supportive Housing

	Examples	Funding Notes
Clinical	Prevention, diagnostic, and treatment services delivered by: • Physicians (PCPs and specialists) • Mid-level practitioners (PAs and NPs) • Licensed Clinical Social Workers (LCSWs) • Clinical psychologists • Psychiatrists	Reimbursable through Medi-Cal. 330 health centers are well positioned to provide care given prospective payment system rates tied to reasonable costs, including costs of mobile teams. However, it is difficult to finance visits outside of health centers because Medi-Cal does not reimburse for services delivered by non-billable providers on multi-disciplinary teams and clinicians have difficulty providing enough reimbursable patient encounters per day to cover costs.
Behavioral Health (Substance Abuse)	• Screenings • Brief intervention • Counseling provided by PCPs, LCSWs, and other providers • Motivational interviewing • Recovery support groups • Peer and individual counseling/coaching	Currently, Medi-Cal only covers treatment services for substance abuse disorders if services are delivered in certified treatment facilities. SAMHSA block grant funding can also support these services.
Behavioral Health (Mental Health)	• Case Management • Individualized and flexible care plans • Medication • Counseling • 24/7 crisis availability • Assistance with housing, employment, and education • Mobile services including home visits • Peer and caregiver support groups	Administrative and financial decisions about the provision of mental health services are made at the county level leading to wide variety across the state. Community-based mental health services for a small number of individuals with a diagnosis of Serious Mental Illness and most at risk for avoidable hospitalizations are delivered through the Full Service Partnership (FSP) model funded through the Mental Health Services Act. Counties offer a wide array of services depending on diagnosis and severity supported from a range of sources (Medi-Cal, MHSA, criminal justice funds, etc.)
"Whatever It Takes" Care Coordination	• Service coordination and linkage between providers • Training on skills for independent living, including budget management, cooking and nutrition, and maintenance of living space • Client outreach • Engagement with people on the streets and in shelters • Accompanying clients to appointments • Crisis intervention and troubleshooting • Helping clients obtain food, clothing, and household items	Federal funds may be available for specific populations such as veterans and additional funding may be available from globally budgeted or capitated healthcare institutions or from philanthropic investments aimed at reducing homelessness. Flexibility in Medicaid funding may be achieved through state plan amendments that take advantage of Section 2703 of the Affordable Care Act, which supports care coordination and case management services for complex patients.
Housing Coordination	• Securing housing subsidies and vouchers • Referrals to housing agencies • Paperwork and legal support • Relationship-building with landlords	These services are best delivered by experienced housing organizations working in partnership with a health organization/agency. Some of the funding for these activities may already exist at those housing organizations, but additional flexible funding from globally budgeted or capitated healthcare institutions, philanthropy, or hospital community benefits will likely be necessary.

A Phased, Strategic Approach to Implementing a Housing–Health Collaboration

Broad implementation of an integrated housing and health strategy requires a paradigm shift. It can be daunting to break with the status quo and envision all the necessary changes: Partnerships and systems need to be developed, staff needs to be hired and/or trained, leaders need to be engaged, and funding streams and resources need to be identified and, in some cases, braided or blended, in order to bundle necessary services together.

Review of the literature and discussions with experts and practitioners revealed that building collaboration between the health and housing sectors can effectively be organized into **three phases**. A phased approach can serve both to break a complex challenge into manageable pieces and to sequence those pieces in the most effective order.

The discussion of phases below is focused on initiatives targeting chronically homeless individuals. However, the idea of a phased approach and many of the concepts discussed could apply to efforts focused on other populations for whom housing status is influencing health outcomes and utilization of health services.

Phase I: Set the Stage

There are three key questions that should be the focus of activity in this phase: Who is the leader with the necessary clout (political and/or financial) to make the case for housing as a health strategy for the target population? Who are the core group of partners who are willing to work intensively together to implement an initiative? Who is currently holding the financial risk and paying for the services for the target population?

Phase II: Demonstrate Local Effectiveness

As discussed earlier in this paper, the evidence for PSH is strong. However, the evidence may not be enough to compel immediate action, and there are always questions about ways in which local contexts may present unique barriers. An initial focus on short-term wins with demonstrable outcomes for specific homeless populations may be necessary to build momentum, create fluid and effective integration, and to get buy-in from risk holders As Jennifer Loving from Destination: Home remarked, “The response to homelessness comes down to a lack of ownership and responsibility; no one feels like they can win on it alone.”

Phase III: Become Standard Operating Procedure

The end goal of health-housing integration efforts is to have a unified approach to ensure that homeless individuals with complex health and behavioral health needs have access to the most appropriate interventions. Initial targeting of high-utilizing populations can focus resources and build capacity necessary for an approach that targets a more broadly defined group of homeless and housing insecure individuals. In essence, this is about expanding standard care to better respond to the needs of the individual rather than having the individual respond to what is available through multiple systems. The sentiment was echoed over and over in our interviews that integrating housing and health approaches are not about expanding charity but rather the efficient use of resources, achieving better outcomes, and the core interests of all parties (e.g., homeless individuals, government, and health payers and providers who bear risk).

Table 4 is organized by the dimensions of whole-person care and provides counties, health systems, and housing agencies with key questions to ask during planning and key actions to take across the three phases.

Table 4. A Phased Approach to Whole-Person Care in Housing–Health Initiatives

	Phase I: Set the Stage	Phase II: Demonstrate Local Effectiveness	Phase III: Standard Operating Procedure
Target Population	• What is the profile of homelessness in the geography?	• Narrow definition of eligibility (agreed upon criteria and target numbers for initial efforts).	• Get to scale with enough resources and provider capacity to respond to the identified need among people in the target population. • Broaden eligibility criteria as resources permit and as supported by evidence of need and likely effectiveness.
Collaborative Leadership	• Who is willing to step forward to make the case and set an ambitious goal?	• Identify core partners and communication practices (regular meetings, etc.).	• Establish a health–housing partnership that formalizes partnerships and communication.
Flexible Funding	• Who holds the risk? • Outreach to multiple funding sources to fill gaps.	• Get commitments from public sector to include resources (housing vouchers, MHSA, etc.); incorporate Health Home care coordination payments as available; secure philanthropy or Social Impact Bonds to fill gaps.	• Secure sustainable, long-term funding from health payers, housing agencies, county general funds, MHSA, philanthropy, etc. to support the range of services, housing subsidies, and project administration necessary.
Shared Data	• How many different systems contain data on the same people? • Get retrospective data on costs and utilization.	• Establish system for capturing information about participants; report on progress regularly.	• Make real-time updates of status and utilization accessible to case managers. • Maintain data repository that collects data from multiple systems that facilitates aggregate reporting and prospective population health analysis.
Coordinated Services	• Who is serving the population? Diagram how individuals are cared for. • Where are the gaps or duplications for persons with complex needs? • Convene potential collaborators.	• Identify an entity to provide intensive case management, sometimes delivered by organizations external to existing health systems.	• Identify referral and response system between housing and health (e.g., housing point of contact in hospital). • Identify system for care coordination/case management funded by health payer(s).
Patient-Centered Care	• Where are members of target population getting care? • What training is needed for existing staff to effectively serve the target population?	• Engage organizations and individuals with the greatest experience and success dealing with target population.	• Ensure individualized care plans include the range of services necessary. • Expand clinical workforce and training for providers.

Case Examples

A number of California counties are taking steps to expand supportive housing for chronically homeless, high-utilizing individuals. We selected three initiatives to look at closely based on their advanced implementation and the range of approaches and project scales. The examples are presented through the lens of whole-person care in order to align with the framework discussion above, to highlight action steps, and to facilitate comparison across initiatives.

I. Project 25 – San Diego

Project 25 is led by St. Vincent de Paul Village and began as a three-year pilot funded by the United Way of San Diego County. The pilot project enrolled 35 of the highest-cost chronically homeless frequent users of multiple systems, and ultimately provided housing and wrap-around support services to those individuals. Housed individuals were connected to a health home through St. Vincent's federally qualified health center (FQHC).

An independent study of 28 participants in the first Project 25 cohort found that, factoring in the housing and service costs of operating the program, the total net savings were $1.6 million in year one and $2.1 million in year two.[43] The pilot was extended in September 2014 with a grant from SAMHSA to serve 20 additional individuals. The project is moving toward becoming sustainably funded by health payers through a fee-for-service model. In April 2014, a Medi-Cal health plan referred and paid for their first patient to receive Project 25 services; since then, three more health plans have also begun to refer some of their highest cost homeless individuals and are in negotiations to pay for program services.

Collaborative Leadership

The pilot was funded primarily by the United Way of San Diego County, with other contributions from the County of San Diego Health and Human Services, and the City of San Diego. St. Vincent de Paul Village served as the lead agency.

Target Population/Population Focus

The target population was the highest cost utilizers of multiple systems in San Diego County based on initial data from two hospitals, county behavioral health services, county jail, and San Diego City EMS/911. The initial list had 71 individuals ranked by cost, 13% were deceased by the time outreach began, and Project 25 ended up enrolling and housing 35 people.

Patient-Centered Care

Project 25 staff has deep experience working with the target population. As Project Director Marc Stevenson put it, he looks to hire people who are "willing to do whatever it takes." The case management provided is truly intensive: staff members are in constant contact with clients and support successful stabilization by coordinating healthcare services at Saint Vincent's FQHC and helping clients access alcohol and drug treatment programs. Staff also assist clients in accessing benefits using the national best practice SSI/SSDI Outreach, Access, and Recovery (SOAR) program; gathering supplies for apartment set-up; and supporting basic life skills activities, such as grocery shopping and budgeting.

Coordination of Services Across Sectors

Project 25 staff interface with multiple St. Vincent's programs, other community organizations, landlords, and county agencies to coordinate services and benefits for participants, to help navigate other systems, such as criminal justice, and to ensure access to and participation in preventive health care.

Shared Data

Data partners included 22 hospitals, two ambulance systems, the County Behavioral Health Agency, the Sheriff's department, the County public defender, and six shelters. Project 25 staff created a database for tracking participants' usage of public systems and program costs. In addition to collecting utilization and cost data for participants, Project 25 developed a partnership with the 911 system to receive real-time alerts via text or email if a participant accesses emergency department services.

Financial Flexibility

The combination of intensive case management, medical and psychiatric care, and permanent housing delivered by Project 25 is not inexpensive: average costs per participant have been roughly $30,000 per year. The funding from United Way of San Diego County allowed the flexibility to provide the level of intensive case management and to develop the partnerships necessary to be successful. Moving forward, Project 25 is in discussions with health plans to expand referral and payment for enrollees. Targeting individuals who have incurred more than $100,000 in annual medical expenses means that there is a strong argument for investing the level of resources necessary to preserve the programmatic flexibility and level of staff time that Project 25 has demonstrated effective. Based on data from the initial cohort, and focusing only on emergency room and hospital stay costs, the project averaged net savings of over $33,000 per participant per year.

II. Housing for Health – Los Angeles

There are an estimated 50,000 homeless individuals in Los Angeles County, the second highest total nationally.[17] The county public healthcare system pays for care for this population due to its statutory obligation to the uninsured, through coverage of individuals enrolled in the county's health plan (My Health LA), and through risk-bearing Medi-Cal contracts with health plans. In response to this cost, the Los Angeles County Department of Health Services (DHS) created a Housing for Health (HFH) division. HFH has set the goal of rapidly scaling up housing efforts in the county to provide 10,000 units of housing. DHS recognized that in order to work quickly to secure housing for so many individuals, it would need to be flexible and think creatively to address potential logistical and bureaucratic barriers.

Collaborative Leadership

The Housing for Health division was initiated by Dr. Mitch Katz, Director of DHS, who got approval from county supervisors to fund the division using departmental resources. HFH has made it a priority to engage with leadership from other public agencies, healthcare institutions, philanthropy, and community-based organizations working on housing.

Target Population/Population Focus

The HFH target population is DHS patients and clients who are homeless with complex medical and behavioral health issues, referred by clinicians. The goal is to house 2,400 high-utilizing homeless DHS patients by 2017.

Patient-Centered Care

Each housed individual receives intensive case management, with an individualized service plan and linkages to health, mental health, and substance use disorder services. Services are provided by on-site staff or mobile teams depending on whether the individual is housed in scattered-site housing or a multi-unit site. The newly opened Star Apartments on Skid Row was financed by DHS and includes 102 units, a health center, and HFH offices.[44] In order to quickly scale-up case management services, DHS uses a vendorizing process to establish Intensive Case Management Services Master Agreements with 25 agencies with strong track records with the target population. The agreements are very specific about the extremely hands-on case management that is required, including connection to health and behavioral health services, but also providing a comprehensive support system that includes life-skills development and crisis management.

Coordination of Services Across Sectors

Patients needing housing are identified and referred for the program at hospitals and clinics. HFH formed a Patient Access Committee to educate nurses and other staff responsible for hospital discharge about HFH and to maintain regular

communication. High-utilizing chronically homeless patients are referred directly to HFH using a simple form and are immediately put in the permanent housing pool and assigned a case manager. Patients leaving the hospital are placed in interim housing while permanent housing is found. HFH has formed strong relationships with the major housing agencies in LA based on the mix of services and rental subsidies that HFH brings as well as HFH's role as facilitator and braider of funding streams. DHS has contracted with Brilliant Corners, a non-profit supportive housing agency, to play the role of multifunctional housing intermediary: searching, securing, and maintaining relationships with landlords (see Figure 5). Once housed, case managers ensure that individuals are linked to DHS primary care and other healthcare services to avoid further hospitalizations.

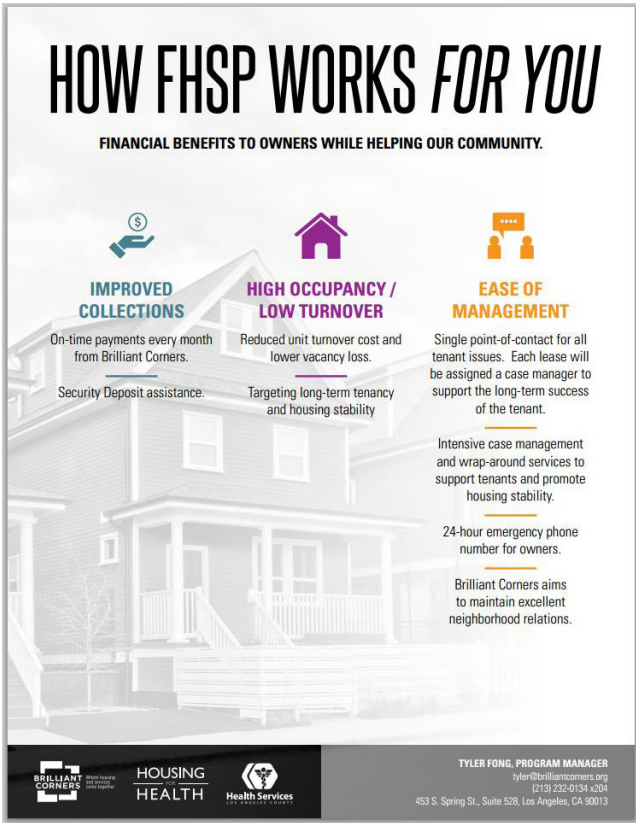


Figure 5: Promotional materials for LA County's Housing for Health division's Flexible Housing Subsidy Pool directly addresses property owner concerns.

Shared Data

Case managers develop Individualized Service Plans (ISPs) for each patient based on healthcare needs and utilization patterns and share ISPs through HFH with providers. HFH aggregates and reviews data on health outcomes, collected by case managers, alongside utilization data to demonstrate the cost savings of the program.

Financial Flexibility

HFH funds PSH from a number of different sources, including allocation from the DHS budget, MHSA dollars, philanthropic funding, as well as other creative channels. For example, through an agreement with the LA Housing Department, HFH used stimulus funds to purchase and renovate 15 properties in South LA. HFH leaders knew from the start that available housing vouchers would not cover the number of individuals that needed housing. In response, DHS created the Flexible Housing Subsidy Pool (FHSP), which is funded from both public and private sources, including a $4 million donation from the Hilton foundation. Brilliant Corners operates the FHSP as part of their role as intermediary. The FHSP is used to provide rent subsidies that facilitate the rapid procurement of rental units that would otherwise have been impossible using public resources.

III. Housing 1000 – Santa Clara County

Housing 1000 is a campaign to house 1,000 chronically homeless men and women in the Santa Clara County.[28] In 2014, HUD reported that Santa Clara County had the second highest rate of unsheltered homeless in the country.[17] Based on a collective impact model,[45] the pilot project was spearheaded by Destination: Home, which serves as the lead organization, or "backbone," for the initiative. Through partnerships with philanthropic organizations, Santa Clara County, the City of San Jose, the Housing Authority, other local government agencies, and community partners, Housing 1000 has been able to successfully house 835 people. For the 103 most costly individuals housed, the estimated annual gross cost savings were $42,706.[28] Additionally, 70% of individuals were connected to a medical home within 90 days of being enrolled and were housed within 120 days, and retention in housing was well over 80%. The largest barrier to housing individuals is the lack of housing supply in Santa Clara County.

The Housing 1000 campaign offers encouraging evidence that PSH is a feasible solution to end chronic homelessness in Santa Clara County. Housing 1000 also increased communication and collaboration between previously siloed parties, including public sector health and housing agencies. In response, the county is taking over the piloted PSH efforts, and is pursuing a Social Impact Bond model wherein investors put up capital to fund PSH and get a return on their investment from the county if financial benchmarks are reached.[46]

Collaborative Leadership

Destination: Home, a public-private partnership, has been the lead facilitator of Housing 1000. The project has over 20 formal partners including the county housing agency, other county and city agencies, philanthropies, and service-delivery organizations.

Target Population/Population focus

The target population for Housing 1000 was 1,000 chronically homeless, vulnerable, and often high utilizers of multiple systems in Santa Clara County, identified through a survey based on the vulnerability index tool developed by the national 100,000 Homes Campaign. Survey results are compiled in Housing 1000's database, and participants are selected based on need as spaces become available.

Patient-Centered Care

Housing 1000 employs an intensive Care Coordination Project through which all participants are assigned a case manager who "will be their advocate throughout the housing process and beyond…making sure they stay housed and have the necessary tools to integrate into their new communities."[47] The Care Coordination Project is led by HomeFirst, a non-profit provider of services to the target population.

Coordination of Services Across Sectors

The agreements among formal partners specify regular communication and meetings to coordinate and plan activity and troubleshoot challenges. Partners have also designated a lead staff person paid to work on the project and have agreed upon metrics to monitor progress and partner activity.

Shared Data

Destination: Home and Santa Clara County worked to ensure that all parties (county agencies, the health system, and case managers) were tracking data along the same metrics. Outcomes measured included how quickly people were housed, for how long they were housed, health outcomes, and utilization of multiple systems. Getting all parties to consistently track this data was initially a barrier. Project leaders convinced funders to support each agency to have an employee designated to managing and sharing data in order to track metrics and to ensure clear communication between parties.

Financial Flexibility

Housing 1000 developed a financial strategy focused on multiple funders and flexibility. For example, case management services were supported by the City of San Jose, Santa Clara County, the eBay Foundation, Applied Materials Foundation, and Destination: Home. Housing 1000 also initiated a crowd-funded initiative, Housing One, to provide furniture and other basics for newly housed individuals. Given the highly competitive housing market in the county, the greatest challenge for Housing 1000 has been the affordable housing supply as current prices are well above subsidy allocations. County supervisors set aside four million dollars from Measure A (a local tax) to create a housing fund, which served as a rental subsidy pool to augment rental subsidies and federal vouchers that came through the Housing Authority. Some philanthropic dollars have also been added to the pool. Moving forward, the intent is to use Social Impact Bond capital to increase competitiveness with private renters and secure rental units.

Conclusion

As healthcare incentives and payments evolve toward paying for value and outcomes, there is increased interest in innovative approaches that address the needs of the whole person. Healthcare leaders are increasingly moving from recognizing a link between health and housing to explicitly developing partnerships and shared resources dedicated to addressing housing as part of a comprehensive approach to health. While health systems are experimenting with a spectrum of innovations to address housing as a critical element of achieving Triple Aim outcomes, a number of California counties have focused initial efforts on forging novel partnerships to expand permanent supportive housing for chronically homeless individuals. A closer look at some of these early efforts has shown that integrating health and housing is complex and requires a thoughtful, long-term commitment from multiple players with particular attention to securing adequate resources through braiding and blending funding. It will be critical to continue to monitor and extract lessons from such efforts as the policy environment evolves. In all cases, close collaboration between health and housing holds great promise to improve cost and quality outcomes for some of the most vulnerable, high-risk individuals while more efficiently allocating public resources across multiple systems.

"We provide very expensive medications to AIDS patients without considering the cost. We have a similar treatment for people with mental illness and substance use. We know what will keep people alive. But we are hesitant to spend the money [on housing]. The kicker is that investing in housing reduces health costs."

– Dr. Josh Bamberger, Medical Director for Housing and Urban Health, San Francisco Department of Public Health

Appendix A

Potential Funding Sources for Housing–Health Initiatives

Local Health Agencies

Because the public sector bears the majority of the cost burden of caring for the homeless population, counties are motivated to invest in a solution for chronic homelessness. Aside from bearing the responsibility for the cost of care incurred by any uninsured individuals, public systems with public hospitals use local funds to finance the non-federal share of the majority of their Medi-Cal payments in place of state general funds. Local governments also pay non-healthcare costs, such as criminal justice and maintenance of parks or homeless encampments and face political pressure to combat chronic homelessness. Public sector funding can come from health departments and/or from county general funds, as in the case of both San Francisco and Los Angeles where money from the County General Fund has been directed towards the Health Department to fund PSH.

Local Housing Agencies

Though they maintain long waitlists for federally funded Housing Choice vouchers (often referred to as Section 8 vouchers),[e] local housing authorities are able to create preferences for specific populations, such as the chronically homeless, and direct housing vouchers towards those individuals through an expedited process. Currently, housing authorities may be especially amenable to creating those preferences because vouchers were frozen in April 2013 due to sequestration.[48] Since the end of sequestration, housing authorities have additional vouchers to distribute and have been encouraged to use preferences to do so.

US Departments of Housing and Urban Development and Veterans Affairs

In addition to providing Housing Choice vouchers, the US Department of Housing and Urban Development (HUD) has committed to expanding housing assistance and services for individuals experiencing chronic homelessness. HUD recently committed $1.83 billion to its Continuum of Care Program, which finances communities' efforts to invest resources in PSH and other programs that serve homeless individuals, and encourages prioritization of PSH for individuals experiencing chronic homelessness. This funding is directed towards accelerating progress on Opening Doors, the nation's first comprehensive strategy to prevent and end homelessness.[49]

The Department of Veterans Affairs (VA) has increased programs and funding for homeless veterans—in FY 2014, the VA dedicated $1.4 billion to specialized homeless programs. In addition, HUD partners with the VA Supportive Housing Program (HUD-VASH) to provide

e Housing Choice Vouchers are designed to provide rental assistance for the elderly, disabled, and low-income families. Generally in order to be eligible, a family must make 50% or less of median family income of the geography in which they choose to live; local Public Housing Agencies [PHAs] are also required to provide 75% of their vouchers to families that earn 30% or less of local median income. Generally, voucher recipients are required to pay 30% of their gross income for rent and utilities. PHAs have discretion in determining preferences and approving rental units and must assess both recipient eligibility and housing suitability annually.

treatment services and supportive housing for homeless veterans. This partnership allocates Housing Choice vouchers to local public housing agencies in order to allow veterans and their families to live in market-rate rental housing while the VA provides case management services. Since the program's inception in 2008, approximately 70,000 vouchers have been issued, with almost 13,000 going to communities in California.[50]

Health Plans

Medi-Cal expansion to low-income childless adults under the Affordable Care Act has created a new reality for health plans. Homeless high-utilizers may be automatically assigned to Medi-Cal managed care plans, with the federal government bearing most of the financial risk for the expansion population. Coverage expansion paired with the gradual move away from fee-for-service payment models creates significant opportunity for payer engagement. As discussed in the Financial Flexibility section above, widespread investment in housing initiatives by health plans likely requires state and/or federal policy change. However, a given plan may be willing to invest in a housing initiative to reduce costs for their highest cost patients. The development of partnerships with multiple payers simultaneously can serve to obviate concern that the benefits of investment by one payer will accrue to another payer if individuals switch plans. For-profit health plans may also have an interest in investing in affordable housing through the investment side of their operations in communities in which they also provide health coverage and services. For example, UnitedHealth has made over $50 million in such investments across the country.[51]

Centers for Medicare and Medicaid Services

Medicaid prohibits paying directly for housing; however, Medicaid does give states flexibility to adopt optional benefits that can be used to reimburse health and behavioral health elements of supportive services.[52] Eligibility for these benefits is dependent upon "medical necessity" criteria established by each state, which in essence limits application to individuals with a serious mental illness diagnoses.[52] As part of the covered mental health services in California, Medi-Cal has a targeted case management component, and some mental health service providers are eligible for reimbursement for services that connect clients to housing and other benefits.[53] However, in California, definitions of covered benefits and service models have not been updated to align with recognized evidence-based practices, and therefore counties such as Los Angeles have chosen to fund some aspects of newer program models with their own resources, while using Medi-Cal reimbursement to pay only for the specific covered services described in the Medicaid state plan.[53] California could move to update definitions of benefits and service models and successful practices in other states. The housing provisions in the State's 1115 waiver proposal could also create significant local flexibility if enacted.

Mental Health Services Act (MHSA)

The Mental Health Services Act (Proposition 63), which passed in 2004, generates designated funding for mental health treatment, prevention and early intervention and education and training for Californians affected by mental illness.[54] The MHSA Housing Program offers subsidies to finance the capital costs associated with development, acquisition, construction and/or rehabilitation of PSH for individuals with mental illness and their families, including homeless individuals.[55] MHSA funding can be

used flexibly to cover services not covered by Medi-Cal. For example, the Los Angeles County Department of Mental Health has used MHSA funds to help pay for services for over 1300 PSH units through the creation of a MHSA Housing Trust Fund. The Trust Fund provides funding for services in PSH and directs MHSA Housing Program funds towards the capital and operating costs of PSH units.[53]

Philanthropy/ Hospital Community Benefits

Philanthropic and non-profit hospital community benefit contributions can play a major role in funding PSH, either through financing specific projects, or by filling in gaps that cannot be publicly funded. One prominent example is Los Angeles, which used a large philanthropic contribution from the Hilton Foundation to finance its Flexible Housing Subsidy Pool. Non-profit hospitals are increasingly being encouraged to move beyond charity care in the use of their Community Benefit resources to consider community health and community-building investments.[56]

Private Capital/ Social Impact Bonds

New housing developments can include units designated for PSH; however, given the complexities of financing low-income housing, a partnership with a housing organization with financial expertise is critical. There is also a significant challenge in committing to operate on a long enough timeframe to satisfy capital investors. In order to secure adequate resources, housing developers generally require a minimum of 7-10 years of stable, predictable revenue. By contrast, health payers typically forecast in 1-2 year increments given the rapidly changing policy landscape and changes to patient populations. To reconcile this mismatch of time horizons, a county, with financial risk across multiple agencies and regulatory authorities, could play a key role in supporting PSH set-asides in housing developments. A county health agency could commit to subsidizing units over a long timeframe and then coordinate placements (potentially multiple placements within the same unit over the term of the commitment) and services.

Social Impact Bonds are emerging funding mechanisms for social reform projects. The Social Impact Bond model requires a private investor to provide the capital necessary to offer specific services in exchange for full repayment of the initial investment as well as an additional return on the investment if the program generates cost savings. Social Impact Bonds have been successfully implemented to address criminal recidivism, and pilots are being developed to address asthma among children, birth outcomes, and diabetes. Because PSH offers such potential for cost-savings, private investors may be willing to fund projects through a Social Impact Bond approach. This model is currently being explored in Santa Clara County.[57]

Appendix B

Dimensions of Whole-Person Care

Dimension	Definition
Collaborative Leadership	• Leadership can create a unifying vision for system transformation and must be present at multiple levels within the health and human services systems • Strong leadership can galvanize time, energy, and resources to identify priority populations and share data; shape a vision for care that addresses social determinants of health; make a compelling case for financial flexibility; and foster and maintain relationships across entities that may not have traditionally collaborated
Target Population	• Identification of a target population is a key starting point for the implementation of whole-person care • In a narrow approach, service model is targeted to a small high-cost, high-risk sub-population • In a population approach, the service model is applied to an entire population at the county or sub-county level

Patient-Centered Care	• Patient-centered care is care that is tailored to the individual, taking into account the complex constellation of social, behavioral, and physical health needs a vulnerable individual has in a consumer-centric manner
	• Emerging commonalities across systems to delivering patient-centered care are:
	  • Multiple providers are working with an individual to develop an individualized care plan that takes into account the patient's goals, motivations, and needs across multiple systems
	  • Individuals may have a designated care manager or care coordinator to support the implementation of the care plan, connect the patient to appropriate services, monitor progress towards care plan goals, and adjust interventions as needed

Coordination of Care Across Sectors	• Coordination between multiple providers and agencies serving a single individual is the key goal in a whole-person care model • Coordination is achieved through integration and/or collaboration between discrete entities that have distinct leaders, goals, budgets, staff • Integration means that services are delivered by a single organization, at times in a single location most appropriate for an individual's care
Shared Data	• Due to the siloed nature of health, behavioral health, and social service systems, as well as privacy laws and concerns, each system typically has its own data system, including information that cannot be shared between providers or across sectors • Four major spheres of data can be shared: eligibility, health, behavioral health (including mental health and substance use), and social services (including utilization of county services and community-based social services such as housing) • Shared data across sectors could help in providing whole-person by 1) Targeting high-need individuals with specific patient-centered interventions; 2) Allowing for coordinating services in real time across entities: and 3) Supporting payment reforms and evaluation of whole-person care delivery system reforms
Financial Flexibility	• Public financing for health, behavioral health, public health, and social services are currently siloed funding streams • Financial flexibility can support and enhance whole-person care by allowing providers to spend funds flexibly to meet individuals' needs rather than funding requirements of public payers • Blended funding and braided funding are the primary mechanisms used to create financial flexibility. Blended funding refers to when two agencies at any level (e.g., county, state, federal) agree to jointly fund a set of services, and the funds are pooled into a single payment to organizations responsible for delivering or contracting for the delivery of services. Braided funding refers to two or more agencies jointly paying for a package of services but the funding stream and reporting requirements remain separate.

References

1. Institute for Healthcare Improvement. IHI Triple Aim. http://www.ihi.org/Engage/Initiatives/TripleAim/pages/default.aspx. Accessed April 1, 2015.
2. Maxwell J, Tobey R, Barron C, Bateman C, Ward M. National Approaches to Whole-Person Care in the Safety Net. John Snow, Inc.; March 2014. http://www.jsi.com/JSIInternet/Resources/publication/display.cfm?txtGeoArea=US&id=14261&thisSection=Resources.
3. Maxwell J, Tobey R, Bateman C, Barron C. Opportunities for Whole-Person Care in California. John Snow, Inc.; September 2014. http://www.jsi.com/JSIInternet/Resources/publication/display.cfm?txtGeoArea=US&id=14817&thisSection=Resources.
4. Saegert S, Klitzman S, Freudenberg N, et al. Health Housing: A Structured Review of Published Evaluations of US Interventions to Improve Health by Modifying Housing in the United States, 1990-2001. Am J Public Health; 2003: 93(9): 1471–1477.
5. Sard B, Rice D. Creating Opportunity for Children: How Housing Location Can Make a Difference. Center on Budget and Policy Priorities; October 2014. http://www.cbpp.org/sites/default/files/atoms/files/10-15-14hous.pdf
6. Becker Cutts D, Meyers AF, Black MM, et. Al. US Housing Insecurity and the Health of Very Young Children. AM J Public Health. 2011;101:1508–1514. http://www.childrenshealthwatch.org/upload/resource/ushousingandchildhealth_ajph_dc_aug11.pdf
7. US Department of Housing and Urban Development, Office of Community Planning and Development. Continuum of Care 101. HUD; June 2009. https://www.hudexchange.info/resources/documents/coc101.pdf.
8. Los Angeles Homeless Services Authority. Continuum of Care. http://www.lahsa.org/continuum_of_care.asp. Accessed January 22, 2015.
9. CHIRP Los Angeles. Glossary of Terms. http://www.chirpla.org/glossary-of-terms. Accessed January 22, 2015.
10. Hennepin County Fact Sheet. Homeless Prevention and Rapid Exit – programs aimed at ending homelessness. http://www.hennepin.us/~/media/hennepinus/your-government/projects-initiatives/documents/housing-rapid-exit-homeless-prevent.pdf Accessed April 1, 2015.
11. Lazar K. Program for Needy Patients Struggles. The Boston Globe. November 10, 2014. http://www.bostonglobe.com/metro/massachusetts/2014/11/10/massachusetts-experiment-improve-care-for-sickest-residents-proves-more-costly-than-expected/UpAtbedS7H4BqP8SX3x0TO/story.html. Accessed April 1, 2015.
12. New York State Department of Health. New York State Delivery System Reform Incentive Payment Program: Project Toolkit. http://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrip_project_toolkit.pdf. Accessed April 1, 2015.
13. Johnson S. Shelter for Convalescence. Modern Healthcare. http://www.modernhealthcare.com/article/20140322/MAGAZINE/303229937. Accessed April 1, 2015.
14. Homelessness Prevention and Rapid Re-Housing Program. Community Spotlight: Homeless Prevention – Lessons from Lancaster, PA. https://www.hudexchange.info/resources/documents/LessonsFromLancaster.pdf. Accessed April 1, 2015.
15. Evans M. Residential Therapy. Modern Healthcare. http://www.modernhealthcare.com/article/20120922/MAGAZINE/309229988. Accessed April 1, 2015.
16. US Department of Housing and Urban Development, Office of Community Planning & Development. The 2009 Annual Homeless Assessment Report (AHAR) to Congress. 2010. App. C-2.
17. US Department of Housing and Urban Development. The 2014 Annual Homeless Assessment Report (AHAR) to Congress. 2014.
18. Sermons MW, Witte P. The State of Homelessness in America. National Alliance to End Homelessness; January 2011.
19. O'Connell, J. Premature Mortality in Homeless Populations: A Review of the Literature. National Health Care for the Homeless Council, Inc.; December 2005.
20. Lee TC, Hanlon JG, Ben-David J, et al. Risk Factors for Cardiovascular Disease in Homeless Adults. Circulation. 2005; 111: 2629–2635.
21. 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. Nov 2012; 12(11): 859–870.
22. Kertesz SG, Larson MJ, Horton, NJ, et al. Homeless Chronicity and Health-Related Quality of Life Trajectories Among Adults with Addictions. Medical Care. 2005; 43(6):574–585.
23. National Coalition for the Homeless. Mental Illness and Homelessness. July 2009. http://www.nationalhomeless.org/factsheets/Mental_Illness.pdf. Accessed January 16, 2015.
24. Corporation for Supportive Housing. Housing is the Best Medicine: Supportive Housing and the Social Determinants of Health; July 2014. http://www.csh.org/resources/housing-is-the-best-medicine-supportive-housing-and-the-social-determinants-of-health/

25. Gladwell M. Million-Dollar Murray. The New Yorker; February 13, 2006. http://www.newyorker.com/magazine/2006/02/13/million-dollar-murray

26. Arnquist S. The Million Dollar (Homeless) Patient: Calculating the Health Care Costs of Chronic Homelessness. USC Annenberg. http://www.reportingonhealth.org/resources/lessons/million-dollar-homeless-patient. Accessed January 16, 2015.

27. Culhane DP, Parker WD, Poppe B, et al. Accountability, Cost-Effectiveness, and Program Performance: Progress since 1998. 2007. http://aspe.hhs.gov/hsp/homelessness/symposium07/culhane/. Accessed March 20, 2015.

28. Flaming D, Toros H, Burns P. Home Not Found: The Cost of Homelessness in Silicon Valley. Economic Roundtable, underwritten by Destination: Home and the County of Santa Clara; 2015. http://destinationhomescc.org/wp-content/uploads/2015/05/er_homenotfound_report_6.pdf

29. Linkins KW, Brya JJ, Chandler DW. Frequent Users of Health Services Initiative: Final Evaluation Report. The California Endowment and the California HealthCare Foundation; August 2008. http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/F/PDF%20FUHSIEvaluationReport.pdf

30. US Interagency Council on Homelessness. Permanent Supportive Housing. http://usich.gov/usich_resources/solutions/explore/permanent_supportive_housing. Accessed January 16, 2015.

31. Henwood B. Permanent Supportive Housing: Addressing Homelessness and Health Disparities? Am J Public Health. 2013; 103. S2: S188-S192.

32. Sadowski L, Kee R, VanderWeele T, Buchanan D. Effect of a Housing and Case Management Program on Emergency Department Visits and Hospitalizations among Chronically Ill Homeless Adults: A Randomized Trial. Journal of the American Medical Association. May 6, 2009, 301: 17, p. 1771.

33. Thomas ML, Shears J, Pate M, Priester M. Moore Place Permanent Supportive Housing Evaluation Study: Year 1 Report. Charlotte, NC: University of North Carolina at Charlotte Department of Social Work; February 2014. http://shnny.org/research/moore-place-permanent-supportive-housing-evaluation-study/

34. Evans M. Hennepin Health Saves Money by Housing, Employing Patients. Modern Healthcare. November 3, 2014. http://www.modernhealthcare.com/article/20141103/BLOG/311039997/hennepin-health-saves-money-by-housing-employing-patients. Accessed March 20, 2015.

35. 100,000 Homes. Vulnerability Index Survey Consent Form. http://100khomes.org/sites/default/files/VulnerabilityIndex.pdf. Accessed April 1, 2015.

36. DESC. Vulnerability Assessment Tool. http://www.desc.org/documents/09.11.2012.DESC.Intro_to_Vulnerability_Assessment_Tool.incl%20VAT%20&%201-page%20validity.pdf Accessed April 1, 2015.

37. State of Utah. Comprehensive Report on Homelessness. Utah Housing anc Community Development Division; October 2014. https://jobs.utah.gov/housing/scso/documents/homelessness2014.pdf.

38. Carrier S. Room for Improvement. Mother Jones; March/April 2015. http://www.motherjones.com/politics/2015/02/housing-first-solution-to-homelessness-utah

39. Health Catalyst. Late-Binding™ Data Warehouse. https://www.healthcatalyst.com/late-binding-data-warehouse/. Accessed April 1, 2015.

40. City and County of San Francisco. Coordinated Care Management System. http://www.counties.org/sites/main/files/file-attachments/pdf_sfdph_ccms_summary_110514.pdf. Accessed March 20, 2015.

41. Blewett LA, Owen RA. Accountable Care for the Poor and Underserved: Minnesota's Hennepin Health Model. AM J Public Health. 2014; 10.2105.

42. Thomson H, Thomas S, Sellstrom E, Petticrew M. Housing Improvements for Health and Associated Socio-Economic Outcomes. Cochrane Database Syst Rev. 2013 Feb 28;2:CD008657.

43. Gallagher C, Reaser L, et al. Project 25: Housing the Most Frequent Users of Public Services among the Homeless. Fermanian Business & Economic Institute at Point Loma Nazarene University; April 2015. http://uwsd.org/files/galleries/Project_25_Report.pdf

44. Los Angeles County Department of Health Services. Housing for Health. http://file.lacounty.gov/dhs/cms1_217171.pdf Accessed January 16, 2015.

45. Kania J & Kramer M, Collective Impact. Stanford Social Innovation Review; Winter 2011.

46. Third Sector Capital Partners. From Idea to Action: Pay for Success in Santa Clara county. The Health Trust. http://www.thirdsectorcap.org/wp-content/uploads/2013/11/131118_Third-Sector-Capital-Partners_Santa-Clara-Case-Study.pdf

47. Housing 1000. About Housing 1000. http://www.housing1000sv.org/index.php/care-coordination-project/. Accessed January 22, 2015.

48. Rice D, Sequestration's Rising Toll: 100,000 Fewer Low-Income Families Have Housing Vouchers. Center on Budget and Policy Priorities. http://www.cbpp.org/cms/index.cfm?fa=view&id=4229. Accessed January 22, 2015

49. US Interagency Council on Homelessness. HUD's FY 2013-2014 CoC Program Competition. http://usich.gov/member_agency/department_of_housing_and_urban_development/fy-2013-nofa. Accessed January 16, 2015.

50. US Department of Veterans Affairs. The Department of Housing and Urban Development and VA's Supportive Housing (HUD-VASH) Program. http://www.va.gov/homeless/hud-vash.asp Accessed January 5, 2014.

51. UnitedHealth Group. United Health Group Provides $15 Million to Help Fund Connections Housing Residential Community in San Diego. http://www.unitedhealthgroup.com/Newsroom/Articles/News/UnitedHealth%20Group/2012/0126ConnectionsHousing.aspx?sc_lang=en Accessed April 1, 2015.

52. Wilkins C, Burt M, Locke G. A Primer on Using Medicaid for People Experiencing Chronic Homelessness and Tenants in Permanent Supportive Housing. US Health and Human Services; July 2014.

53. Wilkins C, Burt M, Locke G. Medicaid and Permanent Supportive Housing for Chronically Homeless Individuals: Emerging Practices from the Field. US Health and Human Services; August 2014.

54. Mental Health Association of San Francisco. Mental Health Services Act (MHSA). http://mentalhealthsf.org/about-us/mhsa/. Accessed January 16, 2015.

55. California Department of Health Care Services. Mental Health Services Act (MHSA). http://www.dhcs.ca.gov/services/mh/Pages/MH_Prop63.aspx Accessed January 16, 2015.

56. Rosenbaum S, Rieke A, Byrnes M. Encouraging Nonprofit Hospitals to Invest in Community Building: The Role of IRS 'Safe Harbors.' Health Affairs; February 11, 2014. http://healthaffairs.org/blog/2014/02/11/encouraging-nonprofit-hospitals-to-invest-in-community-building-the-role-of-irs-safe-harbors/

57. Galloway I. Using Pay-for-Success to Increase Investment in the Nonmedical Determinants of Health." Health Affairs. 33.11 (2014): 1897-1904.