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Toward Data-Driven, Cross-Sector, and Community-Led Transformation: An Environmental Scan of Select Programs

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Introduction

The way we practice, cultivate, and pay for individual and population health¹ in the United States is rapidly changing. Emerging research and experience point to social and environmental determinants as key influencers of health and well-being, and payment policies that reinforce value over volume are finally providing sufficient leverage for action. In part, given the recognition that local conditions drive social determinants, place-based strategies for improving population health are gaining traction. In parallel, public and private funders have increased investments in efforts to broaden our collective understanding of how to address the root causes of poor health, and to design systems that anticipate and intervene proactively for better outcomes.²

This report characterizes ongoing efforts to improve population health as reflected in select national and regional programs. Though not comprehensive, the report investigates 17 programs (Figure 1) that support local and cross-sector collaborations aimed at improving health outcomes for specific populations. The programs address diverse goals (e.g., safety, social justice), focus areas (e.g., data infrastructure, leadership cultivation), and geographic scale (e.g., small neighborhood, large urban center) but share the common objective of building improved community health and wellness through cross-sector collaboration.

These programs are unfolding in a climate of significant policy changes and investments stemming from passage of the American Recovery and Reinvestment Act (ARRA)³ and the Affordable Care Act (ACA).⁴ With new opportunities to insure more lives and unprecedented incentives to implement payment and delivery system reform, the infusion of public funds has helped focus the national dialogue on disease prevention and health promotion. While critically important, these efforts have primarily addressed actors within the traditional health care system (e.g., clinical care providers, insurers) and thus have devoted less attention to public health agencies, social and human service providers, and community development partners—all of which contribute significantly to individual and population

health. These non-health care sectors also employ different tools, strategies, funding mechanisms, and data systems to help manage and support the populations they serve—often the same populations served by the health care system. Historically, few policies or incentives have compelled coordination and collaboration across sectors. Moreover, in the absence of such policies or incentives, a wide range of socio-cultural, financial, and technical challenges has hampered collective action and impact.

Increasingly, however, evidence suggests that lasting improvements in population health depend on enhanced collaboration on common objectives, more porous boundaries for information exchange, and across-the-board accountability for meaningful change.⁵ Encouraging the capture, exchange, and use of data to drive decision-making at a level beyond organizational silos is an increasingly important component of needed change. Despite significant infrastructure investments in health care in recent years, very few policies or regulations ensure that community partners, and the public health and social service sectors have the needed capacity to achieve their own objectives—let alone to link with data systems from other sectors, that would allow them to address the holistic health needs of individuals and populations. In response, several programs have emerged across the country that are working to build capacity at several levels, and to stimulate the desired change.

We conducted an environmental scan and produced this report to establish a baseline understanding for this emerging field of practice. Our hope is that it helps document key aspects of the evolving landscape—acknowledging the increasing volume and variety of community-led initiatives, but focusing on 17 programs that are working to improve population health through enhanced cross-sector collaboration at the local level. Clearly, the 17 programs represent only a subset of the investments in building healthy communities,⁶ but we selected them for a deeper examination of their features and focus areas to help us improve our understanding of the current environment with respect to the:

1. Funding sources, organizational leaders, and program structures for fostering community-based population health improvement;
2. Diversity of program approaches to fulfilling core functions, such as peer learning and technical assistance (TA); and
3. Extent of the focus on building and sustaining data infrastructure to support population health improvement

Figure 1. Programs at-a-glance

Program name	Program description
Accountable Health Communities (AHC)	A Centers for Medicare & Medicaid (CMS) Innovation Center model designed to address a critical gap between clinical care and community services in the current health care delivery system by testing whether systematically identifying and addressing the health-related social needs of beneficiaries affects total health care costs and improves health and quality of care. The program also encourages alignment between clinical and community services to ensure that community services are available and responsive to the needs of community-dwelling beneficiaries.
Alignment for Health Equity and Development (AHEAD)	An initiative to align the resources of health and community development stakeholders into balanced portfolios of investment in comprehensive health improvement strategies and interventions across sectors, with a focus on neighborhoods where health inequities are concentrated.
Bridging for Health: Improving Community Health through Innovations in Financing	A national coordinating center that works with selected communities to pursue innovations to finance population health by leveraging collaboration and promoting health equity.
BUILD Health Challenge	A national program strengthening partnerships among hospitals, nonprofits, local health departments, and other community organizations to improve the health of low-income neighborhoods.
CA Accountable Communities for Health Initiative (CACHI)	A state program supporting six ACHs, which are multisector alliances of major health care systems, providers, and health plans, along with public health agencies, key community and social services organizations, schools, and other partners serving a particular geographic area. An ACH is responsible for improving the health of the entire community.
Community Health Peer Learning Program (CHP)	A national peer learning collaborative for 15 competitively awarded communities to address specified population health management challenges through increased sharing and use of data.
Community Interoperability and HIE Cooperative Agreement Program (Community Interoperability and HIE Program)	A national effort to provide a year of funding to organizations that propose actionable approaches to extend an existing HIE service or use case to a non-eligible ⁵ care provider population while engaging the population in sharing health data across the entire spectrum of health care.
Connecting Communities and Care Funding Opportunity	A Colorado-based initiative to facilitate connections between community-based resources and the health care system to help improve the health of the community's population.
Data Across Sectors for Health (DASH)	A national initiative to support multisector collaborations that share data and information to improve the health of 10 selected projects and their communities. DASH is also concerned with supporting network-to-network collaboration with other national program offices in this arena.
Health Impact Project	A national initiative to reduce health inequities and improve the health of all people by ensuring that health is a valued and routine consideration in decisions affecting consumers of health services. The program is collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, designed to support and expand the field of health impact assessment (HIA) in the United States.
Invest Health: Strategies for Healthier Cities	A national program bringing together leaders from diverse sectors in 50 medium-sized cities to align around a vision for better health, identify and test innovative and data-based approaches for addressing social determinants of health, support and deepen cross-sector collaboration, and unlock new sources of investment.
Safety and Justice Challenge, supported by the John D. and Catherine T. MacArthur Foundation	An initiative to create national demand for reform of the local justice system and safely reduce over-incarceration by eliminating the misuse and overuse of jails in the United States and engaging a diverse range of organizations and individuals to lend their insights.
ReThink Health Ventures	A national initiative to equip well-established multisector partnerships with the knowledge and means to accelerate regional transformation and generate more inclusive health value—demonstrated by the improved health of populations, better care, lower costs, greater equity, and increased economic productivity. Ventures is working with six pioneering partnerships through one-on-one coaching, cohort learning, and practice at home and will share lessons learned to support the work of other collaborative efforts across the country.
Spreading Community Accelerators through Learning and Evaluation (SCALE)	A national initiative, SCALE will match four “mentor communities”—those with a recent track record of achieving better health—with 20 “pacesetter communities” seeking to accelerate their pace of change. The communities will assess their current assets and skills, begin building or enhancing a set of community health metrics, and attend a Community Health Improvement Academy that will strengthen everyone’s capabilities in leading from within, leading together, leading for outcomes, leading for equity, and leading for abundance to create a culture of health in communities. The 24 participant communities are supporting an additional 43 communities earlier in the journey in a program called Pathway to Pacesetters.
Transforming Communities Initiative	A national initiative to fund six communities over the next five years to focus on policy, systems, and environmental changes that can directly affect areas of high local need and that can reduce tobacco use and obesity, the leading drivers of preventable chronic diseases and high health care costs in the United States.
What Works Cities	A three-year initiative to help the mayors and leaders of 100 medium-sized U.S. cities make better use of data and evidence in decision-making to improve outcomes for their citizens and make government more effective.
White House Data-Driven Justice Initiative	A national initiative to create partnerships of cities, counties, and states willing to adopt voluntary, data-driven approaches to improve public health and safety and reduce unnecessary incarceration through data sharing, pre-arrest mental health diversion programs, and risk assessment tools.

Context and rationale

With support from the Office of the National Coordinator for Health Information Technology (ONC), the Community Health Peer Learning Program (CHP) launched in July 2015. Leaders of CHP recognized early that it was one of many new programs designed to advance progress toward community-driven population health improvement—leveraging the infrastructure enabled through the Health Information Technology for Economic and Clinical Health Act (HITECH)⁷. With a common focus on the critical importance of cross-sector collaboration and data sharing to support improvements in population health, CHP quickly joined forces with another new program—Data Across Sectors for Health (DASH)—which is funded by the Robert Wood Johnson Foundation (RWJF) and shares several program features.

As national program offices (NPO), both CHP and DASH focus on community-level action, require collaboration across several sectors (one of which must be health care), and build community capacity to capture, share, and integrate data to drive improvements in population health. These shared elements, along with similar NPO functions and timelines for execution, have led to a strong partnership and the co-creation of a “network of networks” called All In: Data for Community Health, which seeks to build capacity, accelerate learning, and enhance collective impact. All In engages people, organizations, and programs across the country to cultivate peer-to-peer learning and collaboration opportunities for those tackling common challenges and working toward similar objectives. Motivated by the opportunity to accelerate knowledge and progress, BUILD Health Challenge and The Colorado Health Foundation’s Connecting Communities and Care Funding Opportunity awardees have also joined All In as partners.⁸

The environmental scan process and resulting report reflect our commitment to coordination; it characterizes and documents important aspects of a “movement” toward community health improvement through multisector collaboration and data sharing. The scan reveals that several partners are connecting across traditional and nontraditional boundaries to work together in clinical and community settings to improve population health. Many are empowered by national or regional program offices that seek to stimulate and scale information sharing to extend collective impact.

With the considerable recent investments designed to improve total population health at the community level, we recognize the tremendous promise of coordination—as well as the potential consequences of failing to connect, share, and learn together. Even the process of developing this report has yielded productive

connections. We hope that, by documenting key program components and promising practices, we can further accelerate progress by:

1. **Building greater awareness about and among national and regional programs focused on community-driven health improvement, noting points of commonality and distinction.** While we initially identified nearly two dozen programs supporting multisector collaboration at the local level, we determined that several did not meet our inclusion criteria for the scan (see discussion under Methods). As revealed in the recent Build Healthy Places report on healthy community initiatives, however, many more past and current programs have worked to improve several aspects of community health.⁹ For all 17 programs considered for this scan, we note points of similarity and divergence across several characteristics—some focused at the national or regional program level, and others at the community project level. While imperfect and admittedly incomplete, comparisons still offer near-term opportunities to enhance coordination and identify areas for greater concentration of efforts.
2. **Presenting opportunities for increased coordination and potential collaboration across programs and at the project level.** The emerging trends and lessons that we present in the report are relevant to a variety of actors and interests. While some programs have focused more heavily on leadership development, others encourage the exploration of varying financing mechanisms to support multisector collaborations, and still others are attempting to influence health policy at the local level. Lessons specific to the management and facilitation of these national and regional programs warrant documentation and wide dissemination (Figure 14).
3. **Revealing possible gaps where greater attention and resources may be needed.** The scan will inform the funding community about its collective investments and how programs do or do not intersect. Current and future funders may want to see replicable, scalable best practices emerging from this work, along with the identification of emerging areas for further study that may lead to solutions to common and persistent challenges.

The audiences for the scan are numerous and include private and public funders, local and national government officials, the leaders of the 17 programs (as well as the leaders of many related or still emerging programs), and several hundred local collaborative projects that may or may not be affiliated with a national or regional program. Our aim is to build awareness of the volume and variety of aligned initiatives, to inform local leaders and policymakers

about where to look for early lessons and potential policy implications, and to encourage cross-program connections.

The report is structured to first provide audiences with an overview of “who” is operating in this multisector, community-based transformation space and “how” various programs are structured and managed. It then reviews program aims, common themes, and types of available TA. Though many of the efforts are relatively new and therefore have not yet formally documented findings for public consumption, we have synthesized some emerging trends when possible and left placeholders where information is forthcoming. Finally, we highlight areas for continuing or future research that would benefit the emerging field of data-driven and collaborative community health transformation.

Methods

The environmental scan was conducted in three phases: (1) a limited review of available literature, including grey literature, websites, and other publicly available information; (2) early conversations with—and referrals from—contacts directly involved as supporters of and participants in community-based health improvement initiatives; and (3) semistructured interviews with leaders of the 17 programs. The early scanning phase revealed nearly two dozen active programs for consideration, to which we then applied the following inclusion criteria:

- A designated national or regional program office, with a formal application process
- Support of a multisector collaboration (with inclusion of at least one nontraditional health care sector)
- A focus on improving community health
- An interest in OR a stated aim of building capacity for data sharing across organizations and sectors

With the initial review of public documents, we were not always able to determine the nature or extent of the focus on data infrastructure; we therefore erred on the side of inclusivity, which resulted in a broad range of program perspectives regarding the data component. If the identified program satisfied at least three of the four criteria, we advanced to the interview phase and, in so doing, discovered that several programs that did not prioritize data sharing in earlier phases have now determined that data sharing is critical in future rounds of programming and funding.

From May through September 2016, we conducted 17 interviews with key program staff by using a semistructured interview guide (Appendix I). In most cases, the program director was the primary point of contact for the interviews; in some cases, we had the

opportunity to speak with more than one person from a given program. We are grateful for the time and thoughtful insights offered by program staff in both the initial conversations and the feedback provided as part of the review of this report and our characterization of their work.

Given that many of the programs are relatively new, are still in the pre-launch phase, or were in the pre-launch phase when we conducted the interviews (e.g., Accountable Health Communities¹⁰ and Connecting Communities and Care Funding Opportunity¹¹), the scan focuses largely on the programs’ design and intent. Where possible, we highlight emerging strategies and early lessons from a subset of the programs, especially those in operation longer than others. Figure 1 provides a brief overview of each program in the scan.

View of an emerging field

The emerging field of multisector, data-driven, community-led health transformation is rapidly evolving and expanding. Though we fully acknowledge that the report captures only a subset of critical work, we hope that the focus on 17 selected programs provides greater awareness of and helpful insights into recent activities. Our intent is to encourage communication, coordination, and collective action. To support innovations in the field, we need to connect people and programs, accelerate peer learning, and effectively document the narrative arc of change stories as they unfold.

These 17 programs demonstrate a common commitment to supporting new, or enhancing existing, connections between community-based resources and health care partners—many of which significantly advanced health IT capabilities in the last decade—to help improve the health of a designated community. An emerging and promising literature documents several opportunities for health care, public health, and other sectors to work in concert and harness the power of data to demonstrate how a healthier population affects the strategic priorities of labor, education, transportation, and related services.¹³

As noted in Figure 2, roughly half of the 17 programs have contracted out management and facilitation functions to an external program office. The vast majority of programs have made implementation awards, though some also require an early planning phase to prepare local projects for an eventual execution phase. The programs exhibit notable distinctions in terms of the required relationship maturity demonstrated by collaborative partners as a condition of participation and/or the required level of “co-investment” (i.e., direct or in-kind matching funds) by partners. Also evident in Figure 2 is the broad range of financial support available across programs, the largest of which is yet to be awarded.

Figure 2. Key program characteristics

Program name	Funder (NPO/RPO)	Expected duration	Number and nature of sites	Grant design and structure ¹⁴	Financial support
AHC	Centers for Medicare & Medicaid Services (TBD)	2017–2022	44 collaborative agreements	Implementation	From \$1.17 to \$4.5 million per site
AHEAD	The Kresge Foundation (Public Health Institute, Reinvestment Fund)	2014–2019	5 city-based pilot communities	Implementation	\$60,000 of in-kind TA; \$20,000 in direct seed funding for local staff; additional funds for community convenings
Bridging for Health	Robert Wood Johnson Foundation (Georgia Health Policy Center at Georgia State University)	2014–2018	Up to 10 states, regions, collaboratives; 5 currently selected	Implementation	Up to \$70,000 per community per year for two years
BUILD Health Challenge	The Advisory Board Company, The Colorado Health Foundation, de Beaumont Foundation, The Kresge Foundation, Robert Wood Johnson Foundation (de Beaumont Foundation)	2015–2017	11 planning communities; 7 implementation communities	Hybrid	Planning awards: \$75,000 per community for one year Implementation awards: Up to \$250,000 per year per community for two years ⁸
CACHI	Blue Shield of California Foundation, The California Endowment, Kaiser Permanente, Sierra Health Foundation (Community Partners)	2016–2019	6 California communities	Implementation	Up to \$250,000 per community for Year 1; up to \$300,000 per year for Years 2 and 3
CHP	Office of the National Coordinator for Health Information Technology (AcademyHealth, National Partnership for Women & Families, NORC)	2016–2017	10 participant communities; 5 subject matter expert (SME) communities	Planning	Participants: \$130,000 per community SMEs: \$50,000 per community
Community Interoperability and HIE Program	Office of the National Coordinator for Health Information Technology (NA)	2015–2016	10 cooperative agreements	Implementation	\$100,000 per community
Connecting Communities and Care Funding Opportunity	The Colorado Health Foundation (NA)	2016–2018	14 Colorado communities	Implementation	Up to \$200,000 per community
DASH	Robert Wood Johnson Foundation (Illinois Public Health Institute, Michigan Public Health Institute)	2015–	10 communities	Implementation	Up to \$200,000 per community
Health Impact Project	A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts (NA)	2016	Over 100 health impact assessments at the local, regional, and state levels	Implementation	Past funding opportunities range from \$25,000 to \$250,000 per community
Invest Health	Reinvestment Fund, Robert Wood Johnson Foundation, (NA)	2016–2017	50 medium-sized cities	Implementation	\$60,000 per city
MacArthur Foundation Safety and Justice Challenge	John D. and Catherine T. MacArthur Foundation (NA)	2015–2020	20 jurisdictions (counties, cities, state); 10 core sites; 10 partner sites; 20 new jurisdictions added through Innovation Fund ¹⁶	Implementation	Partner sites: \$150,000 per community per year with potential renewal Core sites: \$1.5 to \$3.5 million per community over two years with potential for additional funding Innovation Fund sites: \$50,000 per community
ReThink Health Ventures	Rippel Foundation, Robert Wood Johnson Foundation (ReThink Health)	2016–2018	6 communities	Implementation	\$25,000 per community
SCALE	Robert Wood Johnson Foundation (Institute for Healthcare Improvement)	2015–2017	4 mentor communities; 20 Pacesetter communities; working with 43 Pathway to Pacesetter communities	Hybrid	Pacesetter communities: \$60,000 per year Mentor communities: \$5,000 per year
Transforming Communities Initiative	Trinity Health (NA)	2016–2021	6 communities	Implementation	Up to \$500,000 per community per year for five years
What Works Cities	Bloomberg Philanthropies (Results for America)	2015–2018	55 cities and counting	Implementation	\$42 million; distribution of funds unclear
White House Data-Driven Justice Initiative	The White House ^{17, 18} (National Association of Counties)	2016–	137 cities, counties, and state governments	Implementation	NA

Figure 3. Program scope and scale



A New “Movement”: All 17 programs started within the past **3** years

Program Duration: **8** months to **5** years

Spread and Scale: Neighborhoods, counties, multicounty, cities

Projects: Nearly **450** local initiatives awarded or soon to be awarded

Program Focus: **15** do not limit project objectives to specific diseases or population health conditions; **2** specify project focus areas (e.g., obesity, mental health, diabetes)

Peer Learning and Technical Assistance: All **17** programs offer technical assistance and include a learning network component

Supporting on-the-ground community improvement

All 17 programs are supporting locally driven efforts to cultivate partnerships around common goals, and some are creating shared information systems that more effectively target and deploy resources to influence community health.

What programs and communities are prioritizing

Drawing on our experience in working with ONC to design the CHP Program, and referring to the growing literature on multisector collaboration, we identified seven distinct programmatic aims and characterized each program accordingly. We invited program leaders to assign as many aims as applied to their program from the list below, and allowed them to identify additional aims. Each program set out to support the local achievement of a specific subset of goals, although the longer-term programs signaled that their goals could and had evolved and expanded over time. For each program aim, we have included a program example to demonstrate that aim as a priority. The list is not exhaustive, and the aims are not mutually exclusive.

- **Data sharing, integration, and use.** Building community organizations’ capacity to capture, share, integrate, and use data, but without the imposition of specific constraints on how to do so. *The Community Interoperability and HIE Program is “increasing*

the number of non-eligible care providers who are able to send, receive, find, and use electronic health information (inclusive of all determinants of health) in a manner that is appropriate, standardized, secure, timely, and reliable for both senders and receivers.”

- **Equity/disparities.** Eliminating socioeconomic and racial/ethnic health disparities as an integral part of the community’s chronic disease prevention and health promotion efforts. To improve health at the neighborhood or community level through environmental changes, initiatives seek to identify and address the social determinants of health. *AHEAD aims to “focus resources in neighborhoods where both health and social inequities are concentrated.”*
- **System redesign.** Introducing systematic process changes to care delivery, health systems, or other social services to improve the quality, efficiency, and effectiveness of patient wellness. *Accountable Health Communities will “encourage the alignment between clinical and community services to ensure that community services are available and responsive to the needs of community-dwelling beneficiaries.”*

- **Financing and investment.** Fostering innovations in policy, health care delivery, and financing mechanisms that improve outcomes and rebalance and align investments in health. Examples of such innovations might include pay for success or social impact bonds, wellness trusts, and Delivery System Reform Incentive Payments (DSRIP). *Bridging for Health is focusing on “rebalancing and aligning investments while fostering linkages among public health, health care, and other sectors.”*
- **Leadership development.** Identifying and empowering local leaders to use data and evidence to guide major decisions and take action. *What Works Cities is encouraging “city leaders across the United States to advance the effectiveness of their governments.”*
- **Spread and scale (e.g., city, county, state).** Expanding the stated goals of the geographically defined area that shares common characteristics, values, and experiences by committing to the advancement of specific population health goals in additional communities. *The Invest Health initiative is working to build and leverage relationships that “extend beyond the length of the program and help inform work in other communities nationwide.”*
- **Policy impact.** Seeking to inform and support change of a legislative or regulatory policy. *The Transforming Communities Initiative is working with its communities “to help implement policies to curb tobacco use and reduce obesity.”*

As noted in Figure 4, we have emphasized—by design—programs with aims related to data sharing, integration, and use. At least half of the programs also focused on improving equity/reducing disparities, system redesign, and financing and investment. We identified policy impact as an explicit aim in 7 out of 17 programs; this perhaps suggests that, at this early stage, both program funders and participants feel that much more needs to be learned about: (1) how, when, and by whom community health objectives can best be addressed and (2) how that translates to policy. In short, it may be too soon to require programs to demonstrate policy impact.

Population health concerns

Implicit in cross-sector partnership approaches is a more expansive view of population health, and how to it can be improved through innovative, coordinated and data-driven strategies. With hundreds of local initiatives represented in the scan, we cannot adequately capture all projects or their related health goals; instead, Figure 5 provides examples that demonstrate both the challenges and opportunities associated with local, cross-sector efforts to address social determinants and improve population health.

Community projects vary considerably in terms of their immediate goals and strategies to advance progress; these goals and strategies are driven by specific population health improvement objectives, which in many cases reflect a community’s existing infrastructure and assets. Not every community project adopts a focus on data and infrastructure, but an increasing number acknowledge that data and infrastructure capacity is essential. For example, communities with a robust and trusted health information exchange are often well positioned to leverage the services they have already developed (e.g., patient matching) to tackle health improvements that require the use of individual level and (near) real time data exchange.

Many community improvement initiatives start with efforts to better detect and characterize the scope and scale of that challenge. The linking of disparate data sources to understand the magnitude of a problem (e.g., the number of homeless patients presenting in emergency departments) can be a critical first step in determining whether, how, and where a community can effectively design and target interventions; all note the importance of this work in the context of limited or diminishing resources.






Some community projects rely on linked data resources to improve the community’s understanding of the likely, but not necessarily obvious, interactions between various influencers of health. For these projects, the focus is less on identifying individuals and more on understanding and building analytic capacity to predict needs and outcomes based on the presence or absence of certain factors. Several other projects use data in order to identify individuals in need, and intervene directly.

In addition to defining high-priority community health goals, most projects set forth other objectives that often reflect the priorities of their funding sources. We have documented several sample objectives in Figure 5 (column 2) and note that they can evolve as projects expand their reach. The extent to which projects are able to achieve their stated objectives is partly a function of the duration of their funding. In general, longer-term initiatives seem to place greater emphasis on building community capacity and infrastructure (i.e., Transforming Communities Initiative, ReThink Health Ventures), with the understanding that long-term investment in building both capacity and a collaborative culture are of utmost importance to sustained progress. Programs with shorter funding cycles tend to place greater emphasis on strategic planning, forging relationships with key community partners, and mapping out necessary assets (including data sources and systems) to support project objectives.

Figure 4. Key program objectives and aims

Program name	Data sharing, integration, and use	Equity/ disparities	System redesign	Financing and investment	Leadership development	Spread and scale	Policy impact
What Works Cities							
BUILD Health Challenge							
SCALE							
MacArthur Foundation Safety and Justice Challenge							
Transforming Communities Initiative							
ReThink Health Ventures							
AHC							
CACHI							
Invest Health							
Community Interoperability and HIE Program							
Connecting Communities and Care Funding Opportunity							
CHP							
DASH							
White House Data-Driven Justice Initiative							
Health Impact Project							
AHEAD							
Bridging for Health							
TOTAL	14	13	11	10	9	9	7

Figure 5. Sector-specific objectives and aims

Primary sector	Community health objectives	Project aims
 Housing/ homelessness	Mitigate symptoms of pediatric asthma and avoidable health system use by tackling housing conditions and toxic, unsafe living conditions through home visits, retrofitting HVAC units in apartment buildings, etc.	Build systems of bidirectional data exchange to allow for alerts and communication between hospitals and organizations that focus on housing improvements
 Food/nutrition	Improve food systems by enhancing access to healthy foods and redesigning the food system	Use a HIE to share clients' medical status and dietary needs with food banks to make better nutritional recommendations
 Social/human services	Enhance care coordination, specifically focused on improving care for families of children with medical and behavioral complexity	Create a central platform to which various care circle members in different sectors can share information about a patient to better coordinate care
 Public safety/ law enforcement	Reduce emergency department visits, incarceration rates, and public safety costs by improving care coordination and access to services across sectors for severe and persistently mentally ill high users	Coordinate with police departments and local jails to redirect mentally ill high utilizers to appropriate behavioral health care facilities
 Education	Improve service to, and health outcomes for, chronic vulnerable populations, such as those whose children are chronically absent from school	Build the infrastructure to support data exchange between the school district and the Homeless Management Information System (HMIS) for better case management

Criteria, capacity, and maturity

It is not surprising that funders and program leaders appreciate—and therefore generally require as a program inclusion criterion—the existence of well-established partnerships; research and practice has demonstrated that engaging partners with foundational trust relationships is essential for these types of initiatives.^{19,20} Given program requirements, the majority were not looking to launch new partnerships, but rather to support initiatives deeply invested in their respective communities and already engaged in comprehensive upstream or downstream interventions. As a result, the programs faced a dilemma; assuming that building healthier communities requires the establishment of both new relationships and new infrastructure, how can a program satisfy both requirements? Each program has grappled with this tension in a different way and has emphasized certain inclusion criteria over others, either universally or for a subset of projects.

The result is that, across the nearly 450 local collaborative projects supported by the 17 programs profiled in the scan, we observed great heterogeneity. CHP, for example, invited proposals from communities interested in addressing a specific population health challenge through cross-sector data sharing. Most of the respondents interacted with a subset of—but not all—partners necessary to their work. And some CHP communities included partners that, before program launch, had never collaborated. As a hybrid planning and implementation program, CHP deemed the inclusion of such partners appropriate and consistent with program

objectives. For programs making full implementation awards, which often had more funding at stake and involved a longer period of performance, such a “risky” investment was less common.

Some program leaders also noted that community partners in a given project do not always demonstrate the same awareness or understanding of the maturity of their collaborative relationships. This observation is, in part, what led DASH and CHP to field a readiness assessment survey across their respective project cohorts to better understand project maturity in the domains of collaboration and data sharing. The responses from funded projects (from lead organizations and key partners) overwhelmingly reflected the novelty of this cross-sector collaborative work. In fact, two-thirds of respondents reported that the collaborating partners had been working together for two or fewer years,²¹ suggesting that, even among projects expected to demonstrate mature collaboration, perceptions may differ among those involved; moreover, a specific community’s reality may temper expectations. In late spring 2017, DASH and CHP will redeploy the readiness assessment instrument to the same cohort of funded projects, and other All In partners are considering use of the instrument to establish baseline data for newly funded projects. Our hope is that more programs will recognize the importance of community self-assessment with respect to collaboration and data sharing maturity, thereby measuring the progress of discrete projects and of the field as a whole.

Grant structure and duration

The programs in the scan have made planning, hybrid, and implementation awards, with a heavier emphasis on the latter and often with a staging process from one to the other. For some programs, this staging process is built into a single grant cycle (e.g., the planning performed by Connecting Communities of Care Funding Opportunity projects as part of the award process). Other programs offer different types of awards depending on applicant characteristics and needs. BUILD Health Challenge, for example, established a multicohort model, in which the first wave of funding supports strategic planning followed by subsequent funding of implementation work.²² For its first two funding waves, BUILD Health Challenge's length of engagement for each cohort differed because the first wave of funded collaboratives had the opportunity to remain connected to the larger movement, sometimes in the capacity of a "peer mentor." For the purposes of the scan, we characterized BUILD Health Challenge as a "hybrid" program. The hybrid model is notable because it encourages community collaborators to focus on ultimate health improvement goals while recognizing their capacity limitations and providing much-needed resourcing and external validation.

Technically, CHP offered "planning" grants; participant communities must bolster existing and build new relationships and work with partners to co-design strategic action plans for (eventual) execution. Built into the program design is the recognition that, absent a concerted and strategic process that clearly defines roles, goals, accountability structures, and sustainability measures and plans, successful implementation is imperiled at the outset. Notably, many CHP projects have initiated implementation work; this is in part because their collaboratives are ready and eager to do so, but also because they know that proof of concept and some early return on investment is critical to keep partners at the table and secure additional resources.

Most of the programs in the scan make "implementation" awards; they provide local collaboratives with funding to achieve incremental progress toward documented goals by project's end. The six communities in the Transforming Communities Initiative will evaluate key outcomes, such as smoking and obesity rates, on a quarterly basis; their ultimate goal is to reduce both rates over a five-year period. The implementation programs profiled in the scan generally require projects to meet more stringent inclusion criteria (i.e., they must already have in place certain foundational elements), but program leaders also acknowledge that one cycle of funding is rarely sufficient to achieve and scale up community health objectives. In this respect, all programs are similar; they account for the fact that meaningful and sustained community health improvement takes time, shared commitment, and resources.

Funding models and amounts

In some cases, progress toward goals hinges on the scale and scope of funding, which varied substantially across the 14 implementation programs profiled in the scan (Figure 2). Some local projects are well financed over a multiyear period, such as the Transforming Communities Initiative, which provides as much as \$500,000 annually for up to five years. Others are more modestly financed in terms of direct outlays to community projects. Lower levels of funding can reflect an emphasis on planning, a shorter period of performance, and/or an expectation of supplemental in-kind or actual contributions from major community partners.

It is worth noting that five of the 17 programs in the scan are funded collaboratively by two or more philanthropic organizations (Figure 2). This collaborative funding approach appears to be increasingly common among community-led transformation projects (Figure 10). One reason cited is that local projects benefit from the engagement and support of both national and local philanthropies; another is that—absent strong evidence to guide decisions about where philanthropies can stimulate the greatest population health improvements—the preferred approach has been to test and learn through multiple types of investments.

Sector representation

Taken as a whole, the community projects supported by the 17 programs involve a diverse range of sectors, but some sectors are better represented than others (and some are not represented at all). The majority of programs provided applicants with a fair amount of flexibility to select the sectors that would best map to their community health improvement priorities. Six programs required that at least one partner come from the health care sector. The Transforming Communities Initiative, for example, required local partnerships to be "multisector, with strong ties to the hospital system and local health departments." The 11 remaining programs named health care sector partners as possible, but not required, collaborators. Given what is known about the impact of housing, education, and transportation (among other factors) on health,²³ the participation of nontraditional partners from human and social service sectors is perceived as essential to community-led transformation projects. For now, the most common sector partners represented in the community projects in the scan are health care, behavioral health, public health, and human and social services (e.g., housing).

Not surprisingly, program and local project leaders use different terminology to refer to specific sectors both within and across programs; for example, some consider an organization that provides "homelessness services" as part of the social services sector, but others say that it is part of "human services" or "housing." It is partly because of these different terms that DASH

and CHP undertook an effort to look across several initiatives and create a harmonized set of terminologies and associated definitions for commonly identified sectors, populations of interest, and data types. The initial exercise has and will continue to require several revisions, as feedback from both program sponsors and project participants is incorporated. Nonetheless, it represents an important effort to harmonize language in a way that supports comparisons and assessments in a rapidly evolving field.

Regardless of sector representation, some programs (e.g., AHC and CACHI) required projects to designate a “backbone” organization as the lead contributor to the project. Among the CACHI local projects, the backbone organizational structure varies by site. Four are public health departments, one is an independent nonprofit, and one is a hospital in partnership with a community-based organization. The vast majority of programs, however, did not require a backbone organization to serve as the collaborative lead; instead, local project partners have defined the leadership, governance, and organizational structures deemed appropriate to support project objectives and the local context. Over time, and as more is learned about which partners are essential to population health improvement efforts, it will be important to track the leadership models that appear to work best, along with the factors that facilitate progress.

Geographic coverage and scale

All programs included in the scan focus on community health, but the definition of community and how it was reflected in requirements for participating local projects differs substantially by program. In some cases, projects had to satisfy a certain population threshold requirement (e.g., BUILD Health Challenge, where applicants had to be from cities with at least 150,000 residents). In other cases, project leads were charged to “think local” and focus at a more “intimate” scale by partnering with community organizations and investing in work at the zip code or neighborhood level. Other programs were less restrictive regarding place-based definitions and physical boundaries, allowing projects to designate a community, county, multicounty area, tribal area, or broad regional focus as the geographic basis for a project. Regardless of definition and scale, all programs in the scan share a fundamental belief that place matters, and that where people live, work, worship, and play affects both individual and population health in powerful ways.

Program management, functions, and structural components

In addition to characterizing the broad objectives, specific aims, and major features of the programs in the scan, we sought to document certain structural components of each program. By investigating how the work of the programs is carried out, by whom, and with what resources and supports, we hope to arrive

at a better understanding of the range of approaches possible; ultimately, the differing approaches adopted by these programs should be shared to highlight common challenges, and identify areas for potential cross-program learning and coordination.

Core program function: Staffing models

While the majority of programs engage between two and five dedicated full-time employees (FTE), some operate with a smaller staff. The White House Data-Driven Justice Initiative, for example, was largely supported initially through volunteer and in-kind resources. Three programs (Transforming Communities Initiative, Connecting Communities and Care Funding Opportunity, BUILD Health Challenge) reported that only one dedicated FTE is responsible for oversight and management; all three programs engage TA partners and/or other content experts for some proportion of time to provide supplemental support in program development and execution. Some programs (BUILD Health Challenge, SCALE, What Works Cities) also assigned or hired coaches to facilitate local project progress during the funding period (more detail appears in the Technical Assistance section), and many programs engaged external consultants, evaluators, and/or communications and marketing staff to augment in-house capacity. A few larger programs (What Works Cities) have mobilized larger teams that consist of over two dozen FTE staff and several external partners with broad topical and functional expertise.

Some programs’ approach to staffing continues to evolve based on early experiences and the models employed by others. For instance, BUILD Health Challenge worked with outside consultants to consider infrastructure and staffing model options for its next phase and expansion in terms of both funding partners and funded projects. BUILD Health Challenge leaders are now working to optimize the initiative’s staffing complement in support of its program work components, aims, and objectives.

Regardless of staffing model, all programs acknowledged the time-intensive nature of monitoring and (in some cases) managing multiple local projects. Those providing “add on” functions (e.g., tailored, coordinated, and responsive TA) noted the additional time and resource commitments required. For those building and/or participating in peer learning networks, the equivalent of several full-time employees is typical.

Core program function: Peer learning

The 17 programs in the scan all embrace peer learning. Each model is scaled at a different level and implemented in a different way, but is grounded in the common knowledge that local projects face similar challenges (e.g., inexperience with community engagement, limited resources, siloed data and functions) and benefit greatly from opportunities to share information and experiences.

Many program leaders are working to cultivate opportunities for sharing, learning, and solving problems through semistructured and supported interactions, which are not only useful for the participants but also offer the potential to extend value to other audiences and community members. Given the number of local collaborative projects involved in each program, a supportive program office can help to detect and broker peer connections. A program office can scan and synthesize activities across programs and projects and then determine which substantive issues warrant exploration at the local level, the network level, or both. All noted the value of peer-to-peer exchange, recognizing that it builds on the interests and curiosity of individual partnerships to address complex questions in a deeper way than any one program or project could on its own.

Peer learning models also empower local projects to share their experiences and recommend successful strategies, tools, and products. As a result of peer exchange, for example, two CHP projects are now using the same care coordination software for two different use cases, audiences, and objectives. The North Coast Health Improvement and Information Network (NCHIIN) is linking its health information exchange to its local Homeless Management Information System (HMIS) that is operated by the county Department of Health and Human Services. NCHIIN needed a care coordination platform that would allow social service case managers to receive a hospital's real-time encounter alerts about their patients and coordinate tasks across multiple support agencies to better serve their clients. Early in NCHIIN's project design phase, project leaders heard the Vermont Child Health Improvement Program (VCHIP), another CHP project, deliver a presentation on its use of software that has enabled development of an electronic, shared plan of care for families of children and youth with special health care needs. VCHIP has been using the platform for better coordination and collaboration among medical home staff, social workers, family health partners, and other care members. After several calls and demonstrations between VCHIP and NCHIIN, the latter has successfully deployed the platform and expects the county to expand its use further in the coming months.

The value of peer learning also extends across programs. With the creation of All In in spring 2016, DASH and CHP (and later BUILD Health Challenge) established both formal (e.g., site visits) and informal (e.g., one-on-one telephone calls) mechanisms that permit project participants to connect, share, and learn from each other. This cross-program peer input provides relevant and practical information to local projects, and offers program leaders new insights to deepen their understanding of common issues and challenges within and across programs.

KEY INSIGHT: The power of peer learning should not be underestimated; it is a highly effective mechanism for both the spread and scale of good ideas as well as for sharing setbacks and failed experiments.

In-person convenings. Every program in the scan has convened or will convene in-person gatherings of its respective projects, sometimes bringing together all participants and other times smaller subsets of participants. The value of in-person exchange and networking cannot be overstated, and leaders from all 17 programs saw this as essential. (To underscore this point, the White House Data-Driven Justice Initiative, which initially did not have adequate funds to convene a meeting, worked with numerous partners to generate support for for an in-person meeting last fall.) Some programs convene projects only once over the life of a grant (often a reflection of program length and funding), but others are able to budget for several in-person events.

“The most successful communities embrace ‘failing forward’ and can have open conversations about what happened.”

— Soma Stout, SCALE

Program leaders relayed three primary motivations for convening project participants:

1. Convene all for purposes of program and/or project-level setting, information sharing, and support—often done as “book end” events at the onset and/or close of a program funding cycle;
2. Convene a subset based on some affinity, such as shared geography, or common population health objectives, data infrastructure, and/or sectors; or
3. Directly connect (i.e., via site visits) local projects interested in deeper exploration of related efforts in a “peer” community

Calls and webinars. The fact that all 17 programs—even those with a regional focus—are distributed geographically, affirms that active use of virtual interactions to support engagement is common. All 17 programs arrange and facilitate many interactions between and among local projects with varying frequency and sometimes with external TA providers and/or subject matter experts in attendance. For CHP and DASH, early webinars provided an opportunity for projects to share aspects of their work, learn about possible points of connection with others, and generally appreciate the diversity of efforts represented by the two programs. ReThink

Early findings on virtual platforms

Through this environmental scanning process, we identified the following functions of a virtual platform that are deemed essential to local health improvement initiatives:

- Capacity to find and connect people and projects to build relationships and cultivate collaborations
- Ability to share relevant information and resources via a curated and searchable resource library
- Capacity to support asynchronous dialogue between individuals and groups to exchange experiences, ideas, and questions
- Capacity to post calendar and event features, including reminders

The interviews conducted for the scan also revealed a largely unmet demand for technology products and processes that could also:

- Help projects measure progress toward community and/or population health improvement in a consistent manner and enable the tracking and communication of progress as measured
- Facilitate data sharing (as well as the exchange of analytic tools and code) across people and projects as appropriate
- Illuminate the “bright spots” as they emerge and provide a mechanism for regularly and consistently reporting such information
- Enable users to look seamlessly across the range of virtual platforms in a way that connects people and knowledge and spurs collaboration
- Expose community-based work to broader audiences, making it more visible, searchable, and consumable to others within and across programs

Health Ventures convenes representatives of six sites every other month for a virtual meeting to focus on cross-community learning relevant to the entire group, with content a function of articulated and observed needs and priorities. In the off-months, the six sites conduct optional topic-focused “working groups” (self-organized by affinity) and participate in discussions facilitated by a ReThink Health subject matter expert. The White House Data-Driven Justice Initiative sponsors biweekly conference calls for 120 to 200 people and showcases innovative strategies used by communities for measurably reducing recidivism and jailed populations.

Virtual platforms. Many programs augment their engagement strategies with the use of private, web-based virtual platforms that facilitate direct connections and asynchronous dialogue via discussion threads, promote upcoming events and activities, and disseminate tools, information, and other resources. Many other programs are still considering their options, and are evaluating

desired functionality relative to existing products and competing resource demands. For programs that have invested in virtual platforms, a common justification for the investment is the benefit of a curated, comprehensive, and centralized repository for managing program information and knowledge products in a manner that is broadly accessible, minimally burdensome for end-users, and (hopefully) persistent beyond the life of the program.

Programs are using both off-the-shelf and custom-built virtual platform products. Bridging for Health leverages Mightybell, BUILD Health Challenge uses NING, and ReThink Health Ventures developed a virtual platform with the Community Tool Box group. In general, the platforms offer the same core features and functions, including discussion boards, event calendars, resource libraries, and descriptive program and project information. Some also allow projects to create private pages where they customize their interactions at the discrete project level. The ReThink Health Ventures product allows local projects to map and track their system change efforts over time by using quantitative and qualitative information.

CHP and DASH initially planned to use existing products (Basecamp and HealthDoers Network, respectively) but, after deciding to integrate several national program office functions, they agreed to build a custom platform collaboratively, leveraging the HealthDoers Network infrastructure to avert the perpetuation of silos. Program leaders involved a subset of community projects in the design process, resulting in a product that allows users to identify other people and projects based on shared interests and project characteristics. Other partners of All In are still deliberating the relative merits of various virtual platforms, but have the option of inviting their local projects and working to further enhance functionality over time.

“We are working as the matchmaker. From our vantage point, we can see valuable connections and promising opportunities for information exchange.”

– Beth Blauer, *What Works Cities*

For many programs, a key consideration is the resource-intensive nature of effective and productive platform management. To generate the most value, virtual platforms require a fairly high level of curation, content management, and facilitation on the part of program staff. Some programs have invested accordingly, whereas others have opted to forego a virtual platform component.

Affinity groups. Many programs have used affinity-based meetings to encourage informal conversation and less directed learning, and many more are working to establish processes for doing so. One commonly observed challenge is that affinity groups identified at the outset (usually by program staff based on key characteristics) often do not reflect the more organic project perceptions of affinity revealed over time. Program leaders noted the importance of active listening and flexible structures to support small-group interactions that contribute actual value. As programs mature and staff better understand points of connection, shared challenges, and specific TA needs, opportunities for structured engagement among projects with similar needs and/or other commonalities emerge.

At the outset, CHP and DASH hosted affinity group calls most often defined by common program characteristics (e.g., a focus on housing), common project use cases that drive technology options (e.g., selection of a population health management platform), and common roles (e.g., team epidemiologists). BUILD Health Challenge established “youth violence” and “built environment” affinity groups that support one another through the exchange of information and ideas. Some affinity groups emerged from geographic proximity; three BUILD Health Challenge sites in Colorado meet on a monthly or bimonthly basis to share project updates, exchange ideas, and support one another. Program leaders have seen affinity groups both create “safe spaces” for encouragement and commiseration and offer productive outlets to collectively address shared challenges that impede progress for collectively addressing shared challenges that impede progress.

For the MacArthur Foundation Safety and Justice Challenge, participants at the local level find value in connecting with colleagues in similar roles/professions but situated in different jurisdictions. At a recent in-person meeting, program staff set aside time for defenders, prosecutors, and law enforcement officers from different sites to network and discuss shared challenges (e.g., how best to use arrest data). For What Works Cities, program staff often draw on subject matter experts to support interactions and connections to like-minded colleagues.

Core program function: Technical assistance

All programs profiled in the scan offer a diverse range of TA. Designed to support projects and build community capacity, TA is either general or tailored to a project’s particular needs; it may offer one-on-one or group-based assistance. Both peers and subject matter experts deliver TA. Some programs have taken a fairly “high-touch” approach, leveraging program staff to consistently “coach” projects through an iterative process of assessing needs, documenting barriers, identifying resources, and

engaging support. Other programs apply a less intensive approach and rely more heavily on direct participant input and/or a pre-established and structured TA curriculum.

“Through our work with the Ventures communities we will widely share stories of comprehensive, ambitious, and radical regional transformation efforts so that others are inspired and better equipped to do the often messy work of systems change. It is time to demonstrate that a ‘next level’ of regional change is possible.”

*– Jane Erickson,
ReThink Health Ventures*

Several have observed the common (and increasing) demand for peer-based TA; the opportunities for peer mentoring and exchange are sometimes identified through the course of routine program activities (e.g., monthly check-in calls, web-based surveys, email correspondence) and are catalogued for further consideration and to guide planning. Many programs note, however, that in-person convenings often catalyze subsequent TA; that is, once in-person introductions are made and people have established connections, the energy for peer-based TA and exchange increases significantly.

Engaging TA partners. Most programs have contracted with TA partners to provide assistance on core functions (e.g., marketing and communications, program evaluation) and to provide additional topical expertise relevant to one or several projects. TA relationships differ across programs, with the areas of expertise as diverse as the program aims and objectives. Figure 6 identifies the main TA collaborators for each program.

TA program design. TA in capacity building may be tailored to the needs of a specific recipient or offered collectively on a shared topic of interest. Depending on local context, TA is often calibrated to meet communities where they are. Several program leads noted that local projects initially had trouble articulating their TA needs; as a result, part of the TA process for many

Figure 6. Primary TA partners

Program Name	TA partners
AHC	Not available online
AHEAD	Not available online
Bridging for Health	Georgia Health Policy Center at Georgia State University
BUILD Health Challenge	Practical Playbook, County Health Rankings and Roadmaps, Prevention Institute, Spark Policy Institute, Equal Measure, Housing Partnership Network ²⁴
CACHI	Not available online
CHP	NORC, National Partnership for Women & Families, Advisory Committee, other external SMEs
Community Interoperability and HIE Program	ONC
Connecting Communities and Care Funding Opportunity	Not available online
DASH	National Advisory Committee members, selected consultants as mutually identified by staff and project leads, peers within the funded cohort, colleagues in the All In network
Health Impact Project	Georgia Health Policy Center at Georgia State University, Habitat Health Impact Consulting, Human Impact Partners, Kansas Health Institute, Oregon Public Health Institute, Public Health Institute
Invest Health	Bennett Midland, PHI Center for Health Leadership and Practice, Center for Social Inclusion, NeighborWorks' Success Measures Data System, PolicyMap
MacArthur Foundation Safety and Justice Challenge	Center for Court Innovation, Justice System Partners, Vera Institute of Justice, CUNY Institute for State & Local Governance, Pretrial Justice Institute, Justice Management Institute, W. Haywood Burns Institute, JFA Institute, RTI International, Urban Institute, Bennett Midland, Policy Research Inc., Association of Prosecuting Attorneys, International Association of Chiefs of Police, National Conference of State Legislators, National Association of Counties, National Center for State Courts, National League of Cities, National Legal Aid & Defender Association, Council of State Governments Justice Center
ReThink Health Ventures	Ventures Advisory Group, in-house technical experts
SCALE	Institute for Healthcare Improvement, Community Solutions, Communities Joined in Action, Network for Regional Healthcare Improvement
Transforming Communities Initiative	Georgia Health Policy Center at Georgia State University, ChangeLab Solutions, Public Good Projects, Community Catalyst, Campaign for Tobacco-Free Kids, Reinvestment Fund, IFF, AmeriCorps
What Works Cities	Behavioral Insights Team, Harvard Kennedy School, Johns Hopkins University, Results for America, Sunlight Foundation
White House Data-Driven Justice Initiative	Numerous partners ²⁵

programs has focused on helping projects better understand (and articulate) what they need and when. At the outset, projects are generally able to point to high-level topics or issues, but they tend to focus simultaneously on “big picture” and externally driven issues (e.g., HIPAA). Therefore, an essential part of the TA process is to teach projects how to break down big issues into “micro challenges”—and therefore identify possible TA needs—to ensure that a seemingly intractable issue does not impede progress.

In some cases, the challenges requiring TA are well known, but often only to those in other sectors or with different organizational roles and perspectives. Such cases reinforce the need for broader awareness building within and across programs and present an opportunity for closer coordination among funders and programs that share common aims and objectives.

Coaching. To support or augment the TA function, several programs created a primary liaison or “coach” for each project; the coach’s job is to check in regularly with assigned projects (most often monthly) to listen for issues and opportunities, synthesize

information, and suggest topics for further study and collective action. BUILD Health Challenge relies on a “generalist and specialist model.” Each project checks in monthly with a generalist (the primary liaison) who connects the project with resources as needed. In addition, a TA coordinator transmits any questions from generalists to those with expertise in a given subject.

SCALE deploys coaches to work with each local project, guiding them through the funding period and providing a tailored approach to identifying TA needs. SCALE employs six coaches who work part-time with the community leaders of its 24 collaboratives. Recognizing the importance of early action, What Works Cities offers a highly intensive, short-term coaching and TA program for the first 12 to 18 weeks of a city’s involvement in the program. Colleagues at the Johns Hopkins University Center for Government Excellence devote extensive coaching time to help cities conduct a diagnostic assessment that captures their current and aspirational data needs. The effort helps each city specify and organize its data strategy and establishes a coordinated and consolidated approach for aligning data with desired outcomes.

Figure 7. Observed TA domains

Data sources, types, and associated governance issues. Includes topics related to specific data types, sources, and characteristics (e.g., quality, latency) as well as privacy, security, and governance issues associated with data use for specific purposes. Addresses needs related to relationship cultivation, process development, and the documentation required to permit data sharing, such as data-sharing and business associate agreements.

Systems integration and technical platform selection/development. Focuses on technical approaches to data collection, display, and exchange across systems and organizations and the associated data-linking and integration challenges. Includes issues related to the selection and implementation of new technologies (e.g., population management tools), including navigation of technical standards and other interoperability challenges.

Partner, community, and stakeholder engagement. Refers to processes for building inclusive, ongoing, and sustainable relationships for the purpose of establishing, refining, and advancing a collective project vision. Includes practical aspects (e.g., advisory group management) and social engagement aspects (e.g., conflict resolution) as well as support for engaging nontraditional partners and sectors.

Strategic and sustainability planning. Focuses on supporting achievement of project goals and objectives through leadership development, context awareness, asset mapping, and plan development. Includes guidance on how to build and strengthen community assets (e.g., coalitions, individual champions), develop and advance compelling use cases, and generate sustainable value.

Behavior and workflow change management. Refers to motivational and actionable processes for achieving desired implementation objectives that may be relevant to several stakeholders, including clinical providers, technology partners, and social service agencies. Emphasizes approaches to identifying and addressing obstacles to change and creating opportunities for shared redesign in light of community objectives.

Outcomes assessment and evaluation. Focuses on the identification of relevant, feasible, and consistent measures of interest for the community initiative, including both process and outcomes measures. Includes protocols and processes to support systematic collection and analysis of data through

Identified issues for TA. Though about half of the 17 programs are not yet able to cite the systemic challenges and barriers encountered by their projects, the other half can point to many issues that are strikingly similar across programs. Figure 7 outlines seven domains for TA offerings as characterized by CHP. When mapped against the experiences of the other national and regional programs profiled in the scan, the seven domains generally capture the relevant issues that have emerged. Of course, some issues pose greater challenges than others, and there is much more to observe and learn about how these challenges manifest in different types of projects and at different stages. As such, ongoing refinement of TA domains might be useful, along with an assessment of when (i.e., at what stage) and in what sequence specific challenges typically arise in the pursuit of community health transformation.

At this point, however, program leads generally feel they have not yet learned enough to consider TA domains in any given priority or sequence. In fact, several observed that TA domains can or should be considered (and sometimes addressed) concurrently and prioritized according to each local project's context. Despite this reluctance to be directive about TA topics or processes, our own experiences (reinforced by input from other program leaders), suggests that the capture, integration, and use of data is a foundational issue linked to several aspects of project success.

The programs with data infrastructure development aims noted several important strategies for successful execution; these include data asset mapping—which helps local projects to understand the nature, timeliness, and quality of the data to which they have access—and use case development, which helps focus data discussions on the essential elements for fulfillment of specific objectives. What Works Cities has spent considerable time helping cities understand what data exist, what systems are accessible, and how the data could (or not) be appropriately used to serve various project needs.

Any data-sharing initiative between two or more partners (especially in different sectors) reveals the wide variation in organizational approaches for data capture and curation.

Beyond issues of data availability and interoperability, community data-sharing collaboratives must deal with questions about which data are permissible to share, under what circumstances, and for what purpose (e.g., public health surveillance, individual patient or client care). The answers are subject to the appropriate federal (e.g., Health Information Portability and Accountability Act (HIPAA), Family Educational Rights and Privacy Act (FERPA)) and state requirements and community values. Notably, many projects have pursued early efforts through the research frame that—with Institutional Review Board (IRB) approval, can enable partners to share individual-level data for a specified purpose that would otherwise be prohibited.

Many projects profiled in the scan are working to figure out the technical means by which they will be able to match or link individual records across several data sources and/or transfer the information to relevant parties in a manner that is both actionable and integrated with usual processes and workflows. HITECH investments have spurred partners from health care to invest significant effort doing this within sector, and some of the resulting infrastructure is being re-purposed to extend data sharing with other sectors and partners. In other cases, local projects are working to identify new technologies, vet product vendors, train new and existing staff, and sometimes build infrastructure from scratch.

All programs with a data-sharing component emphasized that any such efforts require significant attention to establishing, supporting, and maintaining trusted relationships. Leaders at the program and project level have observed that gaining the trust and buy-in of various stakeholders can be a long and slow process but that it is essential to ensure true community engagement and a successful partnership.

Program management themes and lessons

Several of the programs in the scan have been operational for less than a year. They recognize that what they experience and learn now will not only shape their own efforts but will also guide future investments for the field. Many have taken the opportunity to reflect on and document what has succeeded and where they have had to make course corrections, always refining as they preserve core components. This process has revealed several commonly applied management strategies.

Be flexible; be adaptive. While each program starts with a core set of expectations, assets, and structural components, it must respond appropriately to the needs of a given community in an evolving policy and resource context. CHP and DASH, for example, made a relatively early but unplanned decision to tightly integrate many core program office functions (based on common program objectives, time frames, and activities) and to co-create the All In: Data for Community Health network. Neither program had built such a collaborative approach into its respective work plan, staffing model, or budget; moreover, the programs had no history of working together. However, given that the case for collaboration was so compelling, program leaders, with strong support from funders, adapted and adjusted plans, processes, and staffing to make the collaboration work.

Programs have also adapted as they have transitioned from early to later-stage funding cycles. What they require and/or offer in subsequent rounds of support can differ significantly from what they require and/or offer in earlier years. For example, the first round of funding for BUILD Health Challenge supported a mix of planning and implementation projects, but the second round focuses solely on implementation awards. Program leaders expect

BUILD Health Challenge’s focus on implementation to enhance the replicable, scalable best practices emerging from the program. For DASH, the second cohort awards will emphasize peer learning and collaboration, with the possibility that earlier projects will function as mentors or guides to new DASH projects.

Learn from end-users. Several programs (CACHI, SCALE, ReThink Health Ventures) acknowledged that they adopted and adhered to user-centered design principles for the development and delivery of TA design and the support of both in-person and virtual peer interactions. Upholding such principles requires the consistent and frequent monitoring of project participant needs as well as the development of feedback loops to capture ideas, complaints, and suggestions. For example, BUILD Health Challenge designed group webinars for all 18 projects early in the program, but evaluation surveys revealed that the broad-based presentations did not achieve their intended aims. The webinars addressed general, high-level questions but did not deliver focused information and tailored TA. BUILD Health Challenge has since shifted to facilitating peer-led webinars, which, rather than relying on external “experts,” support specific, timely, and relevant discussion of project experiences and needs.

The Community Interoperability and HIE Program also had to adjust its TA approach. Many projects requested templates or specific examples of actionable approaches for extending an existing HIE service or use case to a non-eligible care provider. Given that services are highly specific to the local context and participating partners, the Community Interoperability and HIE Program could not respond adequately to project participant requests. While the initial plan called for amassing and sharing a set of curated resources that could be helpful to all, program leaders ultimately had to devise much more focused and customized support strategies. For program leaders, the issue of how to design effective TA—with an appreciation for how and when to scale from the general to the specific—is an ongoing concern and source of tension. Figure 8 reflects an example of the tension experienced by several programs and offers a TA strategy rubric for consideration.

Figure 8. Sample TA strategy rubric

	Group discussion	Individual discussion
Broad topic	General information about HIPAA	Guidance on how to approach HIPAA related questions with various project partners
Narrow topic	Specific information about whether/how HIPAA applies to a particular use case (e.g., research) without consideration of specific partner organizations	Guidance on whether/how HIPAA applies to a particular use case in the context of a project that involves a specific set of data-sharing partners

KEY INSIGHT: Many programs rely on input from project participants to help shape what they do and how they do it. While it is critically important to appreciate and identify common themes and challenges across programs, it is also crucial to build capacity that allows programs to respond to specific project needs. In practical terms, some level of both general and tailored support is required.

Evaluation strategies

Given the emergent and rapidly evolving nature of this field, all programs signaled their intent to learn as rapidly and efficiently as possible, especially as it relates to how program design and execution can optimize project engagement and support. Several programs have established self-directed mechanisms to assess their own performance in a rapid-cycle manner. Many have relied on periodic web-based surveys, check-in calls, and event-specific feedback (e.g., meeting evaluations). Some are also supporting formal evaluations of the program office, usually performed by independent third parties and based on both qualitative and quantitative input.

Several programs made available their initial conceptual plans for evaluating program office involvement and related success factors over time. For instance, the MacArthur Foundation Safety and Justice Challenge will evaluate how the national program conducted itself with respect to implementation of the planning process and the jurisdictions' assessment of the TA they receive. The external evaluation's principal investigator is conducting site visits to all 10-core sites and will facilitate focus group and individual interviews at each local project to augment the qualitative findings.

Of course, the ultimate success of projects funded through the 17 programs is also of great interest. Most programs want to know what stimulates, drives, and sustains community-based health improvement. The programs have voiced a broad consensus about how much they need to learn and how important it is to do so quickly. They are also generally reluctant to make assumptions too soon about the most crucial infrastructure, process, and outcome measures. Nonetheless, not all programs have been able to invest (either time or resources) heavily in program evaluation. Some (e.g., SCALE) have made a significant investment at the front end to determine which measures to capture and track over time. Others (e.g., ReThink Health Ventures) have developed theories of change and are using the experiences of project participants to help refine and further evolve their thinking. Whatever the approach, it is clear that all programs have a strong interest in figuring out how to:

- **Characterize the state of the state (i.e., what exists relative to specific program aims) in terms of capacity and readiness.** Several programs embedded rigorous evaluation metrics in the initial application process, assessing organizational readiness as a key component in the site selection process. SCALE, for example,

conducted a functional “readiness test” to identify communities’ innovation capacity and motivation; periodically, it also conducts follow-on readiness assessments to track activity over time. SCALE has engaged an independent party to conduct a formal evaluation, studying development capacity over time and its potential impact on outcomes. It is coupling formal evaluation with real-time feedback to its funded communities.

- **Identify and track progress measures (capacity, process, and outcome).** Many factors complicate efforts to measure the effects of complex and systems-level community transformation, including the time required to realize intervention results and the many confounding factors that simultaneously influence the health endpoints of interest. Any evaluation is also a function of the time devoted to producing change. As noted, while some partnerships are funded for several years, others operate with only a year or two of funding. Tracking progress measures with the expectation of improved outcomes over a short time has proved challenging. The small subset of programs funded for five years or more have a greater opportunity to track and assess outcome measures. The AHC model design (which involves a five-year program) includes an extensive evaluation component that will test the impact of AHCs on total health care costs, inpatient/outpatient utilization, and health and quality of care under Medicaid and Medicare. The evaluation will include randomization at the beneficiary level and matched comparisons at the community level, with a specificity that will support identification of cost savings associated with each of the three evaluation tracks. The evaluation will include a companion qualitative component to capture contextual factors.
- **Assessing measure quality for achieving optimal benefit to community health.** Invest Health has engaged a national evaluator that will assess both program execution and participant experience, although the evaluation’s primary focus is on the impact of environmental factors on successful collaborations. As Invest Health and other programs begin to measure and track endpoints, their experiences will contribute to the growing body of knowledge about how to successfully generate and sustain improved population health at the community level. Questions for consideration include:
 - Do medium-sized cities located at the edge of a metropolitan area behave differently from medium-sized cities located in more remote locations?
 - Do the identified cities have sufficient “control” to make an impact on community health outcomes?
 - How does team composition affect success?
 - How are baseline measures of readiness, such as pre-existing knowledge, capacity, and relationships within the team, associated with progress?

Figure 9. Investments to date

Programs (number of communities/projects funded)	Estimated grant resources
AHC (44)	\$157,000,000 for communities
AHEAD (5)	\$400,000 for communities
Bridging for Health (5)	\$4,509,278 total
BUILD Health Challenge (18)	\$3,675,000 for communities
CACHI (6)	\$9,500,000 total
CHP (15)	\$2,763,646 total
Community Interoperability and HIE Program (10)	\$1,000,000 for communities
Connecting Communities and Care Funding Opportunity (14)	\$3,000,000 for communities
DASH (10)	\$2,000,000 for communities
Health Impact Project (100+)	Over \$24,000,000 total
Invest Health (50)	\$3,180,000 total
MacArthur Foundation Safety and Justice Challenge (40)	\$101,800,000 total
ReThink Health Ventures (6)	\$5,200,000 total
SCALE (24)	\$4,800,000 total
Transforming Communities Initiative (6)	\$55,000,000 total
What Works Cities (55)	\$42,000,000 total
White House Data-Driven Justice Initiative (137)	In-kind support/TA

- How is the intensity of engagement with interventions associated with progress, particularly with respect to the level of involvement across the entire team and the consistency of involvement among different types of team members?
- How is a team's strategy focus area (e.g., affordable housing, food, safety) associated with progress?

The MacArthur Foundation Safety and Justice Challenge is evaluating the impact of its work on jail admissions, public safety, arrests, and public perception. The evaluation partner is currently designing an evaluative framework and cross-site performance measures for comparison. Among the 20 locales selected for evaluation, the program is also identifying comparison jurisdictions for a more robust impact analysis. Given that a major goal of the Safety and Justice Challenge is to “change the way America thinks about and uses jails,” the MacArthur Foundation will also conduct three opinion polls over the course of the program to assess changes in public perception of the crime and justice atmosphere in both the local jurisdictions and their comparators.

Financing models and sustainability

All programs acknowledge that their desired community health improvements are complex, radical, and transformational in nature and therefore require a systems approach to sustainability. From a health policy perspective, these are turbulent times; communities are being challenged to address changes associated with ACA implementation, payment reform, changes in provider markets, and many other influences. As such, any strategies for supporting and augmenting initiatives focused on community health improvement will need to adapt to larger policy, market, and political contexts.

Partly due to the current turbulence, but also in recognition that the return on investment for many projects has yet to be demonstrated, all programs expressed concern about how their work will continue and grow to scale once funding expires. All 17 programs are working to build in requirements and design elements that will help prepare projects for their respective funding challenges. ReThink Health Ventures, for example, espouses three core pillars: broad-based stewardship, sound strategy, and sustainable financing (i.e., financial sustainability that moves away from a reliance on grant funding and instead supports allocation of resources to match stated priorities). As part of program engagement, ReThink Health Venture projects receive assistance in mapping their regional health economy to show the total flow of resources that are theoretically available for transformation efforts. Through such an exercise, projects will be able to realign their investments, more easily achieve strategic objectives, and focus on success beyond the grant period.

While private philanthropies support the majority of programs in the scan, the federal government is supporting or will support several programs (e.g., CHP, AHC, and the Community Interoperability and HIE Program). Figure 9 presents the dollars invested (or projected to be invested) in all 17 programs; in some instances presented finances include all funded components (e.g., program management, TA; where available), and in others just the direct financing to the funded projects. As evidenced by Figure 10, some funders are demonstrating a deep commitment through their investment in more than one program and sometimes in several programs.

KEY INSIGHT: Whether private or publicly funded, all programs want to see their work “thrive, spread and scale;” therefore, many programs are investing in both strategic and sustainability planning. Such investment does not represent a new strategy, but it appears to demonstrate increasing confidence in community capacity to redirect “reactive” health care spending to more upstream interventions that could yield sizeable returns in both savings and population health improvements.

Figure 10. Depth of funder support



Spotlight on data-driven approaches to community health improvement

Though the scan includes 17 programs dedicated to improving population health through enhanced cross-sector collaboration at the local level, a relatively small subset of programs (currently) views data infrastructure development as central to their mission. The organizing frame in Figure 11 reflects the extent to which the 17 programs consider data capture, exchange, integration, and use in support of population health improvement as central to, a component of, or aspirational for their programs.

Of the seven programs for which data infrastructure is central, program leaders have largely encouraged cross-sector data sharing (i.e., beyond the health care sector) but have allowed significant flexibility regarding populations and conditions of interest. The Community Interoperability and HIE Program focused on

cultivating actionable approaches for extending an existing HIE service or use case to non-eligible (Meaningful Use Program) care providers. The AHC model requires data sharing among the bridge organization, model participants, and a community advisory board to ensure the appropriate linkages between Medicare and Medicaid beneficiaries and community services. What Works Cities is investing in the development of data inventories, data management, and best practices that allow city employees to implement open-data policies to support decision-making.

Through their unique organizing frames, programs have collectively helped enhance the characterization of different use cases for which data can support improvement. The programs have provided TA to help communities navigate technical and other challenges and have supported experiments in how to use data for local-level decision-making.

Data focus central. For seven of the 17 programs in the scan, the development of infrastructure and systems to support data capture, exchange, and use is central to population health improvement. Last year, DASH conducted an environmental scan to catalogue and characterize the vibrant set of local data-sharing collaboratives taking hold across the country; the scan revealed three common community health aims that provide tangible examples of data infrastructure development at the local project level: (1) community needs assessment, including related planning and monitoring efforts; (2) care coordination; and (3) research and policy change.

- **Community needs assessment.** In an effort to improve the detection of and characterize both the magnitude and nature of population health challenges, a DASH project in New York City, for example, is linking new and existing data elements across sectors at the neighborhood tabulation area (NTA) level, allowing for more granular estimates than traditional district-level estimates. Preliminary analyses of the linked data have revealed pockets of disparity in certain health outcomes that were not apparent through data analysis at the district level.
- **Care coordination.** Many data-sharing projects strive to get the right information to the right person at the right time in order to enhance care. A Community Interoperability and HIE Program is working to extend EHR access to elementary school nurses by using a web-based application for connecting organizations to their community affiliates. The effort allows school nurses to view a student’s medical history, including asthma action plans, and the authorization forms of students enrolled in the project. School nurses are able to send direct, secure messages to primary care providers and pediatricians, creating a bidirectional flow of information that improves care coordination and offers school nurses a more comprehensive picture of a student’s health.
- **Research and policy change.** The Crescent City Participant Community (CCPC), a CHP awardee, is working to identify and intervene on behalf of severe and persistently mentally ill individuals and other vulnerable populations that are high users of emergency departments or emergency medical and/or crisis response and social services. These individuals often have unmet behavioral and/or mental health needs that increase their likelihood of encountering the criminal justice system or experiencing chronic homelessness. CCPC is aggregating data from EHRs (including records from a prison facility), proprietary and public community-level records, sources of public health information, and the Greater New Orleans Health Information Exchange (GNOHIE). Findings about how to manage incidents will lead to new measures that can affect systems transformation, risk modeling, alerts and messaging

Figure 11. Program TA offerings and related activities

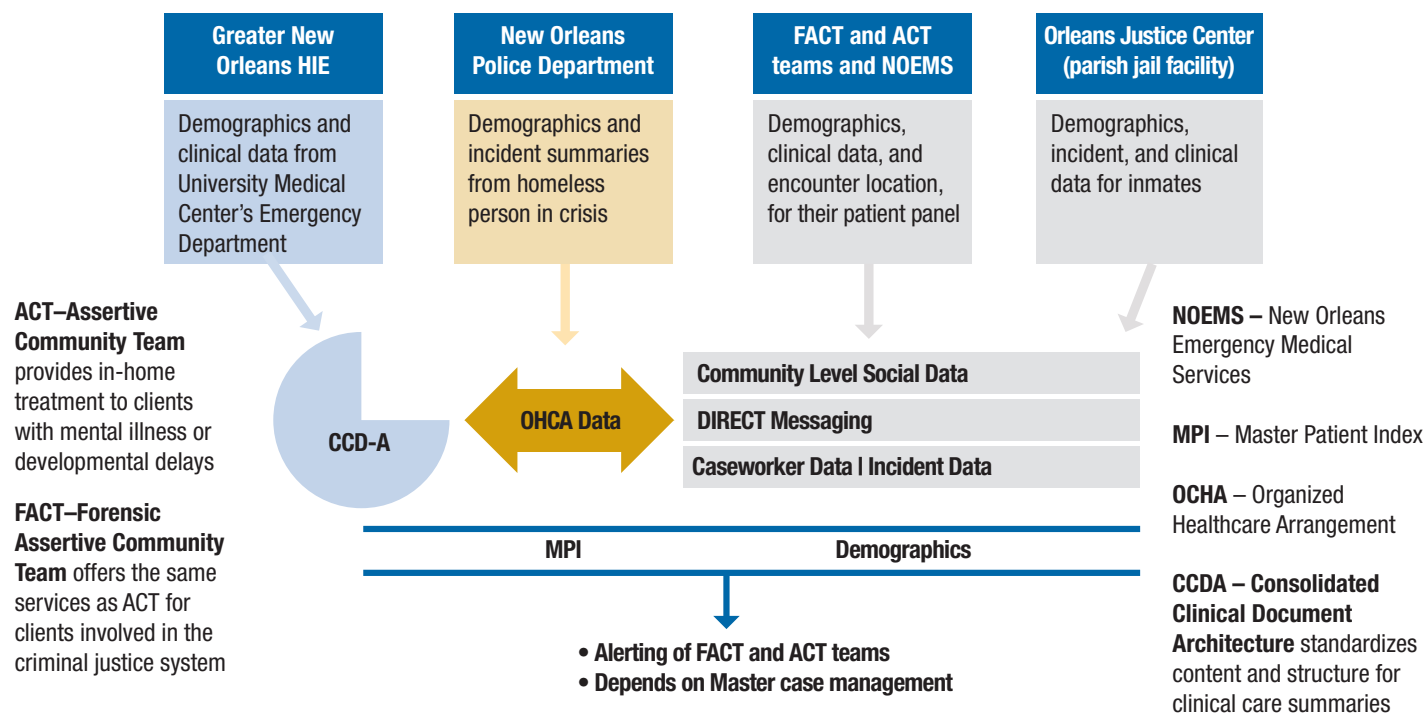
Data capture, exchange, and use is CENTRAL to population health improvement
AHC CHP Community Interoperability and HIE Program Connecting Communities and Care Funding Opportunity DASH What Works Cities White House Data-Driven Justice Initiative
Data capture, exchange, and use is a COMPONENT of population health improvement
BUILD Health Challenge CACHI Invest Health MacArthur Foundation Safety and Justice Challenge ReThink Health Ventures SCALE Transforming Communities Initiative
Data capture, exchange, and use is an ASPIRATIONAL goal to enable population health improvement
AHEAD Bridging for Health Health Impact Project

for referrals, and policy change. Figure 12 provides a representation of the data flow among CCPC partners. The figure highlights all the mechanisms used for communication among partners as well as the potential data types used in caring for the shared population.

Data focus a component. Seven programs viewed data infrastructure development as important but not essential to their projects. For some, it is an issue of local partner and/or community readiness; others may not yet know what types of data systems they might need for supporting their objectives. For example, a BUILD Health Challenge community coalition has created a wellness referral program between health system and community service providers that relies on paper forms that are faxed and manually entered into data systems. The collaborative is considering automation of the current approach but started with a low-tech intervention to elicit input from end-users regarding workflow and feasibility.

Data focus aspirational. Three of the programs in the scan did not view data infrastructure development as a current focus. All 17 programs acknowledged, however, that local efforts to improve population health are multidimensional and commented that the absence of a data focus in a given funding cycle is not a reflection of importance—but rather of priority. It is worth noting that several programs with no previous or current focus on data infrastructure have already made program adjustments or plan to do so in subsequent funding cycles.

Figure 12. Sample data flow diagram: Crescent City Participant Community (CCPC)



To begin to assess the impact of the collective investment on cross-sector data sharing both at the community level and nationwide, Figure 13 maps the seven “data focus central” programs and associated local projects. Whether by virtue of readiness, market dynamics, or some other contextual factors, it is striking to note how and where efforts cluster. There are clearly gaps in geographic representation (some of which may be attributable to the scan’s sampling frame), and there are significant opportunities to help broaden and deepen support for data-driven, cross-sector community collaborations. Again, given that the scan is not comprehensive, future research might map all known public dollars devoted to community-level data sharing to highlight areas of progress and regions in need of attention across the United States.

KEY INSIGHT: Across the profiled programs, the development of robust, multisector data infrastructure is increasingly viewed as critical to building and sustaining efforts that support local improvements in population health.

Opportunities to support and advance the field

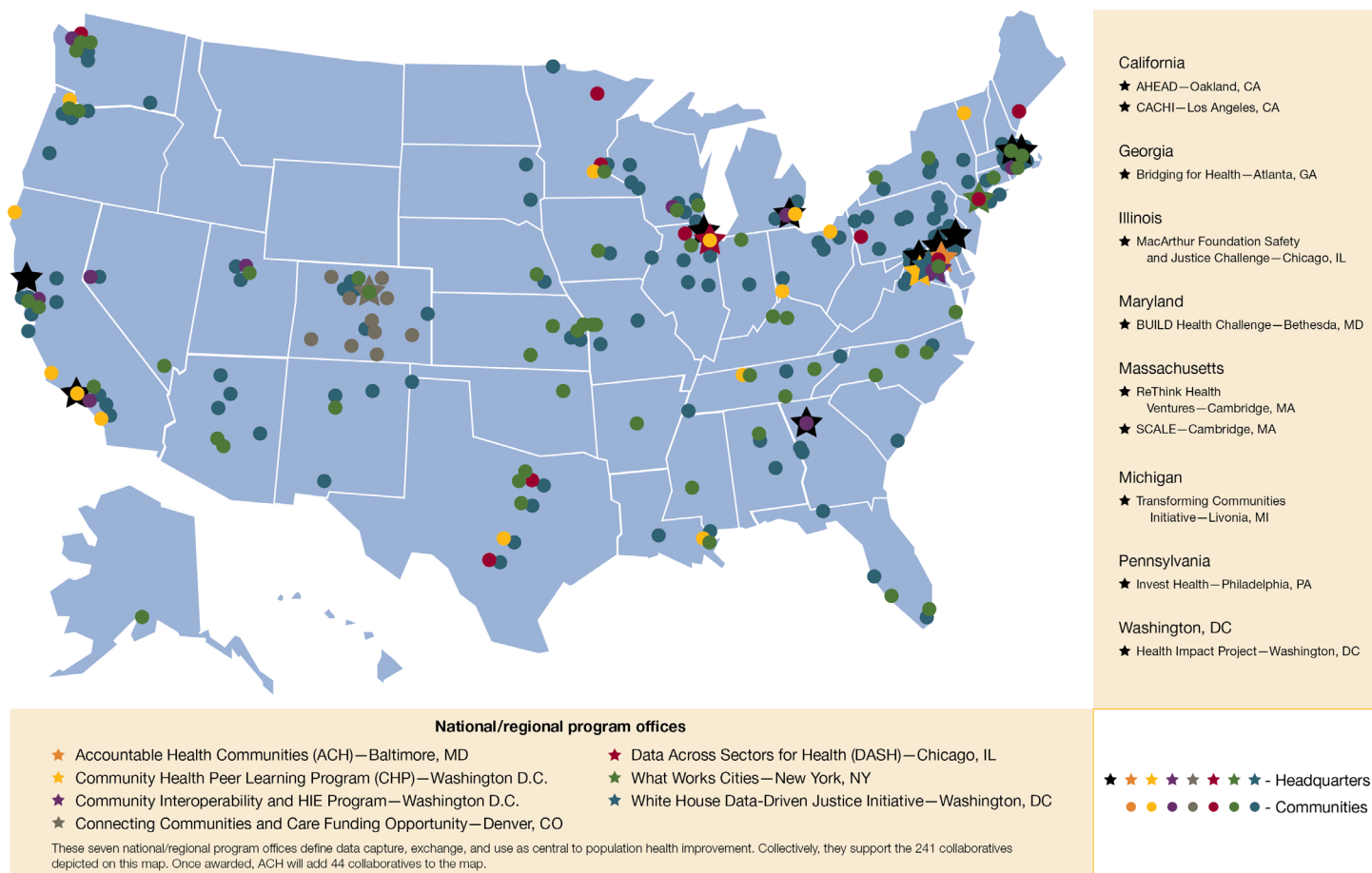
With so many new investments in local health improvement and so much excitement about the possibility of driving systemic change upstream, programs involved have an obligation to others, and to the communities they serve, to seek collaboration where possible. The following suggestions are just a beginning. Many other needs, challenges, and opportunities will likely surface as local projects, along with supporting national and regional programs, grapple with the many factors that influence individual and population health. In this time of intense discovery, it is critical to maintain

clear lines of communication, bridge funding silos, and capitalize on opportunities to maximize collective impact. In short, it will not serve funders, program leaders, or local projects to either compete or work in isolation. Below are some examples of where and how programs are working to maximize impact and scale.

Supporting “aspirational” community collaborations. Although the 450 local initiatives referenced in this report received direct and/or in-kind support for their work, the demand for resources far exceeds supply. Every profiled program received more applications than expected and could fund only a small subset. For some communities, the lack of funding may have been a deterrent to instituting a program of improved population health, but many other unfunded or underfunded local projects are nonetheless working toward population health improvements, although at a relatively slow pace.

Through its Pathways to Pacesetter program, 100 Million Healthier Lives has assumed some of the responsibility for supporting communities interested in initiating projects dedicated to improved population health. The program supports local leaders at every level of the community through a virtual platform that makes resources and tools available to participants. It offers several à la carte and low-cost options for introducing change. It supports communities at earlier stages and engages new cohorts on a rolling basis. Similarly, the All In: Data for Community Health network recently extended an open call for affiliates. The network invites any local data-sharing collaborative to establish a profile, after which it can access and engage many of the offerings available to funded communities.

Figure 13. Mapping (part) of the national movement



Another mechanism for encouraging nascent efforts and/or those not deemed sufficiently mature for a given program is seed funding. Last fall, for example, the MacArthur Foundation Safety and Justice Challenge created an Innovation Fund. Through a new RFP process, the program contacted the 171 jurisdictions not initially selected for the Challenge Network. The program’s goal is for small grants to help jurisdictions build a more solid foundation on which to advance long-term reform.

Engaging with All In

By engaging in the All In network, affiliates will have the opportunity to:

- Build connections and leverage the experiences of similar communities across the country
- Contribute to and access a searchable online knowledge base of projects, resources, and tools
- Participate in virtual and in-person events designed to facilitate peer learning and provide TA
- Help review and test metrics and indicators of progress

Capturing and shamelessly sharing what does and does not work. Those aspiring to deliver change need guidance in navigating the path forward, and avoiding pitfalls. While focused on building community capacity, all programs emphasized their commitment to documenting and sharing lessons learned not just among collaboratives but also across the field as a whole. Figure 14 highlights just a few of the many existing and expected work products developed by the 17 programs, including case studies, impact assessments, and resource guides. Many of the resources are designed to support local projects. For example, CHP has developed a series of Learning Guides that can help local cross-sector data-sharing collaboratives address various components of their work (e.g., partner and stakeholder engagement). At the same time, What Works Cities has developed online public resources to support policymakers who are official program designees and decision-makers not affiliated with a program. These resources have generated interest from outside the United States and, in some cases, have been translated into other languages.

Figure 14. Sample of existing and anticipated resources

Open-Access Documents: What Works Cities worked with the Sunlight Foundation to create manuals and guides related to open-data guidelines and the use of unique identifiers, among other topics.

ACH Data-Sharing Toolkit: CACHI supported the development of this toolkit designed to assist communities that are working to share data across sectors to improve health.

DASH Environmental Scan: Early Learnings from an Emerging Field: DASH conducted an environmental scan of the state of multisector data-sharing initiatives aimed at improving community health; initial findings show that a vibrant and diverse set of initiatives exist across the country.

Data-Driven Justice Playbook: How to Develop a System of Diversion: The playbook outlines six strategic steps that communities can take when building a system that diverts high users from courts and jails to appropriate community-based treatment and services, providing long-term stability to individuals' health and social circumstances.

Pulse Check: Through Ventures, ReThink Health conducted a comprehensive survey of over 230 multisector partnerships for health across the country to learn about their strategic priorities, stewardship structures, and financing approaches.

Community Interoperability and HIE Final Report: Final reports from each funded project summarize their quantitative measures and provide qualitative metrics that highlight lessons learned, successes, sustainability, and opportunities for scale. *(Expected release date: Spring 2017)*

Learning Guides: CHP is producing five Learning Guides for the field featuring best practices, recommendations, and lessons learned from subject matter expert communities about building a community HIE; strategies for partner, community, and stakeholder engagement; guidance on collecting high-quality data for performance management; information on strategic and sustainability planning; and guidance on conducting impact analyses for community-based initiatives. *(Expected release date: Spring 2017)*

Field Sensing Report: The ReThink Health Ventures Program is preparing a report on the program office site selection process. *(Expected release date: Spring 2017)*

White Paper on Health Impact Assessments: A work group of the Society of Practitioners of Health Impact Assessment (SOPHIA) is writing a paper on health impact assessments and health care. *(Expected release date: Spring 2017)*

Supporting a multigenerational workforce. Some programs view sustainable workforce development as part of their charge and see it as an important strategy for building capacity that can extend beyond a specific project or engagement. What Works Cities views its investment as empowering 21st century government employees with the skills and supports needed to tackle population health challenges from a holistic perspective. Acknowledging the value of a multigenerational workforce, What Works Cities has also invested resources to support individuals who have demonstrated a commitment to address population health issues. The program has devised a sustainability framework—built on a certification program and coursework

for mid-level managers and front-line employees—to cultivate a public sector workforce that embraces the use of data and evidence in its daily work, therefore changing the way employees approach daily tasks and strategic decisions. To date, the program has trained 40 mid-level public sector employees through its certification program, with plans for scale-up. Such grassroots investment is intended not only to support the local efforts funded by What Works Cities but also to generate ripple effects that can further advance and help scale up other related initiatives.

Developing measures of progress and building the evidence base. The level of activity, energy, and financing for the emerging field of improved total population health is heartening; several program leaders cautioned, however, that sustained and expanded investment is likely contingent on the capacity, discipline, and will of existing programs to demonstrate and document outcomes on at least two levels. In fact, programs are working with communities to define, refine, and track progress on: (1) key measures that relate to programs' ultimate community-level goals as well as on (2) measures of capacity for change. Many programs have allocated their initial investments to the latter area and to where the appetite for cross-program discussion and potential coordination is great. Several programs (e.g., All In, SCALE, ReThink Health, CACHI) have developed and deployed instruments across their respective cohorts (and sometimes beyond) in order to develop a better understanding of existing capacity (among other topics); such efforts present a tremendous opportunity for comparison and conversation, not only about what programs are learning but also about how they are exploring and characterizing progress (including possible opportunities for some level of harmonization). As one program leader noted, "If we can't articulate progress in common terms—or at least in ways that are relatable to other programmatic efforts— then we've missed a tremendous opportunity to advance the field."

Creating mechanisms to support meaningful connections. No matter its size or funding level, no single program can possibly know of or tap into all of the people, progress, ideas, and resources dedicated to improving total population health. Keeping abreast of the work, experiences, and needs of their own local projects has proved challenging enough for individual programs, but what troubles them most are the known and unknown unknowns.

Most program leaders see networks as vital mechanisms for connecting people and ideas, and have worked both to cultivate such networks within their own programs and to build bridges across networks.

Of course, the concept of building connections through networks is not new, and experiences are mixed. Many programs working within and across networks discussed some strategies that should probably be reflected in any effort that aims to cultivate and sustain meaningful connections within and across programs:

- Engagement of target audiences in network design and development
- Inclusion of high-impact and well-curated resources
- Incorporation of consultative feedback mechanisms
- Commitment to leveraging and promoting internal knowledge
- Ability to adapt, adjust, and relate productively to facilitate connections between networks
- Focus on generating low-friction interaction and value

Conclusion

The conduct of even this limited environmental scan has confirmed our belief that, despite real and important distinctions, programs working to stimulate and support community-led population health improvement efforts have far more in common than not. Program commonalities extend to their ultimate aims, and to the approaches they are pursuing to achieve them. In conversations with program leaders, we heard:

- Expressions of keen interest in others' work and lessons learned
- A desire to compare and contrast experiences and approaches and collaborate on shared challenges
- An eagerness to share tools, resources, instruments, and other program artifacts
- A passion and shared commitment to advancing community-led transformation

Our hope is that this report will shed light on possible opportunities at the funder, program, and local project levels to hasten progress toward greater connectivity and collective action in improving total population health.

APPENDIX I: Contributing Program Staff

A list of those interviewed for this environmental scan and the associated date for each conversation. Interviewed colleagues had the opportunity to review the material in the scan in advance of publication.

Jane Ericson
Project Director
ReThink Health Ventures
Interview date: May 16, 2016

Rachel Keller Eisman
Executive Director
BUILD Health Challenge
Interview date: May 18, 2016

Melanie Herrera Bortz
Program Officer
The Colorado Health Foundation
Connecting Communities and Care Funding Opportunity
Interview date: May 19, 2016

Quentin Moore
Director of Population Health and Disparities Prevention
Transforming Communities Initiative
Interview date: June 6, 2016

Barbara Masters
Project Director
California Accountable Communities for
Health Initiative (CACHI)
Interview date: June 7, 2016

Chisara Asomugha and Bill Winfrey
Project Lead
Accountable Health Communities (AHC)
Interview date: June 8, 2016

Rachel Abbey
Project Officer
Community Interoperability and HIE Program
Interview date: June 9, 2016

Amanda High
Chief of Strategic Initiatives, Reinvestment Fund
Invest Health
Interview date: June 20, 2016

Bethany Rogerson
Project Manager
Health Impact Project
Interview date: June 22, 2016

Anna Barnes and Danielle Lepar
Program Associate and Senior Research Associate
Data across Sectors for Health (DASH)
Interview date: June 29, 2016

Soma Stout
Executive Lead, 100 Million Healthier Lives,
Institute for Healthcare Improvement
Spreading Community Accelerators through Learning
and Evaluation (SCALE)
Interview date: June 30, 2016

Chris Parker
Associate Project Director
Bridging for Health
Interview date: July 5, 2016

Kayvon Behroozian
Policy Adviser
White House Data-Driven Justice Initiative
Interview date: July 13, 2016

Kevin Barnett
Senior Investigator
Alignment for Health Equity and Development (AHEAD)
Interview date: July 26, 2016

Laurie Garduque
Program Director
MacArthur Foundation Safety and Justice Challenge
Interview date: September 8, 2016

Beth Blauer
Executive Director, Johns Hopkins University Center for
Government Excellence
What Works Cities
Interview date: September 21, 2016

APPENDIX II: Environmental Scan Interview Protocol

The following questions guided our conversations with NPO / RPO staff. As NPO / RPO efforts are varied, so too were the composition of questions asked during each interview. Where additional specifics were captured online in advance, we tailored the interview to enhance the richness of discussion.

1. We have spent a bit of time learning about the [fill the blank] program based on what's available via the web, but can you tell us a little more about your efforts, in your own words (i.e., what are the core aims and components of your work)?
 - a. If not addressed in the above, please characterize the maturity of the [fill the blank] program (i.e., planning stages versus implementation)
 - b. If not addressed in the above, how is the [fill the blank] program financed?
2. Roughly, how many staff are involved in day-to-day operations of the [fill the blank] program?
3. If you can generalize, at what geographic level do your participating communities/projects operate? Which sectors are heavily involved? Which sectors are least represented?
 - a. If there are plans to scale or expand these collaborative projects to additional communities, how will you do so? (i.e., produce learning guides, disseminate a tool)
 - b. Can you provide some examples of the population health improvement aims of these collaboratives?
4. We have characterized the following six programmatic aims for multisector, community-based transformation initiatives: 1) System redesign, 2) Equity/disparities focus, 3) Data sharing and use, 4) Leadership development, 5) Expanded geographic scale/spread, 6) Financing and investment, and 7) Policy Impact. How strong is your emphasis on each of these areas? Are there additional programmatic emphasis areas that we are missing?
 - a. If "Data sharing and use" are core to your work, can you tell us more about this component?
 - a. Which sectors are sharing data, and what mechanisms are being used to support this?
 - b. Can you provide examples of the data types and elements being shared?
 - c. What are some of the key issues/challenges that have surfaced through these data sharing efforts?
5. As you support these communities as they engage in multi-sector collaboration, what other issues have surfaced? What topics have been identified for technical assistance?
 - a. How have you responded to these needs? (i.e., How would you characterize your technical assistance offerings?)
 - b. Have you employed any TA experts that you would commend?
 - c. Can you share any key take-aways or insights that have proved invaluable to the collaborative efforts thus far?
 - d. Have any communities shared small-scale or large-scale successes toward their stated collaborative goals? Related, have you, as the NPO / RPO, documented any emerging strategies for achieving success?
6. Do you foster opportunities for peer-to-peer learning among the communities in your initiative? (i.e., conference calls, webinars, virtual platforms, in-person full meetings, regional meetings, site visits, etc.) Can you describe these efforts?
7. Presumably, the community efforts you are engaged with are at different stages in their transformation journey. Have any specific community initiatives served as a guiding post or mentors to others?
 - a. Additionally, is there a sustainability component to the NPO / RPO community-level support?
8. Are you evaluating your NPO / RPO programmatic offerings and/or encouraging the evaluation of the specific community initiatives at the local level? If so, can you describe your outcomes measures/assessments in more detail?
 - a. How would you characterize a successful project at the end of the grant period?
9. Are there other initiatives in the multisector community health transformation space that you regularly
10. Do you think the questions we asked will paint a helpful picture of your NPO / RPO work? Would you characterize your program in ways that we did not address just now? Do you have any questions for us?

Endnotes

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8. The Colorado Health Foundation joined the All In Network in September 2016. The BUILD Health Challenge joined the All In Network in October 2016.
9. Ibid.
10. CMS is still accepting applications for Track 1 recipients. Tracks 2 and 3 have closed and applications are under review. The tentative launch date for the program is March 2017.
11. The first cohort of projects for the Connecting Communities and Care Fund Opportunity were announced following our interview. The second cohort of projects was announced in November 2016.
12. Non-eligible providers include those not eligible for the CMS Electronic Health Record Incentive Programs, including long-term and post-acute care (LTPAC) providers, behavioral health providers, individuals (care providers and others, including family members authorized to act on the patient's behalf), and other care settings and care providers (e.g., safety net providers, public health, social services, emergency medical services) or recognized stakeholders that applicants are encouraged to engage.
13. Herald, L., Blesser, W., Alexander, J., and Wolf, L. (2016). "A Systematic Review of the Literature on the Sustainability of Community Health Collaboratives." *Medical Care Research and Review*, Vol. 73, Issue 2. 1077558715607162.
14. The National/Regional Program Offices rely on various management models to provide technical assistance and financial support to local collaboratives. Planning grants support local collaboratives' design and prepare for process changes. Implementation funds support larger infrastructure investments that ensure the operationalization of goals. Hybrid models fund both planning and implementation. Additional information regarding program design appears in the "Grant structure and duration" discussion.
15. The funding structure for the second round of BUILD Health Challenge funding differs from the structure in round one.
16. Through an Innovation Fund, 20 new jurisdictions were added to the MacArthur Safety and Justice Challenge in February 2017. The sites will receive support and expert technical assistance in designing and implementing local reforms. Their innovations will range from crisis intervention to behavioral health to pretrial release and supervision.
17. Several organizations are providing in-kind support for the effort.
18. As of January 23, 2017, the Arnold Foundation is also supporting this work: <http://www.arnoldfoundation.org/laura-john-arnold-foundation-continue-data-driven-criminal-justice-effort-launched-obama-administration/>
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21. Responses reported from the first administration of the "Multisector Collaboration and Data-Sharing Readiness Survey," which was conducted for the purpose of developing a better understanding of the capacity of CHP and DASH projects to advance community health through multisector collaboration and data sharing. The survey was administered to all program leaders with a significant role in CHP or DASH, with a total of 87 responses from project participants and their partners.
22. In spring 2017, the Build Health Challenge will fund a second cohort of projects through implementation grants.
23. Office of Disease Prevention and Health Promotion. "Determinants of Health." <https://www.healthypeople.gov/2020/about/foundation-health-measures/Determinants-of-Health>.
24. These technical assistance partners are subject to change in the second wave of funding.
25. For a full list of partners, please see <https://www.whitehouse.gov/the-press-office/2016/06/30/fact-sheet-launching-data-driven-justice-initiative-disrupting-cycle>.

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Glossary of Terms

Data currency and timeliness: Data that are up to date, available, and recorded at or very near the time of the event or observation.

Electronic Health Record (EHR): An electronic record of health-related information for a patient that contains information captured in clinical visits, lab and imaging studies, and other information important to the patient's medical past.

Family Educational Rights and Privacy Act of 1974 (FERPA): Administered by the Family Policy Compliance Office in the U.S. Department of Education, FERPA applies to all educational agencies and institutions that receive funding under any program administered by the Department. FERPA generally prohibits the improper disclosure of personally identifiable information derived from education records.

Health Information Exchange (HIE): Verb: The electronic movement of health-related data and information among organizations according to agreed-upon standards, protocols, and other criteria. Noun: A private or public (state or local) entity responsible for health information exchange.

Health Information Technology (Health IT or HIT): The use of electronic health (or medical) records, as well as computers, software programs, electronic devices and the Internet to securely store, retrieve, update and transmit information about patients' health.

Health Information Technology for Economic and Clinical Health (HITECH) Act: A title of the American Recovery and Reinvestment Act (ARRA) that includes health IT provisions, including grant funding and incentives to stimulate the adoption of health IT. It also includes significant modifications to HIPAA designed to strengthen privacy and security protections.

Health Insurance Portability and Accountability Act of 1996 (HIPAA): The Office for Civil Rights enforces the HIPAA Privacy Rule, which protects the privacy of individually identifiable health information; the HIPAA Security Rule, which sets national standards for the security of electronic protected health information; the HIPAA Breach Notification Rule, which requires covered entities and business associates to provide notification following a breach of unsecured protected health information; and the confidentiality provisions of the Patient Safety Rule, which protect identifiable information being used to analyze patient safety events and improve patient safety.

Homeless Management Information System (HMIS): A local information technology system used to collect client-level data and data on the provision of housing and services to homeless individuals and families and persons at risk of homelessness.

Master Patient Index (MPI): A database that maintains a unique index (or identifier) for every patient registered at a health care organization.

Meaningful Use: A federal program that gives eligible health care professionals and hospitals funding for adoption and meaningful use of certified electronic health record technology. Providers need to show they are using "certified electronic health record technology" in ways that improve the quality of care, individual access to health information, and the health of populations.

National/regional program office (NPO)/(RPO): One or more organizations responsible for executing activities that support multisector collaborations committed to improving the health of their communities. The subset of supported projects may be national or regional in scope.

Open source software: Software whose source code is available for modification or enhancement by anyone. "Source code" is the part of software that most computer users do not ever see; it is the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works.

Use case: A specific scenario or example considered when designing processes and/or technical solutions.