ASTHO-CDC-HUD Convening Meeting Notes: Cross-Sector Partnership Models to Improve Health and Housing Outcomes

November 29th-30th, 2016

Table of Contents

Introduction

The Association of State and Territorial Health Officials (ASTHO), Centers for Disease Control and Prevention (CDC) and the U.S. Department of Housing and Urban Development (HUD) convened public, private, and nonprofit leaders to share their insights on how to improve health and housing outcomes. Individual participants described their work and experiences in cross-sector partnerships, mechanisms for funding and financing, as well as data sharing. The convening, which was held November 29-30, 2016, sought to improve understanding of the reasons why these approaches have been successful in the context of the communities where they were implemented.

This document provides a summary of the information that was presented and shared at the convening as a resource for individuals and organizations. The main themes of the convening focus on improving housing and health outcomes through various cross-sector partnerships, financing mechanisms, and data sharing/use. Participants also shared some of the barriers they encountered and the solutions that were implemented in response. A selection of case examples as well as a complete list of all case examples is included, with references for further reading. Finally, additional resources are listed, including research articles and tools that convening participants found helpful as they engaged with representatives of other sectors.

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Recurring Experiences

During the convening, participants engaged in facilitated small-groups where they shared individual experiences. Before finalizing this report, individual participants reviewed the information listed below to ensure its accuracy. This is a list of individual experiences reported by multiple participants and is meant to provide examples of issues or options that may arise when engaged in the healthcare-housing work, rather than recommendations of specific actions to take.

1. **Strong leadership and champions can help support the development of cross-sector partnerships:** A leader or champion can help individuals or organizations identify new or nontraditional partners and think creatively about how to best engage them. Leaders may have the capacity to directly influence resource allocation and development, particularly with compelling data. The leader can also bring diverse partners together and build the support necessary to spur action. A leader or champion may also have a nontraditional background such as a property manager who has public health knowledge. Additionally, a separate backbone organization can leverage leadership from like-minded partners.

2. **Windows of opportunity can present an opportunity for action:** The development of new sustainable financing streams and partnerships can result from responses to severe weather, a natural disaster, or a disease outbreak. For example, the response to Hurricane Katrina and the Flint water crisis catalyzed partnerships at the federal, state, and local levels that led to the development of programs that improved housing and health outcomes.

3. **Explore collective buy-in early in the planning process:** Articulating the potential for improved health and housing outcomes can further engagement to make the business case. The development of shared goals, a common understanding, and clearly defined roles and responsibilities early in the planning process can help create a collaborative, effective partnership structure. This can help with ensuring that partnerships are established in the beginning.

4. **Coordination among partners may increase outcomes:** Partnerships may result in a redefinition of organizational practices, policies, or missions to avoid competing or duplicating efforts. These can include creating new or changing priorities, modifying the organization's structure, redirecting community interactions, and redefining performance measures. Additionally, after ensuring buy-in from partners, agencies and communities can build on the strengths of these relationships. Coordinating partnership efforts around common goals and objectives allow for greater resource efficiency and increased access to organizational expertise.

5. **A "translator" can help improve communication and collaboration:** To help partners communicate better and use resources and funding more strategically, it may be helpful to develop a common understanding of the different terms used and motivations across sectors in order to help partners communicate better and use resources and funding more strategically. Long-term sustainability can be improved if partners understand one another's available resources and funding restrictions early in the planning process.

6. **Develop a business case with supporting data to may assist in private-sector support:** A well-substantiated business case can be beneficial outcomes for a partner's beneficiaries and includes compelling data, such as return on investment. For example, presenting zip code-level data can help develop a stronger and more attractive business case as it can highlight the local issues and potential impact.

7. **The development of a data sharing agreement can help build data collection efforts that are actionable:** A Memorandum of Understanding (MOU) may help cross-sector partners develop and define mutual goals and establish procedures. A data sharing agreement can be present within the MOU to help gain cooperation and buy-in from stakeholders by defining data ownership and usage, as well as other responsibilities among stakeholders. Certain data systems require a data sharing agreement within the MOU before sharing access to sensitive, health-related information or other personally identifiable information. To maximize investment in data collection efforts, an agency or organization can determine if the purpose of all collected data can be actionable and relevant to the different partnership efforts.

Summary of Convening Presentations

This section details the approaches and examples presented at the Convening. The broad topics of the convening focused on partnership strategies, funding/financing mechanisms and data sharing. Presenters from the federal government, state and local agencies, and the private and nonprofit sectors highlighted their individual work addressing cross-sector partnerships, financing structures, and data sharing mechanisms used to improve health and housing outcomes. The presenters also provided a brief analysis of how their approach has been implemented and sustained (including aspects of culture change, policy development, and financing) along with additional resources for future learning.

Engaging Cross-Sector Partners

Medicaid's Role in Supporting Integration of Health and Housing: State Medicaid programs, through a variety of state plan and waiver options, can help advance the integration and coordination of health care and supportive housing services, including enabling managed care organizations to address some of their Medicaid enrollees' housing support service needs. This work is occurring nationwide, serving individuals and families enrolled in state Medicaid programs.

The statute authorizing the Medicaid program includes several waiver and state plan authorities that allow states to provide services in innovative ways. These sections include: 1905(a) state plan benefit categories, 1915(c) home and community-based services (HCBS) waiver provisions, 1915(i) HCBS state

plan provisions, 1915(j) self-directed personal assistance services, 1915(k) community first choice state plan option, managed care authorities, and 1115 demonstrations. Section 1915(c) HCBS waivers are the primary tools that states use to meet the growing need for long-term services and supports (LTSS) in their populations. Section 1915(i) can be used by states to provide HCBS to people who may not meet the "institutional level of care" standard and does not have a cost neutrality requirement.

Managed care can be the predominant delivery system employed by states in their Medicaid programs. A state can use one of the available statutory options to allow managed care in its Medicaid program. The Managed Care Organization's (MCO) flexibility to support specific interventions can be enhanced by state use of managed care authorities such as 1915(b) waivers.

Section 1115 Research & Demonstrations allow states broad flexibility in altering their Medicaid programs within the approved terms of the demonstration and can be used to help bridge health care and supportive services. A requirement of Section 1115 waivers is that states must demonstrate budget neutrality during the 5-year waiver period, effectively requiring that their interventions demonstrate cost savings.

The Innovation Accelerator Program Partnerships Track offers targeted program support to Medicaid agencies seeking to promote community integration for Medicaid beneficiaries. The goals of the State Medicaid-Housing Agency Partnerships Track are to develop public and private partnerships between the Medicaid and housing systems, and to support states in the creation of detailed action plans that foster additional community living opportunities for Medicaid beneficiaries. Consistent with statute, CMS does not provide Federal Financial Participation for room and board in home and community-based services.

Additional Resources:

- Informational Bulletin on Coverage of Housing-Related Activities and Services for Individuals with Disabilities (Center for Medicaid and CHIP Services)
- A Quick Guide to Improving Medicaid Coverage for Supportive Housing Services (Corporation for Supportive Housing)
- A Primer on Using Medicaid for People Experiencing Chronic Homelessness and Tenants in Permanent Supportive Housing (U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation)
- Improving Care for Medicaid Beneficiaries Experiencing Homelessness (State Health Reform Assistance Network)
- Homelessness Initiatives (Centers for Medicare and Medicaid Services)
- Medicaid Coverage of Social Interventions: A Road Map for States (Manatt Health)
- Medicaid and Permanent Supportive Housing (*Health Affairs*)

Collaborating to Improve Health: Enlisting multiple sectors to work together toward a common goal can provide community-wide progress and bring about broader, more lasting change across the nation. Collaboration methods include: providing a backbone support, connecting and engaging partners, creating and maintaining a shared vision, providing capacity through technical support, providing data, measuring and reporting progress and success. For example, the Atlanta Regional Collaboration for

Health Improvement (ARCHI) offers a platform for partners to come together to align their goals, develop shared measures and jointly invest in evidence based practices that advance education and health outcomes, build quality communities and further economic opportunities for individuals and families.

Having a coordinated health care-housing entry or access system can help foster linkages and referrals for individuals. This can help agencies prioritize care and housing coordination for at-risk populations. Examples of partnerships between health providers and Supportive Housing include Federally Qualified Health Center (FQHC)-provided services and satellite clinics in supportive housing, homeless services provided through mental health providers, and mobile integrated health/outreach teams. An example of an agency that is working in this arena is the Corporation for Supportive Housing (CSH). CSH is focused on changing the medically focused traditional models of coordination by creating partnerships among homeless services and social services providers, housing agencies, primary health, counseling and support, health promotion and continuing care. Agencies similar to CSH do not provide direct services, address the needs of vulnerable populations. Similar organizations can offer lending, technical assistance and capacity building, and consulting services. This can assist in thinking beyond traditional models of housing and of health, and promote ways to address the needs of our most vulnerable populations.

Additional Resources:

- Atlanta Regional Collaboration for Health Improvement (ARCHI)
- How We Drive Impact (Corporation for Supportive Housing)

Cross-Sector Funding Approaches

Building Connections, Integrating Systems and Shifting to Prevention: In a coordinated effort to address social determinants of health, city, county and state governments as well as nonprofit organizations are building connections, integrating systems and shifting to prevention. Sharing organizational strategies to improve the health and well-being of communities through system integration seems to accelerate the work towards addressing social determinants of health. Moreover, discussing partnership opportunities to accelerate system integration, targeting prevention services and outcome improvement may be important for success. Examples of system capacity challenges and opportunities to shift services 'upstream' to prevention include: reaching more people preventatively, better matching services to need, receiving right services at the right time, improving client experience, improving outcomes, and expanding knowledge and expertise of workforce.

An example of this work is Boulder County in Colorado, which was able to integrate successfully its Housing and Social Services Departments with the Boulder County Department of Housing and Human Services by allowing services to be shifted upstream to target low-risk, low-involvement investments. Both programs and data were integrated. Being practical about the incentives at play in a given sector, or even across sectors, requires breaking out of ineffective systems. Strong leadership has the possibility to change the culture and the systems may follow. Even though the values might be defined differently by each group, when it comes to affordable housing, people with different interests can come together and negotiate. County leadership was able to make a compelling business case with enough historic

credibility to make the merger successful. Furthermore, it was sustained because the merged department was able to provide more coordinated services than the separate departments. The private sector may also be an option to enhance the health care services that can be provided. For example, United Healthcare worked with the development of the insurer's real estate investments to reduce health spending and improve overall health among complex patients.

Additional Resources:

- Housing & Human Services (Boulder County, Colorado)

Financing Affordable Housing Using Low Income Housing Tax Credits: The objective of Low Income Housing Tax Credits (LIHTC) is to provide equity through an investor to a project so that there is less debt, thereby lowering rents. The tax credit purchased by the investor is a dollar-for-dollar tax reduction off income taxes due and these tax credits are claimed over 10 years. The tax credit compliance period is 15 years with a minimum 30-year affordability commitment. The amount of tax credits awarded is based on the cost of constructing or rehabilitating the housing development and demands a limit on maximum income for renting units as well as a maximum rent amount in order to make the units affordable.

There are two types of affordable housing tax credits: the 4 percent and the 9 percent. The 4 percent tax credits are available with tax exempt bonds through the state's volume cap allocation, are non-competitive and are to be used when 50 percent or more of the costs are financed with tax-exempt private activity bonds. The 9 percent tax credits are awarded annually on a competitive basis. Moreover, a Qualified Allocation Plan (QAP) is a federally mandated planning requirement that states use annually to explain the basis upon which they distribute their LIHTC allocations. Based on their QAP, states establish preferences and set-asides within their tax credit competitions to target the credits toward specific places (such as areas of opportunity) or types of people (such as elderly households).

The San Antonio Housing Authority led the Wheatley Choice Neighborhoods Initiative, promotes a comprehensive approach to transforming distressed areas of concentrated poverty into sustained mixed-income neighborhoods using LITHC. This initiative links housing improvements with public services, including schools, public transit, primary care, and employment opportunities. This contributes to positive fiscal impacts for the state and local governments, improves worker retention and employer attraction and retention, and increases the buying power of San Antonio residents. Overall, the San Antonio Housing Authority pursues affordable housing programs by providing public housing (6,026 units at 70 properties), the Housing Choice Voucher Program (Section 8), and mixed-income housing (7,196 mixed-income units at 46 properties administered through non-profit entities and partnerships).

Additional Resources:

- Wheatley Choice Neighborhood (San Antonio Housing Authority)
- Wheatley Choice Neighborhood Initiative (NowData)

Cross-Sector Data Sharing and Use Efforts

Improving Health Quality and Housing Access through Data Usage: Providing health care delivery organizations the tools, support, and coaching required to operationalize addressing social needs can be

a standard part of quality care. Organizations are creating sustainable, high-impact and cost-effective interventions such as computer software that include the patient's health data as well as social needs identified by systematic screening for social determinants of health. This enables healthcare providers to navigate patients to the community-based resources they need to be healthy, from food, to transportation, to health care benefits. Organizations similar to Health Leads can, offer health systems a variety of training, technology, and learning tools that enable healthcare providers to design, launch, and scale social needs interventions for their patients. More specifically, health systems can use software platforms to manage patient social needs, catalogue the community resource landscape, and assess program outcomes and trends.

To improve housing access and health outcomes, affordable housing providers are collecting data using a variety of methods such as surveys, interviews and database systems to measure health-related impacts. These may include: the number of emergency department visits, the number of hospital admittances, access to a regular physician and health care services, and insurance coverage. Using this data can be helpful to identify trends, improve their services, foster unique partnerships/collaborations and attract more funding for service-enriched housing. For example, Stewards of Affordable Housing for the Future (SAHF)'s Outcomes Initiative works to create a common framework for members to demonstrate the impact on residents of providing safe, quality affordable housing. Data collection and evaluation is one of the main activities of this initiative. SAHF encourages their members to use their own data collection methods and learn from each other and the broader field about the value of investments in data collection and application.

Additional Resources:

- Creating Collective Impact – Far Beyond What Any Single Player Could Achieve (Health Leads)
- Stewards of Affordable Housing for the Future

Highlighted Examples of Cross-Sector Efforts to Improve Health and Housing Outcomes

The seven case examples detailed below were shared and reviewed by the convening participants during the breakout sessions. These case examples were chosen because they reflect a broad combination of initiatives by national organizations, federal agencies, and local programs. Additionally, they include stakeholders from both the public and private sectors. Selection criteria included the ability to bring together nontraditional partners, utilize financing models, encourage cross-sector data collection and sharing, maturity of implementation, and evaluation. A full list of case examples and resources shared at the convening can be found in Appendix A.

The California Endowment Building Healthy Communities Initiative: The California Endowment is funding place-based initiatives in 14 California communities affected by dramatic health inequities. The communities are located across the state, from Long Beach and Coachella Valley in the south to Del Norte County in the north.

The Endowment selected each of the 14 partner sites because of their racial, geographic, and political diversity. Other factors in choosing the sites included social determinants of health data, grant-making

history, and key stakeholder interviews, all of which were used to identify areas affected by poor health outcomes but with the potential to become healthy environments.

Each community developed a list of targets to focus on including activities in schools and neighborhoods, health care services, food systems, housing, and more. This project is sustained financially through $1 billion in philanthropic funding over a 10-year period. Leaders are also developing cross-sector, public-private partnerships among foundations, corporations, and policymakers to bring forward new ideas and resources.

Additional Resources:

- California Endowment Build Healthy Places

Data Aggregation Approaches Across Washington State Agencies: Washington State uses a high level of data aggregation and sharing across Medicaid claims, criminal justice, behavioral health, and social service systems. The state has two data integration activities: AIM (Analytics, Interoperability, and Measurement), which is funded through a State Innovation Models (SIM) grant, and PRISM (Predictive Risk Intelligence SysteM), which is a sustainable and ongoing activity of Washington State's Department of Social and Health Services.

Data sharing benefits citizens of the state by helping improve the quality and consistency of care and service delivery by providing targeted services to the most vulnerable, at-risk residents. The AIM data feeds from Healthier Washington Stakeholders (accountable communities of health, research teams, evaluation teams), Washington State agencies (Health Care Authority, Department of Social and Health Services, and Department of Health), and healthcare organizations (payers and providers). Predictive Risk Intelligence SysteM (PRISM) is a predictive risk modelling system that uses data from the Department of Social and Health Services to calculate a risk score and projects the anticipated Medicaid costs in relation to other health and community services users. The state manages the system through managed care programs that can identify clients most in need of comprehensive care coordination.

Additional Resources:

- Washington State Dual Eligibles' Demo Uses Risk Modeling System (*Healthcare IT News)*
- Improving Service Delivery for High Need Medicaid Clients in Washington State Through Data Integration and Predictive Modeling (Washington State Department of Social and Health Services)
- Analytics, Interoperability and Measurement (AIM) (Washington State Health Care Authority)

Mayors' Committee to End Homelessness in Memphis and Shelby County, Tennessee: The City of Memphis and Shelby County have jointly undertaken several initiatives with the stated goal of decreasing the number of homeless people. The central initiatives include increasing the permanent supportive housing supply, prioritizing ending chronic homelessness through public outreach, and creating transitional housing. From 2012 through 2014, overall homelessness in Memphis-Shelby County decreased by 21 percent and chronic homelessness among individuals decreased by 39 percent. The number of homeless families decreased by 30 percent, from 214 families in 2012 to 149 families in 2014.

The priority of ending homelessness had strong support from local officials in the beginning because the mayors of Memphis and Shelby County both became interested in addressing high local rates of homelessness, particularly among veterans. The city and county mayors formed the Mayors' Committee to End Homelessness, which created a 10-year plan to end homelessness by 2021 and includes 18 strategies focused on preventing and ending chronic homelessness, as well as homelessness among families, young people, and veterans. Financing these programs is an ongoing challenge; however, the Memphis homeless assistance system continues to forge relationships with other systems (such as Veterans Affairs, the Workforce Investment Network, and the Department of Children's Services) and collaborate with publicly and privately funded homeless providers throughout the community.

Additional Resources:

- Community Snapshot of Memphis-Shelby County (National Alliance to End Homelessness)
- The Action Plan to End Homelessness in Memphis and Shelby County (Mayors' Committee to End Homelessness)

Cultivating Health for Success by Health System Investments in Permanent Supportive Housing: The Cultivating Health for Success project in Allegheny County, Pennsylvania, established in 2010, offers permanent supportive housing to certain homeless adults enrolled in a University of Pittsburgh Medical Center (UPMC) Medicaid health plan. The intervention specifically focuses on homeless who had one or more chronic illness and a history of more than one year of greater than average unplanned care utilization (e.g., emergency department use).

The program identifies potential enrollees through community outreach. Those who agreed to become patients at specific FQHC look-alike primary care practices and work with a local housing support organizations were offered permanent supportive housing. The program focuses on including safe, affordable housing as part of medical care interventions, with the goal of improving healthcare outcomes, lowering health care costs, and improving quality of life for enrollees.

Additional Resources:

- Case Studies in Capturing Health Care Savings through Population Health (John Lovelace, UPMC Health Plan)
- Integrating Health Care and Supported Housing to Improve the Health and Well-Being of the Homeless: A Population Health Case Report (National Academy of Medicine)
- Cultivating Health for Success Information

Recurring Barriers and Possible Solutions

This section highlights examples of barriers for implementing and sustaining cross-sector efforts to improve health and housing outcomes. Following the sharing of each recurring barrier, this summary also provides a description of the possible solutions that convening participants have implemented in response. The barriers and possible solutions described below are relevant to improving housing and health outcomes through various approaches to cross-sector partnerships, financing, and data sharing and use. The barriers and possible solutions described in this section summarize some of the individual

perspectives and experiences shared at the meeting. The following possible solutions were selected for inclusion because each was brought up in at least three small-group discussions

1. **Understanding terminology and priorities of different sectors:** The public and private sectors often use different terminology and have different priorities (e.g., varying budget cycles, definitions of risk), which can make partnership efforts difficult.

   Possible solution: Explore accessing "translators" that can help partners to bridge language and cultural divides. Translators may come from a backbone entity or an intermediary group, or it may be someone who has worked in multiple sectors.

2. **Achieving consensus on target population, measuring prevention, and cost savings:** No two communities are alike, so health and cost outcomes relevant to one population are likely to be different for other populations. Additionally, the timeline for identifying and analyzing outcomes (particularly cost outcomes) can vary among different populations. Partners may each have different priorities in terms of the population they wish to target. For example, a health care system may be interested in focusing on patients who are frequent users of the emergency department services or "super-utilizers." Meanwhile, other sectors may be focused on individuals who are experiencing homelessness. Additionally, sometimes the target population may be selected based on practical realities, such as the amount of funding, staff, and time available.

   Possible solution: Consider steps to understand the social, political, and economic context of the community where the intervention is to take place, then develop solutions based on existing evidence that correlates to the targeted population. One option is for partners to assess that cost savings are analyzed and projected periodically. Additionally, data may also be used for informed decision-making about the target population. This may assist in maximizing investments among partners. The purpose, goals, and objectives of the program are often the driving force behind the selection of a target population. For example, there can be a relationship between the super-utilizers in the emergency room and their housing status. Data can be used to identify these individuals and determine what additional social supports such as housing can be available.

3. **Mitigating risk:** Risk mitigation can be challenging for organizations that want to develop, implement, and monitor efforts to improve health and housing outcomes. Understanding risk, and how partners may measure risk differently, is important for making effective and appropriate partnership and investment decisions.

   Possible solution: Develop and refine risk assessments and evaluation plans on a continual basis. A cadre of leaders and decision makers could convene at least quarterly and engage in discussions on how to best mitigate risks and address issues surrounding project sustainability.

4. **Managing scarce resources, limited funding, and competing priorities:** Funding can come attached with restrictions or limitations on their procurement and use. Partners also may have different priorities, budget cycles, spending restrictions, and indicators of success, which can limit partnership and joint funding activities. For example, banks have the ability to receive tax credits, whereas

hospitals do not. For states to award federal tax credits, the state housing finance agency may develop a Qualified Allocation Plan that includes the selection criteria for its awardees. Furthermore, Medicaid provider reimbursement restrictions do not always align with the most critical needs of beneficiaries or target populations.

Possible solution: Early in the planning process, it is important to understand each partner's priorities and constraints and to clearly define each partner's resource and funding obligations. Partners can engage in strategic planning, creative thinking about the combination of private and public funding, and discussions on the social, political, and economic context of the community where the intervention is to be implemented. These early discussions may help motivate new partners and engage new funders, as well as allow partners to identify different opportunities to address limited resources. For example, the social determinants of health lens has been successful in motivating the health care sector to invest in housing. Additionally, policymakers tend to respond to research evidence that demonstrates the health and cost impacts of an intervention or issue on their constituency and, as a result, may be willing to allocate funding that can be applied flexibly at the local level.

5. **Overcoming insufficient data infrastructure and data sharing challenges:** The construction of data infrastructure can be a cumbersome, labor intensive, and lengthy process. Barriers to data sharing may also arise from concerns about proprietary information or processes for linking data.

   Possible solution: Early in the planning process, determine the party or parties responsible for developing, implementing, and maintaining the data infrastructure. Establish a formal data sharing agreement which can be present within an MOU in consultation with the appropriate legal experts that outlines the responsibilities of each party and the process through which data will be shared. An MOU also allows for all parties to mutually agree upon the purpose and goals for data collection to ensure data will be actionable. While important, personally identifiable information situations were not discussed by participants

6. **Maintaining momentum for partnership activities:** If no action steps are taken within a reasonable timeframe, partners may lose trust, interest, and lose traction. For example, if affordable housing developments encounter delays during the planning phase, investors may be unwilling to wait for these processes to be resolved and may move on to other investment opportunities.

   Possible solution: Develop a project plan that outlines concrete action steps to be taken and account for potential disruptions to the timeline. Ensure the project's goal aligns with specific community needs and investors' interests. This strategic planning allows investors and other partners to share a vision and understand their roles and next steps, even if there are potential delays.

Conclusion

Throughout the country, health systems are beginning to partner with housing providers, social service sectors, government agencies, public health agencies, and financial institutions engaged in community

development. These cross-sector partners can each make contributions in addressing the social determinants of health influencing their service populations. Many of these efforts attempt to address the lack of affordable, accessible, quality housing in the United States, which can be a central barrier to good health and community living.[1,2,3] Such interventions can benefit from the unique perspectives, expertise, and reach of different stakeholders, including those in both public and private sectors.

As cross-sector efforts emerge at the local level, work remains to evaluate, replicate, and scale these models. In particular, successful interventions can be supported through new partnership development, financing mechanisms, and data sharing and data use infrastructure. Common experiences have emerged, such as learning to build a business case that is attractive to different partners and learning to speak the language of other sectors. Partners can build upon existing collaborations and create a supportive environment where innovations can occur. Multi-sector partnerships and social interventions can fill critical needs for vulnerable populations and benefit whole communities. The lessons learned from these collaborations can help build upon progress already made in health-housing partnerships and can also serve as a model for work within other social domains.

[1] HHS Office of Disease Prevention and Health Promotion. "Social Determinants of Health." 2017. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health. Accessed 1-30-17.
[2] Maqbook N, Viveiros J, Ault M. "The Impacts of Affordable Housing on Health: A Research Summary." *Center for Housing Policy.* April 2015. Available at http://www2.nhc.org/HSGandHealthLitRev_2015_final.pdf. Accessed 1-30-17.
[3] Pew Charitable Trusts. "Connecting Public Housing and Health: A Health Impact Assessment of HUD's Designated Housing Rule." June 2015. Available at http://www.pewtrusts.org/~/media/assets/2015/06/connecting-public-housing-and-health.pdf. Accessed 1-30-17.

Helpful Resources When Working Across Sectors

This section provides helpful resources for individuals and organizations to consider before they engage in cross-sector efforts to improve housing and health outcomes. The convening participants shared the materials listed here as resources that were most helpful in grounding and guiding their own work. These materials were collected by participants after the event and they may offer direction and supplemental information for interested stakeholders. Before finalizing this report, the convening participants reviewed the information listed below to ensure its accuracy. Please note that this document does not represent the collective opinions and perspectives of all convening participants, nor should anything in this summary be considered a CDC or HUD formal recommendation.

Leveraging the Social Determinants of Health: What Works?
Author: The Blue Cross Blue Shield of Massachusetts Foundation
Description: *Leveraging the Social Determinants of Health: What Works?* provides evidentiary support for addressing housing as a social determinant of health. The report also discusses the importance of supportive housing services and working in collaboration with the health care and social service providers. It includes a summary of housing interventions, such as Housing First, 10th Decile Project, housing subsidies, and Low-Income Energy Assistance Program, and their health and cost outcomes. This document also offers strategies, programs, and resources for low-income families and older adults. It also shares examples of health care and housing services being integrated in communities.

Supportive Housing Helps Vulnerable People Live and Thrive in the Community
Author: Center on Budget and Fiscal Priorities
Description*: Supportive Housing Helps Vulnerable People Live and Thrive in the Community* describes the evidence base for supportive housing. The authors also highlight the cost savings that this model provides in the health care arena and the corrections system and describes how to scale supportive housing. An appendix lists federal funding for housing that shows the budget, the location (state or local) and the funder.

The Impacts of Affordable Housing on Health: A Research Summary
Author: Center for Housing Policy
Description: *The Impacts on Affordable Housing on Health: A Research Summary* describes the link between health care and housing. The summary looks at 10 pathways that resulted in positive health outcomes and describes the evidence. These pathways range from improvements in eating habits to the decreasing the spread of infectious disease.

Sources for Data on Social Determinants of Health
Author: Centers for Disease Control and Prevention (CDC)
Description: Data can be a catalyst for improving community health and well-being. Understanding data on social determinants of health, such as income, educational level, and employment, can help focus efforts to improve community health.

CMS Informational Bulletin on Medicaid & Housing Related Services
Author: Centers for Medicare & Medicaid Services (CMS)

Description: CMS released this informational bulletin on Medicaid and housing-related services to help states understand the ways in which Medicaid can provide reimbursements for housing related services, excluding room and board expenses. This guidance is intended to help states address the needs of people living with disabilities, older adults, and those experiencing chronic homelessness

Housing is the Best Medicine: Supportive Housing and the Social Determinants of Health
Author: The Corporation for Supportive Housing
Description: *Housing is the Best Medicine* describes the evidence-based practice of supportive housing as a cost-effective intervention for addressing homelessness and housing instability for vulnerable populations. This report details how supportive housing improves health outcomes and health care costs. Finally, this report provides strategies for making supportive housing a health care solution, including opportunities with Medicaid, system integration, and performance measures.

Housing America's Older Adults: Meeting the Needs of an Aging Population
Author: Joint Center for Housing Studies
Description: *Housing America's Older Adults* provides insights into policies and partnerships that can help older adults have a higher quality of life and assist communities in becoming increasingly livable and vibrant. It concludes that effective action will require concerted efforts at all levels of the government, as well as by the private and nonprofit sectors.

Federal and State Collaboration to Improve Health Through Housing
Author: National Academy for State Health Policy
Description: *Federal and State Collaboration to Improve Health Through Housing* identifies concrete policy recommendations and actionable steps that federal and state policymakers can take to align health and housing programs and ensure that vulnerable people receive the housing and supportive services they need to achieve optimal health.

Meeting the Health-Related Social Needs of Low-Income Persons: Funding Sources Available to States
Author: National Academy for State Health Policy and the Robert Wood Johnson Foundation
Description: *Meeting the Health-Related Social Needs of Low-Income Persons* provides a summary of possible funding sources available to states, detailing the population served, what the funding source can and cannot provide, state requirements, and state accountability.

Housing as Health Care: A Road Map for States
Author: National Governors Association
Description: *Housing as Health Care: A Road Map for States* was developed to guide state planning efforts to address housing issues, particularly homelessness. This document provides recommendations and scientific evidence to help governors create new or inform current programs to address housing as a health care issue. Some recommendations include (1) building partnerships with key housing and health stakeholders; (2) leveraging the state's role as purchaser and administrator; and (3) increasing access to safe, decent, and affordable housing.

Housing Intersections Research
Author: National Housing Conference

Description: A series of articles by Janet Viveiros and Lisa Sturtevant consolidating research syntheses and best practices analyses on the ways that housing serves as a platform for positive health, education, and economic outcomes.

Blueprint for a Healthier America: Prioritizing Wide-Scale Implementation of the Most Effective Approaches for Improving Health in Communities Around the Country
Author: Trust for America's Health
Description: *The Blueprint for a Healthier America from Trust for America's Health* highlights policies and strategies that address the social determinants of health, such as housing, and promote overall health and well-being. This report includes health and cost evidence for various housing interventions, such as those related to lead and asthma remediation, smoke-free housing, supportive housing, financial assistance, and aging in place. The report provides recommendations about public health workforce training and health care and housing collaboration. It also describes examples of housing initiatives that have been implemented in a variety of communities.

Public Health 3.0: A Call to Action to Create a 21st Century Public Health Infrastructure
Author: U.S. Department of Health and Human Services Office of the Assistant Secretary for Health
Description: In response to our country's approach to public health evolving in due to funding limitations, health system transformation activities, and new partnerships, the Assistant Secretary for Health launched the Public Health 3.0 initiative to describe a new vision for the public health community. This report summarizes lessons learned from regional discussions and recommendations related to that initiative.

Opening Doors: Federal Strategic Plan to Prevent and End Homelessness
Author: US Interagency Council on Homelessness
Description: In 2010, *Opening Doors*, a national framework for addressing homelessness in the United States presented the following goals: (1) prevent and end homelessness among veterans in 2015; (2) finish the job of ending chronic homelessness in 2017; (3) prevent and end homelessness for families, young people, and children in 2020; and (4) set a path to end all types of homelessness. *Opening Doors* is being implemented by 19 federal agencies and their local and state partners in the public and private sectors.

Appendix A. Examples of Cross-Sector Efforts to Improve Health and Housing Outcomes

The following examples seek to provide additional context within each of their categories. This is in addition to the examples that were highlighted earlier in the document. These case examples were shared either during the roundtable sessions or sent in after the convening. A brief preview of each reference is presented so the reader can determine if it matches their need. More information can be found in the hyperlinked title. Before finalizing this report, the convening participants reviewed the information listed below to ensure its accuracy. Please note that this document does not represent the collective opinions and perspectives of all convening participants, nor should anything in this summary be considered a CDC or HUD formal recommendation.

a. State and Local Government (Legislation and Policy)

1. Virginia Children's Services Act Blend Funding and Planning: Under the Virginia Children's Services Act, the Departments of Social Services, Juvenile Justice, Education, and Mental Health blend their funding and decide jointly how pooled funding can be best spent to address local health-related and social needs, such as housing. Prior to enactment of this legislation, Virginia had separate agencies that all addressed different needs of low-income and at-risk children and families. The legislation leads to braided and blended funding between agencies, which allows the agencies to meet the full scope of family and individual needs, reduce fragmentation and duplication, and improve the integration of interagency services.

2. Minnesota Data Sharing Law/Hennepin County: Minnesota law (MS 13.46 Subd 2) allows health and social services agencies to access electronic health record (EHR) data for the purpose of care coordination. It uses shared EHR data to coordinate care and connect patients with services.

b. State and Local Government (Funding and Resource Alignment)

1. Boulder County Integration of Housing and Social Services: Boulder County, Colorado, was able to successfully integrate its Housing and Social Services Departments with the Boulder County Department of Housing and Human Services, allowing services to be shifted upstream to target low-risk, low-involvement investments.

2. Data Sharing Agreement in Lake County, Illinois: The Illinois state attorney created an agreement to share data across behavioral health providers, public health agencies, housing authorities, and clinicians. A database tracked how many interactions each individual had with each agency or provider. A dedicated case manager funded by the public health agency looked at 20 patients records.

3. TB/HIV Incidence in the Homeless Population: The TB Education and Training Network (TB ETN) was formed to bring TB professionals together to network, share resources, and build education and training skills. Membership includes representatives from TB programs, correctional facilities, hospitals, nursing homes, federal agencies, universities, the American Lung Association, Regional Training and Medical Consultation Centers, and other U.S. and international organizations interested in TB education and training issues.

4. City-owned properties to be made available for constructing affordable housing incentives in Eastside San Antonio, Texas: The San Antonio City Council unanimously approved the conveyance of vacant, city-owned properties to San Antonio Affordable Housing, Inc. (SAAH) to use for affordable housing. SAAH has been working for more than a year to identify properties across the city for redevelopment and found that District 2 had the most city-owned, vacant properties in all districts.

c. Housing Authorities and Providers

1. San Antonio Housing Authority Wheatley Choice Neighborhoods Initiative: The San Antonio Housing Authority led the Wheatley Choice Neighborhoods Initiative which promotes a comprehensive approach to transforming distressed areas of concentrated poverty into sustained mixed-income neighborhoods. The initiative does this by linking housing improvements with public services, including schools, public transit, and employment opportunities.

2. Beyond Housing 24:1 Initiative in North St. Louis County: The 24:1 Initiative brings together unique partnerships to foster strong childhood development and build strong communities. Beyond Housing has served as a convener for multiple projects including an Affordable Quality Homes Program that offers homeownership opportunities to families, Family Engagement Liaisons to connect families to resources, and a Money Smart Week learning series to help families and consumers pursue their financial goals. The success of the 24:1 initiative is driven by community engagement, with community members taking part in hundreds of local meetings and partnerships with nonprofits, businesses, churches, and government agencies.

2. Mercy Housing Northwest Supports King County's Accountable Community for Health in Washington State: Through an Accountable Community for Health initiative titled “Prevention and Management of Chronic Disease in Low-Income and Immigrant Populations through Housing-based and Community Health Worker Interventions in King County,” this partnership project addresses the health disparities among Medicaid recipients in Seattle and King County. This partnership includes Mercy Housing Northwest, Global to Local, Neighborcare, HealthPoint, Seattle Housing Authority, King County Housing Authority, and Public Health – Seattle & King.

3. Corporation for Supportive Housing (CSH) Interventions: CSH seeks to improve the lives of vulnerable populations, maximize public resources, and build healthy communities through lending services, technical assistance, capacity-building efforts, advocacy and policy development. This organization works to increase meaningful Medicaid funding opportunities

for supportive housing services, team-based partnership models of medical care, and coordinated access systems and referrals for at-risk populations.

4. Stewards of Affordable Housing for the Future Outcomes Initiative: Stewards of Affordable Housing for the Future (SAHF) leads policy innovation and facilitates the delivery of affordable rental homes. SAHF members operate properties in 49 states, Puerto Rico, and the Virgin Islands and provide more than 130,000 affordable rental homes across the country. SAHF Outcomes Initiative creates a common framework for members to demonstrate the impact on residents. Members are collecting data using a variety of methods to measure the number of emergency department visits, the number of hospital admittances, access to a regular physicians and health care services, and insurance coverage.

d. Hospitals and Health Systems

1. 10th Decile Project: The 10th Decile project connects frequent users of emergency health services with housing in Los Angeles County, California. More than 25 organizations, including five health centers, are involved with six neighborhood networks. Hospitals use a triage tool to identify and refer eligible individuals to intensive case management, including supportive housing services. The individuals' rent payments are subsidized by either Section 8 or Shelter Plus Care vouchers. CSH coordinates these efforts through a Social Innovation Fund award.

2. Camden Coalition of Healthcare Providers: The Camden Coalition is a citywide coalition of hospitals, primary care providers, and community representatives who collaborate to deliver better healthcare to vulnerable citizens. The Camden Coalition is introducing the Housing First model, which is an evidence-based intervention that identifies frequently hospitalized and housing-unstable individuals in southern New Jersey and provides them with a housing voucher and wraparound support services to help improve health outcomes and manage chronic conditions. The model has also demonstrated that building relationships with high-risk patients and addressing social needs can reduce emergency department use and reduce health care spending.

3. California Accountable Communities for Health Initiative: The California Endowment, Blue Shield of California Foundation, Kaiser Permanente, and Sierra Health Foundation are funding six pilot sites in California for a 3-year demonstration project to support Accountable Communities of Health (ACH). Each ACH is a partnership among health systems, health care providers, public health departments, key community and social service organizations, schools, and other entities working to improve community health in a particular geographic area. The ACHs are prioritizing community needs, including asthma, violence, obesity, and cardiovascular disease. The sites will receive up to $5.1 million in foundation funding to advance innovative health models focusing on reducing health disparities. Further work following the pilot is in the planning stage.

4. Central Florida Hospital Collaboration: The Orlando Health-hospital system in Florida conducted joint community health needs assessments in 2013 and 2016, involving multiple hospitals and public health agencies. The lack of affordable housing and homelessness emerged as central

challenges in each county that participated in the assessment. Further, the Orlando mayor set a goal of housing 300 of downtown Orlando's chronically homeless people within 3 years, which prompted the Florida Hospital investment. As a result, the Florida Hospital in Orlando committed $6 million over 3 years to address homelessness in central Florida. This aligned with a $4 million commitment from the city of Orlando and $13.5 million from Orange County. A local charity also donated the Wayne Densch Center for the Homeless to Florida Hospital, which is now leasing the property to Ability Housing, a supportive housing service program, for $1 per year.

5. Socially Responsible Investments to Address Housing Stability by UnitedHealthcare: UnitedHealth Group's treasury team has pursued socially responsible and mission-driven investments to create community development through affordable housing. Since 2015, United has made available $20 million in private capital to a developers, who have developed affordable housing units and are in the process of placing members.

6. Oregon Health Care Organizations Investments in Housing: In Portland, six health care organizations will invest $21.5 million to support 382 new housing units of affordable housing for homeless populations. These units will be constructed across three locations, one of which will have an integrated health center. This will be accomplished through a partnership with the non-profit organization Central City Concern.

7. Bon Secours Hospital in Baltimore partnership with Enterprise: Bon Secours Hospital's partnership with Enterprise to develop affordable housing units has focused on multiple housing projects in the area surrounding the hospital. Results of this partnership include an 80-unit apartment project called Bon Secours Gibbons Apartments, and 29 affordable apartments created by renovating 14 historic row houses, part of 90 restored units that have transformed five formerly rundown, largely vacant city blocks surrounding the hospital. The major source of funding for these projects is the equity from low-income housing tax credits provided by Enterprise Social Investment Corp.

e. Medicaid and Medicare

1. Illinois Department of Healthcare and Family Services Use of Section 1115 Waiver: The Illinois Medicaid agency, with the support of other agencies, submitted a Section 1115 waiver with the goal of broadening the transformation of Illinois' Behavioral Health System. Though not yet approved, the elements of the waiver include changes to the data system, Medicaid state plan amendments, collaboration among cabinet officials, and the ability to look at spending from different agencies to help determine what is at stake and what is available.

2. Michigan Section 1115 waiver: The governor of Michigan submitted a Medicaid Section 1115 waiver proposal to CMS in February 2016 to address the long-term health impacts from potential lead in water. Under the waiver, Michigan offers face-to-face Targeted Care Management (TCM) services to all Medicaid-eligible children and pregnant women served by the Flint water system (including those newly eligible under the waiver and those already

eligible). TCM will include services such as comprehensive assessment; development and management of individualized care plans; communication with beneficiaries' primary care physicians and health plans; coordination of physical and behavioral health-related services, nutritional supports, and early education programs; and referrals to and assistance with obtaining additional social supports, such as financial, housing and transportation assistance and lead assessment and abatement resources. TCM services will be provided by certain organizations approved by the state in consultation with stakeholders, and TCM case managers will be licensed registered nurses or social workers.

3. The Oregon ACO Experiment — Bold Design, Challenging Execution: In 2013, Oregon had embarked on an ambitious program centered on the Accountable Care Organization (ACO) model, which aimed to change Medicaid financing and health care delivery. Savings realized from health care entities partnering to provide integrated care have been used to invest in supportive housing.

4. Oregon's Section 1115 Medicaid waiver to evaluate coordinate care: Oregon implemented 16 Coordinated Care Organization (CCOs) to deliver managed care for Medicaid recipients. The state is tracking 17 CCO incentive metrics and 16 additional state performance metrics. By using quality, access, and financial metrics together, the state can determine whether CCOs are effectively and adequately improving care, making quality care accessible, eliminating health disparities, and controlling costs for the populations they serve.

5. Data aggregation in Washington State Health Agencies: In Washington State, there is a high level of data aggregation addressing Medicaid claims, criminal justice, behavioral health, and social services. Two data integration efforts are underway in the state: AIM (Analytics, Interoperability, and Measurement), which is funded through a State Innovation Models (SIM) grant, and PRISM (Predictive Risk Intelligence System), which is a sustainable and ongoing element of Washington State's Department of Social and Health Services. This data-sharing benefits citizens of the state by helping improve the quality and consistency of care and service delivery.

6. Support and Services at Home (SASH): SASH coordinates the resources of social service agencies, community health providers and nonprofit housing organizations to support residents in Vermont who choose to live independently at home. SASH serves seniors and others with special needs who live in congregate housing and receive Medicare support. Individualized, on-site support is provided by a Wellness Nurse and a trained SASH Care Coordinator. A 5-year demonstration grant initially supported the program, which ultimately was able to show a reduction in Medicaid spending. For more information, here is the evaluation on this program.

f. Foundations, Philanthropic Organizations, and Non-profits

1. California Endowment Build Healthy Places: The California Endowment is funding place-based initiatives in 14 California communities impacted by dramatic health inequities. These 14 partner sites were selected because of their racial, geographic, and political diversity. The sites were also chosen based on criteria grounded in social determinants of health data, grant-making

history, and key stakeholder interviews. All of these criteria were used to identify areas impacted by poor health outcomes that nevertheless had the potential to become healthy environments. Each community developed a list of targets to focus on, including schools, neighborhoods, health care services and, food systems.

2. Advancing Safe and Healthy Homes Initiative: The Kresge Foundation funded the Advancing Safe and Healthy Homes initiative, which identified nonprofit organizations in communities already working to remedy home safety hazards and address the underlying causes of dangerous or unhealthy homes (e.g., asthma-triggering allergens, lead contamination, fire hazards). The initiative focuses on policies, building codes, and laws that ensure that homes are healthy and safe. The nonprofits were tasked with remediating individual homes as well as engaging in advocacy activities to promote systemic change. The project supports initiatives in Oakland and Los Angeles, California; Greensboro, North Carolina; and Omaha, Nebraska.

3. Kresge Foundation- Colorado Coalition for the Homeless: Through funding from the Kresge Foundation, the Colorado Coalition for the Homeless seeks to prevent homelessness and create solutions for families, children and individuals. Sustained by a large group of donors, both within the state and externally, the agency has been able to continue these efforts. Specifically when assessing the data, the coalition engages in a pay for success metric so that funding can be provided at a lower interest rate based on the metrics being met.

4. Healthy Neighborhoods Equity Fund: The Healthy Neighborhoods Equity Fund in Boston, MA, seeks to support low-income populations in neighborhoods likely to undergo gentrification. A Health Impact Assessment (HIA) identified neighborhoods likely to undergo gentrification, and the fund were invested to buy property in these neighborhoods.

5. Robert Wood Johnson Foundation (RWJF) intervention in Spokane, WA: RWJF is working with nontraditional partners to improve capital absorption (e.g., debt capacity, ability to obtain and manage loans) for those working to increase opportunities for young people and provide safety net services. In Spokane, high truancy rates are being addressed by building interest among the business sector and improving the job pipeline between technical courses at local high schools and local industry.

6. Robert Wood Johnson Foundation (RWJF) Digital Bridge: RWJF in conjunction with other organizations is working on a Digital Bridge to create public health records using bidirectional information exchange with the health care systems. This national-level work will begin implementation at several sites in 2017. The approach is based on public–private partnerships, which are motivated by mutually beneficial outcomes, such as improved public health data and case reporting and lower information-sharing costs. The foundation for the Digital Bridge was based on electronic case reporting; however, there is potential to use bidirectional data exchange to encompass non-communicable diseases.

7. Habitat for Humanity: Habitat for Humanity is a global agency that helps families build and move into affordable housing based on their level of need, willingness to partner, and ability to repay a mortgage. Currently, through funding from Kresge, Habitat for Humanity is exploring a housing and health pilot.

8. Neighborworks America: Through a national network spanning all 50 states, Washington D.C., and Puerto Rico, NeighborWorks is beginning efforts to collect health and housing data. These data will be gathered and generated from all the NeighborWorks member organizations. Additionally, SuccessMeasures is a social enterprise within NeighborWorks that assists nonprofits and funders in measuring the impact of their community development activities.

g. Private and Mixed Use Investments

1. The Healthy Futures Fund: The Healthy Futures Fund (HFF) is a $200 million initiative formed by the Local Initiatives Support Corporation (LISC), Morgan Stanley, and The Kresge Foundation. HFF is connecting health care and affordable housing in more than 45 states, and it responds to the clear association between poverty and disease by incorporating a health lens into traditional community development work. The fund uses a unique financing structure that leverages New Markets Tax Credits, Low Income Housing Tax Credits, grants, and loans to help new developments get off the ground and to connect existing housing and health services to each other.

2. The Healthier California Fund: The California Endowment and Capital Impact Partners are fostering investments to improve data collection and sharing among community health centers. The California Endowment provides investments in community health centers when they transition to electronic health records (EHRs).

i. Multi-Sector Collaboratives

1. Atlanta Regional Collaborative for Health Improvement: The Atlanta Regional Collaborative for Health Improvement (ARCHI) is a regional coalition of public, private, and nonprofit organizations, all working to improve the health of the Atlanta region's residents through a collaborative approach to community health assessments and improvement strategies. ARCHI attracts a wide array of stakeholders to their meetings, which can lead to new opportunities for potential collaboration. ARCHI members include hospitals, federally qualified health centers, behavioral health providers, public health and philanthropic organizations, local governmental and regional leaders, academics, the CDC, the Atlanta Regional Commission, and the United Way of Metropolitan Atlanta.

2. Purpose Built Communities across the country: Pioneered in East Lake, Georgia, the Purpose Built community model focuses on integrating health into community planning and housing. This model seeks to improve housing quality and local education, gathering and activating

community wellness partners and programs, and creating a single nonprofit organization for the community with the mission of leading and coordinating ongoing community revitalization work. This work has yielded positive health and educational outcomes in East Lake and is currently being replicated in more than 15 other sites across the United States.

3. The Baltimore City Anchor Plan: The Baltimore City Anchor Plan is a community and economic development strategy of the city of Baltimore and three sectors of anchor institutions: (1) Bon Secours Baltimore Health System and Coppin State University; (2) Johns Hopkins University, Maryland Institute College of Art, and the University of Baltimore; and (3) Loyola University Maryland, Morgan State University, and Notre Dame of Maryland University. The plan was designed to develop long-term economic strategies that will attract 10,000 families during the next 10 years.

j. Resources and Tools for Using Data to Inform Decisions

a. Assessment and Screening Tools

1. Social Vulnerability Index (SVI): CDC's Agency for Toxic Substances & Disease Registry (ATSDR) Social Vulnerability Index uses U.S. census variables at tract level to help local officials identify communities that may need support in preparing for hazards or recovering from disaster.

2. The Behavioral Risk Factor Surveillance System (BRFSS): BRFSS is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents on their health-related risk behaviors, chronic health conditions, and use of preventive services. Established in 1984 with 15 states, BRFSS now collects data in all 50 states as well as the District of Columbia and three U.S. territories. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world.

b. Data Matching

1. Opening Doors: Federal Strategic Plan to Prevent and End Homelessness, as amended in 2015 (sources of data): To draft this strategic plan, the federal government executed a data-sharing strategy, analyzing data from HUD's Annual Homeless Assessment Report to Congress; the Department of Education (the number of children and young people enrolled in public schools who are experiencing homelessness); the U.S. Department of Veterans Affairs (the number of veterans who experience homelessness, collected using data portals such as the Homeless Operations and Management Evaluation System and patient medical records); and the Department of Justice screening tool (on housing, substance abuse, and disability).

2. Manitoba, Canada, Population Health Database: This Population Health Database is a comprehensive collection of administrative, registry, survey, and other data primarily relating to residents of Manitoba. It was developed to describe and explain patterns of health care and profiles of health and illness, facilitating cross-sector research in areas such as health care, education, and social services.

c. Social Service Referral and Coordination Systems

1. Aunt Bertha- Connecting People and Programs: Aunt Bertha's mission, as a Public Benefit Corporation, is to make information accessible to people in need and the organizations that serve them.

2. HealthIFY: HealthIFY works in the arena to make the complex task of providing community referrals and coordinating care easier for care teams by assessing, addressing, and managing social health determinants through collaborative work across community services.

3. Pathways Community Hub: The Pathways Community Hub is a community-based care coordination model scaled to community-based organizations and hospital systems at the county and state levels. This model has been sustained through contracts with Medicaid managed care plans.

4. Gateway Homeless Service Center: The Gateway Center (GWC) is designed to serve as the "gateway" to the community continuum of care that helps individuals move out of homelessness. GWC provides 338 places for men who enter into programs geared to address the underlying reasons for their homelessness, such as unemployment, addictions, mental illness or domestic abuse.

5. Health Leads: Health Leads uses data to drive quality improvement among clinical practices and to encourage health care organizations to address all patients' basic resource needs as a standard part of quality care. Health Leads shows clinical partners that it is operationally possible to systematically address social determinants of health in a typical health exam and to address how such interventions can be scaled.

k. Models Targeting Special Populations

a. Incarcerated and Newly Released Individuals

1. Sponsors, Inc. is developing affordable housing for men and women transitioning back from incarceration to the community in Lane County, Oregon: Since 1973, Sponsors, Inc. has been providing re-entry services, including transitional housing, to people who are released from Oregon prisons and jails. Recently, Sponsors, Inc., has begun plans to build an affordable apartment complex with up to 54 units in Eugene Oregon; housing will be long-term rentals and will be available to men and women transitioning back to the community.

b. Veterans and Active Duty Military

1. U.S. Department of Housing and Urban Development-VA Supportive Housing Program: The VA Supportive Housing Program is a collaboration between HUD and VA that combines HUD housing vouchers with VA supportive services to help homeless veterans and their families find and sustain permanent housing.

c. Persons Living with Disabilities

1. Section 811 Project Rental Assistance Program: The Supportive Service Demonstration for Elderly Household in HUD-Assisted Multifamily Housing provides three- year grants to selected owners of multifamily properties to implement the Demonstration. HUD's Supportive Services Demonstration (SSD) seeks to implement a voluntary, housing–based, supportive services model to facilitate aging in place by helping residents proactively address their health and social needs, including transitions across care settings, and enhance their ability for self-care management. HUD seeks to bring health, wellness, and social support interventions to HUD-assisted housing. The Demonstration supports aging in place and is expected to have positive impacts on healthcare utilization, including emergency department (ED) visits, hospitalizations, hospital readmissions, skilled nursing facility (SNF) visits, and transitions to nursing home care.

2. Project Access, Section 8 Housing Choice Vouchers in Texas: *The Project Access* program uses Section 8 Housing Choice Vouchers to assist low-income persons with disabilities in transitioning from institutions into the community by providing access to affordable housing. This is a partnership of the Texas Department of Housing and Community Affairs, Department of Aging and Disability Services, and the Department of State Health Services.

d. Elderly

1. Supportive Services Demonstration for Elderly Households in HUD-Assisted Multifamily Housing: Provides three-year grants that is intended to produce evidence about the effectiveness of this enhanced supportive services model for elderly households and to evaluate the value of enhanced service coordination paired with affordable housing for seniors. The Demonstration will be independently evaluated to determine the impact of the enhanced supportive services model on aging in place in HUD-assisted senior developments, avoiding early transitions to institutional care, and preventing unnecessary and often costly health care utilization (such as some emergency room visits and hospitalizations) for residents in HUD-assisted senior developments.

e. Non-Housing Related Interventions

1. Massachusetts Coalition of School-Based Health Centers Addresses School Dropout as a Public Health Concern: The Massachusetts Coalition of School-Based Health Centers address the local challenge of Boston high school dropout rates, treating school dropout as a public health concern. In 2008, the coalition invited policymakers and leaders from the health, education, business, philanthropic, and advocacy sectors to a forum, believing that each participating

organization had a unique way of addressing the underlying physical, emotional, and social challenges facing students at risk for dropping out. The coalition is a nonprofit organization that is funded through public and private grants and individual contributions.

2. CDC provided funding for Essentials for Childhood framework: CDC provided funding to five state health departments (California, Colorado, Massachusetts, North Carolina, and Washington) to implement the technical package in its Essentials for Childhood framework, which provides strategies for promoting safe, stable, and nurturing relationships and preventing child maltreatment. CDC also provides technical assistance and training to many other states that do not receive CDC funding. The framework is intended to create alignment at the state level among private and public stakeholders.

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