Office of Policy Development and Research (PD&R)
U.S. Department of Housing and Urban Development
Secretary Julián Castro



Search HUD User...

HOME

ABOUT PD&R

**RESEARCH & PUBLICATIONS** 

**DATA SETS** 

**INITIATIVES** 

**QUICK LINKS** 

**EVENTS** 

🚹 Share

# **Evidence Matters**

Transforming Knowledge Into Housing and Community Development Policy

Winter 2016

### HIGHLIGHTS IN THIS ISSUE:

Leveraging the Health-Housing Nexus Smoke-Free Public Housing: Research and Implementation Financing Effective Housing Interventions With Pay for Success

### Leveraging the Health-Housing Nexus

#### Highlights

- Housing aspects, ranging from physical quality to neighborhood conditions, affect health in multiple ways, and research has established links between housing and a
  range of health outcomes.
- Targeted interventions at the nexus of health and housing, such as addressing asthma triggers and providing supportive housing to those experiencing homelessness, can improve health outcomes while reducing long-term healthcare expenditures.
- The Patient Protection and Affordable Care Act has created new opportunities to combine housing and health funds and test new coordinated models of care.



Safe, stable, and affordable housing can be a platform for better health outcomes. Station Center Family Housing in Union City, California, offers 157 affordable units, green design, walkability, and onsite recreational opportunities and services for residents. *Bruce Damonte/David Baker Architects* 

A well-established and growing body of research shows that social and economic factors substantially influence individual health. According to one estimate, these nonmedical factors can account for up to 40 percent of all health outcomes.1 Defined by the World Health Organization as "the circumstances in which people are born, grow up, live, work, and age, and the systems put in place to deal with illness," many of the social determinants of health relate directly or indirectly to housing.2 Housing that is expensive, overcrowded, in poor physical condition, or located in a hazardous neighborhood environment can lead to negative health outcomes. Conversely, safe, stable, and affordable housing in an opportunity-rich neighborhood with access to health services can serve as a platform for improved health outcomes. Housing with supportive services and home and community-based services (HCBS) can be especially effective for improving health and reducing the number of high-cost visits to emergency departments for health services as well as reducing the need for institutional care among seniors and people with disabilities, including those experiencing chronic homelessness. Recent changes in healthcare policy, many of them associated with the Patient Protection and Affordable Care Act (ACA), have opened up new opportunities to use housing as a platform to achieve desirable health and fiscal outcomes, although some challenges remain.

## The Housing Determinants of Health

Various aspects of housing, ranging from the physical quality of a home to the conditions of the surrounding neighborhood, affect residents' health. Among the social determinants of health, housing is a key lever.3 A robust body of research has established links between health and housing. For example, Coley et al. find that the physical quality of housing is a strong predictor of emotional and behavioral problems for low-income children and adolescents, and poor conditions such as the presence of lead, mold, pests, and inadequate heating or cooling adversely affect physical health.4 Environmental conditions such as clutter, loose rugs, electrical cords, and the absence of railings and grab bars can increase the risk of falls, especially for older people.5 Although the physical quality of the nation's housing stock has improved substantially over the past several decades, a small but significant stock of severely inadequate housing remains, affecting approximately a half-million households.6 Physically inadequate housing disproportionately affects poor and minority children.7



Lower housing cost burdens can give families greater flexibility to spend on healthy food and

health services. Armstrong Townhomes, developed by BRIDGE Housing, offers 124 housing units in the high-cost housing market of San Francisco. Brian Rose

A lack of affordable housing stock contributes to overcrowding, housing instability, and homelessness.8 A lack of privacy and control, noise, overstimulation, and other conditions related to overcrowding can cause psychological distress. In 2012, 14 percent of children lived in overcrowded conditions. As with inadequate physical conditions, poor and minority children are disproportionately affected by overcrowded housing.9 Increased stress and a lack of adequate sleep can negatively affect mental and behavioral health.10 Overcrowded housing may also increase the transmission of infectious diseases.11 An insufficient supply of affordable housing limits residents' ability to live in neighborhoods with beneficial health effects and limits the stock available for conversion to permanent supportive housing. The lack of affordable housing that meets the needs of people with disabilities in community settings, in particular, restricts fulfillment of the *Olmstead* mandate — a 1999 Supreme Court decision that requires public entities to provide the least restrictive care settings for persons with disabilities.12 Homelessness causes new physical and mental health problems and makes existing problems worse. In addition to stress, living on the street or in shelters can increase exposure to communicable diseases, malnutrition, and harmful weather conditions and make accessing or managing medicine

The relationship between housing affordability and health outcomes is complex. On one hand, high housing costs may reduce the amount of money available for residents to spend on food or health services. On the other hand, higher-priced housing in an area with beneficial neighborhood effects can improve residents' health.14 Research shows that high-quality neighborhoods reduce residents' exposure to environmental toxins and stressors such as crime. High-quality neighborhoods can also offer better access to health-related resources such as services, healthy food, medicine, and recreational opportunities.15

#### The Housing-Health Opportunity

Because the evidence supporting a connection between housing-related factors and resident health is so compelling, considerable potential exists to both improve health and reduce healthcare costs through targeted, preventive, and low-cost care interventions at the nexus of health and housing. Home modifications such as installing grab bars in a shower, for example, can prevent falls, and interventions such as mold remediation reduce asthma. Evidence shows that these and similar investments that target housing-related social determinants of health not only improve health outcomes but also reduce health expenditures. The potential for gains is especially high for certain subpopulations — children, seniors, low-income households, individuals with disabilities, and individuals experiencing homelessness — particularly those with complex health and social issues who frequently use emergency departments and hospitals. This small, high-cost population has a disproportionate impact on public spending. For example, 5 percent of Medicaid-only enrollees accounted for nearly half of all spending for Medicaid-only enrollees each year from 2009 to 2011.16 The opportunity to leverage strategic investments into public savings is apparent. As Khadduri and Locke write, "[t]he combination — and coordination — of housing, health care, and supportive services, if effectively delivered and well targeted, can help to achieve savings in health care expenditures, which are major drivers in federal deficit projections."17

Within the literature connecting housing and health, several studies point to areas ripe for targeted interventions and investments to improve health for various subpopulations. Research shows, for example, that multicomponent home interventions aimed at addressing triggers such as mold, rodents, cockroaches, and dust mites are effective at reducing asthma symptoms among children and adolescents. In addition to improved health, successful asthma interventions promise to decrease the estimated 500,000 hospitalizations, 1.8 million emergency department visits, 12.3 million physician office visits, and 10.5 million school days missed each year, all of which amount to an estimated annual cost of \$56 billion in medical expenses and lost productivity.18 Lead abatement has also proven to be an effective investment with considerable impact; nationwide, the number of children with lead poisoning dropped by approximately 75 percent from 1992 to 2012.19 Despite this remarkable progress, there is still room for additional gains, particularly among low-income children. The American Healthy Homes Survey finds that an estimated 22 percent of homes have one or more lead-based paint hazards and that low-income households have a higher prevalence of such hazards.20

Research suggests that supportive housing is an effective intervention for individuals experiencing chronic homelessness. Several studies find evidence that Housing First and permanent supportive housing interventions for people experiencing homelessness reduce the use of expensive healthcare services and promote better health. In a groundbreaking 2002 study, Culhane et al. report that a supportive housing intervention in New York City between 1989 and 1997 reduced the utilization of public services such as shelters, hospitals, and correctional facilities, with a corresponding savings of \$16,281 per housing unit at \$17,277 annually for a net cost of \$995.21 A more recent study by Larimer et al. of a Housing First intervention in Seattle for individuals experiencing chronic homelessness and severe alcohol problems finds that the intervention, which offered participants housing and access to voluntary case management and onsite services, reduced alcohol consumption as well as total costs compared with control groups after 6 months, with monthly costs averaging \$2,449 per person.22 Research has also found that case management, along with coordinated care, are effective in reducing hospitalizations and emergency department visits by chronically ill adults experiencing homelessness.23 Many individuals experiencing chronic homelessness are also high-cost, frequent users of health and emergency services for whom supportive housing could be an important health intervention. Individuals experiencing homelessness are three times more likely than those in the general population to use an emergency department at least once a year.24



A GHHI hazard reduction worker paints a new lead-free window frame. Although much progress has been made toward reducing instances of lead poisoning, an estimated 22 percent of homes have one or more lead-based paint hazards. *Photo by Andre Chung* 

For seniors and persons with disabilities in institutional long-term care, transitioning to home and community-based settings not only satisfies the Olmstead mandate but also is cost effective and the preference of many seniors. Research shows evidence of cost savings from using HCBS rather than institutional long-term care both on a per-person basis and, over the long term, at the state level.25 Environmental modifications can reduce health risks for seniors aging in their homes. Studies show that environmental assessments and modifications coupled with education and followup reduces falls among older persons; interventions that also add exercise and vision management are particularly effective.26 The Centers for Disease Control and Prevention estimates that in 2013, falls caused \$34 billion in direct medical costs, indicating that reducing falls could reap substantial savings.27

Finally, research has shown health benefits for low-income people who move from high-poverty to low-poverty neighborhoods. An evaluation of the Moving to Opportunity for Fair Housing Demonstration Program, for example, finds that women who moved into lower-poverty neighborhoods were less likely to be obese and have diabetes, and women and girls who moved into lower-poverty neighborhoods were less likely to have psychological distress and depression compared with the control group.28

### The Changing Health Policy Landscape

Recent changes in health policy have created new avenues for capitalizing on the housing-health opportunity. Signed into law in 2010, the Patient Protection and Affordable Care Act (ACA) reshaped the context for investments and interventions that leverage housing as a platform for improved health and fiscal outcomes. ACA places renewed emphasis on preventive, integrated, and holistic care and on the social determinants of health. More specifically, ACA opens new opportunities at the intersection of health and housing by extending Medicaid coverage to previously ineligible individuals, expanding the types of providers eligible for Medicaid reimbursement, and authorizing new coordinated models of care under Medicaid and enhancing existing models. ACA's emphasis on facilitating community integration and attention to holistic approaches that address the social determinants of health builds on lessons learned from the Money Follows the Person (MFP) Demonstration program, Real Choice Systems Change Grants for Community Living program, and Section 1915(c) HCBS waivers. Researchers find that under MFP, states that employed housing specialists were more successful at transitioning people from institutional to community-based care than those that did not offer such services.29 The Real Choice Systems Change program helped states forge and strengthen partnerships between Medicaid agencies and housing organizations to leverage non-Medicaid funding sources for supportive housing; after all, having the ability to offer additional supportive services means little if the supply of housing to be coupled with these services is insufficient.30 Finally, Section 1915(c) HCBS waivers allowed states to experiment with offering medical and supportive services in home and community settings to people needing institutional-level care. Such waivers remain important for giving states the flexibility to experiment, but ACA has now designated several care models that no longer require waivers.31



Kenneth, the first of 50 new residents, looks on as movers prepare his unit at the Heights of Collingswood

apartments in Collingswood, New Jersey. Led by the Camden Coalition of Healthcare Providers, Heights of Collingswood offers permanent housing and wraparound support services to individuals experiencing chronic homelessness with high-cost medical conditions. April Saul, courtesy of the Camden Coalition of Healthcare Providers

Expanded Coverage. ACA has dramatically increased the number of individuals eligible to receive Medicaid, expanding the number of opportunities to fund supportive housing. Before ACA, Medicaid eligibility included pregnant women and children under 6 years of age with household incomes below 138 percent of the federal poverty level, children 6 to 18 years of age at or below 100 percent of the federal poverty level through the Children's Health Insurance Program, and disabled adults 65 years of age and older. As interpreted by the U.S. Supreme Court, ACA allows states to voluntarily expand eligibility to all individuals under age 65 with household incomes at or below 133 percent of the federal poverty level.32 As of September 1, 2015, 30 states and the District of Columbia have opted to expand Medicaid eligibility and 20 have not.33 Notably, this expansion opens Medicaid eligibility to many of the approximately 83,000 individuals and 13,000 members of families with children experiencing chronic homelessness on a given night nationwide.34

Newly Eligible Providers. The Centers for Medicare & Medicaid Services (CMS) has also issued rule changes that authorize Medicaid reimbursement to nonmedical providers of services recommended by doctors or other licensed practitioners (previously, only the doctors or licensed practitioners themselves could be reimbursed for providing services). The rule change is aimed at encouraging patients to use preventive services. CMS characterizes the change as "another tool for states to leverage in ensuring robust provision of services designed to assist beneficiaries in maintaining a healthy lifestyle and avoiding unnecessary healthcare costs."35 Janet Viveiros of the National Housing Conference writes that although the rule change does not authorize activities such as environmental abatement, it does "[open] up more opportunity for activities that address hazards in homes through assessments of asthma and lead poisoning risk in individual homes and the provision of educational materials to families about risks, treatments, and remediation options."36

New Incentives and Requirements. ACA introduces incentives and penalties that encourage healthcare providers to attend to the social determinants of health. The Hospital Readmissions Reduction Program, for example, reduces payments to hospitals with excess readmissions of patients within 30 days of discharge for designated conditions.37 Unstable housing is one of many factors that increase the risk of readmission, which motivates hospitals to work with supportive housing providers.38 Under ACA, tax-exempt nonprofit hospitals are required to conduct a community health needs assessment every three years and adopt an annually updated implementation strategy that addresses barriers to care and community health. The regulations governing community health needs assessments encourage collaboration between a community's hospitals and public health agencies, both in preparing the assessment and in planning its implementation.39 The regulations direct hospitals to "address social, behavioral, and environmental factors that influence health in the community."40 Nonprofit hospitals are also required to conduct community benefit activities. The Catholic Health Association of the United States, the Association of American Medical Colleges, and the American Hospital Association are pressing the Internal Revenue Service to recognize housing as a community benefit activity, arguing that "[i]t has been demonstrated that providing access to safe, quality and affordable housing can have a greater impact on the health of a community than more traditional clinical modalities."41

Newly Authorized Housing-Related Activities. ACA has allowed Medicaid greater flexibility to cover supportive services that could be coupled with housing. CMS issued guidance to clarify which housing-related services can be reimbursed for individuals with disabilities, older adults who need long-term services and supports, and those experiencing chronic homelessness. The authorized activities fall into three general categories: individual housing transition services (tenant screening, support to address tenancy barriers, assistance with housing searches and applications, move-in assistance), individual housing and tenancy-sustaining services (coaching, training, support, and interventions to maintain tenancy), and state-level collaborative activities related to housing (state agencies partnering with and providing data to housing agencies to plan for housing opportunities for Medicaid populations).42



Garden Village in Sacramento, California, is the first property in the nation built under HUD's Section 811 Project

Rental Assistance Program. Section 811 provides funding to develop and subsidize rental housing with access to supportive services for very low- and extremely low-income adults with disabilities. *Domus Development* 

New Care Models and Initiatives. ACA endorses and encourages models of care that emphasize holistic, preventive measures that address the social determinants of health. Some of these models have the potential to incorporate housing-related activities or provide the services of a supportive housing unit or building. Among these new or enhanced models and initiatives are Accountable Care Organizations (ACOs), health homes, community benefit requirements and community health needs assessments for hospitals, the Community First Choice (CFC) Option, and the HCBS State Plan Option.43 HUD's Section 811 Project Rental Assistance Demonstration program, authorized by the Frank Melville Supportive Housing Investment Act of 2010, also creates opportunities for collaboration to expand the supply of supportive housing.

The ACA recognized ACOs for Medicare patients and authorized a pediatric ACO demonstration for patients participating in Medicaid and the Children's Health Insurance Program. Several states have begun experimenting with ACOs for Medicaid populations. ACOs are voluntary networks of providers that coordinate care from various providers and share the risk and savings associated with the total cost of care for their patient population. Coordination breaks down silos of provider types and reduces the duplication of services and expenditures. ACOs use metrics to evaluate the quality of patient care and receive bonuses for meeting quality standards or meeting savings benchmarks.44 The 12 states with Medicaid ACOs have used a variety of payment systems. Although all Medicaid ACO-model programs have the same basic structure, they are known by other names in some states; for example, they are called Coordinated Care Organizations in Oregon and Regional Care Collaborative Organizations in Colorado.45 Viveiros suggests that ACOs have a strong incentive to partner with organizations that can address the social determinants of health such as housing providers, which can offer nonmedical services such as hospital discharge planning and can help residents enroll in Medicaid or an ACO.46



GHHI works to improve health by facilitating collaborative efforts to identify and remediate home health hazards.

Photo by Andre Chung

Like ACOs, health homes involve one or more healthcare providers or a managed care organization that will coordinate care for an individual, including referrals to social services. Health homes, however, are designed specifically for people with chronic illnesses, and states can choose to target specific subpopulations. Target populations must meet at least one of three eligibility requirements: having a serious mental illness, having two or more chronic conditions, or having one chronic condition and being at risk of a second.

Wisconsin, for example, chose to use health homes in four counties to serve individuals with HIV/AIDS who either have one other chronic condition or are at risk of another.47 CMS increased the Federal Medical Assistance Percentages (the rates used to calculate matching funds) for the first two years of the program to encourage states to adopt the model.

Health homes do not have to be offered statewide. The 15 states that had health homes in place as of August 2014 vary in the populations they target and in their payment systems, but their programs have generally included people with mental illness and have used a per-member, per-month rate.48 As with other Medicaid programs, funding for health homes cannot be used directly for housing, but the target populations are likely to overlap with those served by affordable housing programs. The opportunity exists for health home providers to partner with other organizations for activities such as enrollment outreach and referrals to housing providers.49 States can decide what types of providers can serve as a health home (such as community mental health centers and physicians' offices). The National Alliance to End Homelessness points out that behavioral health agencies that already fund supportive housing could integrate health homes into their operations, leveraging their experience with and connection to supportive housing to benefit individuals with serious mental illness or chronic conditions who are experiencing homelessness.50

Five states to date have received approval to offer a Community First Choice (CFC) Option in their state plans. The CFC Option, authorized by ACA and added to the Social Security Act as Section 1915(k), reimburses person-centered HCBS such as assistance with activities of daily living and health-related tasks. The option is part of an effort to rebalance Medicaid spending on long-term services and supports. States can also reimburse costs associated with transitioning out of institutional care, including security deposits and first month's rent. CFC Option plans must be offered statewide.51 Oregon's K Plan provides assistance with daily living activities through an agency-provider model in which the state contracts with providers. Individuals eligible for nursing facility services and needing an institutional level of care as well as those who have an income at or below 150 percent of the federal poverty level who need an institutional level of care are eligible. In addition to personal assistance, the plan allows expenditures of up to \$5,000 per modification for environmental modifications that substitute for human assistance and that are related to the person-centered plan; the plan will also allow expenditures for transition costs, including first month's rent and utilities.52

Under the 1915(i) HCBS State Plan Option, states can choose to target a specific population — a group with either certain risk factors or a particular disease.53 The state of Montana, for example, opted to target HCBS benefits to youth with a serious emotional disturbance who are also eligible for Medicaid. The program provides mental health services in a community setting for youth who might otherwise be placed in a Psychiatric Residential Treatment Facility, inpatient hospital, or therapeutic group home.54

HUD's Section 811 Project Rental Assistance Demonstration program likewise seeks to expand opportunities for individuals to receive needed care outside of costly institutional settings. The program leverages affordable housing resources such as low-income housing tax credits to increase the supply of supportive housing units. HUD awards funds to state housing agencies that then collaborate with state health agencies to create supportive housing.55 The first property in the nation to implement Section 811 Project Rental Assistance was Garden Village in Sacramento, California. Through a collaborative effort among the state's Housing Finance Agency, Department of Housing and Community Development, Department of Health Care Services, Department of Developmental Services, and Tax Credit Allocation Committee, along with local partner Domus Development, Garden Village offers supportive housing units for 11 extremely low-income people with disabilities.56 The residents were referred by California Community Transition coordinators or the Department of Developmental Services Regional Center to transition out of an institutional care setting.57

## Implementation

State health and housing agencies have a growing number of options and opportunities to meet the needs of residents, and they have considerable flexibility in choosing which programs to implement. Building on Minnesota's recent history of healthcare innovation, four Hennepin County organizations — the county's Human Services and Public Health Department, the Hennepin County Medical Center, Metropolitan Health Plan, and NorthPoint Health and Wellness Center — participate in an ACO called Hennepin Health. Hennepin Health integrates physical and mental health, social, and claims processing services for approximately 10,000 members. The ACO is the default assignment for Medicaid enrollees in the county who do not select an alternative health plan. Community health workers coordinate care and services that address the social determinants of health. Services include job placement supports, case management, and housing navigation.58 Hennepin Health receives a per-member, per-month payment regardless of the services utilized by members as well as a share of any overall savings. As a result, the ACO has an incentive to avoid unnecessary and expensive care. Because the housing situation of many Hennepin Health members is precarious — 30 to 50 percent are homeless, living in a shelter, or experiencing other housing instability — Hennepin Health uses existing contracts that the county's Human Services and Public Health Department has with housing providers to give Hennepin Health members priority admission to supportive housing.

The ACO also employs staff members to provide housing counseling and navigation services along with other social services that might affect members' ability to remain housed. Viveiros notes that not enough affordable housing is available to meet the needs of all Hennepin Health members.59 The early results for Hennepin Health have been promising; emergency department and inpatient admissions decreased from the ACO's first to second years, and an overwhelming majority of enrollees indicated that they were satisfied with the quality of their care experience.60



A new supportive housing resident accesses her unit for the first time at an apartment building in New Jersey

designed to serve youth coming out of homelessness. Corporation for Supportive Housing

In New York, the state's Medicaid Redesign Team has identified investment in supportive housing as a critical lever for improving housing and health outcomes as well as realizing Medicaid cost savings. The team recommended allocating funds for capital investment to create supportive housing units, operating expenses, rent subsidies, and supportive services with the aim of targeting patients with high and modifiable costs.61 The state requested authorization to reinvest a share of projected Medicaid cost savings into supportive housing capital and operating costs, but CMS rejected the proposal on the grounds that Medicaid is prohibited by law from paying for housing. New York has instead invested state funds to construct supportive housing units and subsidize rent. Jennifer Ho, HUD senior advisor for housing and services, says that the state misdirected its energies by asking CMS to do something it statutorily cannot do. Instead, Ho argues, state plans should focus on having Medicaid pay for all allowed services — a once-murky issue considerably clarified through the CMS informational bulletin delineating which housing-related activities can be covered — and maximizing federal Medicaid matching funds while also investing in housing through other funding streams.62 Peggy Bailey, director of health systems integration for the Corporation for Supportive Housing, says that the health sector does not understand the extent to which housing providers fund services that could be paid for by Medicaid. Both state and federal governments, she argues, could stretch their non-Medicaid investments in supportive housing if freed from paying for service coordination and other activities that Medicaid covers.63 HUD, for example, pays more than \$400 million per year for services for individuals experiencing homelessness, a large portion of which could be paid for by Medicaid.64 Managed care organizations' interest in addressing social determinants of health to improve members' health outcomes, says Bailey, will motivate them to e

## Challenges

A growing research base and expanding policy options have created new opportunities to leverage health and fiscal benefits from the nexus of housing and health, but significant challenges remain. Foremost among them, as Ho puts it, is that "[t]he budget environment is such that we're not doing what we know works, and not doing anything at [a] scale that matches the need."66 Congress, state legislatures, and other stakeholders will need to commit more resources to fully capitalize on these new opportunities. Even if Medicaid paid for all of the supportive services for which it is permitted to pay, the limited supply of affordable housing and the inadequacy of rental assistance will prevent stakeholders from providing enough supportive housing to meet the need. Currently, only about one in four income-eligible households receives federal rental assistance because of funding limitations, and similar shortfalls exist for the other population groups most likely to need housing with supports.67 For example, in 2011 only 36 percent of income-eligible households aged 62 and over without children received rental assistance.68 Despite the evidence that permanent supportive housing is a "proven, cost-effective solution to chronic homelessness," the U.S. Interagency Council on Homelessness says that "[s]hortfalls in the most recent budget passed by Congress have forced us to move the national goal to end chronic homelessness from 2015 to 2017 "69

The traditional separation of housing and health policy presents a barrier to coordination. Institutions and interests are entrenched, and the systems are structured differently:

Medicaid is administered at the state level, and housing is produced and administered by developers and public housing agencies, usually without coordination at the state level.

Both systems are complex, making it difficult for housing providers to navigate Medicaid and vice versa.70 Efforts to bridge these gaps, however, are emerging, as demonstrated by the Section 811 Project Rental Assistance Demonstration program's partnerships between state health and housing agencies and collaboration and communication among federal agencies.71 National housing organizations and advocates face the added challenge of adhering to different sets of policies and rules for each state.72 For example, as the Corporation for Supportive Housing helps housing providers determine whether or not they can be reimbursed for supportive services and, if so, become certified to bill Medicaid, it must make sure it is complying with state-specific regulations.

Although ACA offers many new opportunities, understanding and implementing it will be difficult, and the potential housing implications are just one aspect. Despite the solid evidence base showing that housing is a key determinant of health, getting and maintaining supportive housing as an administrative priority may prove difficult. ACA is still in the early stages of implementation, and states are just beginning to experiment with new models of care delivery and authorized housing-related activities. Already, however, major hurdles are apparent. First, as discussed above, the limited supplies of affordable housing and rental assistance will restrict efforts to use ACA programs to expand permanent supportive housing. Second, states may face challenges in their attempts to target high-cost, high-need individuals and enroll them in Medicaid. Adults experiencing chronic homelessness, for example, face barriers to enrollment and may require targeted outreach.73 Housing agencies and other housing providers can assist through providing outreach, helping clients navigate the enrollment process, or by becoming certified so that they can enroll clients directly into Medicaid.74 It may also be difficult to identify high-cost individuals before they incur substantial expenses — people who have high costs one year do not necessarily have similar needs the next year, and most people who experience homelessness do so only temporarily.75 Bailey notes that, although evidence exists that housing stability reduces the use of health services, less is known about housing stability and specific health outcomes, with the exception of HIV/AIDS. In some cases, managed care providers have incentives based on particular health outcomes, and more research could investigate the impact of supportive housing on specific conditions such as diabetes or heart disease. Such research could shed light on which individuals would be most likely to benefit from supportive housing.76 And although many high-cost services are avoidable, the Medicaid a

## Conclusion

Investment in stable, affordable, healthy housing in safe neighborhoods with access to healthcare services and a variety of amenities promises improved health for residents of all types. Housing that adds supportive services for those who need them, particularly seniors and individuals with disabilities who are experiencing homelessness or who need institutional levels of care, also promises to substantially improve health outcomes. Addressing the social determinants of health that are related to housing — investing "upstream" to prevent and treat health issues before they become more serious — may substantially reduce public and private healthcare costs. Through its expansion of Medicaid eligibility and new models of healthcare service delivery and payment, ACA, along with concurrent changes in healthcare policy, creates numerous opportunities and incentives to pursue targeted investments that leverage housing as a platform for improved health and fiscal outcomes. Capitalizing on this opportunity will require collaboration among healthcare and housing providers, research to identify best practices, and a commitment of the resources needed to take proven models to scale.

- 1. Deborah Bachrach, Helen Pfister, Kier Wallis, and Mindy Lipson. 2014. "Addressing Patients' Social Needs: An Emerging Business Case for Provider Investment," The Commonwealth Fund. See also: Alvin R. Tarlov. 1999. "Public Policy Frameworks for Improving Population Health," *Annals of the New York Academy of Sciences* 896, 281–93
- 2. World Health Organization. "Social Determinants of Health: Key Concepts" (www.who.int/social\_determinants/thecommission/finalreport/key\_concepts/en). Accessed 2 September 2015.
- 3. James Krieger and Donna L. Higgins. 2002. "Housing and Health: Time Again for Public Health Action," American Journal of Public Health 92:5, 758.
- 4. Rebekah Levine Coley, Tama Leventhal, Alicia Doyle Lynch, and Melissa Kull. 2013. "Relations between Housing Characteristics and the Well-Being of Low-Income Children and Adolescents," *Developmental Psychology* 49:9, 1775–85.
- 5. Mary E. Tinetti. 2003. "Preventing Falls in Elderly Persons," New England Journal of Medicine 348:1, 42.
- 6. Barry L. Steffen, George R. Carter, Marge Martin, Danilo Pelletiere, David A. Vandenbroucke, and Yunn-Gann David Yao. 2015. *Worst Case Housing Needs: 2015 Report to Congress*. Office of Policy Development and Research, U.S. Department of Housing and Urban Development, 3.
- 7. U.S. Department of Housing and Urban Development. 2014. "Housing's and Neighborhoods' Role in Shaping Children's Future," Evidence Matters (Fall), 1.
- 8. Nabihah Magbool, Janet Viveiros, and Mindy Ault. 2015. "The Impacts of Affordable Housing on Health: A Research Summary," Center for Housing Policy, 1.
- 9. Claudia D. Solari and Robert D. Mare. 2012. "Housing Crowding Effects on Children's Wellbeing," Social Science Research 41:2, 464–76; Kids Count Data Center, Annie E. Casey Foundation. 2014. "Children Living in Crowded Housing" (www.datacenter.kidscount.org/data/tables/67-children-living-in-crowded-housing#detailed/1/any/false/868,867,133,38,35/any/368,369). Accessed 13 January 2016; Econometrica, Inc., Kevin S. Blake, Rebecca L. Kellerson, Aleksandra Simic, and ICF International. 2007. "Measuring Overcrowding in Housing," U.S. Department of Housing and Urban Development.
- 10. Solari and Mare.
- 11. Wilder Research. 2007. "Homeless and near-homeless people on northern Minnesota Indian reservations," 3.
- 12. "About Olmstead," Americans with Disabilities Act website (www.ada.gov/olmstead/olmstead\_about.htm). Accessed 22 October 2015.
- 13. Margot B. Kushel, Sharon Perry, David Bangsberg, Richard Clark, and Andrew R. Moss. 2002. "Emergency Department Use Among the Homeless and Marginally Housed: Results From a Community-Based Study," *American Journal of Public Health* 92:5, 778.
- 14. Maqbool et al., 2; Tama Leventhal and Sandra Newman. 2010. "Housing and Child Development," Children and Youth Services Review 32:9, 1165–74.
- 15. Commission to Build a Healthier America. 2008. "Where We Live Matters for Our Health: Neighborhoods and Health," Robert Wood Johnson Foundation.
- 16. U.S. Government Accountability Office. 2015. "Medicaid: A Small Share of Enrollees Consistently Accounted for a Large Share of Expenditures."
- 17. Jill Khadduri and Gretchen Locke. 2012. "Making Subsidized Rental Housing a Platform for Improved Health for Vulnerable Populations," Abt Associates.
- 18. Deidre D. Crocker, Stella Kinyota, Gema G. Dumitru, Colin B. Ligon, Elizabeth J. Herman, Jill M. Ferdinands, David P. Hopkins, Briana M. Lawrence, and Theresa A. Sipe. 2011. "Effectiveness of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: A Community Guide Systematic Review," American Journal of Preventative Medicine 41:2S1, S5–S32; Jack Meyer, Gaylee Morgan, and Mike Nardone. 2015. "Sustainable Funding and Business Case for GHHI Home Interventions for Asthma Patients," Health Management Associates; Ruth Ann Norton and Brendan Wade Brown. 2014. "Green & Healthy Homes Initiative: Improving Health, Economic, and Social Outcomes Through Integrated Housing Interventions," Environmental Justice 7:6, 151; American College of Allergy, Asthma & Immunology. 2012. "Asthma Results in Missed Sleep, School Days for Children" (acaai.org/news/asthma-results-missed-sleep-school-days-children). Accessed 18 December 2015.
- 19. Peter Ashley. 2012. "HUD Working to Reduce Racial and Ethnic Asthma Disparities Among our Children," The HUDdle, 4 June. Accessed 15 October 2015.
- 20. U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control. 2011. "American Healthy Homes Survey: Lead and Arsenic Findings," 4.
- 21. Dennis P. Culhane, Stephen Metraux, and Trevor Hadley. 2002. "Public Service Reductions Associated with Placement of Homeless Persons with Severe Mental Illness in Supportive Housing," *Housing Policy Debate* 13:1, 107.
- 22. Mary E. Larimer, Daniel K. Malone, Michelle D. Garner, David C. Atkins, Bonnie Burlingham, Heather S. Lonczak, Kenneth Tanzer, Joshua Ginzler, Seema L. Clifasefi, William G. Hobson, and G. Alan Marlatt. 2009. "Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons With Severe Alcohol Problems." *Journal of the American Medical Association* 301:13, 1355–6.
- 23. Laura S. Sadowski, Romina A. Kee, Tyler J. VanderWeele, and David Buchanan. 2009. "Effect of a Housing and Case Management Program on Emergency

  Department Visits and Hospitalizations Among Chronically III Homeless Adults: A Randomized Trial," Journal of the American Medical Association 301:17, 1771–8.
- 24. Kushel et al., 778
- 25. H. Stephen Kaye, Mitchell P. LaPlante, and Charlene Harrington. 2009. "Do Noninstitutional Long-Term Care Services Reduce Medicaid Spending?" *Health Affairs* 28:1; 263, 270.

- 26. Carla A. Chase, Kathryn Mann, Sarah Wasek, and Marian Arbesman. 2012. "Systematic Review of the Effect of Home Modification and Fall Prevention Programs on Falls and the Performance of Community-Dwelling Older Adults." *American Journal of Occupational Therapy* 66:3, 284.
- 27. Centers for Disease Control and Prevention. "Costs of Falls Among Older Adults" (www.cdc.gov/homeandrecreationalsafety/falls/fallcost.html). Accessed 18 December 2015.
- 28. Lisa Sanbonmatsu, Jens Ludwig, Lawrence F. Katz, Lisa A. Gennetian, Greg J. Duncan, Ronald C. Kessler, Emma Adam, Thomas W. McDade, and Stacy Tessler Lindau. 2011. Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation. U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- 29. Debra J. Lipson, Christal Stone Valenzano, and Susan R. Williams. 2011. "What Determines Progress in State MFP Transition Programs?" Mathematica Policy Research, 7.
- 30. Matthew Kehn and Debra Lipson. 2014. "The Real Choice Systems Change Grant: Building Sustainable Partnerships for Housing Final Report," Mathematica Policy Research
- 31. Janet Viveiros. 2015. "Affordable Housing's Place in Health Care: Opportunities Created by the Affordable Care Act and Medicaid Reform," National Housing Conference. 3.
- 32. Viveiros 2015, 4–5; U.S. Interagency Council on Homelessness. "The Affordable Care Act's Role in Preventing and Ending Homelessness" (www.usich.gov/tools-for-action/aca-fact-sheet). Accessed 19 October 2015.
- 33. Henry J. Kaiser Family Foundation. "Status of State Action on the Medicaid Expansion Decision" (kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/). Accessed 19 October 2015.
- 34. Jack Tsai, Robert A. Rosenheck, Dennis P. Culhane, and Samantha Artiga. 2013. "Medicaid Expansion: Chronically Homeless Adults Will Need Targeted Enrollment and Access to a Broad Range of Services," Health Affairs 32:9, 1553.
- 35. Cindy Mann. 2013. "Update on Preventative Services Initiatives," CMCS Informational Bulletin (27 November), 1-2.
- 36. Viveiros 2015, 9
- 37. Centers for Medicare & Medicaid Services. "Readmissions Reduction Program" (www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps/readmissions-reduction-program.html). Accessed 23 October 2015.
- 38. Collaborative Healthcare Strategies, Amy Boutwell, John Snow, James Maxwell, Angel Bourgoin, and Sarah Genetti. 2014. "Hospital Guide to Reducing Medicaid Readmissions," Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, 3.
- 39. Sara Rosenbaum. 2015. "Additional Requirements for Charitable Hospitals: Final Rules on Community Health Needs Assessments and Financial Assistance," Health Affairs Blog (27 January). Accessed 20 October 2015.
- 40. Department of the Treasury, Internal Revenue Service. "Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals; Requirement of a Section 4959 Excise Tax Return and Time for Filing Return," Federal Register 79:250, 79002.
- 41. Lisa Gilden, Janis M. Orlowski, and Melinda Reid Hatton. Email to Sunita Lough and Tamara Ripperda, Internal Revenue Service, 14 July 2015.
- $42.\ Vikki\ Wachino.\ 2015.\ "\textbf{Coverage of Housing-Related Activities and Services for Individuals with Disabilities,"}\ \textit{CMCS Informational Bulletin}\ (26\ \text{June}).$
- 43. Viveiros 2015, 5-10.
- 44. Kaiser Commission on Medicaid and the Uninsured. 2012. "Emerging Medicaid Accountable Care Organizations: The Role of Managed Care," Henry J. Kaiser Family Foundation, 1–3.
- 45. "Patient Centered Medical Homes (PCMH) and Accountable Care Organizations (ACO)," The Henry J. Kaiser Family Foundation website (kff.org/medicaid/state-indicator/patient-centered-medical-homes-pcmh-and-accountable-care-organizations-aco/). Accessed 8 October 2015.
- 46. Viveiros 2015, 5.
- 47. Julia Paradise and Mike Nardone. 2014. "Medicaid Health Homes: A Profile of Newer Programs," Kaiser Commission on Medicaid and the Uninsured; 4, 15.
- 48. Paradise and Nardone, 4, 15; Viveiros 2015, 6.
- 49. Viveiros 2015, 6.
- 50. National Alliance to End Homelessness. 2012. "Medicaid Health Homes: Emerging Models and Implications for Solutions to Chronic Homelessness."
- 51. Kathleen Sebelius. 2014. "Report to Congress: Community First Choice," U.S. Department of Health and Human Services.
- 52. NORC. 2014. "Research Summary: ACA Section 2401, Community First Choice Option (Section 1915(k) of the Social Security Act; Oregon State Plan Amendment Summary," University of Chicago.
- 53. Centers for Medicare & Medicaid Services. "Home & Community-Based Services 1915(i)" (www.medicaid.gov/medicaid-chip-program-information/by-topics/long-term-services-and-supports/home-and-community-based-services/home-and-community-based-services-1915-i.html). Accessed 30 September 2015.
- 54. Montana Department of Public Health and Human Services, Children's Mental Health Bureau. 2014. "1915(i) Home and Community Based Services State Plan Program for Youth with Serious Emotional Disturbance (SED) Policy Manual," 5.
- 55. U.S. Department of Housing and Urban Development. 2015. "Section 811 Project Rental Assistance (PRA) Program" (www.hudexchange.info/programs/811-pra/).

  Accessed 1 October 2015.
- 56. U.S. Department of Housing and Urban Development. 2015. "Deputy Assistant Secretary for the Office of Multifamily Housing Programs Visits First 811 PRA Property" (www.hudexchange.info/news/deputy-assistant-secretary-for-the-office-of-multifamily-housing-programs-visits-first-811-pra-property/). Accessed 1 October 2015.
- 57. California Housing Finance Agency. 2015. "California First in Nation to House Disabled Residents through New HUD Funding: U.S. Department of Housing and Urban Development Official visited April 29," press release, 30 April.

- 58. Lynn A. Blewett and Ross A. Owen. "Accountable Care for the Poor and Underserved: Minnesota's Hennepin Health Model," *American Journal of Public Health* 105:4, 622—3; Janet Viveiros. 2015. "Addressing Housing as a Health Care Treatment," *Housing and Health: Innovations in the Field* (June); Jennifer N. Edwards. 2013. "Health Care Payment and Delivery Reform in Minnesota Medicaid," Commonwealth Fund.
- 59. Viveiros 2015. "Addressing Housing as a Health Care Treatment."
- 60. Blewett and Owen, 624.
- 61. Kelly M. Doran, Elizabeth J. Misa, and Nirav R. Shah. 2013. "Housing as Health Care New York's Boundary-Crossing Experiment," New England Journal of Medicine 369:25, 2374—6.
- 62. Interview with Jennifer Ho, 23 October 2015.
- 63. Interview with Peggy Bailey, 26 October 2015.
- 64. Jennifer Ho. 2015. Speech delivered at "The Intersection of Health and Housing: Opportunities and Challenges," Centene and Alliance for Health Reform, Washington, DC, 7 August.
- 65. Interview with Peggy Bailey.
- 66. Ho 2015.
- 67. Center on Budget and Policy Priorities. "Policy Basics: Federal Rental Assistance" (www.cbpp.org/research/housing/policy-basics-federal-rental-assistance). Accessed
- 68. Joint Center for Housing Studies of Harvard University. 2014. "Housing America's Older Adults: Meeting the Needs of an Aging Population," 17.
- 69. U.S. Interagency Council on Homelessness. 2015. "The President's 2016 Budget: Fact Sheet on Homelessness Assistance," 2.
- 70. Interview with Jennifer Ho.
- 71. Interview with Jennifer Ho; Ho 2015.
- 72. Viveiros 2015. "Affordable Housing's Place in Health Care," 13.
- 73. Tsai et al., 1557.
- 74. Council of Large Public Housing Authorities and Corporation for Supportive Housing. 2014. "Opportunities for Health Partnerships through the Affordable Care Act."
- 75. Doran et al., 2375-6.
- 76. Interview with Peggy Bailey.
- 77. Interview with Jennifer Ho.

**Evidence Matters Home** 

Next Article

## About PD&R

Delegations of Authority and Order of Succession

Events

**HUD Secretary's Awards** 

PD&R Careers

# Initiatives

Assessment of Native American Housing Needs

International and Philanthropic Innovation

Office of University Partnerships

Sustainable Construction in Indian Country

## Research

Case Studies

Data Sets

Periodicals

Regulatory Barriers Clearinghouse

Reports

The Edge

# Reference

Bibliographic Database

Data Sets Reference Guide

Guidelines for Preparing a Report for Publication

**HUD** Historical Timeline

Programs of HUD

## Resources

Disaster Recovery PD&R Toolkit

Housing Scorecard Market Analysis

Related Websites

## More...

Contact Us
eBookstore
Glossary

**HUDUser Archives** 

Webstore

Connect with HUD User

RECOVERY.GOV | Accessibility | Contact Info | Privacy Policy | FOIA | Web Management and Web Policies | Inspector General | No Fear Act | PaymentAccuracy.gov







## HUD USER