Connecting Fragmented Systems: Public Housing Authority Partnerships With the Health Sector

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Abstract

- *Objectives: The primary objective was to learn about the types of health partnerships and priorities large public housing authorities (PHAs) have developed to improve resident and community health.*
- *Methods: The Council for Large Public Housing Authorities (CLPHA) developed a survey that catalogued PHAs' partnerships with the health sector to gain insight into health-related initiatives for residents. CLPHA conducted 15 indepth interviews to develop a survey instrument that was administered online in 2017. Participants included 39 PHAs (57-percent response rate) that collectively serve 24 percent of the 3.5 million U.S. Department of Housing and Urban Development-assisted public housing and housing choice voucher households nationally (n = 847,908).*
- *Results: Large PHAs report high engagement with public health entities and community-based social service providers. Respondents also report working with healthcare service providers, including behavioral health providers and federally qualified health centers. The most common health-related activities in which PHAs are engaged include healthcare service coordination (87 percent) and improving healthy community resources (67 percent). Perceived barriers to establishing health-housing partnerships and health-related programming or alignment include concerns about privacy or liability and lack of resources or capacity.*
- *Conclusions: Large PHAs' level of engagement with the health sector vary widely by agency as does the depth and breadth of established health partnerships.*

Background

Stakeholders across sectors serving low-income Americans increasingly recognize that breaking down silos can produce more positive life outcomes and promote effective service delivery. Specifically, intersections between housing and health have recently gained attention as the housing sector has embraced "health in all policies," and the health sector has increasingly sought to address social determinants of health like housing (Bostic et al., 2012; HHS, 2010; HUD, 2014). Underscoring the impetus for these initiatives is the high medical need of the population served by housing assistance programs. National estimates suggest that, although low-income adults receiving U.S. Department of Housing and Urban Development (HUD) rental assistance are far more likely to have health insurance coverage and report higher rates of healthcare service utilization compared with those who do not receive housing assistance, they do not necessarily have better health outcomes and often report lower health status (Fenelon et al., 2017; Helms, Sperling, and Steffen, 2017; Simon et al., 2017).

The extent to which existing systems-level partnerships and alignment efforts encourage collaboration between public housing and healthcare institutions that serve this population remains largely unknown. A survey by the Council of Large Public Housing Authorities (CLPHA) sought to learn about the prevalence and types of health partnerships that have been developed to improve resident and community health, including with which health entities public housing authorities (PHAs) most often partner. Secondarily, CLPHA sought to understand what health-related priorities PHAs set, either alone or in concert with partners, and any target subpopulations of public housing residents.

The study focused on PHAs as they act as the chief provider of housing to low-income Americans at the state and local level. In this context, PHAs may play a critical role in multisector solutions to address complex challenges associated with poverty and health for millions of low-income Americans. CLPHA focuses on "large" PHAs as defined by HUD as managing 1,250 units or more. As of March 2018, CLPHA's large PHA membership manages 40 percent of the nation's public housing program, administer 26 percent of the Housing Choice Voucher (HCV) program, and operate a wide array of other housing programs. Large PHAs like these may have greater resources, scale, or both to effectively create partnerships around resident health.

Methods

CLPHA developed the health and housing partnership survey, spanning a wide range of topics, primarily through key informant interviews with public housing authorities.

Overview

This project represents a survey of members of CLPHA that was administered from August 2017 to November 2017. CLPHA is "a national non-profit organization that works to preserve and improve public and affordable housing through advocacy, research, policy analysis, and public education" (CLPHA, 2018).

Survey Development

CLPHA developed a draft survey instrument designed to collect information on a wide range of PHA partnerships with the health sector, including type of common health partners, health priorities, type of health-related initiatives, extent to which health partnerships were formalized, source or sources of funding for health programming, engagement with data sharing with health partners, and incorporation of resident health into strategic planning efforts.

The survey instrument was modified based on key informant interviews with 15 PHAs conducted from April 2017 to July 2017. Each PHA executive director contacted for these interviews was asked to invite all staff (for example, directors or coordinators) knowledgeable about the agency's current activities and future planning of health-related initiatives, and each call consisted of between one and five PHA staff members and one CLPHA staff member who acted as the interviewer. Interviews ranged in length from 30 to 90 minutes, and each agency was asked to share their organization's health-related activities and priorities, with standard followup questions to elicit greater detail. Agencies described existing partnership activities, services, or referrals, examples of their strongest health partnerships, and short- and long-term goals. Some PHAs were asked to review items from the survey instrument for clarity and comprehensiveness. The final survey instrument included 21 core survey questions, including affirmative "choose all that apply" statements, about respondents' health partnerships. Appendix A reproduces the survey questions.

Survey Distribution

The survey was distributed online to all 68 CLPHA members. One email announcement of the survey was sent to PHA executive directors. Information about the survey was subsequently included in three editions of the CLPHA e-newsletter and followed up with individual emails to PHA executive directors from nonrespondent PHAs on two occasions, 1 month prior to closing the survey and 1 week prior to closing. PHA executives, senior-level staff, or both were encouraged to complete the survey on behalf of each agency, drawing on other staff or external partners as needed to accurately answer all survey questions. No incentives were offered to respondents to complete the survey. Duplicative survey responses from the same housing authority were clarified with followup emails or phone calls.

Results

The survey elicited responses from 39 PHAs (57 percent of all CLPHA members) that collectively serve 24 percent (847,908) of the 3.5 million HUD-assisted public housing and HCV households nationally. The study sample includes PHAs from 20 different states and represents 80 percent of the 1.1 million public housing and HCV units managed by CLPHA members. When compared with nonrespondents, survey respondents represented larger portfolios on average, with the mean number of HUD-assisted, occupied units among respondents at 8,737 compared with 2,499 among nonrespondents. Slightly more representation was from states in the West (33.3 percent of respondents versus 18.5 percent of nonrespondents) and slightly less from states in the South (28.2 versus 40.7 percent). For a more detailed comparison of survey respondents and nonrespondents see exhibit 1.

Exhibit 1

Characteristics of Public Housing Authority Respondents

	Respondents (n = 39)	Nonrespondents (n = 27)
Characteristic	Mean (Median)	
Number of assisted, occupied units	8,737 (1,511)	2,499 (1,922)
Percent elderly	13.5 (11.9)	12.9 (12.1)
Percent disabled age 62 or less	15.1 (13.7)	14.4 (15.4)
Percent below 80% AMI	96.9 (98.4)	96.8 (98.6)
Number of children	15,443 (7,049)	8,210 (8,170)
Region	n (%)	
Northeast	7 (18.0)	6 (22.2)
Midwest	7 (18.0)	4 (14.8)
South	11 (28.2)	11 (40.7)
West	13 (33.3)	5 (18.5)
U.S. Virgin Islands or Puerto Rico	1 (2.56)	1 (3.70)

AMI = Area Median Income.

Internal Planning, Goal-Setting, and Staff Responsibilities

A key objective of the survey was to gain a sense of motivation by large PHAs to expand health-related programming and systems alignment efforts and to better understand the nature of their goals. For example, in response to the following multiple-choice question, "In general, our housing authority would like to _____ our work at the intersection of health and housing," 69 percent of respondents answered "expand," 31 percent answered "maintain/improve," and no respondents said "reduce." Despite interest in expanding or maintaining current efforts, PHAs are often without resources dedicated to health initiatives, and they draw on a variety of funding sources to support their health programming and alignment efforts. Most respondents indicate that they appropriate internal PHA funds (62 percent) and resources provided by nonprofit partners (56 percent). One-third or fewer PHAs report drawing funding from other sources such as foundations, hospitals and other healthcare service providers, private-sector partners, and community development corporations or organizations. One-half of Moving to Work (MTW) demonstration program agencies that responded (6 of 12) report using funding flexibility under the MTW program to fund health-related programming and alignment efforts. Five agencies (13 percent) report using the Rental Assistance Demonstration (RAD) program to enhance the built environment to encourage healthier behaviors and improve accessibility. Fewer than 10 percent report using local and federal government grants and social impact, or "pay for success," bonds to help fund health-related initiatives.

Dedicated Health Staff

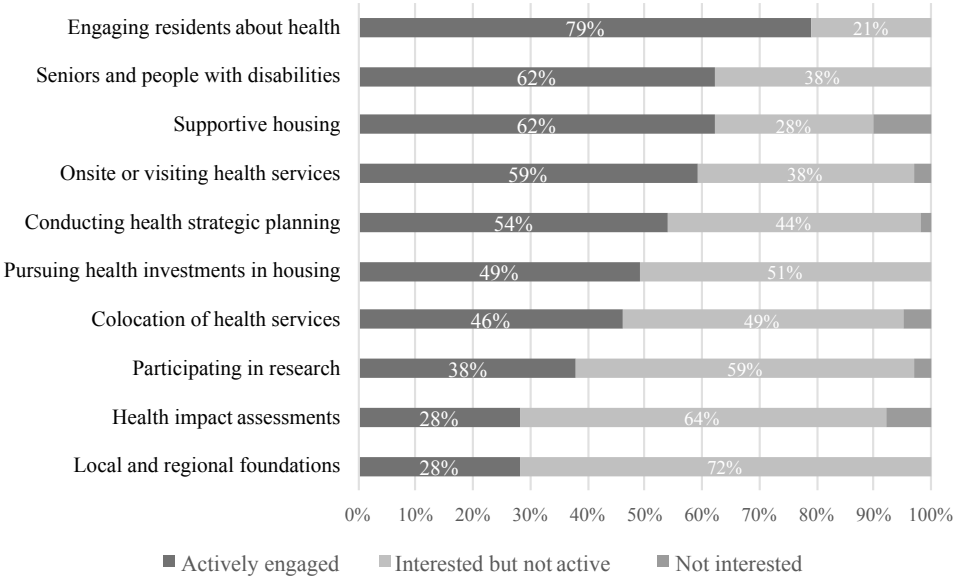
Only 5 PHAs (13 percent) report having dedicated housing-health staff members. The staff most commonly involved with health-housing initiatives are resident services directors and staff (74 percent), service coordinators (67 percent), Family Self-Sufficiency Program coordinators (51 percent), property management personnel (41 percent), and executive leadership members (33 percent). Fewer than one-fourth of respondents (21 percent) report having staff hired in temporary, grant-funded capacities related to health activities.

Types of Services

PHAs' current health-related initiatives and interests in future activities varied. Respondents were asked to indicate in which of 10 activities they were engaged and those that interest their institutions (exhibit 2). Most PHAs report working with residents around health priorities (79 percent), providing or contracting for supportive housing and other wraparound services (62 percent), implementing health interventions for seniors and people with disabilities (62 percent), facilitating onsite or visiting health service delivery (59 percent), and conducting strategic planning focused on setting health-related goals (54 percent).

Exhibit 2

Current Public Housing Authority Health Activities and Interests in Future Activities



Note: N = 39.

Health Impact Assessments

Despite high rates of engagement with residents and health-related strategic planning, only 28 percent of PHAs report having conducted more formalized, comprehensive health impact assessments (HIAs), which "[use] an array of data sources and analytic methods and [consider] input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population" (NRC, 2011: 5). PHAs are interested in these efforts; 64 percent say they are interested in conducting HIAs to address new projects' impacts on resident health (exhibit 2). Other health activities PHAs are included in but not currently pursuing include raising funds from local or regional foundations to support health programs (72 percent), participating in health-housing research projects and interventions (59 percent), and securing investments in affordable housing from health sector partners (51 percent). Few PHAs indicate a lack of interest in any of the 10 activity options.

Priority Health Conditions

PHAs were asked whether or not they had internal programs, work with external health partners, or both, that specifically address 22 health condition or behavior categories spanning medical and behavioral health (exhibit 3). PHAs are most commonly engaged with substance use disorders (SUDs), with 72 percent of respondents indicating they work with SUDs and addiction broadly or alcohol dependence and tobacco use or addiction specifically. About two-thirds (64 percent) work on at least one specific medical health condition, such as diabetes (46 percent), heart disease (46 percent), and asthma (38 percent), and nearly one-half of all PHAs (44 percent) report working on two or more of the conditions in this category.

One-half of PHAs (51 percent) work on preventive health efforts, such as prenatal care (36 percent) and sexually transmitted infections and diseases (31 percent) and dental care (28 percent), with 36 percent working on two or more. Slightly less than one-half (46 percent) report focusing on behavioral health conditions. A third of respondents (33 percent) have efforts directed at physical disabilities. An identical number of PHAs (33 percent) report focusing on general wellness (for example, stress reduction, physical activity, and nutritious food preparation and eating) rather than

Exhibit 3

Health Conditions of Interest for PHAs

Health Conditions	n	%
Behavioral health conditions[a]	18	46
Anxiety and stress	16	41
Bipolar Disorder	13	33
Depression	15	38
Post-traumatic stress disorder	12	31
Schizophrenia	10	26
Medical health conditions[b]	25	64
Asthma	15	38
Chronic obstructive pulmonary disease	8	21
Diabetes	18	46
Dementia	9	23
Heart disease	18	46
Obesity	13	33
Physical disabilities	13	33
Preventive health[c]	20	51
Dental care	11	28
Infant mortality	9	23
Prenatal care and pregnancy	14	36
Sexually transmitted infections and diseases	12	31
Vision care	10	26
Substance use disorders[d]	28	72
Addiction, general	22	56
Alcohol dependence	21	54
Substance use disorders	18	46
Tobacco use	25	64
Wellness, no specific condition	13	33

PHA = public housing authority.

[a] Twelve PHAs (31 percent) have initiatives addressing two or more conditions in this category.

[b] Seventeen PHAs (44 percent) have initiatives addressing two or more conditions in this category.

[c] Fourteen PHAs (36 percent) have initiatives addressing two or more conditions in this category.

[d] Twenty PHAs (51 percent) have initiatives addressing two or more conditions in this category.

Note: N = 39.

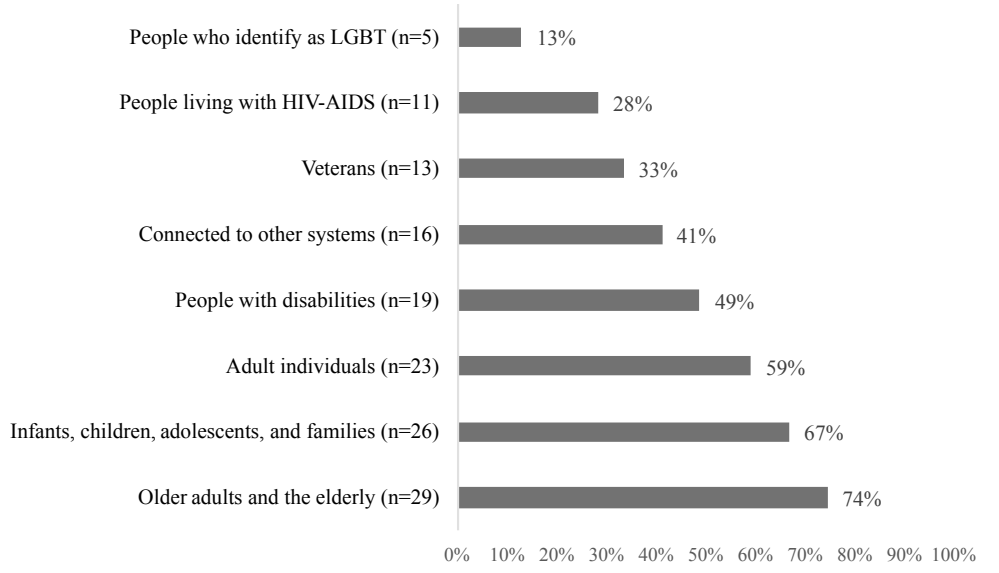
or in addition to programming or services addressing specific conditions. It should be noted that 8 of the 13 PHAs choosing "wellness" as an option in this category also indicate they also work on at least one specific health condition.

Subpopulations of Interest

Although PHAs may focus on certain priority health conditions and behaviors, they may also focus their programming and partnership efforts on specific segments of their resident population. The leading subpopulations of interest (exhibit 4) are older adults and elderly people (74 percent); infants, toddlers, children, and families (67 percent); adult individuals (59 percent); and people with disabilities (49 percent). A smaller proportion of PHAs report a focus on people connected to other systems, such as the criminal justice system or Medicare-Medicaid dual eligibles (41 percent); veterans (33 percent); people living with HIV/AIDS (28 percent); and people identifying as lesbian, gay, bisexual, or transgender (13 percent).

Exhibit 4

Resident Subpopulations Targeted With Public Housing Authority Initiatives



HIV-AIDS = human immunodeficiency virus and acquired immune deficiency syndrome. LGBT = lesbian, gay, bisexual, or transgender.

General Direction of Health Initiatives

Most PHAs (87 percent) report supporting healthcare service coordination activities. Other common focuses of programming include increasing healthy community resources like community gardens, healthy retail options, and bike-sharing services (67 percent), improving the built environment (46 percent), and varied offerings dictated by funders or partners (36 percent). Slightly fewer than one-third of PHAs help provide preventive health for children and adolescents

(30 percent), offer harm reduction resources like prevention and treatment of sexually transmitted infections and diseases or drug use (30 percent), and support medication management support (20 percent).

Location of Programming and Service Provision

When asked to identify the location of their programming, most PHAs indicate that their health programming focused on residents in specific buildings (72 percent). Slightly more than one-half of respondents (51 percent) report having initiatives that bring health services or education to residents' doorsteps (including visiting services), and slightly less than one-half of respondents (44 percent) take a community "hub"-based approach with institutions like schools, hospitals, community centers, libraries, and churches. Slightly less than one-fourth of respondents (23 percent) report having other forms of decentralized health programming (not focused on specific buildings) that serve voucher families.

Types of Health Partners

The survey asked PHAs to indicate which of 34 types of organizations they work with across public health, healthcare service providers, community-based health and social service providers, community resources and development, and advocacy/funding/research. PHAs most commonly work with community-based social and human service providers and public health entities, with 85 percent of respondents (n = 33) working with at least one health partner in each of those categories (exhibit 5). PHAs report often working with multiple organizations within these categories: 56 percent work with three or more community-based social or human service providers such as Aging and Disability Resource Centers and Area Agencies on Aging (56 percent) and homeless continuums of care (51 percent), and 36 percent report working with three or more public health entities such as local and state health departments (64 percent and 62 percent respectively), violence prevention organizations (33 percent), and organizations serving veterans (33 percent).

In addition to community-based service providers and public health, most PHAs also work with healthcare service providers (79 percent); advocacy, funding, and research entities (72 percent); and community resources and development organizations (54 percent). One-half of respondents (49 percent) work with three or more types of healthcare service providers. Some of the most common partners in this category include behavioral health providers (51 percent), fitness facilities and providers (41 percent), federally qualified health centers (38 percent), hospitals (33 percent), and dental providers (33 percent). Within the advocacy, funding, and research category, PHAs most commonly work with universities and research centers (46 percent) and advocacy organizations (44 percent). The most prevalent community resource or development partners for PHAs are parks and recreation (36 percent), community development corporations (31 percent), and law enforcement (31 percent).

Exhibit 5

Most Common Health Partners for PHAs

Health Partners	n	%
Community resources and development[a]	21	54
Affinity groups (for example, walking, running, weight loss, etc.)	7	18
Community development corporations	12	31
Environmental health	4	10
Law enforcement	12	31
Parks and recreation agencies and organizations	14	36
Urban planners	3	8
Healthcare service providers[b]	31	79
Behavioral health providers	20	51
Dental	13	33
Emergency departments	5	13
Family planning and sexual health providers	5	13
Federally Qualified Health Centers	15	38
Fitness providers/facilities	16	41
Hospitals	13	33
State Medicaid agencies	4	10
Medicaid Managed Care Organizations	6	15
Pharmacists	6	15
Public health[c]	33	85
Local health departments	25	64
Nutrition organizations	24	62
Schools and school-based providers	8	21
State health departments	5	13
Veterans organizations	13	33
Violence prevention organizations	13	33
Community-based human and social service providers[d]	33	85
Aging & Disability Resource Centers and Area Agencies on Aging	22	56
Assisted living	11	28
Child and adolescent health and welfare	13	33
Home health agencies	11	28
Homeless continuums of care	20	51
Social service providers and charities, general	23	59
Supportive housing services	14	36
Advocacy, funding & research[e]	28	72
Advocacy organizations	17	44
Data sharing entities	5	13
Foundations/funders	9	23
Think tanks	2	5
University/research centers	18	46

PHA = public housing authorities.

[a] Seven PHAs (18 percent) work with three or more types of organizations in this category.

[b] Nineteen PHAs (49 percent) work with three or more types of organizations in this category.

[c] Fourteen PHAs (36 percent) work with three or more types of organizations in this category.

[d] Twenty-two PHAs (56 percent) work with three or more types of organizations in this category.

[e] Six PHAs (15 percent) work with three or more types of organizations in this category.

Note: N = 39.

Information Sharing

Most respondents have formal memoranda of understanding (MOUs) with health partners (69 percent) and refer residents to healthcare service providers (64 percent), one-half of respondents report sharing data with health partners (49 percent), and slightly under one-fourth of PHAs share or exchange financial resources with health partners (23 percent) and share staffing resources (21 percent).

To characterize the reciprocal nature of data sharing activities for health initiatives, respondents could indicate the following, choosing all that applied—11 percent characterize the data sharing as unidirectional (share data with partners or partners share data with the agency without reciprocation), 11 percent as multidirectional (share data with and receive data from health partners), 39 percent as both or depending on the partner (engaged in both unidirectional and multidirectional data sharing), 6 percent as supported by centralized or third-party data system or repository, or 17 percent as conducted without a formal process (data shared on informal basis). One-third of respondents (33 percent) report not currently sharing or receiving data from health partners.

Limitations

This survey received responses from 39 of the 125 large PHAs (managing 1,250 or more units) across the country. Although the 39 survey respondents represent 24 percent of all public housing and HCV households served nationally, this sample is self-selected (that is, those who chose to complete the survey) rather than a representative sample of large PHAs or PHAs of any size. Although the demographics of nonrespondents are comparable with those of respondents (see exhibit 2), it is unknown whether the PHAs that did not complete the survey have a higher, similar, or lower level of engagement with health partners.

Additionally, the survey only includes data from PHAs that were members of CLPHA as of August 2017. The capacity, activity level, and interest in health-housing partnerships among smaller housing authorities (fewer than 1,250 available units) cannot necessarily be inferred based on the results of this survey. CLPHA is currently fielding a brief survey to more than 3,000 PHAs of various sizes, with the support of the Public and Affordable Housing Research Corporation (PAHRC).

Lastly, the survey did not provide detailed data about PHAs' individual partnerships and programs, instead providing a more high-level summary snapshot. Additional surveys of and interviews with PHAs could explore the specific elements of successful, fully reciprocal partnerships, as well as barriers to cross-sector collaboration.

Discussion

This survey of large PHAs presents findings relevant to the future of housing and health partnerships involving PHAs. First, all PHAs want to either expand or improve on their work at the intersection of housing and public health, with 92 percent already engaged in at least some health partnerships. Second, despite engaging in a variety of program and systems alignment efforts (targeting specific subpopulations and conditions), partnership opportunities between PHAs and certain health entities that have clear overlap in populations and needs served are seemingly underexplored. Third, PHAs must overcome challenges like limited funding and regulatory hurdles (for example, Health Insurance Portability and Accountability Act[1] [HIPAA] privacy concerns) to expand internal capacity and deepen cross-sector engagement—challenges that health partners can

[1] Pub. L. 104–191, 110 Stat. 1936. August 21, 1996.

help PHAs resolve. The findings of this survey form an important baseline regarding PHA health system partnerships and underscore the desirability of PHAs as key housing partners for all facets of the health sector serving vulnerable populations.

Engaging Underutilized Health Entities

The survey suggests that PHAs are engaged with a wide and varying array of health partners across components of health systems, but certain types of health partners could partner with PHAs given demographic information about resident or patient populations and utilization patterns. For example, the following two emerged as key areas of opportunity.

1. Medicaid entities: Although 85 percent of PHAs work with at least one type of healthcare service provider, most PHAs do not work with large Medicaid partners, such as state Medicaid agencies (10 percent) or Medicaid managed care organizations, or MCOs (15 percent). An estimated 75 percent of adults in HUD-assisted households have public health insurance (for example, Medicaid, Medicare), suggesting more opportunities for better alignment between PHAs and Medicaid systems exist (Fenelon et al., 2017; Helms, Sperling, and Steffen, 2017; Simon et al., 2017). Many Medicaid MCOs have started to invest more resources in social determinants of health such as housing, with promising opportunities to serve residents' often-complex health needs (Scally, Waxman, and Gourevitch, 2017; SAHF, 2017).

2. Acute or emergency care: Fewer than one-half of PHAs work with key safety-net healthcare service providers like hospitals (33 percent) and emergency rooms (13 percent). Residents in HUD-assisted households use emergency services at a higher rate than the general population. According to a recent report, "Nearly one-fourth (22.9 percent) of HUD-assisted adults reported two or more ER visits during the past 12 months. This rate is greater than the 17.8 percent rate among unassisted low-income renters, and more than twice the 8.6 percent rate among adults in the general population" (HUD, 2017: 13). Many PHAs indicate having standard operating procedures for staff to connect residents with emergency health services (38 percent) and nonemergency health services (49 percent), but only 18 percent report systematically tracking these referrals. Interventions seeking to decrease nonurgent emergency department visits such as case management, care planning, information sharing, and diversion strategies have been shown to be effective at reducing unneeded visits (Moe et al., 2017; Raven et al., 2016).

Formalizing Partnerships

Most CLPHA members report establishing formal MOUs with health partners and referring residents to healthcare service providers. More than one-half of respondents report sharing data with health partners, although it is unclear from this survey how much of PHAs' data-sharing informs decision making and the sophistication level of the data being collected, tracked, and analyzed. PHAs express concern about violating HIPAA requirements, with several PHAs identifying this as a barrier to confidently engage health partners around health data. The level of formality with which PHAs and their partners conduct business is less critical to evaluate than the degree to which PHAs and their partners engage in collaborative goal setting, decisionmaking, and accountability tracking. Formalized agreements can help facilitate such partnerships, as well as help PHAs manage

long-term partnerships based on stated, shared commitments. Separate from this survey, CLPHA works with membership to identify examples of MOUs with health sector partners that have effectively established or strengthened partnerships, or both.

Funding Partnerships and Capacity Building

Currently, large PHAs are primarily funding their health-related activities with limited internal resources and nonprofit partners, often adding health partnership activities to resident service leadership and staff without resources for dedicated staff. Smaller numbers of PHAs—around one-fourth or fewer—fund these efforts with the support of foundations, healthcare service providers, private-sector partners, and community development corporations or organizations. Even fewer are leveraging alternative financing mechanisms for health-related services such as social impact bonds, despite large PHAs' general familiarity with innovative, mixed-finance deals from affordable housing development. To increase capacity, PHAs could explore innovative financing mechanisms for health-related activities and prioritize financial arrangements and health partnerships that provide financial resources long-term and as needed.

Partnership Quality and Effectiveness

Although the survey provides greater insight into PHAs' existing health partnerships—with whom they work and in what capacity—it did not collect enough data to assess how far-reaching these partnerships are or the quality of these partnerships more generally. To foster better collaboration between PHAs and the health sector, more information about these health-related activities and priorities is needed, as well as the partnerships that make them possible and sustainable. Future surveys should seek to identify success factors and barriers specific to PHAs and health sector partners to eventually assess the quality of these partnerships in their interconnectedness, impact on outcomes, and cost-effectiveness.

Future Research

Results suggest merit in this survey and support expanding administration to a larger, nationally representative sample of PHAs to provide greater insight into these critical partnerships. The CLPHA released another version of this survey in February 2018 to more than 3,000 PHAs of various sizes, with the support of the PAHRC.

Conclusion

CLPHA's survey results provide a compelling snapshot and baseline concerning the number and breadth of PHA partnerships with the health sector, including types of partners, health conditions of interest, subpopulations targeted, types of collaborative activities, and service or educational offerings for residents of HUD-assisted housing, which all constitute key ingredients in successful cross-sector collaborations or partnerships aimed at improving health (Towe et al., 2016). Additionally, this project identified gaps in the existing partnership and health intervention landscapes pertinent to housing agencies. Large PHAs' level of engagement with the health sector and health-related priorities vary widely by agency, as do the goals of their established health partnerships.

Future inquiry could explore other ingredients of successful cross-sector collaboration, such as the quality of these PHA health partnerships individually and collectively, the depth and impact of cross-sector investments related to these partnerships, and the effectiveness of policies developed and implemented to support collaboration across sectors.

Housing providers pursue a wide range of health partnerships and nearly uniformly seek to expand and refine cross-sector efforts to improve resident health. This desire should be paired with resources to help PHAs build greater capacity to partner with the health sector and, in the process, learn more about what successful partnerships can achieve for individuals and families in assisted housing.

Appendix A: Survey Instrument (40 total questions, 21 survey questions)

Introductory Text:

The Council of Large Public Housing Authorities (CLPHA) is committed to working with public housing authorities (PHAs) and health sector partners to develop resources, trainings, and convenings that promote housing as a critical social determinant of health and wellbeing.

This survey will help establish a baseline of cross-system partnerships between housing and health providers. Results from this survey will provide a clear sense of how larger PHAs are working with health system partners, what lessons can be learned from successes to date, and what needs PHAs have as they work to improve resident/community health and wellbeing.

General Information Questions (4 total)

- Housing Authority Name
- State/Province
- Who is Completing the Survey on Behalf of the Agency?
- Point of Contact for Health-Related Activities

Core Survey Questions (16 total)

1. In general, our housing authority would like to _____ our work at the intersection of health and housing.
    - Expand
    - Maintain/Improve
    - Reduce

2. We are interested in or currently engaged in the following activities (not interested, interested but not active, active)
   - Conducting strategic planning focused on setting health-related goals
   - Engaging resident to guide efforts to improve community health
   - Health impact assessments to assess new projects' impacts on resident health
   - Securing investments in affordable housing from health sector partners
   - Raising funds from local or regional foundations to support health programs
   - Colocation of affordable housing and health service providers
   - On-site and/or visiting health service delivery for residents
   - Participating in health-housing research projects and interventions
   - Implementing health interventions for seniors and/or people with disabilities
   - Providing and/or contracting for supportive housing services and/or other wraparound health and human services
3. We have internal programs and/or work with external partners to specifically address the following conditions in our resident population. (Check all that apply.)
   - Addiction
   - Alcohol dependence
   - Asthma
   - Anxiety/stress
   - Bipolar Disorder
   - COPD
   - Dental
   - Depression
   - Diabetes
   - Dementia
   - Disabilities (physical)
   - Heart disease / high blood pressure
   - Infant mortality
   - Post-traumatic stress disorder (PTSD)

- Prenatal care and pregnancy
- Obesity
- Schizophrenia
- Sexually-transmitted infections and diseases (STI/D)
- Substance use disorders
- Tobacco use
- Vision
- We do not focus on specific conditions. Instead, we focus on general wellness and healthier behaviors (e.g. stress reduction, physical activity, nutritious food preparation and eating, etc.).
- We do not currently have targeted health-related programming.

4. We have specific health programs, interventions, and/or partnerships targeting the following groups of residents:

- Families ("whole family" interventions)
- Adult individuals
- Adolescents
- Children
- Infants/toddlers
- Expectant and new mothers/parents
- Seniors
- People living with physical disabilities
- People living with psychiatric disabilities
- People living with HIV/AIDS
- Formerly incarcerated (or other "justice-involved") individuals/families
- People who identify as lesbian, gay, bisexual, and/or transgender (LGBT)
- Those receiving other forms of public assistance besides HUD assistance (e.g. Medicaid, TANF, SSI/SSDI)
- Dual-eligibles (i.e. people enrolled in both Medicare and Medicaid)
- Veterans
- N/A or None of the Above

5. Our health-housing programming and alignment efforts can best be characterized as: (Check all that apply)
   - Centralized (i.e. focused on residents in specific buildings)
   - Decentralized (i.e. focused on voucher families)
   - Visiting (i.e. bringing health interventions to residents' doorsteps)
   - "Hub"-based (e.g. schools, hospitals, community centers, libraries, churches)
6. Our health-housing programming and alignment efforts include: (Check all that apply)
   - Built environment (e.g. building rehabilitation, removing environmental health hazards, improving walkability of neighborhoods, increasing use of stairs)
   - Increasing healthy community resources (e.g. urban gardens, farmers markets, bike sharing services, "healthy" retail options)
   - Healthcare service coordination (i.e. working with health service providers to make referrals, provide on-site or visiting services, etc.)
   - Medication management and other compliance-related interventions
   - Preventative health for children and adolescents (e.g. vaccinations)
   - Harm reduction (e.g. STI/D prevention and treatment, drug use)
   - Focused on groups dictated by funders/partners (i.e. those funding/supporting the intervention decide who to target within our resident population)
   - None of the Above
   - Other (please specify)
7. Our health and housing interventions are targeted at residents with the following forms of HUD assistance. (Check all that apply)
   - Public housing
   - Project-based vouchers
   - Tenant-based vouchers
   - Special-purpose vouchers (e.g. HUD-VASH, FUP, NED)
8. Our health and housing work leverages the following programs supported by HUD: (Check all that apply)
   - LIHTC-financed or RAD developments
   - Continuums of Care (CoCs)
   - Choice Neighborhoods

- Hope IV Revitalization
- Lead Safe Housing
- Section 202 – Supportive Housing for Elderly
- Section 811 – Supportive Housing for Persons with Disabilities
- Self-Sufficiency Program
- Smoke-Free Initiative
- None of the Above
- N/A
- Other (please specify)

9. Which of the following partners directly support or provide health-related programming and/or help guide your efforts to improve resident and community health? (Check all that apply)
   - Advocacy organizations
   - Aging and Disability Resource Centers (ADRCs) / Area Agencies on Aging (AAAs)
   - Affinity-based community groups (e.g. walking/running/weight loss support groups)
   - Assisted living providers
   - Behavioral health providers
   - Bike-share programs
   - Child and adolescent health and welfare
   - Community development corporations/organizations
   - Continuums of Care (CoC)
   - Data sharing organizations (warehouses, repositories, nonprofit conveners, etc.)
   - Dental care providers
   - Environmental health organizations
   - Emergency/urgent care departments
   - Family planning and sexual health providers
   - Federally-Qualified Health Centers (FQHCs)
   - Fitness providers or facilities (i.e. gyms, YMCA/YWCAs)
   - Funders for health programming
   - Home health agencies / home care

- Hospitals – nonprofit
- Hospitals – private
- Law enforcement
- Local health department
- Medicaid – Managed Care Organizations (MCOs)
- Medicaid – State Agencies
- Medicare – Special Needs Plans (including Dual-Eligible SNPs)
- Nutrition (including food shopping/preparation)
- Parks and recreation agencies/organizations/foundations
- Pharmacists
- Physician practices (separate from physicians affiliated with health systems)
- Private-sector health clinics
- Schools and school-based providers and clinics
- Social service providers / charities (e.g. Catholic Charities)
- State health department
- Supportive housing service providers
- Think tanks
- Transitional care providers
- Universities/research centers
- Urban planners
- Veterans organizations and/or Veterans Administration
- Violence prevention organizations

10. Choose "yes" if at least one health partnership satisfies each statement. (Check all that apply)
    - We have Memorandums of Understanding (MOUs) with our health partners.
    - We share data with our partners for health-related goals.
    - We refer patients/residents to each other when appropriate.
    - We share/exchange financial resources when appropriate.
    - We share staffing resources (e.g. co-hire FTEs, loan/receive staffing support) when appropriate.

11. Sources of funding for health-related initiatives: (Check all that apply)

- PHA Funds (e.g. Section 8 admin fees, MTW-related savings, ROSS Program)
- Foundations
- Private-sector partners (e.g. Medicaid managed care)
- Nonprofit partners
- Community development corporations/organizations
- Hospitals and other healthcare service providers
- Social impact bonds or other non-traditional financing
- N/A
- Other (please specify)

12. Which of the following statements are true for your agency, if any? (Check all that apply)

- We leverage funding flexibility from the Moving to Work (MTW) program to fund health-related programming and alignment efforts.
- We have used RAD conversions as a vehicle for public health-informed changes (e.g. making buildings more accessible and tailored to residents' health and human service needs) to residents' built environments.
- We do NOT use MTW flexibility or RAD specifically for health-related programming or systems alignment.

13. We have (or have ready access to) data about resident health in the following areas: (Check all that apply)

- Chronic health conditions (e.g. diabetes, asthma, depression, COPD, HIV/AIDS)
- History of emergency healthcare referrals (i.e. PHA staff referrals to services)
- Health-related behaviors (e.g. physical activity, tobacco use)
- Attendance at and/or satisfaction with health education programming
- Health insurance coverage status
- Healthcare service utilization (e.g. visits to primary care)
- Other (please specify)

14. Our data sharing with healthcare partners is: (Check all that apply)

- Unidirectional (i.e. we share data with them or they share data with us without reciprocation)
- Multi-directional (i.e. we share data with and receive data from health sector partners)

- Depends on the partner; we are engaged in both unidirectional and multidirectional data sharing
- Supported by centralized and/or third-party data systems or repositories
- Conducted without a formal process (i.e. on an informal basis)
- Not Sure
- We do not currently share data with healthcare partners

15. Which of the following are true for your agency?
    - We have an established process for staff to follow to connect residents with emergency health services.
    - We have an established process for staff to follow to connect residents with non-emergency healthcare services.
    - We track referrals to health services by resident/household.
16. Which of the following staff members are involved with your health-housing initiatives? (Check all that apply; there might be overlap since specific titles vary by PHA)
    - Service coordinators
    - Resident services
    - Family Self-Sufficiency coordinators
    - Dedicated health-housing staff
    - Executive leadership (e.g. ED/CEO, COO, etc.)
    - Property management
    - Temporary/grant-funded staff
    - Other (please specify)

Partnership Inventory Questions (5 total)

Please complete the following fields to provide an inventory of your health-housing partners.

1. Partner 1 (name of partner, nature of partnership and any relevant notes)
2. Partner 2 (name of partner, nature of partnership and any relevant notes)
3. Partner 3 (name of partner, nature of partnership and any relevant notes)
4. Partner 4 (name of partner, nature of partnership and any relevant notes)
5. Partner 5 (name of partner, nature of partnership and any relevant notes)

CLPHA Programming-Specific Questions (5 total)

- What would you hope to learn more about from other housing authorities and experts focused on the intersection of health and housing? (open-ended)
- What resources would you like to see come from peer PHAs and generally from CLPHA's *Housing Is* Initiative? (open-ended)
- What activities would you and your staff like to participate in to improve your organization's health and housing planning and programming? (open-ended)
- Would you be interested in attending an online health-housing strategic planning training in early 2018? (yes. no, maybe)
- Would you be willing to participate in a Health-Housing workgroup or webinar series?

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References

Bostic, Raphael W., Rachel L.J. Thornton, Elizabeth C. Rudd, and Michelle J. Sternthal. 2012. "Health in All Policies: The Role of the US Department of Housing and Urban Development and Present and Future Challenges," *Health Affairs* 31 (9): 2130–2137.

Council of Large Public Housing Authorities (CLPHA). 2018. "About CLPHA." http://clpha.org/about.

Fenelon, Andrew, Patrick Mayne, Alan E. Simon, Lauren M. Rossen, Veronica Helms, Patricia Lloyd, Jon Sperling, and Barry L. Steffen. 2017. "Housing Assistance Programs and Adult Health in the United States," *American Journal of Public Health* 107 (4): 571–578.

Helms, Veronica E., Jon Sperling, and Barry L. Steffen. 2017. *A Health Picture of HUD-Assisted Adults, 2006–2012: HUD Administrative Data Linked With the National Health Interview Survey*. Washington, DC: U.S. Department of Housing and Urban Development. huduser.gov/portal/sites/default/files/pdf/Health-Picture-of-HUD.pdf.

U.S. Department of Health and Human Services (HHS). 2010. "Healthy People 2020: An Opportunity To Address Societal Determinants of Health in the United States." https://www.healthypeople.gov/2010/hp2020/advisory/SocietalDeterminantsHealth.htm.

U.S. Department of Housing and Urban Development (HUD). 2014. *Strategic Plan* 2014–2018. Washington, DC. huduser.gov/portal/publications/pdf/HUD-564.pdf.

Moe, Jessica, Scott W. Kirkland, Erin Rawe, Maria B. Ospina, Ben Vandermeer, Sandy Campbell, and Brian H. Rowe. 2017. "Effectiveness of Interventions To Decrease Emergency Department Visits by Adult Frequent Users: A Systematic Review," *Academic Emergency Medicine* 24 (1): 40–52.

National Research Council (NRC). 2011. *Improving Health in the United States: The Role of Health Impact Assessment*. Washington, DC: The National Academies Press. https://doi.org/10.17226/13229.

Raven, Maria C., Margot Kushel, Michelle J. Ko, Joanne Penko, and Andrew B. Bindman. 2016. "The Effectiveness of Emergency Department Visit Reduction Programs: A Systematic Review," *Annals of Emergency Medicine* 68 (4): 467–483. https://doi.org/10.1016/j.annemergmed.2016.04.015.

Stewards of Affordable Housing for the Future (SAHF). 2017. *The Path to Partnership: Lessons Learned in the Pursuit of Joint Initiatives Between Affordable Housing Providers and Medicaid Managed Care Programs. Stewards of Affordable Housing for the Future*. Columbus, OH. https://www.sahfnet.org/sites/default/files/uploads/sahf.hma_matchmaking_lessons_learned_final_4.20.17.pdf.

Scally, Corianne Payton, Elaine Waxman, and Ruth Gourevitch. 2017. *A National Insurer Goes Local: Emerging Strategies for Integrating Health and Housing*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/91966/2001419_uhc_case_study_3.pdf.

Simon, Alan E., Andrew Fenelon, Veronica Helms, Patricia C. Lloyd, and Lauren M. Rossen. 2017. "HUD Housing Assistance Associated With Lower Uninsurance Rates and Unmet Medical Need," *Health Affairs* 36 (6): 1016–1023.

Towe, Vivian L., Laura Leviton, Anita Chandra, Jennifer C. Sloan, Margaret Tait, and Tracy Orleans. 2016. "Cross-Sector Collaborations and Partnerships: Essential Ingredients To Help Shape Health and Well-Being," *Health Affairs* 35 (11): 1964–1969.

Additional Reading

Cunningham, Mary, and Graham MacDonald. 2012. *Housing as a Platform for Improving Outcomes Among Low-Income Children*. Washington, DC: Urban Institute.

National Center for Health in Public Housing (NCHPH). 2018a. "Health Center Sites in or Immediately Accessible to Public Housing Developments." https://nchph.org/about/public-housing-primary-care-grantees/.

———. 2018b. *Housing and Health: Building Partnerships To Support Public Housing Residents*. Alexandria, VA: National Center for Health in Public Housing. https://nchph.org/wp-content/uploads/2018/02/Housing-and-Health.pdf.

Pew Charitable Trusts. 2018. "About Health Impact Assessment." http://www.pewtrusts.org/en/projects/health-impact-project/health-impact-assessment.

Sturtevant, Lisa, and Janet Viveiros. 2016. "How Investing in Housing Can Save on Health Care." https://www.tn.gov/content/dam/tn/health/program-areas/NHC_Invest_Housing_Save_Health_Care_2016.pdf.

U.S. Department of Housing and Urban Development. 2016. "Picture of Subsidized Housing." huduser.gov/portal/datasets/assthsg.html.