Supportive Housing for Homeless Super-Utilizers of Crisis Health Services

CSH's Social Innovation Fund Initiative

Background

In nearly every state, there is a small subset of individuals who cycle between emergency room, hospitals, detox and other crisis health services. Often referred to as the '5:50 population' (the 5% of beneficiaries that represent 50% of costs), these men and women have complex and co-occurring physical and behavioral health challenges, limited support networks, and more often than not, experience homelessness or unstable housing situations.

For these individuals, homelessness exacerbates chronic illnesses by increasing exposure to trauma and high-risk behaviors, which in turn, results in social isolation and difficulties accessing coordinated primary and behavioral health services needed to manage and expedite positive health outcomes. Homelessness functions as a virtual tri-morbidity for those with existing chronic health and behavioral health challenges, imposing additional ill-effects on health status as well as on public costs. Studies examining emergency health services use among high-need, high-cost individuals experiencing homelessness have found expenditures exceeding $60,000 per individual per year on "band-aid" services that treat symptoms without improving overall health status, since they fail to address the underlying, often interlinked and invisible, problems that lead to poor health[1].

In recent years, select communities have, with impressive results, piloted enhanced models of supportive housing that feature direct and more deliberate links to primary and behavioral health services to reach and effectively serve high-need, high-cost clients. These enhanced supportive housing models have shown impactful results in their ability to improve care while reducing costs, including:

Select communities have, with impressive results, piloted enhanced models of supportive housing that feature direct and more deliberate links to primary and behavioral health services to reach and effectively serve high-need, high-cost clients.

- Housing stability
- Improved physical and mental health, decreased mortality rates, and reduced substance use;
- A significant reduction in emergency room utilization;
- A significant decrease in hospital inpatient admissions and hospital days;
- Reductions in detox utilization and psychiatric inpatient admissions; and
- A significant reduction in Medicaid costs[2].

Despite these promising findings, integrated supportive housing and health models have not yet been systematically adopted as a solution to high-need, high-cost clients. This failure-to-adopt stems in part from three challenges: a) the lack of awareness of supportive housing's potential as a solution for high-need, high-cost individuals; b) limited technical and practice knowledge around how to pair supportive housing with

[1] Raven et. al. (2009).; Flaming, D., Burns, P., Matsunaga, M. (2009). "Where We Sleep: Costs when Homeless and Housed in Los Angeles" Los Angeles: Economic Roundtable.

[2] Perlman, J., and Parvensky, J. (2006). "Denver Housing First Collaborative: Cost Benefit Analysis and Program Outcomes Report." Denver: Denver's Road Home.; Larimer et. al., (2009).; Sadowski, L.S., Kee, R.A., VanderWeele, T.J., Buchanan, D. (2009). "Effect of a Housing and Case Management Program on Emergency Department Visits and Hospitalizations Among Chronically Homeless Individuals," *Journal of the American Medical Association* 301(17): 1771-1778.; Mondello, M., Gass, A.B., McLaughlin, T., Shore, N. (2007). "Cost of Homelessness: Cost Analysis of Permanent Supportive Housing State of Maine – Greater Portland." Report submitted to Corporation for Supportive Housing, MaineHousing, and Maine Department of Health and Human Services.; Massachusetts Housing and Shelter Alliance. (2007). "Home and Healthy for Good: A Statewide Pilot Housing First Program." Boston.

integrated community health services; and c) the fragmented way that public systems fund programs that serve vulnerable people (i.e. health systems repeatedly offering stand-alone medical services without addressing behavioral health and homelessness/housing needs). Further, there remains a need to rigorously evaluate integrated supportive housing and health programs.

Opportunities to Develop Non-Traditional Service Delivery Systems

Affordable Care Act implementation and other national health reform initiatives seeking to improve care while reducing costs are creating unprecedented opportunities for expanding non-traditional health care services and integration between health and housing systems. In particular, with the expansion of Medicaid in several states to very low income populations, health systems and policy makers are seeking innovative solutions that can reach the people they serve with the most complex health conditions and highest costs. New health care delivery approaches such as Medicaid Health Homes and Accountable Care Organizations that emphasize care coordination, high-touch services, a focus on whole-person health outcomes and moving from fee-for-service to bundled payment rates are a perfect fit with supportive housing. Health care financing systems – including Medicaid, Medicare and private payers – are exploring innovative payment models that incentivize greater collaboration between health, housing and social service sectors and elevate the health system's ability to address the social determinants of health. Federal agencies and officials are embracing and championing the idea that Medicaid can pay for the services in supportive housing. Medicaid departments and managed care companies alike are beginning to look seriously at supportive housing as a health care solution, with a few states like New York, Pennsylvania and Minnesota incorporating supportive housing as part of their larger Medicaid reforms and plans to control costs.

CSH's Social Innovation Fund Initiative

Spurred by a federal Social Innovation Fund grant awarded through the Corporation for National and Community Service (CNCS), CSH is leading a five-year national initiative to create and evaluate innovative solutions at the intersection of supportive housing and healthcare. The initiative seeks to build credible evidence regarding the effectiveness of supportive housing for improving health and reducing public costs for homeless super-utilizers, raise public awareness of this approach, and create a blueprint for scaled replication through collaborative multi-sector policymaking and resource integration. A rigorous evaluation of this initiative is central to these efforts.

CSH initially awarded grants to four nonprofits in four communities who are bringing this enhanced supportive housing model to life in rigorously evaluated pilot programs including: the Tenderloin Neighborhood Development Corporation in San Francisco (SF), AIDS Connecticut in Hartford (CT), The Economic Roundtable in Los Angeles (LA), and Catholic Social Services of Washtenaw County in Ann Arbor (MI). CSH is providing technical assistance and capacity building to create the highest-quality programs. Launched in early 2012, the initiative is currently in its fourth year of implementation.

CSH has also, with the support of CNCS, funded an evaluation of the Social Innovation Fund Initiative that includes both formative feedback and impact analyses. Conducted by a team of researchers at New York University, this

evaluation includes: regular and ongoing site visits to better understand the programmatic models and document their strengths and challenges; a pre-post survey of client experiences; a study of programmatic costs; and an analysis of program impacts on utilization of shelters and health care services.

This paper is the first in a series of papers focused on CSH's SIF initiative. While this paper is not part of the formal SIF evaluation, some aspects of the paper have been informed by our continuing work with the NYU evaluation team. This paper describes the core components of the SIF model across the four demonstration sites and the progress made to date on the initiative. The paper also includes some preliminary data on client demographics, housing outcomes, and health status. These data were collected to help track participants and program activity and not as part of the formal evaluation.

Core Components of the SIF Model of Enhanced Supportive Housing

Programs across all four sites encompass the following five elements found to be essential to the achievement of the initiative goals:

1. *Data-driven identification of target population*
2. *Assertive outreach, engagement and recruitment*
3. *Supportive housing*
4. *Care Management/Service Coordination*
5. *Comprehensive and coordinated primary and behavioral health care*

Although all four sites follow the same basic program model, there are key differences in the design and implementation of these core components across sites. Table 1 provides a matrix highlighting the way in which each site planned to implement the core components of the program. It should be noted that as implementation began and as the program model matured in each site, adjustments were made to the original program design and structure in each site. Additionally, as each site focuses their attention on sustainability over the next 2 years, we anticipate that additional programmatic and structural modifications will be made to each model.

<u>Data-Driven Identification of Target Population</u>: Given the persistent cycling between systems, it is clear that traditional targeting and engagement approaches fail in successfully reaching and engaging this population. Therefore, all programs utilize administrative data to identify the specific target population of high-cost, high-need utilizers of crisis health services experiencing homelessness or housing instability. Three of the four sites (CT, MI, SF) employ some type of cross-system data matching procedure between the health care and homeless systems to generate lists of people who meet a community specific threshold of homelessness and health care utilization costs[3]. The fourth site (LA) employs a point of contact identification model utilizing a predictive algorithm that can identify individuals with high-risk scores for high utilization of crisis health services[4]. This triage tool is administered by hospital staff at 14 participating hospitals and potential candidates are identified as they appear in the hospitals. Qualified individuals are then referred to program staff for recruitment and enrollment.

---

[3] MI identified high cost patients using data from two of the three hospital systems serving the county and matching those data with shelter use data from Washtenaw County. CT uses statewide Medicaid data and the CT Homelessness Management Information System (HMIS) data. For 50 of its 172 slots in KCC SF used data from the San Francisco Health Plan (SFHP), a Medicaid health care plan, and other sources of data, although once the 50 SFHP lots were filled, this procedure was no longer followed. (The remaining 122 initial slots and all slots resulting from turnover were/are identified and placed through the San Francisco Department of Public Health's standard operating procedures for housing people on the waiting list for the Direct Access to Housing (DAH) program.)

Assertive Outreach, Engagement and Recruitment: All programs conduct assertive outreach into crisis service and institutional settings (e.g. hospitals, clinics, detox programs, treatment programs, etc.) and homeless service settings (e.g. shelters, streets, single-room occupancy hotels, etc.) to recruit members of the target population. Programs engage target population members – often multiple times - and offer them the opportunity to obtain affordable housing along with health and social services without any requirements for sobriety or participation in services.

Supportive Housing: At the core of the programs supported through this initiative is supportive housing—a combined package of affordable housing coupled with intensive care management services that are designed to help vulnerable, formerly homeless individuals remain in housing, live with maximum independence, connect to needed clinical and mainstream services, and facilitate the attainment of their goals and aspirations. Supportive housing has several subcomponents:

- *Quality permanent and affordable housing* – Supportive housing is affordable rental housing with no time limits on residency. Tenants hold their own leases as well as the rights and responsibilities of tenancy. Rent is adequately subsidized such that extremely low-income tenants can pay no more than 30% of their gross monthly income for rent. The design, construction, appearance, physical integrity, and maintenance of the housing units provide an environment that is attractive, safe, sustainable, functional, appropriate for the surrounding community, and conducive to tenants' stability and community integration

- *Housing stability services* – Tenants are assertively engaged and offered services to maximize their tenure in housing, including assessing barriers to housing stability and developing a person-centered plan for getting and keeping housing, providing assistance to overcome barriers, and help with negotiating with landlords, setting up/maintaining a household, understanding tenant responsibilities, budgeting and financial education, negotiating conflicts with neighbors, preventing avoidable evictions, building community among tenants, intervening in crises and maximizing self-sufficiency.

- *Informed property or landlord management* – In the case of developed apartment buildings operated as supportive housing, property management maintains a balance between ensuring effective operation and management of the physical facility (including the maintenance and safety of the building) and fostering tenants' housing stability and independence. In the case of scattered-site supportive housing models where apartments are leased on the private rental market and subsidized using a rental assistance voucher, programs actively communicate, engage, advocate on behalf of tenants, and mediate conflicts with landlords.

- *Case management* – In addition to services focused on helping tenants maximize housing stability, services in supportive housing also assist tenants to connect to, navigate, and coordinate needed health and social services. Services engage tenants to identify and define their own service goals and needs, and then assist with obtaining and coordinating health, behavioral health, vocational/educational, transportation, medication management, nutrition education, community engagement, activities of daily living, and other services.

Enhanced Care Management/Service Coordination: A key approach to improving health care, health outcomes, and reducing avoidable hospitalizations among high-need, high-cost individuals with chronic conditions is the patient-centered medical home. The patient-centered health home is a philosophy and approach to health care that coordinates care for individuals who have complex and co-occurring health conditions and/or who have barriers to accessing regular care. In contrast to approaches in which patients must navigate health services on their

own and seek care from multiple providers for different conditions and needs, the patient-centered health home provides a system of coordinated care wherein a team of primary care, behavioral health, and other social services providers coordinate and deliver care for all aspects of the person's health. Through this approach, barriers to health care access are removed, information is shared to maximize the management and treatment of illnesses, and patients' are empowered to direct their own care.

Comprehensive and Coordinated Primary and Behavioral Health Care: Through formal partnership(s) with a clinical partner(s), the programs provide participants with access to comprehensive and coordinated primary and behavioral health services. Tenants are assisted with enrolling in Medicaid or other health insurance, and are engaged and supported to participate in regular and routine primary care visits.

Table 1 provides an overview of how each of the sites planned to implement each of the core components of the program. As mentioned above, several modifications were made to the initial program design. We will highlight some of these changes in the next section.

Table 1. Core Program Elements across SIF Sub-Grantee Sites
(As originally planned and proposed)

Original Sub-Grantee Lead Organization	Tenderloin Neighborhood Development Corporation	Connecticut AIDS Resource Corporation	The Economic Roundtable	Catholic Social Services of Washtenaw County
Target Geography	San Francisco, CA	Connecticut (statewide)	Los Angeles County, CA	Washtenaw County/Ann Arbor, MI
Target Number of Individuals to be Served/Housed	172	160	107	110
Data Driven Approach to Client Identification	Analysis of ED/hospitals records & top 200 users of county health plan services	Data match between Medicaid and HMIS to identify top 10% highest users	Predictive algorithm to identify highest decile of costs of crisis health service use	Data match between HMIS, hospital claims data and community mental health agency data to identify homeless super-utilizers
Outreach and Recruitment	Street outreach and in-reach into hospitals, emergency rooms, detox facilities	Street outreach and in-reach into hospitals, shelters, detox facilities	Hospital-based screening and in-reach into hospitals, street outreach	Street outreach and in-reach into emergency rooms, hospitals, shelters, jails, detox
Housing Model	Single-site supportive housing building	Scattered-site and single-site; State funded Rental Assistance Vouchers	Single-site and scattered-site; PHA vouchers	Scattered-site; supportive housing units and PHA vouchers
Primary and Behavioral Health Service Partners	On-site FQHC operated by City of San Francisco Housing and Urban Health	Five regional partnerships between FQHCs and LMHAs	Several FQHCs	University of Michigan Hospital, St. Joseph Mercy Health System, Packard Health
Planned Integration of Health and Housing	Integrated services team (case managers, public health nurse, money manager) between TNDC and SF Dept of Public Health	FQHC-based patient navigators/boundary spanners	Integrated Team of Health and Housing Case Managers	Integrated, multi-agency housing and health care team

Early Program Modifications

1. Changes in service providers

Two of the four sites experienced the loss of an implementing partner in the first year of the initiative. Early on, it was clear that these departing organizations may not have the experience or flexibility necessary to serve the target population. For example, one of the sites required that all appointments take place in the office, which proved to be a challenge to client engagement.

2. Impact of Sequestration on Housing Resources

Two of the sites - SF and CT - brought dedicated new housing resources as part of their SIF application. Given that these resources were already committed to the initiative they were not impacted by external factors, such as sequestration. In the other two sites availability of housing was dependent on leveraging existing resources through the local public housing authority (PHA). The national budget sequestration in 2013 impacted the ability of these two sites to access these resources for the program when PHA resources were decreased and housing vouchers were not available for a period of time in the early startup phase of the project. However, each of these sites worked diligently and successfully to leverage other state and local housing resources.

3. Change in lead agencies in two of the sites

Each of the selected proposals came to the initiative with one lead agency and several partner agencies as part of the project. At the time of application, the lead agency played a convening and fiduciary role in each of the sites. In SF, the lead agency was also the developer and owner of the building that would eventually house all of the program participants. As the program launched and matured, two of the sub-grantee lead agencies have shifted since the start of the program due to organizational restructuring. In Washtenaw, MI the contract was transferred from Catholic Social Services of Washtenaw County to Avalon Housing, a supportive housing developer and service provider. In Los Angeles, the contract was originally awarded to the Economic Roundtable and was later shifted directly to three of the four implementing partners.

Progress to Date

Program staff are required to track and report several data elements - including demographic characteristics, housing status, health status and health care engagement - for each participant at intake and four times throughout the year. The figures presented in this section present the most recent results (as of October 2015) of this tracking process and were not gathered as part of the formal evaluation.

As of December 2015, 546 individuals have been housed through the CSH SIF initiative. Table 2 displays the number of housing exits to date for each site. As individuals leave housing, program staff at each site records the reason for the individuals exit and date, to the best of their knowledge. In order to measure housing retention, we only consider those individuals who have exited housing for the following reasons: incarcerated, hospitalized, became homeless or evicted. We exclude individuals who moved to independent housing or in with family in our calculation of housing retention, as these individuals did not need to retain housing. Those who died or whose exit reason is unknown were also excluded. As shown in Table 2, the program maintains an extraordinarily high housing retention rate for this high-risk population, ranging between 88 and 96 percent across all sites. Notably, among those that exited the program, nearly a third (31%) died and another 10 percent moved as a result of needing a higher level of care, illustrating the high degree of medical vulnerability among this population.

Table 2. SIF Clients in Housing

	Los Angeles	San Francisco	Washtenaw County	Connecticut	Total
Ever housed	**93**	**220**	**88**	**145**	**546**
All Housing Exits	8	47	17	16	88
Reasons for Leaving (included in housing retention calculation)	**4**	**18**	**10**	**10**	**42**
Became Homeless	2	6	0	0	8
Evicted	1	5	2	5	13
Hospitalized/Higher level of care	0	3	2	4	9
Incarcerated	1	4	6	1	12
Reasons for Leaving (excluded from housing retention calculation)	**4**	**29**	**7**	**6**	**46**
Moved to Independent Housing	0	2	0	1	3
Moved in with Family	1	12	0	0	13
Deceased	2	15	6	4	27
Other/Unknown	1	0	1	1	3
Housing retention rate*	96%	91%	88%	93%	92%

As shown in table 3, the program serves an aging population, with the average age of participants across all sites hovering around 50 years old. The majority of participants are male, ranging from 64 to 70 percent of participants across sites. The race/ethnicity of participants varied considerably across sites but the vast majority identified as white (42%), African American (37%), or Latino (13%).

Table 3. Demographic Characteristics of SIF Participants

	Los Angeles	San Francisco	Washtenaw County	Connecticut	Total
Average Age	50.4	51.7	46.3	46.6	49.3
Gender					
Female	34%	30%	30%	30%	31%
Male	66%	64%	68%	70%	67%
Male-to-Female	0%	4%	0%	0%	2%
Race/ethnicity					
African-American	39%	40%	39%	29%	37%
Latino or Hispanic	14%	10%	2%	22%	13%
White	40%	33%	55%	49%	42%
Asian	1%	2%	2%	0%	1%
Native American	4%	0%	0%	0%	1%
Hawaiian/Pacific Islander	0%	0%	0%	0%	0%
Multi-ethnic/Multi-racial	1%	5%	0%	0%	2%
Other/Declined/NA	1%	7%	0%	0%	3%
% Veteran	5%	3%	2%	5%	4%
Total N	**93**	**220**	**88**	**145**	**546**

As shown in Table 4, all programs have been very successful in targeting a highly vulnerable population with multiple complex and chronic conditions. Eighty four percent of participants have a chronic health condition, 72 percent have a mental health condition, and 72 percent have substance use issues. Nearly 60 percent report a tri-morbidity of physical illness, mental illness and substance misuse. The vast majority of clients qualify for Medicaid and sites have done an excellent job of enrolling clients upon entry into housing with enrollment rates ranging between 94 and 100 percent across sites.

Table 4. Health Conditions and Health Insurance of SIF Clients

	Los Angeles	San Francisco	Washtenaw County	Connecticut	Total
Morbidity*					
Chronic health condition	89%	87%	83%	79%	84%
Substance use issues	55%	75%	80%	74%	72%
Mental health issues	64%	72%	77%	76%	72%
Tri-morbid (all three indicated)	51%	58%	60%	59%	58%
Health Insurance					
Medicaid	94%	90%	100%	97%	94%
Other insurance type	3%	5%	0%	1%	2%
Not enrolled in any insurance	3%	1%	0%	1%	1%
Unknown	0%	3%	0%	1%	2%

* These data refer to current health/behavioral health conditions as reported by participants and recorded by program staff in the tracking sheets

The evaluation team is beginning to receive administrative data from the sites. While it is too early to report specific utilization and cost numbers, preliminary data suggest that the program has been successful in targeting super-utilizers of medical care. Preliminary information on health care utilization and costs should be available in an interim report released by NYU in 2016.

Telling the SIF story: “Popeye”

Timothy B., who goes by “Popeye,” had been a fixture in Pasadena on the freeway off-ramp for the past 15 years. Popeye, 53, was homeless for 15 years and suffers from hypertension, asthma, depression, and severe alcoholism, all of which has landed him in the hospital consistently. Popeye is originally from Michigan where he was a fisherman.

Popeye was admitted to Huntington Hospital for two months in October 2012, after being struck by a car while riding a bicycle under the influence of alcohol.

Popeye was identified as a homeless, frequent user of the hospital in early September 2012, using the triage tool, and the hospital called in Anthony Ruffin, a Housing Works case manager, to talk with Popeye about a place of his own. He said no.

A week after he was discharged from the hospital, Anthony found him. "I caught up with him on the side of the freeway. He was infested with lice and scabies," Ruffin said. "All his friends moved on and he was just out there by himself." After a few more weeks of developing trust through street outreach, Popeye said yes.

Housing Works helped Popeye locate a one-bedroom apartment in Dec. 2012 through the Housing Authority of the City of Pasadena. Housing Works also helped Popeye gain access to Medi-Cal and SSI, connect with CHAP, Community Health Alliance of Pasadena, as his medical home, and helped him manage his finances.

As Popeye put it, “It’s a different world” from living on the streets. Popeye quit panhandling and gets regular visits from Ruffin to help him shop, cook, and keep his monthly primary care and behavioral health appointments. Popeye has only returned to the hospital once at the end of 2013, and in December 2014, Popeye celebrated his two-year anniversary in his apartment.

With the help of Anthony and Housing Works, Popeye was able to start receiving care for his chronic medical and mental health conditions, and start putting his life back together. Anthony still takes Popeye to his behavioral health appointments and they still get together regularly to watch football. on the weekends. This year, Anthony was able to help Popeye reconnect with his son, after 20 years, and meet his new granddaughter.

Conclusion

CSH's Social Innovation Fund Initiative responds directly to one of the most pressing policy problems currently facing states and communities and the nation as a whole: rising public spending on health care (Medicaid) with poor health outcomes. The poor outcomes and significant public costs associated with avoidable use of public services by frequent users represent both a serious problem for public and private systems of care, and an enormous opportunity to improve the lives of frequent users while making better use of public resources. Frequent users also highlight opportunities to bridge gaps in fragmented service systems to make these systems work better for everyone. The SIF initiative addresses many of these challenges, and our goal is to bring integrated housing and health services to scale as a viable alternative to the tragic and costly "revolving door" for vulnerable and homeless men and women. Through this work we are building credible evidence regarding supportive housing's effectiveness, raising public awareness of the model, and creating a blueprint for scaled replication through collaborative multi-sector policymaking and resource integration.

Currently in its fourth year of implementation, preliminary data confirm that the data-driven targeting strategies employed by the demonstration sites are effective in identifying frequent users of healthcare and other crisis service systems with complex health and behavioral health conditions. Housing retention figures also suggest that the integrated model of housing and enhanced health services is effective in helping clients maintain housing. The evaluation of the SIF initiative, which includes administrative data on costs and service utilization as well as information from a participant survey, will compare data from the 12 months before housing to the first 12 months in housing. All participants will have been housed for at least 12 months by the end of July 2016. The final evaluation of the program will be released in the summer of 2017.

For more information and resources visit csh.org/sif