

SOCIAL DETERMINANTS OF HEALTH SERIES



Food



Housing



Education



Transportation



Violence



Social Support



Health Behaviors



Employment

Housing and the Role of Hospitals



August 2017



American Hospital Association™

Advancing Health in America

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Table of Contents

Introduction	4
Housing Instability and Health.....	5
The Web of Housing and Health.....	7
» Housing Interventions Improve Health.....	8
The Role of Hospitals.....	8
Conclusion.....	11
Case Studies.....	12
» Bon Secours Baltimore Health System.....	12
» Children’s Mercy Kansas City.....	15
» St. Joseph Health, Humboldt County.....	18
» St. Luke’s Health System and Saint Alphonsus Health System.....	21
» University of Illinois Hospital & Health Sciences System.....	24
Endnotes.....	27

Introduction

Wellness and well-being are inextricably linked to the social and economic conditions of people's lives. Up to 40 percent of health outcomes may be attributed to nonmedical factors like income, housing status and access to sufficient healthy food.¹ Individuals struggling with poverty, food insecurity, housing instability or other barriers may experience poor health outcomes, increased health care utilization and increased health care costs. Efforts to address these nonmedical needs can have a profound, positive impact on health, including longer life expectancy, healthier behaviors and better overall health.²

Although 80 percent of physicians agree that patients' social needs must be met in order for them to achieve maximum health, health care providers historically have not been in a position to address these issues. Traditional payment models reimburse providers for medical interventions and typically do not address the social determinants of health. But recent changes across the health care system have increased hospitals' capacity to mount social interventions.³ For example:

- » Providers must provide comprehensive care, including social supports, to qualify as a medical home.
- » Holistic patient care, including attention to social determinants of health, improves provider and patient satisfaction, which can increase reimbursement for care, improve employee retention and build and maintain patient loyalty.

With more low- and middle-income individuals gaining insurance coverage under the Affordable Care Act, health care providers must invest in meeting the social needs that can shape the health status of these patients. Hospitals and health systems that prioritize addressing

the social determinants of health as well as focusing on medical interventions will better position themselves to achieve the Triple Aim of improved health, improved care and lower costs.⁴

This guide is the second guide in a series of resources from the Health Research & Educational Trust (HRET) and Association for Community Health Improvement (ACHI) on how hospitals can address the social determinants of health— such as adequate housing, quality education and access to transportation— to improve the environment where people live, work and play.

This guide includes five case studies about hospitals and health systems engaging in innovative programs to address different housing issues in their communities:

- » **Bon Secours Baltimore** has taken a broad approach to community investment, including developing more than 700 affordable housing units for families and individuals.
- » **Children's Mercy Kansas City** developed an extensive Healthy Homes program to provide environmental health assessments and repairs and renovations.
- » **St. Joseph Health, Humboldt County** operates a medical respite program for chronically homeless individuals who are discharged from two hospitals in its rural California community.
- » **St. Luke's Health System** and **Saint Alphonsus Health System** are collaborating with the local government and several community groups to develop a single-site Housing First program in Boise, Idaho.

- » **University of Illinois Hospital** partnered with the Center for Housing and Health to provide chronically homeless individuals with stable housing and supportive services; the ultimate goal is to help individuals eventually move into fully independent and permanent living situations.

The American Hospital Association (AHA), HRET and ACHI are committed to supporting community health and advancing health in America through innovative campaigns, initiatives, partnerships, publications and awards. In addition to social determinants of health, this work focuses on several areas, including health equity and eliminating care disparities, community health workers, violence and safety, and health system and community collaborations. To learn more about community health initiatives at the AHA, visit hpoe.org/communityhealthinitiatives.

Housing Instability and Health

Housing instability is an umbrella term for the continuum between homelessness and a totally stable, secure housing situation. Housing instability takes many forms: physical conditions like poor sanitation, heating and cooling; compromised structural integrity; exposure to allergens or pests; homelessness; and unstable access to housing or severe rent burden. Some recent estimates highlight the scope of housing instability in the United States:

- » In 2013, 7.72 million households had “worst-case housing needs,” which means they had housing expenses that far exceeded their income or they lived in severely substandard shelter.⁵
- » 1.48 million individuals are homeless in the U.S. each year.⁶

Collectively, these issues are associated with poor health and increased health care utilization.⁷ For example:

- » The homeless population is aging, and older homeless adults have elevated rates of chronic health conditions like cardiovascular disease, diabetes and chronic obstructive pulmonary disease (COPD), as well as geriatric conditions (i.e., cognitive, functional or mobility issues).⁸
- » Homeless individuals are more likely to have infectious diseases, like pneumonia, tuberculosis and HIV, and mental health, psychotic and affective disorders. Homelessness is associated with a shortened lifespan.⁹
- » Individuals experiencing distress related to housing unaffordability or foreclosure experience self-reported poorer health and elevated anxiety and depression.¹⁰ Children in these households are more likely to have developmental delays.¹¹
- » Substandard housing conditions can cause or exacerbate serious health issues like asthma, which affects more than 24.6 million Americans and accounted for 1.6 million emergency department visits in 2013.^{12,13}

Studies show that individuals experiencing housing instability have limited access to preventive health care compared to stably housed people, are more likely to delay filling prescriptions and are less likely to adhere to treatment plans.^{14,15} These trends may be a matter of competing priorities. When faced with limited resources, some individuals may choose to spend their money, time and energy seeking housing or other basic needs first.

At the same time, unstably housed individuals are disproportionately high utilizers of acute health care resources:

- » Homeless individuals are five times more likely than nonhomeless individuals to be admitted to inpatient hospital units. They also stay in the hospital for up to four days longer, at a cost of \$2,000 to \$4,000 a day.^{16,17}

- » The annual cost of homelessness-related hospitalizations of children under age 4 was more than \$238 million in 2015.¹⁸

Some common types of housing instability and their relationships to health conditions are described in Table 1.

Table 1. Types of Housing Instability and Related Health Conditions

Housing Issue	Examples	Related Health Conditions
Homelessness	<ul style="list-style-type: none"> » Total lack of shelter » Residence in transitional or emergency shelters 	<ul style="list-style-type: none"> » Increased rates of chronic and infectious conditions (e.g., diabetes, asthma, COPD and tuberculosis) » Mental health issues, including depression and elevated stress » Developmental delays in children
Lack of affordable housing	<ul style="list-style-type: none"> » Severe rent burden » Overcrowding » Eviction or foreclosure » Frequent moves 	<ul style="list-style-type: none"> » Stress, depression and anxiety disorders » Poor self-reported health » Delayed or diminished access to medications and medical care
Poor housing conditions	<ul style="list-style-type: none"> » Structural issues » Allergens like mold, asbestos or pests » Chemical exposures » Leaks or problems with insulation, heating and cooling 	<ul style="list-style-type: none"> » Asthma or other respiratory issues » Allergic reactions » Lead poisoning, harm to brain development » Other chemical or carcinogenic exposures » Falls and other injuries due to structural issues

Source: HRET, 2017.

The Web of Housing and Health

Housing instability is not randomly distributed, and some populations are particularly vulnerable. For example, newly homeless individuals entering the shelter system tend to come from neighborhoods with high rates of unemployment. Individuals in unstable housing situations tend to have lower education levels and more recent periods of unemployment or tenuous employment than other individuals. Several types of housing instability, including eviction and foreclosure, disproportionately affect women and African-Americans.¹⁹

A number of other issues intersect with housing to affect individuals' overall health and well-being. For example, people experiencing housing instability may also experience or encounter:

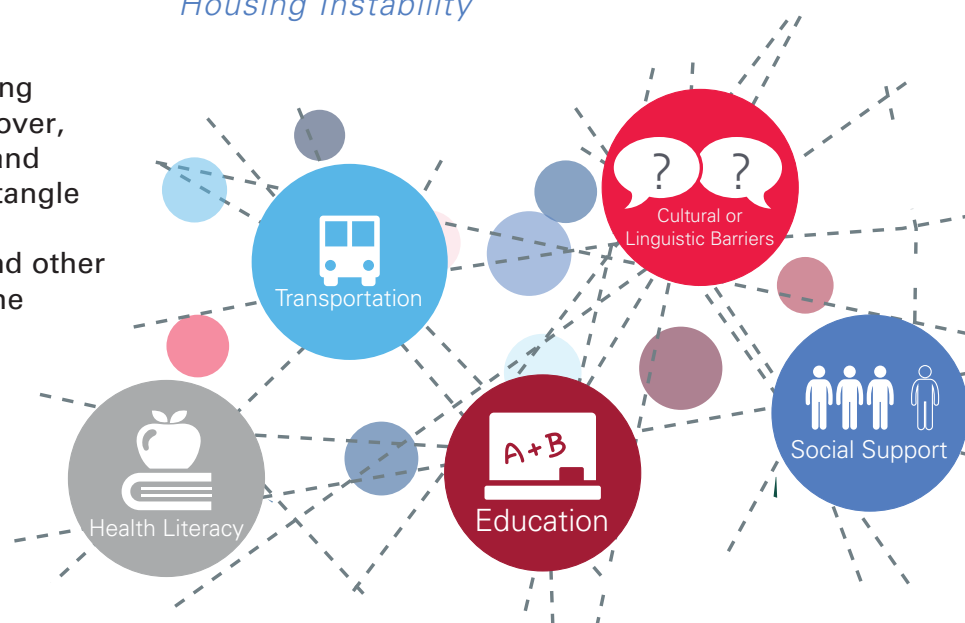
- » Lack of transportation
- » Limited literacy or low educational achievement
- » Cultural or linguistic barriers to care
- » Limited health literacy and difficulty maintaining complete personal health records
- » Lack of social supports²⁰

These factors contribute to housing instability and poor health. Moreover, the causes and effects of health and housing issues are difficult to untangle from larger concerns around low income, unstable employment and other forms of social disadvantages. The relationships between factors are best understood as a web, with social and economic disadvantages contributing to and stemming from each:

- » Housing instability can cause or exacerbate health conditions through exposure to hazards in the environment, lack of social supports, competing priorities and difficulty managing chronic conditions and handling stress. Individuals who are unable to adhere to treatment plans because of lack of financial resources, lack of safe and clean places to rest or administer medication, or continued exposure to environmental hazards may get sick, stay sick or get sicker.²¹
- » Pre-existing health problems may also predate housing instability. Health conditions can interfere with employment opportunities, limiting financial stability. The financial strain of medical care also can place individuals at risk. Individuals may have difficulty obtaining or maintaining stable housing because of mental or behavioral health issues, substance use disorders or discrimination due to disability or health status.²²

To ameliorate the negative impacts of housing instability on health status, it is necessary to shift from a mindset that considers each individual's health

Factors That Influence Housing Instability



situation in isolation to a view that acknowledges broader social, political and economic factors.²³ A view that embraces the interconnectedness of all aspects of individuals' lives demands an equally complex and interconnected response to social and health challenges. Experts across the human services and health care fields are beginning to converge around this shared understanding. For example, the U.S. Department of Housing and Urban Development suggests that tackling homelessness will require a simultaneous focus on improving health and other social issues like education, employment and intimate partner violence,²⁴ while the U.S. Department of Health and Human Services acknowledges that "[chronic] health conditions can usually only be ameliorated if [individuals] have a safe, stable and secure living environment."²⁵

Housing Interventions Improve Health

The links between housing and health are clear: Individuals struggling with unsafe or unstable housing experience worse health outcomes and higher health care costs. Evidence is equally strong for the benefits of interventions to promote housing stability. Spending more time in more stable housing and eliminating housing-related stressors lead to improved health and fewer, shorter hospitalizations.²⁶

Housing stabilization also has important psychosocial impacts. The "sense of home" that comes from stable housing can strengthen individuals' mental and emotional well-being and help them avoid risky or unhealthy behaviors. Increased stability and less frequent moves also help individuals build the social ties that are essential for physical and mental health.²⁷

The Role of Hospitals

Given the enormous impacts of housing, income and other social determinants of health, health providers are realizing they can no longer expect to heal patients through medical treatments alone. Since the broad consensus is that individuals' social needs are central to health and well-being, hospitals and health systems are getting involved in these types of interventions, either alone or in partnership with community organizations.

The economic benefits for hospitals can be significant, since homeless or unstably housed individuals are more likely to be uninsured, be hospitalized more frequently, have longer lengths of stay in the hospital, be readmitted within 30 days and use more high-cost services. Reducing homelessness and other forms of housing instability—through case management, supportive housing (supportive services combined with housing), housing subsidies or neighborhood revitalization—improves health outcomes, connects individuals with primary care and reduces these high levels of utilization. When hospitals and health systems focus their resources on housing supports and case management, the cost savings can offset the expenditures by between \$9,000 and \$30,000 per person per year.²⁸ Reducing readmissions by improving care transitions also matters more and more as health care providers move toward value-based models of care.

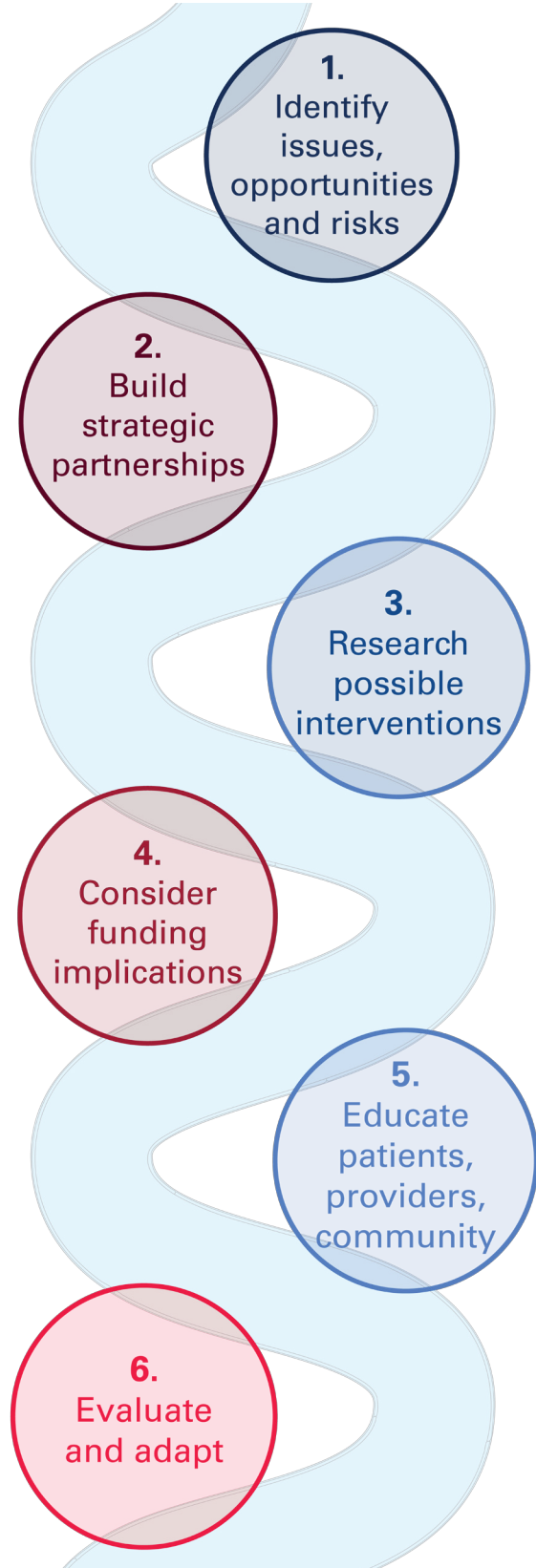
Hospitals and health systems are in a strong position to make an impact. Many already have robust community benefit departments. They understand the communities they serve, have strong ties to other medical and social organizations, and have a large community footprint. Once hospitals decide to get involved in promoting housing stability, they need to identify their targets and approach, based on their capacity and specific goals. See Table 2 for strategies.

Table 2. Strategies to Improve Housing Stability and Potential Health Impacts

Housing Strategy	Key Features	Potential Health Impact
Neighborhood revitalization	<ul style="list-style-type: none"> » Community investment and partnerships to improve economic and housing stability » Frequent use of “anchor organization” approach, which recognizes the role of hospitals as prominent employers and economic drivers in their communities » Examples include community centers, jobs programs, education, affordable housing development 	<ul style="list-style-type: none"> » Improved health outcomes through stabilized housing, employment, economic stability, social service programs and neighborhood safety
Home assessment and repair programs	<ul style="list-style-type: none"> » Home safety assessments for environmental hazards » Renovations or repairs 	<ul style="list-style-type: none"> » Reduced risk of harmful exposures to environmental hazards » Decreased housing costs and less instability
Medical care for the homeless	<ul style="list-style-type: none"> » Preventive and acute medical care for homeless or at-risk individuals » Care typically provided at traditional medical facilities, shelters or on the street via mobile medical vans 	<ul style="list-style-type: none"> » Reduced emergency department use and hospitalization » Improved health outcomes
Medical respite care	<ul style="list-style-type: none"> » Short-term transitional housing for homeless individuals deemed well enough for hospital discharge but not well enough to return to the street or a shelter » Case management and social service referrals 	<ul style="list-style-type: none"> » Improved care transitions » Reduced readmissions
Transitional or permanent supportive housing	<ul style="list-style-type: none"> » Affordable housing units for disabled, elderly or chronically homeless individuals and families » Case management and supportive services » May follow the “Housing First” model, which holds that baseline housing needs must be met before individuals can benefit from other forms of treatment 	<ul style="list-style-type: none"> » Improved mental health, increased satisfaction with quality of life » Reduced hospitalizations, length of stay, and emergency department visits » Improved housing stability, substantial reduction in chronic homelessness » Substantial health care cost savings

Source: HRET, 2017.

Path for Developing Housing Programs



Hospitals and health systems should consider several steps on the path to developing housing programs:

- 1. Identify issues, opportunities and risks.** Valuable information about community needs and opportunities can come from community health needs assessments, patient demographics and health trends, and observations by management and front-line staff.
 - **Questions to ask:** What are the greatest needs for housing in our community? What aspect of housing or health do we hope to affect? Who is our target demographic?
- 2. Build strategic partnerships, both inside and outside the hospital.** This includes making sure that staff from the front line to the C-suite are on board and that the hospital is in conversation with community partners that can support or collaborate on the effort. Partners may include other health care providers; city, county or state governments; regional housing authorities; social service organizations; universities; hotels and property owners; and other community stakeholders.
 - **Questions to ask:** What strategies for meeting housing needs have been identified or promoted by community members? Who is doing similar or related work? Can our hospital join or initiate a collaborative? Who has valuable expertise or resources we can put to use?
- 3. Research possible interventions.** Other organizations are grappling with similar issues, and there can be a great benefit to adapting successful strategies rather than starting from scratch. Even the most innovative programs will build on what came before.

- **Questions to ask:** What has already been done to address this issue? What worked and what did not work? What were the outcomes? How can strategies be adapted to meet our community's unique needs?

4. Consider funding implications.

Consider the costs and benefits of the program. As with any new initiative, your organization will need to develop a funding plan, particularly because return on investment may not be immediate.

- **Questions to ask:** What will the initiative cost up front? What government and nongovernment funding sources are available? Are services reimbursable through health insurance? What are the financial implications of entering a new service area? What will be the return on investment, and how soon do we expect that return will be realized?

5. Educate patients, providers and the community.

Community and provider buy-in is key. Consider how you will reach the individuals who need to know about the initiative.

- **Questions to ask:** Who needs to know what about this initiative, and when? What is our media or public relations plan? What actions do we hope individuals will take?

6. Evaluate and adapt.

Data collection and analysis will be an important part of any new initiative. As you see what is and is not producing the desired effects, you will likely need to adjust the initiative.

- **Questions to ask:** What outcomes do we hope to see? What will success look like, and how quickly can we expect it? How will we know what elements of the initiative are most successful?

Conclusion

Hospitals and health systems are acknowledging the health impacts of housing instability and taking steps to improve their patients' housing conditions. These actions stem from a recognition that homelessness, unsafe housing and unstable housing situations can contribute to poor physical and mental health, while interventions can counteract these effects. Hospitals' diverse responses include providing case management and supportive services, connecting individuals with community resources, identifying and resolving individuals' home safety issues and providing safe and affordable housing.

Housing interventions are part of a wider recognition that addressing the social determinants of health, like housing, income, employment, education and food security, is a necessary component of the journey toward improved population health.

Bon Secours Baltimore Health System

Introduction

Bon Secours Baltimore Health System has had a presence in Baltimore since the 1880s, and Bon Secours Hospital has stood in its current location in West Baltimore since 1919. Over the past century, the surrounding neighborhood has undergone massive changes. After a peak in the 1950s, population has fallen and vacancies have swelled, with an acceleration in population loss in the 1980s and 1990s. At one point, more than 65 percent of the residential units on a three-block stretch adjacent to the hospital sat vacant.

The neighborhood also saw widespread crime, drug use and diminished quality of life for individuals who lived, worked and visited there. The troubling neighborhood trends extended to the health of individuals in the community: Residents who live in the Bon Secours Baltimore service area have higher rates of chronic disease and a shorter life expectancy than Baltimoreans overall.

As an “anchor institution” in West Baltimore with a strong Catholic social tradition, Bon Secours recognized that it needed to get involved in community development to improve the lives of its staff and patients. The hospital began to develop affordable housing in the neighborhood, first for seniors and disabled individuals and then for families. It also stepped up its investment in community programs, such as those promoting workforce development and early childhood education. Today, Bon Secours Baltimore owns and operates more than 720

affordable housing units and multiple community and resource centers.

Approach

Bon Secours Baltimore began its foray into the residential market in the late 1980s, when it made use of a U.S. Department of Housing and Urban Development program to turn a vacant school into housing for low-income elderly adults. A similar project followed shortly afterward, but its scope was also limited to affordable housing for seniors and disabled persons.

In the mid-1990s, administrators observed that, despite a \$30 million investment in hospital facilities and services, patient volumes were falling. Bon Secours examined the causes and discovered that neighborhood conditions, including rising home vacancies and drug-related crime, were keeping potential patients and potential staff recruits away.

At that time, Bon Secours Baltimore did not have the frame of

“social determinants” through which to understand the connection between housing and health. But staff and leadership observed firsthand the impact that the vacancies, lack of affordability and lack of community investment were having in West Baltimore, so the hospital decided to take action.

After purchasing a critical mass of the vacant properties adjacent to the hospital, Bon Secours went public in 1995 about its plans to revitalize the community by developing additional housing units and

At a Glance

System Name

Bon Secours Health System

System Stats

19 acute-care hospitals and one psychiatric hospital in six states

Featured Hospital Name

Bon Secours Baltimore Health System

Hospital Type

Urban, nongovernment, nonprofit, Catholic

Location

Baltimore, Maryland

Beds

77



other community resources. At that time, leadership also made a public commitment to involve community members in all future development decisions, rather than act unilaterally.

In collaboration with a steering committee of neighborhood and church leaders, Bon Secours Baltimore began to refine its mission to promote “neighborhood transformation” and launched a strategic revitalization plan.

In the two decades since those early community conversations, Bon Secours Baltimore has led an array of development projects, always guided by community priorities and in collaboration with community partners. The health system has increasingly focused on addressing social factors, with the understanding that basic needs must be met before individuals can thrive. In collaboration with the community, the system has tackled:

- » **Affordable rental housing.** Bon Secours has developed 729 housing units, including 119 scattered-site family units and 610 more in senior and family buildings.
- » **Residential case management.** Residential buildings have housing coordinators who act as case managers helping neighbors access health care and other services. A pilot project is also exploring peer health support among senior residents.
- » **Support for families with young children.** A family support center offers services such as parenting classes, childcare, early Head Start, and GED preparation and career counseling for families with children up to 4 years old.

- » **Reduction of “crime and grime.”** Bon Secours leads a Crime and Grime Committee that allows community residents to meet regularly with city officials and law enforcement to discuss their concerns.
- » **Career development and financial literacy.** Programs provide job and financial skills training, job placement and mentoring programs for youth, adults and ex-offenders.
- » **Crime-related stress and trauma.** The health system is in early conversations about what role it can take to ameliorate crime-related trauma.

Bon Secours acknowledges that some of these interventions can be costly, and the community development arm pursues grants when feasible. But leadership maintains that investment on the front end can pay dividends, especially since traditional medical care only goes so far to improve community health and well-being.

Impact

Bon Secours’ housing programs provide roughly 1,200 individuals with safe, quality affordable housing. The health system acknowledges that it can be difficult to connect specific health improvements to the programs, since units are open to all residents of Baltimore, not just to patients, and Bon Secours does not collect health data from its tenants. Hospital representatives also point to the long time period over which changes in the population level can be observed.



When considered as part of a larger suite of programming to improve the health and well-being of West Baltimore residents, however, the impact is easier to see. In 2015, the health system served over 78,000 people through its resource centers, parenting classes, youth outreach programs and other initiatives. Among other achievements, Bon Secours connects these various community outreach programs to reduced readmissions for congestive heart failure patients; development of life skills plans by 83 individuals; 15 full-term births to parents enrolled in parenting programs; and 32 new health insurance plan enrollments.

Lessons Learned

- » It is necessary to be open to new, innovative and effective ways to do things. What works in one community, or what works in theory, will not necessarily have the desired impacts in every community.
- » Community development programs must be led by the priorities of the community. A health system can engage more community members that way, and community buy-in is a health system's most valuable asset.
- » Hospitals entering the housing space need to understand the financial implications. Financing works differently for health organizations and housing developers, so hospitals must pay attention to the risks so as not to endanger core hospital financing.

Next Steps

Bon Secours Baltimore has plans to break ground on another housing development in 2017. The new building will bring the number of affordable housing units above 800. The hospital also continues to explore innovative service and funding models, including opportunities to combine Medicaid with housing funding; designating units for elderly individuals in behavioral health programs; and opening a facility for individuals with chronic mental illness. The hospital is also beginning conversations about high health care utilization by individuals with chronic conditions and hopes to draw direct, non-anecdotal connections between these issues and its development programs soon.

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Photos courtesy of Bon Secours Baltimore Health System.



Children's Mercy Kansas City

Introduction

The Healthy Home program is an initiative of Children's Mercy Kansas City to reduce the burden of chronic health conditions caused or exacerbated by environmental factors in the home. After beginning 15 years ago to address home-related asthma triggers, the program expanded to incorporate other health and safety risks like moisture or water damage, poor ventilation, secondhand smoke, pests, mold, asbestos, lead, chemical exposures, pesticides and structural issues.

Services include a healthy home assessment by an environmental hygienist and a health coordinator; development of an assessment and action plan; coaching by phone or in person to help families resolve issues; and referrals to community services as appropriate.

In 2010, the Environmental Health Program integrated with the Region 7 Mid-America Pediatric Environmental Health Specialty Unit. Today, any provider in the 200-mile-radius service area, whether part of Children's Mercy or not, can make referrals to the program. Providers working within the network can initiate a referral through the health system's electronic health records system.

Approach

In the 1990s, allergy, asthma and immunology providers at Children's Mercy Kansas City noticed that medical treatment alone could not prevent children from ending up in the emergency

department. The hospital began to experiment with conducting home visits to evaluate for environmental triggers and then connecting families with community partners to resolve any issues they discovered. The results were clear: After these home interventions, many asthma patients' symptoms eased, use of medication could be reduced, and these children avoided further trips to the emergency room.

Children's Mercy looked at these early successes, as well as emerging research about the role of environmental factors in asthma disease management, and decided to develop a program around home-based environmental health. In 2001, the system hired a full-time environmental hygienist to develop a strategic plan for a program that would systematically identify and address asthma-related hazards through home visits, patient and family education, case management, and home-based interventions and repairs.

However, Children's Mercy quickly realized that focusing on asthma was important but that many other children with other significant health conditions were living in homes with significant environmental concerns. Rather than looking to address issues associated only with better asthma care, the health system moved toward conducting more holistic assessments. The Healthy Home Program, as it came to be called, developed protocols to evaluate patients' homes comprehensively,

At a Glance

System Name

Children's Mercy Pediatric Care Network

System Stats

Two hospitals and nine outreach clinics across Kansas and Missouri, six additional clinics in Kansas City

Featured Hospital Name

Children's Mercy Kansas City

Hospital Type

Urban, nongovernment, nonprofit

Location

Kansas City, Missouri

Beds

167

looking for evidence of a wide range of potential health and safety risks—not only allergens and asthma triggers, but also lead, other chemical exposures, pests, and structural issues that might lead to injury.

In 2010, the Environmental Health Program staff began to work more closely with staff at CMKC who worked for the regional Pediatric Environmental Health Specialty Unit (PEHSU). PEHSUs, in partnership with the U.S. Environmental Protection Agency and the Agency for Toxic Substances and Disease Registry, are responsible for educating and advocating around environmental health exposures to children in the EPA region they serve. These subject matter experts can provide guidance for health departments, community agencies, health care providers and the public in understanding and addressing an array of potential hazards or exposure concerns. In collaboration with the Environmental Health Program, CMKC now offers physician health reviews, home environmental investigations and case management.



Today, the Environmental Health Program includes experts in other areas of indoor environmental health. The Healthy Home Program regularly refers participant families to any of more than 100 community organizations. These organizations make home repairs, provide resources like appliances or bedding, and connect patients and families with additional health and social services. Recently, Children's Mercy received a grant to pilot the development of a web-based resource management program, OneTouch KC, to help providers connect patients with an array of community organizations through

a common intake form. OneTouch KC will also assist providers and community organizations in tracking referrals and follow-up.



Impact

The Healthy Home program at Children's Mercy Kansas City has completed more than 750 home assessments and served more than 2,500 families. It also has conducted thousands of assessments of classrooms and schools. The program has had great efficacy in reducing asthma-related hospitalizations and has improved asthma self-management.

Lessons Learned

- » Up-front funding is always an issue. Hospitals need to understand that they are preventing future health care costs by improving outcomes. A risk stratification model, based on current patient health status, reported environmental risks, and past health care utilization, can help health systems target their resources most effectively. Highest intensity services may be necessary for the highest utilizers, while lower utilizers may benefit from lower- cost, lower-intensity services.
- » When looking to establish an intervention around environmental health and self-management education in the home, asthma is a straightforward issue to start with. The health impacts and the benefits of interventions are well supported by evidence. (See [Community Guide for Asthma Control: thecommunityguide.org/topic/asthma](http://thecommunityguide.org/topic/asthma))
- » Every federal region in the country has access to environmental health expertise, including a toxicologist and

a pediatrician, through its regional PEHSU. These units are backed by respected federal agencies and can advocate on behalf of patients and providers concerned about environmental health. Understanding the impact of environmental factors on children's health requires both clinical and environmental knowledge

- » Partnerships are key. Utilizing community-based resources and organizations to address housing health and safety issues is essential to success in helping patients who struggle to manage their asthma because of environmental exposures in their home.

Next Steps

Because the evidence for home assessments and interventions around asthma and lead is so strong, many states are pursuing programs to credential nonclinical personnel to conduct home visits under the Affordable Care Act's essential health benefits rules. Children's Mercy Kansas City continues to spread knowledge about environmental health and serves as a training center for other facilities looking to pursue healthy home and healthy school programs.

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Photos courtesy of Children's Mercy Kansas City.



St. Joseph Health, Humboldt County

Introduction

St. Joseph Health, Humboldt County operates two hospitals in rural northern California, St. Joseph Hospital and Redwood Memorial Hospital. The nonprofit Catholic health system has a robust community benefit department. St. Joseph Health is actively involved in dialogue with its community and has developed a number of services in response to specific community needs, including:

- » Multiple community resource centers
- » Healthy Kids Humboldt, a program providing food and health insurance referrals and application assistance
- » Paso a Paso, which provides education, parenting classes and other support for Spanish-speaking pregnant women and families
- » Evergreen Lodge, a short-term studio housing complex for individuals traveling to the area for medical treatment

St. Joseph Health also operates a Care Transitions Program to help individuals leaving the hospital make the transition back to home life. One component of Care Transitions is a medical respite program for chronically homeless individuals. The hospital maintains 15 beds for homeless patients who do not meet

diagnostic criteria to be in the hospital but are not well enough to return to shelters or the street. While enrolled in the medical respite program, these individuals have the opportunity to regain their strength in a safe transitional housing environment. They also receive follow-up care, medical education including medication assistance, and case management.

Approach

The Care Transitions Program at St. Joseph Health, Humboldt County began as a collaboration

with the nursing program at Humboldt State University. Nursing students would connect with patients with core measure diagnoses, including congestive heart failure and COPD, as they were preparing for discharge. Students then made home visits to these patients after discharge to provide condition-specific

education and referrals. The model, which has evidentiary support, was successful in reducing patient readmissions.

Around this time, one of St. Joseph's Community Resource Centers and Open Door Community Health Centers, a FQHC working with homeless individuals in the community, identified a significant gap with

medical care. Many of these individuals ended up in the hospital; though they did not always meet diagnostic criteria for inpatient admission, they may not

At a Glance

System Name

Providence St. Joseph Health

System Stats

50 hospitals across seven states

Featured Hospital Name

St. Joseph Health, Humboldt County

Hospital Type

Rural, nongovernment, nonprofit, Catholic

Location

Eureka, California

Beds

138

At a Glance

System Name

Providence St. Joseph Health

Featured Hospital Name

Redwood Memorial Hospital

Hospital Type

Critical access, nongovernment, nonprofit, Catholic

Location

Fortuna, California

Beds

35



have been strong enough to return to their unsheltered living situations and lacked other options for safe recuperation. To fill this gap in care, the hospital began funding five beds at a clean and sober house, a transitional living

facility where individuals who agree to abstain from drugs and alcohol can reserve a bed at a low cost. Individuals without stable housing could stay in the facility for up to two weeks after leaving the hospital. The program, called the Healing Ring, was providing a useful service in the rural Humboldt County community, where affordable housing is scarce and homelessness is a significant issue. However, it was not widely known even among St. Joseph Health staff.

In 2010, St. Joseph received a grant to target services toward low-income, nondisabled individuals who may have been falling through the cracks of existing programs. A nurse and a social worker who were hired through that grant learned about the respite beds, saw the opportunity to reach homeless individuals in need of additional support, and put together a proposal for a new community benefit program: expanded medical respite services.

The Care Transitions Program team launched expanded care coordination for homeless patients enrolling in the Healing Ring after discharge. During a maximum of two weeks in the transitional housing program, the newly hired social worker and nurse provided an adapted version of traditional care transitions services: They visited individuals, provided medical education and coaching and also provided expanded case management. They attended follow-up doctor visits

with some clients or connected them with housing and other community resources. The St. Joseph Care Transitions Program team also worked to get the word out about their services in the community and across the hospital.

Impact

The positive impact of the program quickly became evident. Within its first few years after expansion, St. Joseph was able to demonstrate a significant reduction in readmission rates and length of stay among the population served by the Healing Ring. The return on investment was so significant that the care transitions programs, including the Healing Ring, have since been fully folded into the hospital's operational budget.

The Care Transitions Program also points to anecdotal evidence of success. Program staff report several instances when clients have entered the medical respite program after a hospitalization, then gone on to access other transitional housing resources, such as nonrespite clean and sober living facilities, while developing a longer-term recovery plan.

Lessons Learned

- » When designing transitional programs, carefully consider time frames for services. Too short a time in a program can make it difficult for individuals to get their footing and access services, but too long a time limit can cause clients to lose inertia.
- » Before admitting residents to a transitional housing program, establish clear guidelines and a screening protocol to ensure that the program is a good fit.



- » Even when individuals cycle through a transitional housing program and return to their previous situations multiple times, programs may still serve the role of planting seeds, building relationships and trust, and preparing individuals to take steps toward permanent change when they are ready.

Next Steps

St. Joseph Health, Humboldt County recently partnered with a community foundation, the Betty Kwan Chinn Homeless Foundation, to open 10 additional medical respite beds for homeless patients after discharge. The new building, located downstairs from a newly opened family shelter, has increased accessibility for patients. The Betty Kwan Chinn Homeless Foundation provides meals, and the hospital's Care Transitions Program team continues to provide transition planning and connections to additional community resources.

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Photos courtesy of St. Joseph Health, Humboldt County.



St. Luke's Health System and Saint Alphonsus Health System

Introduction

St. Luke's Health System and Saint Alphonsus Health System, two organizations serving southwest Idaho, are part of a collaborative to tackle chronic homelessness in Boise. Each health system sees the initiative as integral to its larger mission:

- » **Saint Alphonsus** sees its role as that of a transformative healing presence that cares for Idaho's most vulnerable residents. The Saint Alphonsus mission includes a commitment to broad community health and well-being through attention to social determinants.
- » **St. Luke's** is community owned and deeply committed to civic engagement. It prioritizes partnering with other organizations to develop solutions to complex community needs, including health, housing, education and financial stability.

Within the last few years, both health systems identified housing as a priority issue in Boise. Both have signed onto a city plan to eliminate chronic homelessness through supportive housing and wraparound services, using a model

known as Housing First. Each health system has pledged \$100,000 to the effort, and each also has been a driving force behind the development of the initiative.

At a Glance

System Name
St. Luke's Health System

System Stats
Eight hospitals in Idaho

Featured Hospital Name
St. Luke's Regional Medical Center

Hospital Type
Urban, nongovernment, nonprofit, nondenominational

Location
Boise, Idaho

Beds
430

Approach

In 2007, the city of Boise launched a 10-year plan to reduce chronic homelessness. However, as of 2015, the number of unsheltered residents was increasing, and the need for affordable housing stock far exceeded the availability. In search of an effective intervention, the mayor

convened about 40 community partners for an ongoing series of discussions. St. Luke's and Saint Alphonsus both got involved with this Roundtable on Housing and Homelessness because of their

At a Glance

System Name
Saint Alphonsus Health System, Trinity Health

System Stats
Two hospitals in Idaho, two hospitals in Oregon, 74 clinics

Featured Hospital Name
Saint Alphonsus Regional Medical Center

Hospital Type
Urban, nongovernment, nonprofit, Catholic

Location
Boise, Idaho

Beds
387

community-oriented missions, expertise and prominence in the city.

The roundtable worked with Boise State University to research options for interventions and eventually decided on a single-site Housing First model. This model was developed on the belief that individuals need to be stably housed before they can successfully address their health or other social needs, and that housing should not be contingent upon compliance with

any medical treatment plans. Citing extensive evidence, researchers at

Boise State estimated that Housing First could save the city government and hospitals nearly \$1.5 million per year.

The roundtable is now in the process of working out the details. St. Luke's and Saint Alphonsus worked together to define their roles in the initiative, and both are now part of the task force designing the implementation plan. Each system also made a financial commitment of \$100,000.

The planned development in Boise will house 40 chronically homeless individuals. Support services will include mental and physical health care, case management, treatment for substance use disorders and financial counseling. Neither St. Luke's nor Saint Alphonsus will provide on-site health care services, but they are working to ensure that, when residents do require specialty care, the transition into either health system is as seamless as possible. The hospitals have been using their troves of data on the links between housing and health issues to advise the task force. For example, St. Luke's presented the startling analysis that, among its 10 costliest patients, homelessness was a prominent factor in six of their lives. These patients either had been

homeless before hospitalization or had lost their housing because of hospitalization.

There is precedent for this type of collaboration in Boise. Seven years ago, a similar group

of collaborators, including St. Luke's, Saint Alphonsus, the city, the county and social service agencies, came together to develop a detox and crisis mental health facility called Allumbaugh House. As with Housing First, the hospitals provided needs

assessments, subject matter expertise and financial resources. The community hopes that the Housing First initiative will repeat the success of that earlier program.

Impact

The Housing First program in Boise is still in its early stages, so no residents have been directly served to date. The Roundtable on Housing and Homelessness is currently in talks about developing targets and measures of success. Stakeholders expect that the initiative will stabilize housing, increase income levels, improve several vulnerability indicators and reduce costs to the city and health systems by reducing emergency department visits, hospitalizations and hospital readmissions.

Health system representatives warn that results may not be immediate. But the health systems expect to see decreased emergency department use as a leading indicator, with additional results emerging over subsequent years.

Lessons Learned

- » Hospitals will never improve community health, or reduce health care costs, until they embrace all members of their communities.
- » Hospitals and health systems need to understand their communities and specific needs. The same intervention does not work for all communities, so hospitals and health systems need to be mindful of the specific problems they are trying to solve.



- » Working around entrenched social issues can be complicated and slow, and it requires a collective effort. Stakeholders working to develop programs to address homelessness include health care providers, law enforcement agencies, emergency medical services, governmental bodies and the individuals being served.
- » Hospitals will succeed by making use of expertise at all organizational levels, from front-line and operational staff to the C-suite.

Next Steps

Saint Alphonse Health System will continue to design the Housing First initiative and track metrics and outcomes to evaluate the success of existing and new housing programs. To create a larger impact on population health, Saint Alphonse is hoping to disseminate the housing project and its benefits to more populations across the community. The hospital will continue to collaborate with the city, county, other health care providers, law enforcement, U.S. Department of Housing and Urban Development and many others to address housing and other community health issues.

St. Luke's knows that the opportunity for members of the community to pursue jobs, education and financial stability, and to have better health and a stronger social network, correlate with stable housing. It is for those reasons that St. Luke's invests in, partners with and supports organizations and initiatives that address the full spectrum of needs, not just for the health of individuals but for the health of communities.

Through its community health improvement grant program, the hospital will continue to support high-impact programs focused on employment, education, food security, transportation, housing efforts and many of the other drivers of stability and well-being.

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Photos courtesy of St. Luke's Health System and Saint Alphonse Health System.



University of Illinois Hospital & Health Sciences System

Introduction

University of Illinois Hospital, part of the University of Illinois Hospital & Health Sciences System (UI Health), is the only state hospital in Illinois. The system also operates a number of community health centers and clinics and is associated with the university's seven health sciences colleges. UI Health professes a mission to serve the communities of Chicago and of Cook County, including individuals who are uninsured and may have trouble accessing care elsewhere.

Staff in the hospital's emergency department have long been concerned about frequent use of emergency services by a small number of individuals. Through meetings about the issue, staff identified homelessness as a common factor in the lives of many of these patients. Several patients, could be characterized as chronically homeless, meaning they had been continually homeless for at least one year or had experienced at least four episodes of homelessness over a period of three years. These individuals were particularly likely to experience mental health or substance issues, uncontrolled chronic disease and early death. Through cost profiling, UI Health discovered approximately 200 of its chronically homeless patients fell into the 10th decile for patient cost, with an annual, per-patient cost in the range of \$51,000 to \$533,000.

Health system leaders decided on a housing program as one way to respond to chronic homelessness and associated health concerns. UI Health connected

with a community group in Chicago called the Center for Housing and Health and launched a demonstration project called Better Health Through Housing under the nationally validated Housing First model. The initiative built on an earlier randomized controlled trial at Cook County Hospital that had shown that supportive housing for homeless patients could translate into a significant drop in health care cost and utilization.

Approach

In spring of 2015, UI Health and the Center for Housing and Health began conversations about what would become the Better Health Through Housing program. UI Health provided seed funding, and the partners worked out the details over a period of a few months. The program that developed from those conversations was designed to provide 25 to 27 chronically homeless individuals with stable housing and supportive services.

The program began accepting patients in November 2015 and filled its quota by the following August.

Patients usually come in contact with Better Health Through Housing when they are referred by a health care provider. A panel of physicians, social workers and other experts then considers each applicant's needs and determines eligibility. Once a patient has been accepted by the program, an outreach worker from an outside agency must find that patient and connect him or her with services. This task can be more difficult than the health system initially anticipated:

At a Glance

System Name

University of Illinois Hospital & Health Sciences System

System Stats

22 outpatient clinics, 13 FQHCs, seven colleges

Featured Hospital Name

University of Illinois Hospital

Hospital Type

Urban, nongovernment, nonprofit, tertiary

Location

Chicago, Illinois

Beds

495

Individuals may be skeptical or mistrustful, and it may take several months before the outreach workers can build sufficient trust. Once a patient has decided to accept housing, he or she moves into a “bridge unit,” or transitional housing unit, while case managers make longer-term arrangements. The Center for Housing and Health works with nine to 12 agencies to secure a one-bedroom unit, taking the patient’s neighborhood preferences into account. Case managers assist patients with the transition to independent living.

Impact

UI Health has been studying patients’ health conditions and health care utilization since the Better Health Through Housing program began in 2015, and early results are encouraging. The system saw a 42 percent drop in participants’ health care costs almost immediately. More recent assessments place the cost reduction at 67 percent when one outlier—an individual receiving end-of-life care—is excluded from the calculation. On the utilization front, the hospital has seen a 35 percent reduction in use of the emergency department and an increase in patients accessing clinics for routine care. These cost and utilization reductions are in line with national expectations of Housing First programs.



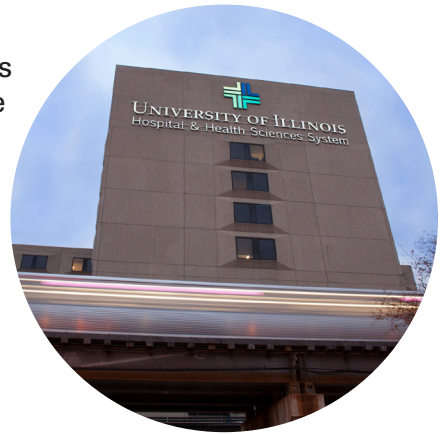
Better Health Through Housing also seems to be achieving one of its other primary goals: It has helped spark larger conversations about homelessness and health in Chicago.

UI Health’s CEO, Avijit Ghosh, stresses that

hospitals cannot solve the problem of homelessness by themselves, but he is encouraged by the observation that the public is much more aware today than it

was two years ago about the relationship between health and housing issues.

Public support for a coalition of health care providers, governmental bodies, businesses and nonprofit organizations seems to be building. UI Health is particularly hopeful about collaborating with insurance companies, city and state governments, and representatives of the criminal justice system, as those entities all stand to benefit from the collective social benefits to reducing chronic homelessness.



Lessons Learned

- » When designing complex social programs, hospitals and health systems will need to consider things like the level of patient need, their capacity to live independently, eligibility and enrollment processes, and how to build relationships with targeted patients.
- » The future of health care must be concerned with social conditions, and a broad coalition of interested parties must work together to make a collective impact.
- » Social programs may not be justifiable using traditional financial criteria. Instead, hospitals and health systems must consider long-term impacts of social factors and must also consider their responsibilities to their patients and communities.

- » In Medicaid expansion states, many nonprofit hospitals are concerned about defending their nonprofit status. Housing programs are an opportunity for hospitals to demonstrate direct community benefit.

Next Steps

UI Health has elected to fund Better Health Through Housing for a second year, and plans are underway to enroll more patients. The health system has made a commitment to supporting the individuals already enrolled in the program and to continuing this work for the near term. The ultimate goal is to help individuals move out of supported housing and into fully independent, permanent living situations.

UI Health hopes to continue connecting with governmental, business and philanthropic partners to expand the range and capacity of housing resources in Cook County, Illinois, in the coming years.

One element of community collaboration already under development is a flexible housing subsidy pool, which will allow multiple partners to apply combined financial resources toward increasing the affordable housing stock in Chicago. The initiative is looking to a similar partnership in Los Angeles, which was able to increase the number of affordable units from 200 to 2,400 over a period of four years.

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Photos courtesy of University of Illinois Hospital.

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