

Developing Community Health Leaders:

An Expanded Evaluation of the National Leadership Academy for the Public's Health

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I. Introduction

Training of individuals to be effective leaders in the business sector gained traction in the years following the Second World War. But the call for public health leadership development did not come until 1988 when the Institute of Medicine (IOM) published *The Future of Public Health*, a detailed study of America's public health system.[1] While it acknowledged advancement within the public health system and recognized the dedication and effort of public health workers nationwide, the report revealed disarray of leadership in the public health field and shed light on the need for leaders of all disciplines to come together in collaborative action to restore public health capacity.[2]

Key federal agencies and national professional organizations, convened by the Centers for Disease Control and Prevention (CDC), came together to respond to the IOM's call to action.[2] In 1991, CDC funded the Public Health Leadership Institute (PHLI) through a cooperative agreement with the Western Consortium for Public Health, which later became the Public Health Institute (PHI). This was the first national leadership venture of its kind. Following this initial investment, CDC went on to support the development of numerous state and regional public health leadership institutes throughout the country. In 2000, the CDC funded the second iteration of PHLI—the National Public Health Leadership Institute (NPHLI)—in partnership with the University of North Carolina at Chapel Hill's School of Public Health [2] During this time alumni networks were also formed to support ongoing leadership learning.

In 2003, the IOM followed up its original report with *The Future of the Public's Health in the 21st Century*.[3] This report again noted achievements but also emphasized that the United States led the world in health expenditures but still lagged behind many of its peers in health status. The IOM called for collaboration stating that, "government public health agencies, as the backbone of the public health system, [were] clearly in need of support and resources, and could not work alone. They must build and maintain partnerships with other organizations and sectors of society, working closely with communities and community based organizations, the health care delivery system, academia,

business, and the media."[4] One of the most recent IOM reports, *Primary Care and Public Health: Exploring Integration to Improve Population Health*,[5] echoes this call by noting that organizations and disciplines that have historically operated independently must recognize that through collaboration, significant and sustained improvements in the health of individuals, communities, and populations can be produced.[5]

In response to IOM's present day call for collaborative public health leadership development, the Center for Health Leadership and Practice (CHLP), a project of the Public Health Institute in Oakland, California, developed the National Leadership Academy for the Public's Health (NLAPH), which was funded by CDC and launched its first cohort in 2012. NLAPH brings together teams of leaders from multiple sectors to actively engage their communities in achieving health equity and improving population health. The program uses an experiential learning process to advance leadership skills, including a webinar series, leadership retreat, coaching support, and peer networking. For more information about NLAPH, please see CHLP's website, www.healthleadership.org/program_nlaph.

Because today's public health challenges are complex and rapidly evolving, NLAPH uses an emergent design to respond to the needs of its participants and a continuous quality improvement (CQI) framework to respond to feedback and make mid-course corrections. To inform both the emergent design and CQI process, CHLP has embedded an ongoing program evaluation into the NLAPH model.

The program evaluation, conducted by the Center for Community Health and Evaluation (CCHE), was designed to gather baseline and mid-term feedback to inform the program design, as well as assess the impact of NLAPH participation immediately following the program year. There are limitations to the program evaluation in that it was not designed to collect longitudinal data from participants and there was not an effort to look at NLAPH in the context of other public health leadership development programs.

The Kresge Foundation provided funding for an expanded evaluation to explore critical leadership competencies and learn how leadership programs contribute to the development of those competencies, viewing NLAPH in the context of other leadership training programs. This report presents findings from the expanded evaluation, including critical leadership competencies, leadership development programs' contributions to those competencies, and best practices for design of community health leadership development programs.

II. Methods

The Kresge-funded evaluation built off of the CDC-funded NLAPH program evaluation. For the program evaluation, CCHE collected data from multiple sources throughout the NLAPH program year using varied methods to assess impact of the NLAPH training on individual and team leadership capacity and intersectoral collaboration, success factors, and most valuable components of the program.

The methods used for the program evaluation of the two completed NLAPH cohorts are outlined below.

NLAPH PROGRAM EVALUATION

Data source	Data collection method	Sample & response rate
NLAPH participants – individual	Pre/post individual assessment survey	Cohort 1 (n=80): Pre=80; Post=70 Cohort 2 (n=81): Pre=80; Post=76
	Mid-term participant feedback survey	Cohort 1: 65 responses Cohort 2: 67 responses
	Participant interviews (sample)	Cohort 1: 18 individuals Cohort 2: 19 individuals
NLAPH participants – team	Pre/post team assessment survey (completed collaboratively)	Cohort 1 (n=20): Pre=20; Post=19 Cohort 2 (n=20): Pre=20; Post=19
NLAPH coaches	Coach assessments of team readiness and progress (mid-term and final)	Cohort 1 (n=20 teams): 20 (mid-term only) Cohort 2 (n=20 teams): 20 (mid-term & final)
	Coach interviews	Cohort 1: 8 individuals Cohort 2: 7 individuals
Program documents	Document review: • Team applications • Participation data • Post-retreat and webinar feedback surveys • Big Picture and Leadership Learning documents	N/A

To inform future program development, NLAPH program staff and the Kresge Foundation were interested in building on the existing evaluation to identify best practices in the field—viewing NLAPH in the context of other leadership development programs. The key questions that this expanded evaluation sought to answer are:

A. What are the critical leadership capacities for community health leaders?

B. What is the contribution of leadership training to the development of critical leadership capacities?

C. What are best practices for community health leadership development programs?

The data collection methods used to answer these expanded evaluation questions are summarized below.

EXPANDED EVALUATION

Method	Purpose	Sample
Environmental scan and literature review	Identify the scope and structure of leadership development programs similar to NLAPH	37 community health leadership development programs and synthesis of peer reviewed literature
Key informant interviews with staff/leaders of community health leadership development programs	Identify best practices for leadership development programs aimed at improving community health	8 individuals (sample of 8 of the 37 programs included in the literature review)
Key informant interviews with other thought leaders, funders, and program planners	Gather expert opinions about leadership competencies needed to effectively engage in community health improvement work and best practices for leadership development programs	10 individuals
Site visits with NLAPH alumni (in-person team interview) Site visits were co-funded by the Kresge Foundation and the Robert Wood Johnson Foundation	Assess the impact of participating in NLAPH and gather perceptions of critical leadership capacities and NLAPH components that contributed most to their learning	21 NLAPH Cohort 1 and 2 teams
NLAPH alumni survey	Assess the impact of participating in NLAPH and the California Leadership Academy for the Public's Health (CaLAPH), also run by CHLP	52 NLAPH Cohort 1 participants

The literature review and environmental scan were completed in 2013 by CHLP in collaboration with CCHE. The literature review informed the rest of the data collection, which was completed by CCHE in 2014. For the purposes of this report, "key informants" is used to refer to the combined group of leadership development program staff and thought leaders (listed in Appendix A); "NLAPH alumni" will be used to describe feedback from participants from the first two cohorts of NLAPH.

III. Results

The results are a synthesis of lessons learned from the ongoing program evaluation of NLAPH with information and perspectives from similar leadership development programs and thought leaders in the field. Findings are organized by the three expanded evaluation questions discussed in the methods section above.

A. What are the critical leadership capacities for community health leaders?

The evaluation team looked at critical competencies for community health leadership development programs from the perspectives of those involved in other leadership development programs as well as the views of NLAPH alumni and thought leaders.

1. Competencies of existing leadership development programs

The **Public Health Leadership Competency Framework**,[6] developed by the National Public Health Leadership Network, was the most commonly cited as the keystone for identifying important competencies for leadership development programs aimed at improving community health. One key informant stated: *"We decided that we can't be all doing this without developing a leadership competency framework. We developed that, published it in 1994 in the Journal for Public Health and since then we've edited it twice. That is the core. That's what everyone should be trained in."*

Public Health Leadership Competency Framework	
Core transformational competencies	• Visionary leadership • Sense of mission • Effective change agent
Political competencies	• Political processes • Negotiation and mediation • Ethics and power • Marketing and education
Trans-organizational competencies	• Understanding organizational capacity and dynamics • Trans-organizational capacity and collaboration • Social forecasting and marketing
Team-building competencies	• Develop team-oriented structures and systems • Facilitate development of teams and work groups • Serve in facilitation and mediation roles • Serve as an effective role model

The environmental scan of the 37 community-health related leadership development programs confirmed that the competencies included in this framework continue to be the focus of many public health leadership programs. Of the 15 programs for which a list of competencies was available, all covered topics related to each of these four competency domains (core transformational, political, trans-organizational, and team-building). In addition, most included competencies related to awareness of self and personal preferences.

Peer-reviewed literature reinforces the importance of these competencies. Within medical teams the most effective leader is a person capable of delegating responsibility to team members, yet who retains an overview, monitors action, and steps in when direct application of her/his experience and expertise is needed.[7] Prominent public health leaders have stressed the importance of advocacy and the need to take risks in advocating for progress.[8] Communication, political, and interpersonal skills, as well as the ability to achieve a shared vision have been cited as important for leadership in reducing health disparities.[9] During public health crises (including epidemics and terrorism) a leader's success depends on the ability to work across agencies and communities.[10]

2. Most important competencies for community health leaders in the future

Key informants and NLAPH alumni highlighted many of the competencies included in the Public Health Leadership Competency Framework as essential for community health leaders in the future. Often critical competencies build on one another—i.e., some competencies are fundamental and required in order to effectively develop other leadership skills. The competencies that a program needs to focus on depend on the prerequisites for participation and assumptions about what level of skill participants have coming into the program.

The competencies discussed by key informants fell into three broad categories: pre-requisites and characteristics (passion and commitment, institutional support), collaborative ability, and skill building (vision and systems thinking, technical skills).

	**Passion & commitment**	Desire to learn & grow Belief that you can have an influence Authentic & open Demonstrate resilience Show courage & willingness to take risks Have passion (& compassion) for the community Have connection to the community
	**Institutional support**	Dedicated time to participate Take risks & practice what is learned Real world opportunity to apply learnings
	**Collaborative ability**	Awareness of own styles, strengths & challenges Communication skills Strategically building teams & networks Promoting dialogue & listening effectively Managing change & conflict Valuing collective impact
	**Vision & systems thinking**	Systems thinking Establish a vision Apply continuous quality improvement principles
	**Technical skills**	Influence policy Use data to drive decisions Content expertise

Prerequisites

Passion and commitment were emphasized as a critical prerequisite for program participation. This category includes what many key informants described as characteristics of "ideal candidates" that were perceived to predict individual success in the leadership development program. These include:

- Desire to learn and grow
- Belief that you can have an influence
- Being authentic and open
- Demonstrating resilience, including perseverance, ability to see things though, and willingness to be uncomfortable
- Showing courage and willingness to take risks
- Having passion (and compassion) for the community and the work of community health improvement
- Having a connection to the community: *"you need someone who's got some level of knowledge, understanding, and presence in the community." (key informant)*

To benefit from participation in leadership development programs, individuals must have a desire to participate. Participants who were nominated by a supervisor—instead of by their own expression of interest in developing leadership skills—were not perceived to benefit as much.

There were also questions as to whether these essential characteristics could be taught. Some sources suggest that individual leadership traits can be encouraged or enhanced through coaching and training, however, at least some thinking among psychologists suggests that they are innate.[11]

Institutional support was also identified as a key prerequisite with the level of support required being somewhat dependent on the goals of the program. For example, if the program aimed to have an organizational/institutional impact, institutional support was more important than for programs focused solely on individual level outcomes. Regardless of intended outcomes of the program, institutional support was needed to allow participants to have dedicated time to participate, take risks and practice what they learn when they return to work, and have a real-world opportunity to apply learnings.

Without this support, the participant will face more challenges that may prevent individual growth and influencing or driving change.

If the program is aiming to influence collaboration or networking among organizations it should support current or emerging leaders who are already involved in the collaborative efforts so they can apply the learnings. Otherwise participants may not retain or sustain what they learn in the program.

Collaborative ability. As noted in the 2003 IOM report,[3] to be effective in community health improvement, public health departments need to engage in cross-sectoral collaboration. Key informants and NLAPH alumni identified many discrete skills for effectively working in a collaborative venture.

- In order to lead, individuals need to be **aware of their own styles, strengths and challenges** and they must be able to leverage this understanding in order to effectively work with others. Most leadership programs incorporated some individual assessment tools (such as the Myers Briggs Type Inventory®) to have participants reflect on their styles and strengths.

One key informant said that leaders must have the *"ability to see themselves and use themselves as an instrument of change, to have some awareness of how their preferences, their blind spots, their abilities and strengths can be harnessed and leveraged to engage in partnership with other people, realizing that it's going to take more than just their effort to see the change they want to see in the world."*

- **Communication skills** were seen as essential for a leader, particularly a leader working to influence change at the community level. It is critical for leaders to be able to communicate clearly and understandably both in writing and in person. Additionally, being able to frame messages in order to inform and persuade others was seen as essential, particularly when working to influence policy.

- **Strategically building teams and networks.** The ability to bring together a group of stakeholders with diverse perspectives and be able to leverage that diversity is critical. Key informants and NLAPH alumni discussed the need to engage the "unusual suspects" (e.g., for-profit partners) and community residents in community health improvement efforts. An underlying skill is working effectively with a team, including building team structures, facilitating team processes, and participating as a team member.

- **Promoting dialogue and effective listening** are closely related to the two competencies discussed above (communication skills and building teams). Leaders need to have active listening and facilitation skills as well as the ability to summarize discussion to create action. To effectively promote dialogue, a leader needs to be open to different perspectives and suspend judgment.

- **Valuing collective impact** is also critical to effectively leading a community-wide health improvement project. As one key informant said, leaders who value collective impact are: *"people who have embraced that work [and realize it] is bigger than one individual or coalition."* Leaders must set aside personal and institutional agendas and focus on a common vision with other organizations.

- **Managing change and conflict** is important for facilitating collaboration on community health improvement strategies. It is critical to understand how to effectively manage

change and to be able to effectively resolve conflict when it arises. As one key informant stated, *"Art of conflict resolution [is critical] because everything we deal with is varying viewpoints…so the ability to resolve conflict can have a huge impact on developing relationships."*

Vision and systems thinking is another group of critical competencies. These include:

- **Establishing a vision.** Leaders must be able to facilitate a process to create a shared vision and goals for collective action. This includes understanding the small steps and how they fit together to have an impact on the community. The ability to establish a vision builds on many of the skills discussed in "collaborative ability" above.
- **Systems thinking**. Leaders need to be able to see the "big picture" and understand how things fit together in the broader context. This is critical to understanding complex problems and potential solutions. One key informant explained, *"I think teaching people system thinking skills… understanding the role they play within a larger system to try to understand more how things fit together and work to create health in the first place is really an important piece."*
- **Applying continuous quality improvement principles**. Leaders are most effective when they seek to learn how they can improve—this is done through **reflective learning** and soliciting feedback. Effective leaders then use reflection and feedback to support improvement. For example, *"Say you're providing a program in a community. You assess them to say, 'does this program work for you or is there something missing in this program that would make it more effective?'"*

Reflective learning is the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self, and which results in a changed conceptual perspective. This process is central to understanding the experiential learning process.[12]

Technical skills make up the final group of competencies. The three technical skills that were most often identified by key informants and NLAPPH alumni are:

- **Content expertise.** Key informants and NLAPH alumni noted that in order to drive community health improvement, leaders must have a certain level of subject matter expertise or, if they don't, they need to engage people who can bring that content expertise to the collaborative effort. In particular, leaders needed to understand the concepts of population health, health equity, and social determinants of health.

- **Ability to influence policy.** For sustainable community health improvement that will impact the entire community, leaders need to be working at the policy and systems level. As a result, they need to understand how to create policy change. NLAPH alumni talk about needing practical support, including understanding community implications of policies, how policy is developed, the legislative process, and how to build advocacy skills.

- **Use data to drive decisions**. Key informants noted that decision makers are confronted with a lot of data, and a leader needs to be able to determine what data are the most useful to drive decisions and inform change. This includes ensuring that data are high quality and measure what is important to key stakeholders. One key informant highlighted the need for this competency by saying, *"Much of our world is dealing with a tremendous amount of data, so effective leadership needs to decipher what is relevant for their population health movement—harmonize the data—because there's a lot of noise in it … Being able to be a translator to humanize it because it's really the art of storytelling."*

B. What is the contribution of leadership training to the development of critical leadership capacities?

Due to lack of longitudinal evaluation data, descriptions and understanding of the impact of leadership development programs is limited. Key informants reported that the evaluations of leadership development programs tend to focus on more immediate outcomes, such as satisfaction with the program and self-rated assessment of skills and abilities; however, published evaluations of these programmatic evaluation results are also limited. As a result, we sought to understand the key outcomes of participating in these programs from the perspective of key informants—both staff of leadership development programs and "thought leaders" in this area.

When asked about what outcomes they had observed resulting from leadership development programs, key informants identified the following outcomes that resulted from program participation:

- **Awareness of own style, strengths and weaknesses;** for example, *"One [outcome] is self-awareness, some recognition of their own strengths and weaknesses, what it is they need to think about and want to develop."*
- **Improved communication capacity**; for example, *"[We see] improvements in writing and speaking skills because of these methods, particularly problem-based learning. People do have to speak up in group, so they learn to hold their own."*
- **Expanded networks**, both continued relationships with other alumni and expanded networks in their communities; for example, *"A lot of times what people say they get out of these programs is the relationships that are built, not necessarily a skill that was learned."*
- **Improved interpersonal and team-building skills**; for example, *"People coming through the programs are more effective in their interactions with others. Most of what it takes to be an effective leader is in your interaction with others, to either inspire or develop those that you're working with to be more effective in the work that they do. Or to make a group of people who haven't worked together effective in the work they do or what they can create."*

These identified outcomes suggest that existing leadership development programs have been successful in building capacities related to the "collaborative ability" domain discussed above.

While the majority of comments were about individual-level outcomes, many informants suggested that these individual changes would have community-level outcomes as well. As one informant stated, *"I think [we are] developing individuals to take positions of leadership to improve the health of their particular region and their population."*

Through the program evaluation of the two completed cohorts, NLAPH has shown positive results related to leadership learning, team development and progress on their project (which is the experiential learning aspect of NLAPH. A summary of these results are presented below.

Spotlight on NLAPH outcomes

NLAPH participants consistently report that participation has an impact on their growth as a leader, team development and progress on the experiential learning project (i.e., Applied Health Leadership Project (AHLP)).

Contribution of NLAPH to development and project progress	Average rating*	
	Cohort 1	Cohort 2
Your growth as an individual leader	3.5	3.5
Your team's development as a team	3.6	3.7
Progress or success in your team's project	3.5	3.5

*Scale: 1–not at all, 2–very little, 3–somewhat, 4–a great deal

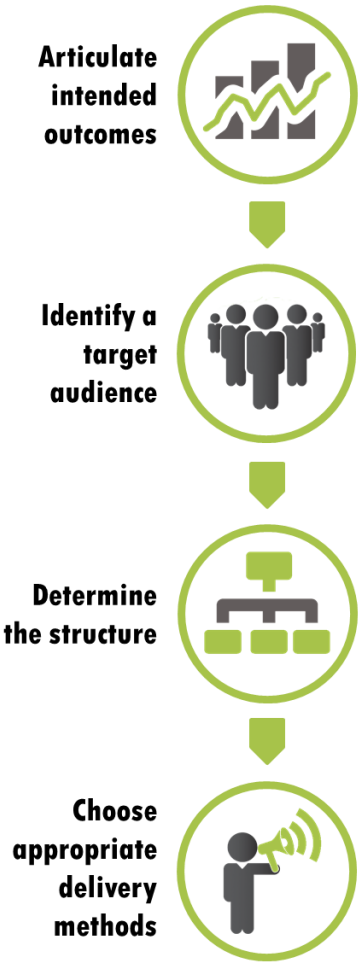
Growth as an individual leader. Results from the pre and post individual participant surveys from the two completed NLAPH cohorts showed statistically significant improvement in participants' reported abilities across all five NLAPH competency domains for which data were available: individual leadership mastery, effectively work across sectors, application of continuous quality improvement, appropriate use of data, and applying a public health perspective.

Team development. Participants reported that NLAPH participation advanced their teams' stage of development and strengthened team functioning. The evaluation found that individuals rated their team higher on positive team characteristics in the final survey than in the baseline survey. Because NLAPH required teams to have multiple sectors represented, the strengthening of the team also increased the individuals' and teams' ability to engage in intersectoral collaboration.

Project progress. In the post-participation team survey (completed collaboratively by each participating team), over half of teams from the completed cohorts (21 of 36 teams for which data were available) reported that they made more progress than expected on their project. Participants who were interviewed identified contributing factors as time spent working with their team, improved collaboration in their local environment, NLAPH training components (retreat, coaching, and webinars), and access to the networks of their teams and coaches.

While the program evaluation suggested positive results immediately following NLAPH participation, funding for the expanded evaluation enabled the evaluation team to follow up with alumni from cohorts 1 and 2 six months to a year after they finished the program. Evaluators met with the teams in person to explore what they felt the key contributions of NLAPH were to their work—i.e., what was different because they participated in NLAPH? The table below provides a summary of the key areas of impact that resulted from participating in NLAPH.

NLAPH impact on alumni	Example quote
Ability to communicate, collaborate, and lead change *with* the community	*The way that we worked, there was constant input from the community. It was community driven. The community had a lot of input and they were leaders of the project versus us taking the lead … they know their community so well; they should drive the bus… and recognize that they are leaders.*
Ability to bring the *right* partners together to move the work forward	*[When thinking about new work, we need to ask] do we have all the right voices represented at the table? … [NLAPH] has helped me develop that. I'm always thinking about not how [community members] can meet me, but how I can meet them where they are.*
Ability to frame the message for diverse audiences in order to gain support and build a movement	*Prior to this when I was talking about chronic disease, I would just give a whole litany of problems. But now I learned a new language where instead of just making people feel bad about a situation, there's actually a solution and not only a solution for a few people, it's a solution that the entire community can get involved in. So for me [that awareness has] made it so much better to give these presentations because I don't have to stop at just this is where we're at; I can say this is where we're going.*
Enhanced ability to build a strategic vision and bring people together for a shared purpose	*We took aspects from the academy and brought it to the [coalition] table. I have that memory of [our coach] coming and visiting, and then us having a meeting and saying, 'think about your vision for this coalition.' 'Where do you see it driving you?' And I think that [conversation] changed the room.*
Expanded networks & ability to work across sectors	*For me it's really been a development of networks. I've made contacts not just in the city in public service but some private entities that have been on the committees. That's invaluable. That's partly due to [my work] but [NLAPH] has given me some skills on how to talk to those folks and try to get those agencies working together.*
Ability to engage in systems thinking and understand work through a public health lens	*We're all leaders in what we do. That was my defining moment. That helped me bridge the whole concept around public health awareness and how you can make it your own. Even now in the public workforce arena, there are public health issues that come into play all the time…So it's helped me have a more well-rounded awareness of how it all comes into play.*
Ability to understand own style, strengths and engage in reflective practice	*I think part of it was that you're always your own biggest critic. Going through this leadership program really helped me understand my capabilities and how to utilize my strengths to be effective, and also know where my limitations were and find ways to build a cross-sectoral team.*



C. What are best practices for community health leadership development programs?

There is limited evidence in the literature about the best method or methods for delivering a leadership program curriculum. Each program is organized differently depending on the intended outcomes and its target audience. Because the overall design of the program needs to drive all other decisions, we start by outlining overall design factors and then describe promising approaches to delivering the curriculum.

1. Leadership Program Design Factors

When asked about the ideal characteristics of leadership development programs, most key informants responded "it depends." The structure of the program—which drives other decisions—needs to be aligned with intended outcomes and characteristics of the participants (e.g., background and level of experience). A program logic model or theory of change should be developed early in the development process to ensure a common understanding of the program's expected outcomes, intended impact, and target audience. These decisions will impact how the program is structured, including the size of the cohort and the length of the program.

Clearly articulate intended outcomes

Leadership programs that focused on community health tended to identify four levels of impact: 1) the individual; 2) the organization, coalition, or team; 3) networks or collaboration among organizations/teams; and 4) the community.

The extent to which the program focused on each of these levels differed due to intended outcomes, funder priorities, and target audience. For example, programs that emphasized community-level impact tended to take a more regional approach to involve multiple individuals and/or teams from the same community. This creates a more concentrated effort, which increases the likelihood of creating community impact. Programs that had more emphasis on impacting the organization needed to ensure organizational-level support for participation.

Clearly identify a target audience

In addition to clearly articulating the intended impact, the type of participant (target audience) and participant mix within the cohort must be defined. Two primary considerations are the discipline and sector of participants and their level of experience and

position in the hierarchy of their organizations (i.e., positional power). For example, when a program intends to impact the community, it was important to engage decision makers with positional power in the program.

Some programs targeted a certain sector or audience segment while others aimed for diversity in both level of experience and discipline. A more narrowly defined audience allows for more customization of curriculum, while diversity provides new and different perspectives to the learning experience. Both can be appropriate depending on the goals for the program.

A diverse cohort presents some challenges to ensure that the curriculum is relevant to all participants. For example, when the cohort includes participants with different levels of experience, some senior leaders feel that the curriculum is too basic for them and that they aren't able to benefit from participating with people earlier in their career. However, key informants agreed that a cohort including a mixed level of leaders can be very beneficial if the expectations are clear. For example, senior leaders can offer lessons learned, while emerging leaders can offer more innovative ideas.

.Similar challenges exist when engaging participants from different sectors—it makes it more difficult to develop a curriculum that feels relevant to everyone, but including diverse sectors helps to support innovation and "thinking outside of the box" when discussing approaches to community health improvement.

Determine the structure of the program

After decisions have been made about intended impact and target audience, there are several structural decisions that key informants emphasized.

Size of the cohort. Key informants recommended cohort size of 20-30 people to ensure that the learning process and environment were intimate and manageable. Larger cohorts are possible, but would require providing more opportunities to promote peer learning and exchange of ideas.

Length of the program. Generally key informants felt an effective program lasted at least a year. Several indicated that even a year was not sufficient to internalize the content covered and that additional support beyond the program year would be beneficial. Several programs have established alumni networks to encourage leaders to continue to stay in touch with their peers. Network development is described in more detail below.

Cost. Registration fees for leadership development programs can be a barrier for participation. Key informants recommended that program planners seek funding so that cost does not have to be a barrier to participate in the program. However, several also indicated that cost-sharing between a program funder and an organization can make both parties accountable as they both have "skin in the game".

The community's input is not always something that's there. So it's one thing to work with your collaborators, it's another to assess the community and what its thoughts are. How do you pull the folks you are providing those services to and engage them in being leaders as well? I may run the program, but how do I get the community to help me think about the future of that program? It's more about co-leadership, both inside and outside of the program.

Team vs. individual participation. Programs differed regarding who was enrolled in the program: 1) team-based where leaders come from the same organization or community and 2) individual-based where leaders come from different organizations, communities or across the country. There are trade-offs to both types and this should be decided prior to opening up the enrollment process.

If the program engages teams, the structure of the team and who is included needs to be determined, i.e., teams within one organization, intersectoral teams, or teams representing local coalitions. The program also needs to determine how directive it will be about team structure and who is represented. Several key informants encouraged program planners to consider how to engage the people in the community who benefit from public health services—a frequently missing but important perspective.

Self-selection vs. being appointed/nominated. As outlined in the section on competencies, passion and commitment was identified as a key predictor of success for participants. Key informants raised some concerns about recruitment models where an organization, community, or supervisor appointed the individual to participate. Several informants indicated that when people were appointed, they were less apt to gain anything from the program and, therefore, less likely to bring about change. However, a few key informants indicated that having supervisors appoint participants reflects organizational buy-in for participation. Ideally the application process will ensure enrollment of a committed pool of individuals who have institutional support for their participation.

I think alumni can be used in multiple channels, it's finding what their strengths are, what their interests are, and their availability to see how they can be used [e.g., teaching, mentoring, promoting the program].

Helping alumni stay connected and engaged. Key informants agreed that programs should include opportunities and structures for alumni to remain connected after the program has ended. Key informants indicated there were many different ways to approach this including:

Community of Practice (CoP) can be defined as "A group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise by interacting on an ongoing basis."[13]

CoP provides an independent opportunity for individual members of different teams, cohorts, sectors, and interests to collaborate.

- sharing contact information
- establishing a listserv
- establishing discussion groups and **Communities of Practice**
- holding a reunion or reception at relevant conferences;
- providing alumni opportunities to participate in ongoing trainings;
- engaging alumni as content providers and/or coaches to subsequent cohorts.

While some key informants indicated that program staff or coaches should follow-up with alumni after the program ends, much of the support could be driven by alumni—creating opportunities for them to foster their own learning community to stay connected and engaged. Whatever support is provided does have resource implications so needs to be planned for and expectations clearly communicated up front.

Choose appropriate delivery methods

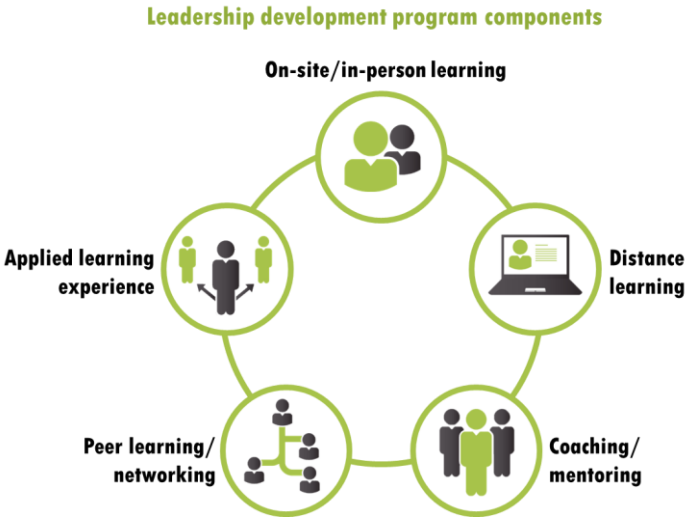
Blended learning generally applied to the practice of using both online and in-person learning experiences when teaching students.

Leadership development programs have different components or methods of delivering the curriculum. While there are differences, key informants agreed that a **blended learning approach** grounded in adult learning theory was critical; they stated that diverse curriculum delivery methods can be used synergistically.

2. Curriculum Delivery Methods

A review of program materials from the 37 different leadership development programs showed that the most frequent curriculum delivery methods included:

- On-site learning (retreats and site visits)
- Distance learning (webinars, online learning modules, and teleconferences)
- Coaching and mentoring (professional and peer)
- Action learning Projects
- Networking (Communities of Practice and online communities)



NLAPH alumni from the two completed cohorts consistently rated the national in-person retreats and coaching support as the components of the program that contributed most to their growth as a leader. There was also a high level of agreement that the strategy of promoting experiential learning by applying leadership development content to a community health improvement project is effective.

When key informants and NLAPH alumni were asked about the most valuable components of leadership development programs their responses were consistent with findings from the literature review and results of the NLAPH participant survey. The key components identified consistently were: in-person learning opportunities, distance learning, coaching and mentoring, peer networking, and applied learning experience. These components are each discussed in more detail below.

In-person learning opportunities

In-person component is essential…for that sort of cohort bonding kind of thing; there are things that happen when you're in person that you just don't get from a webinar.

In-person participation was recognized as the number one factor in developing successful leaders. It was seen as critical because it allows participants to build relationships, network, and provide and receive peer consultation from one another and provides dedicated time away from other responsibilities to focus on learning and development.

The spotlight on the NLAPH retreat on the next page is an example of the benefits of in-person learning opportunities.

Most key informants agreed that it was not economically feasible for leadership development programs to consist of solely in-person sessions; the ideal is a combination of in-person and distance/virtual learning.

Distance/virtual learning opportunities

I think webinars are really good supportive activities that help either reinforce concepts or allow folks to talk about how they've tested out things they've learned in person, but I think it would be really hard to do a strictly online curriculum.

Virtual learning opportunities were identified as a way to keep participants engaged in the curriculum and with each other throughout the course of the program. While most key informants agreed that virtual learning was a necessary component, they also agreed that it can be challenging to keep people engaged.

For participants to get the most out of virtual opportunities they should be as interactive as possible and there should be some level of participant accountability—whether that be through polling, discussions, or pre-work. Other best practices included:

- Use virtual learning communities rather than training via webinar. There are online platforms that include options to have online break out rooms to enable virtual discussion groups
- If training is provided, keep it short and allow time for discussion and peer interaction
- Use videoconferencing to connect with people visually
- Provide discussion questions in advance and ask people to come prepared to discuss
- Require attendance and participation

Spotlight on NLAPH retreat

NLAPH, a year-long program, provides two in-person learning opportunities: an annual retreat at the beginning of the program year that includes the participants and coaches and a coaching site visit with each team.

The three-day retreat brings together participants, coaches, and program staff, and has been consistently rated by participants as the component of NLAPH that contributes most to their growth as a leader (97% of participants from the two completed NLAPH cohorts). Each year the retreat content is adapted based on feedback from the previous year and the participants' needs and interests articulated in the baseline assessments. At least 90% of Cohort 2 respondents agreed that the retreat was a valuable use of their time; deepened their awareness of their own leadership style; provided useful skills, tools, frameworks, and/or resources; and increased the capacity of their team to work together effectively.

The aspects of the retreat that were considered to be the most beneficial across the first two cohorts included:

Time dedicated to team work. *"It was great to come together with five other high-level colleagues in a spirit of partnership. We are all leaders in our own worlds, but the retreat sort of leveled the playing field and brought us together as partners. We all need each other in order to be successful in achieving our goals."*

Time to plan or move forward the applied learning project. *"Our team was able to work out a plan for the year, work through some team issues and develop agreed upon goals for our work together and how the project could impact our personal goals."*

Time spent with coaches. Participants talked about the value of meeting with the coach early in the program year; most indicated that they would have liked even more time with their coach during the retreat.

Speakers' presentations that provided content around population health, collaboration, health equity and social determinants of health. *"The opportunity to attend the retreat was amazing. It gave me a broader context to [my work] made me aware of options professionally in public health… I've gotten a broader perspective from a population standpoint."*

Group exercises to understand personal styles and strengths of their team. *"One of the things that really helped us was the Myers-Briggs…it made the connections we had deeper and we were able to be very open about our strengths and weaknesses…everyone has their own strengths so that really came to light."*

The value of dedicated in-person time to connect with their teams and coaches was identified as a critical component that set the course for the rest of the program. The most significant critique of the retreat was that participants wanted even more time to work with their teams and coaches and to network with other participants in the cohort.

I think the fact that there is now more of a culture around having coaches, that's not viewed as something that means that you're weak and you don't know what you're doing, it means you're strong and you need more support.

Coaching/mentoring

Key informants agreed that coaching or mentoring was a critical component of a leadership development program. About half of the 37 programs examined in the literature review included a coaching or mentoring component. Key informants identified many different models for coaching, and no consensus on the best model other than that it is well suited for the program's intended impact and target audience. Regardless of the model, coaching provides support and guidance to individuals who are growing, experimenting, and taking on new work.

Examples of coaching and mentoring models included in leadership development programs include:

Classification	Type of engagement	Description
Mentor	Participant identifies and engages	*We encourage people to find a mentor. It's a leadership task for them to find a mentor. I have not in any of my programs ever found that mentor for them because [if they find a mentor] we know that that is at best a longer term, more specific kind of relationship.*
Executive coach	Program engages to work with individuals	*When they had their 360 [a self-assessment], one of the things we would do is bring in an executive coach, and they would meet with fellows one time and help them understand their 360 and some other concepts of leadership.* *Executive coaches who are generally used with individuals, understanding self, personal assessment, those can be very powerful in the public health world but since we don't have money we use average people to help us understand – I think this is dangerous. If you use an executive coach with an individual – you need an experienced person."* *If program is more interactive, you need to be ready to provide support to people with whatever they need. With exec coaching, if you are going to open a wound, and make someone vulnerable, you need to be ready to help them work through and close them.*
Action learning coach	Program engages to work with teams	*An action learning coach needs to be experienced. If I were going to have a team, to help people learn faster, build relationships of working well together, I would use an experienced action learning coach. Action learning coach is a different role, so if you have someone who doesn't understand how to let people reflect or learn from failure it's not coaching. An experienced action learning coach knows when to stop a team and the questions to ask, they dig deep … You can have a mentor, which is great, but you can also have someone who will maximize the project experience. A good action learning coach is the way to go but it's expensive.*

Action learning is "a coach-supported process involving a small group of people solving real problems while at the same time focusing on what they are learning and how their learning can benefit each group member and the organization or community as a whole."[14]

Spotlight on NLAPH coaching model

Coaching or mentoring was identified as a best practice for leadership development programs. In NLAPH, coaches are assigned to work with participating teams.

The coaches' role is to help translate and apply the content from the curriculum to the applied learning project and to support team development through an action learning framework. During the program year, coaches meet with teams twice in-person—at the national retreat and during a multi-day site visit. In addition, they have monthly conference calls or online meetings with the individual teams. In their work with teams, coaches used a customized approach to be responsive to the teams' needs and interests. In the two completed NLAPH cohorts, almost 90% of participants (126) agreed that coaching support contributed to their growth as a leader and two-thirds of teams from the most recent cohort reported that their coach was instrumental to advancing leadership capacity and effectiveness of their team (12 of 18 teams).

- Participants reported that coaches contributed to learning by:
- Encouraging teams to focus on leadership development
- Supporting team development
- Challenging teams to look at issues from different perspectives
- Supporting teams to set project goals and monitor progress
- Helping teams identify potential solutions and overcome challenges
- Providing tools, resources and key contacts to teams

In particular, coaching had an impact on:

Leadership learning goals. A Cohort 1 team reported: *"The coaching component of NLAPH helped us to focus on the big picture leadership goals instead of getting "caught in the weeds" of the details of our project. [The coach] provided our team with gentle, firm and consistent reminders to keep our leadership goals in the forefront of our minds as we worked together on our project."*

Refining the scope and focus of the applied learning project. A Cohort 2 team noted that their coach pushed them to look at their project from different perspectives and to make sure that they had all key stakeholders at the table before moving the work forward. The coach *"played a significant role in challenging us to develop and expand on initiatives that not only improve health but also create opportunities for individuals to live fuller more flourishing lives. [Our coach] helped us realize that our current initiative alone would not do that."*

The coach encouraged the team to focus more on the context of the work, stressing that they are not only accountable to the funder of their program, but also to the community that they serve. *"[Our coach] asked 'why are you doing this [project]?' I said, 'we have resources and funding that I want to use to help this community.' She said 'well, if they don't have better health outcomes, aren't you in essence using this community? Squandering funds that should be used for them?' That was a big transformation for me…it's not just about hypertension, it's about empowering people to have a voice in our community."*

Give the work back to the participants to do their own work. … We are building communities of leaders, people who can again continue the conversation and the peer consultation after a program has ended. [The program] has to be authentic and it's going to have to be meaningful to the participant […] that what they do in those seminars has relevance to what they do outside of those seminars.

I believe we learn by doing. And particularly when you're dealing with these complex situations, that if you can create an environment in which you can begin to work across differences, across boundaries of various kinds, with people who are in that space with you, that's real time learning […] there's a lot that you can do to really teach people the skills they're going to need in order to do any kind of change.

I worry about the project that people aren't internalizing as much besides just getting the project done. Some programs are called applied project, but they often don't get sustained and the purpose of having the chance to learn is lost.

Applied learning experience

Key informants stated that an essential learning method for adult learners is the opportunity to apply new knowledge in the real world. Applied learning experiences help to make the program information relevant for participants. Several key informants spoke of the importance of an action learning project.

The literature also supports the benefits from integrating applied learning within a leadership program. The programs most likely to succeed in producing more effective leadership are those that teach potential leaders to create situations in which they can lead effectively and focus training not on individual capabilities but the social atmosphere of the organization and community to be led[15, 16]

Key informants offered these suggestions for effective action learning and applied learning projects:

- **Identify a project or experience that is part of the mission of the organization or community so it can be meaningful and have greater potential impact**. *"If the leadership training program artificially develops projects for "action learning," then it will not be sustained because it's an artificial task. If the leadership training is based around the real world issues out of that organization], then you have some opportunity to sustain the work, because it comes out of work that was already being done, there's already commitment to it."*
- **Start small with something that you can influence during the program period**. *"I'd say [focus on] a local level, small scale project. Our goal was to institute a policy and that turned out to be not realistic. I'd say start small."*
- **Use the project as a way to deepen leadership learning**. *"The point for us, when [action learning is] embedded in the leadership program, is not just to do a great project, it's to learn the critical collaborative leadership skills required to engage in that kind of work."*

The challenge with using an applied learning project is that participants may focus more on the project goals and activities than on their leadership learning goals. In such cases, the program staff and/or coaches need to make sure participants focus on leadership skills as they implement their project. Some programs are experimenting with other applied learning experiences that are not specific to a project to try to minimize this tension.[a]

[a] For example, Annie E. Casey Foundation's Leadership in Action program uses 'aligned contribution' rather than a project—for more information see http://www.aecf.org/resources/leadership-in-action-program/ .

Spotlight on NLAPH Applied Health Leadership Project

The NLAPH Applied Health Leadership Project (AHLP) is an experiential learning opportunity for teams to apply their leadership skills. Teams propose a project in their application to NLAPH, and then work with the team and coach to refine the scope, scale and focus of project during the NLAPH retreat. The NLAPH curriculum is informed by the focus and needs of the AHLPs in order to maximize the potential for the leadership skills to be applied in a real world setting.

Ideally, the AHLP would focus on taking a new approach to improving population health by engaging non-traditional partners across sectors. A successful AHLP is described as one that "critically analyzes the situation in the community including the environmental, political, social and built environment to work towards achieving health equity." Each AHLP must have a clear intervention strategy and defined indicators of success prior to applying to participate in NLAPH. Examples of successful AHLPs include asthma prevention in a low-income urban neighborhood, school-based childhood obesity prevention on a Native American reservation, and emergency preparedness in an area prone to wildfires.

Almost 95% of NLAPH participants from two completed cohorts agreed that, "the program strategy of promoting experiential learning by applying leadership development content to a community health improvement project is effective." Over half of teams from the completed cohorts (21 of 36 teams) reported that they made more progress than expected on their AHLP.

In an alumni survey conducted 12 months after the completion of the program, participants indicated that the AHLP:

- Helped their team accomplish leadership learning goals (83% at least somewhat agreed)
- Positioned their team to take on other community health improvement efforts (75% at least somewhat agreed)
- Had a positive impact on their community (79% at least somewhat agreed)

Often the work related to the AHLP is not complete at the end of the program year because it is situated or aligned with a broader spectrum of work. Over half (54%) of alumni from the first NLAPH cohort indicated that they continued to work on their AHLP a year after completing the program—others either completed the project (22%) or did not complete the project as designed (24%).

Alumni report that participating in NLAPH helped provide time and permission to collaboratively work on the project. This contributed by enabling the project to happen more efficiently and effectively than it would have otherwise. *"I think we did a better job [because of NLAPH participation]. This project had to be done, regardless, but I think the quality is much better because of the Academy. It would have been a more seat-of-the-pants effort without the Academy."*

Another component of the NLAPH expanded evaluation, funded by the Robert Wood Johnson Foundation, is looking more explicitly at the community impact of the AHLPs. Results from that evaluation will be available in late 2015.

Peer networking

The value of having a cohort of participants in a leadership development program is so they can learn from and support one another's learning experience, which is one reason why key informants advocate so strongly for in-person learning opportunities such as retreats. Many program planners are also trying to more intentionally build in opportunities for peer exchange in distance learning and virtual experiences. Programs often have other vehicles for peer exchange that occur during program participation and afterward to support alumni, as noted on pages 17-18.

Peer learning is a way to ensure sustainable support beyond the life of the program. NLAPH alumni and key informants stated that ideally someone affiliated with the program would check in with them after they had completed the program; however, resource limitations typically prevent such follow up. Several key informants indicated that robust peer networks could help to fill that gap. One key informant noted that for strong peer networks to be established, participants need to build relationships during program participation and recognize the expertise of everyone in the cohort—not just "the people standing at the front of the room."

IV. Summary and implications

Public health leadership development programs began in the early 1990s in response to an IOM report calling for increased leadership abilities in the public health workforce. Over the past 25 years these programs have evolved to respond to the changes in the environment and growing understanding about what is needed to improve community health. In 2003, IOM called for public health departments to work collaboratively with "other organizations and sectors of society" to improve health. In 2012, NLAPH was created in response to a need for collaborative public health leadership development.

This expanded evaluation effort funded by Kresge Foundation sought to answer three broad questions about best practices for community health leadership development programs, putting NLAPH in context with other public health leadership development programs. The questions we sought to answer include:

A. What are the critical leadership capacities for community health leaders?
B. What is the contribution of leadership training to the development of critical leadership capacities?
C. What are best practices for community health leadership development programs?

Critical leadership capacities. The competencies discussed by key informants and NLAPH alumni fell into three broad categories: pre-requisites and characteristics (passion and commitment, institutional support), collaborative ability, and skill building (vision and systems thinking, technical skills). As would be expected, these competencies parallel the domains in the Public Health Leadership Competency Framework[6] and NLAPH's competency domains. Key informants and the literature debated whether you could garner passion and commitment and institutional support through the program or if those should be expectations of participants coming into the program—regardless both domains were considered characteristics of successful participants.

Contribution of leadership training to capacity development. Lack of longitudinal evaluation data makes it difficult to definitively answer this question; instead we relied on key informant perceptions and the personal experiences of alumni from the first two cohorts of NLAPH. Key informants identified several areas where they had observed growth of participants (e.g., awareness of own style, strengths and weakness, improved communication capacity, expanded networks, improved interpersonal and team-

building skills). The examples of participant growth given by key informants were all related to “collaborative ability” competency domain. The ongoing program evaluation of NLAPH suggests that leadership development programs can have a broad positive impact. The NLAPH evaluation shows positive outcomes related to leadership learning in all targeted competencies, team development and progress on the teams’ applied projects. In follow-up site visits with NLAPH alumni, they elevated the benefits that they experienced related to “collaborative ability” as the most significant impact that NLAPH had on their work after the program ended.

Best practices for community health leadership development programs. The best practice for community health leadership development programs is to align the program with the intended outcomes and target audience for the program. There are trade-offs depending on how broad or focused the outcomes and audience are intended to be. Additionally, there are a number of structural decisions that need to be made upfront regarding recruitment, the size of the cohort, and the length of the program. There were not universal recommendations for these structural decisions, but emphasis that these decisions should be made with the outcomes and audience in mind.

There was general agreement that the curriculum should use a blended learning approach that takes into account adult learning theory. A review of program materials from the 37 different leadership development programs showed that the most frequent curriculum delivery methods included: on-site learning (retreats and site visits); distance learning (webinars, online learning modules, and teleconferences); coaching and mentoring (professional and peer); action learning projects; and networking (Communities of Practice and online communities), which are also the key components of NLAPH. Each of these methods is detailed above. NLAPH spotlights are included for areas where its current practice reflects the best practices articulated by key informants—in-person learning opportunities (i.e., NLAPH’s annual retreat), customized coaching, and an applied learning project. These components of NLAPH are also what participants most frequently rate as having contributed most to their leadership learning.

Implications

Based on this expanded evaluation effort, we provide the following recommendations for informing future community health leadership development programs.

Customize for audience and use an emergent design. When key informants were asked to identify best practices, their answer most commonly was “it depends.” This is consistent with the history of public health leadership development programs which have needed to constantly evolve to meet the changing demands of the public health workforce. To stay relevant these programs need to be customized to the needs of the target audience. They also need to have the flexibility to adapt to the needs of the cohort during the program year. To do this, NLAPH, for example, uses an emergent design and builds in evaluation to inform real time adjustments to meet the needs of participants.

Engage “unusual suspects” and community residents to have more of an impact on community health. In public health there is a growing understanding that it will require a collaborative effort to impact community health, particularly as the field moves more towards addressing social determinants of health. Engaging participants representing different sectors and community residents in leadership development programs is a way to more directly and inclusively involve the community in health improvement efforts. To do ensure broad engagement, NLAPH requires teams include members from multiple sectors. Additionally, NLAPH coaches often work closely with teams to expand the level of community engagement in their projects.

Set and communicate realistic outcomes to promote investment. While key informants and NLAPH alumni agree that leadership development programs aimed at community health have an impact—particularly on collaborative ability—building the case for ongoing funding of these programs remains a challenge. Selling leadership development to potential funders is difficult. There is ongoing tension between leadership learning and the outcomes associated with an applied project that is often part of these programs. The skills that participants develop position them to engage more effectively in community health improvement efforts, but will not likely result in demonstrable changes in community health during a funding period. Yet, project outcomes are often used to sell the program, even when the primary goal and focus is leadership learning. As this work becomes more cross-sectoral, opportunities will emerge to engage other sectors in investing in community health leadership development programs. As the potential for investors diversifies, there is a need

to think creatively about how to fund and sustain these programs and what evidence potential investors need to see to be convinced of the return on their investments.

Invest in evaluation to follow-up with participants. The challenge of sustaining the program is compounded by the lack of longitudinal evaluation data (and reliance on self-reported progress) to document the impact of these programs. To fully understand and communicate the impact of these programs more longitudinal data is necessary and new methods for evaluating the programs should be considered. This will require a commitment to investing in evaluation and longer term follow-up with program alumni.

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Appendix A. Key informants

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