Recent public health workforce reports have identified the political, economic, social, technological, and health-related trends that require the application of skills and approaches well beyond traditional public health practices (see references). In response, national public health agencies and consortia have called upon public health practitioners to build leadership and strategic capacity to address these emerging trends. Increased capacity is needed to fully comprehend and persuasively communicate public health issues, to organize diverse partnerships to address complex challenges, and to implement sustainable policy and health systems change. To build this capacity nationwide, a coordinated system of effective, efficient, and quality learning opportunities is needed.

In this evolving environment, public health professionals have an opportunity to engage their partners and the public to create new and renewed value for the skills and practice of public health. The Public Health Learning Network (PHLN) Strategic Workforce Action Agenda (Action Agenda) builds on the themes found in previous reports, while adding relevant state and local voices to paint a more comprehensive picture of our workforce development system. The Action Agenda highlights the system’s gaps and potential for enhancement and emphasizes that a more robust and coordinated approach to workforce development is necessary to address the diversity and complexity of challenges faced by public health.

With sincere thanks to Dr. Mark Edgar, for his leadership on conducting the focus groups and key informant interviews, and to the participants from national public health partner organizations, training centers, and state and local public health agencies who shared their wisdom and experience.
Purpose: Recognizing the need for more coordinated workforce development, the PHLN embarked on a project to develop a Strategic Workforce Action Agenda. The project aimed to identify how PHLN might better lead, coordinate, and expand the public health system’s workforce development capacity. The project asked four essential questions:

1. **WHAT ARE THE MAJOR PUBLIC HEALTH SYSTEMS CHALLENGES AND ISSUES?**
2. **HOW ARE CURRENT WORKFORCE DEVELOPMENT APPROACHES RESPONDING TO THESE CHALLENGES?**
3. **WHAT NEEDS TO BE CHANGED?**
4. **HOW CAN WORKFORCE DEVELOPMENT APPROACHES IMPROVE?**

Data collection and analysis: Using an environmental scan design, the project team first conducted a document review of major public health workforce development reports, plans, and peer-reviewed literature to a) identify existing themes, b) develop an interview guide, and c) guide subsequent data collection and analysis. From August – November 2017, the team engaged an external workforce expert to conduct a) key informant interviews with national level public health organizations and b) focus groups with PHLN members and practice partners. To obtain further expert review, validation, and input, the project team shared the results for discussion and feedback several times with PHLN members and twice with large national audiences: once during a webinar and once at the Public Health Workforce Forum.

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1The project was deemed exempt by the institutional review board of the University of Illinois at Chicago (Research Protocol # # 2017-0753).
Results: A total of 43 public health experts participated in data collection and analysis, representing a variety of size, levels, and types of public health organizations. Experts represented small county health department leaders, state health departments, state health associations, public health institutes, large city health departments, territorial departments of public health, and academic public health programs. Participants were mostly in leadership and/or managerial roles such as manager of workforce development, director of nursing, director of health promotion, director of performance management, assistant secretary for health, and state policy director. Participants shared about the public health challenges and workforce development needs (described below) that were then used to inform a) recommendations for how workforce development efforts could be improved and b) opportunities for the PHLN to contribute to those improvements.
Challenges are diverse, and many represent “big systems changes.”

- A broad range of challenges are faced by the public health workforce, from technical issues, like conducting environmental health inspections or quality improvement processes, to more emergent topics, such as addressing the social determinants of health or racism.

- There was a strong call for leadership skills to help practitioners navigate multiple challenges simultaneously. Participants stated that the most commonly mentioned challenges are systemic and complex — challenges with many problems embedded within them and for which no one person or program can address.

“Challenges include an emphasis on really addressing social determinants of health and not just having evidence based practices that you can pick up and easily integrate. They require so much more multi-sector work and maybe longer term strategies. They’re not small programs. They’re big systems changes.”

Traditional public health functions remain important, but there is also a need to build new partnerships and constituencies to address complex public health challenges.

- The traditional roles of public health remain, but participants noted the pressure of new expectations being added to their current scope of work. Participants indicated needing technical knowledge, alongside the ability to apply information to diverse settings.

- The role and responsibility of public health agency practitioners was described as conveners and facilitators of intersectoral work to address community health priorities and health inequities. This is an example of the intersection of traditional public health functions (i.e., conveners, facilitators) with complex community challenges (i.e., intersectoral work, health inequities).

- The potential for public health agencies to engage with the public and with partners in a way that builds constituency and community momentum is underdeveloped, especially as a strategy for addressing the social determinants of health.
The workforce is unavailable and/or unprepared to respond to public health challenges.

- A workforce shortage due to retirements and an inability to replace positions threatens public health capacity. Participants validated statements from other national workforce reports but with a strong sense of urgency and emphasis on the impact of these position losses on practice.

- A gap exists in planning for and preparing the upcoming workforce. Positions are often not being replaced, or if they are, new graduates do not want to apply. Furthermore, recent graduates who do apply are unprepared to enter the workforce.

- Education and training available for students and current workers is focused on technical content and/or single skills rather than integrated competencies.

- There is a lack of creative strategies at the local, state, and national level to increase the human resource pipeline for filling public health positions or preparing students to enter the public health workforce.

- Participants emphasized the need for “interchangeable” public health positions, with training standardized across an agency so that there are more employees with diverse skill sets, rather than many content- or skill-specific positions.

“In one year, I lost most of my management team that had been here for 10 to 20 years... Most of my current management team and supervisory level staff feel like it’s just every day they’re coming in to deal with a crisis... How do we address an issue that we just don’t have enough people to...handle, or we don’t have educated people to handle?”

Funding for workforce development should reflect community needs and help practitioners and partners collaboratively integrate skills and topics.

- Workforce development funding has not caught up with emerging challenges. Available funding is often misaligned with community health challenges or addresses specific categorical topics, making it difficult to help practitioners integrate the skills needed to address complex challenges.
Public health practitioners need quality, multi-modal training to promote learning that supports diverse outcomes and outputs.

- More opportunities for multi-dose, multi-modal training are needed to help practitioners integrate skills and topics while also addressing real-time challenges. A one-time only training model will not suffice.
- Participants echoed previous workforce development reports describing a need for more flexibility in training access, such as just-in-time training or training during breaks or lunch.
- More diversity in what is considered “training” is needed. Respondents emphasized wanting intentional opportunities for greater engagement in the learning process, such as with peer-to-peer learning, mentorship, or technical assistance help discuss and address real-time challenges.

“We need a shared vision of what a system would do.”

A stronger, more coordinated infrastructure for training is needed.

- A strong need exists for a shared national vision and conceptual framework for public health workforce development. Participants also called for stronger training coordination and greater clarity on how public health workforce development is carried out in ways that reflect practitioners’ needs.

“...whether it’s housing insecurities or racial inequities or food access or any of those things. Those are the types of things we’re seeing in community health improvement plans... [practitioners] need to know how to address those, and how to work across sectors and how to piece funding together to implement interventions and policy changes.”
Funding for training should be geared toward practical application and integration of learning to address system changes.

- While technical content is still needed, training that helps practitioners integrate content and skills to engage diverse partners and address challenges is needed even more.

“It gets difficult because funders want credit for delivering... content in specific [topical] lanes. It’s much more difficult to get the funders’ attention on training products that fill in the space between the [topical] lanes...between nurses and environmental health, between physicians and environment health, for example. It’s the space between the professions where all the action is, but no one owns that.”

Coordinators of workforce development and learning opportunities can play a strong role in making training more accessible.

- Training opportunities from multiple training producers should be better aligned and coordinated to help leverage funding, address priority needs, and communicate training.

- The quality and outcomes of trainings need to be well-defined to guide practitioners to the best opportunities quickly.
1. **Expand PHLN membership to better connect with other workforce development and capacity-building efforts.**

   PHLN has the potential to connect to, leverage, and align training and workforce development occurring in other public health and related sectors. While no one group can capture all national training, more can be done to identify and show alignment among various training opportunities. PHLN can play a lead role by making meaningful connections with other workforce development efforts, within public health and related sectors. PHLN can also connect with other workforce development-related funding streams to contribute to PHLN’s systems (e.g., Elevate, the Navigator) to encourage cross-communication and coordination of training. Examples of funding streams include but are not limited to Total Worker Health grants from the National Institute for Occupational Safety and Health (NIOSH), the Prevention Research Center, and the Maternal Child Health National Workforce Development Center.

2. **Develop and apply a framework to measure and evaluate what learning is expected from different types of training.**

   There is no conceptual framework that identifies, defines, and integrates learning needs with actual community challenges and links these to anticipated outputs and outcomes. Such a framework could be used to help practitioners identify needs; help PHLN to assess products to ensure there is diversity of learning approaches and content to better meets learning needs; and support research to measure workforce development effectiveness and quality.

3. **Promote best-practice, as well as promising approaches, for training and capacity building.**

   There are a variety of training and capacity-building models that likely meet the needs of learners today, but coordination is needed to highlight effective approaches across models. This coordination can clarify best and promising practices for practitioners and help other workforce development experts learn from each other.

4. **Formalize the PHLN structure to support national coordination, develop and focus on specialized areas, and foster infrastructure building across and within states.**

   A formalized PHLN could include a PHLN National Advisory Board to oversee and lead workforce development in the United States; working groups to help deepen the focus and rigor for workforce development; and learning communities at the local, state, and national levels to promote stronger connections to training grants and opportunities.

5. **Create a system of programs for all levels of public health practitioners focused on building mentor relationships and supporting the workforce pipeline.**

   PHLN can explore connecting, coordinating, and expanding opportunities for fellowships, internships, practicums, and any student practice opportunities into a more robust system of workforce pipeline support. In addition, PHLN can help to develop longer, required, practice-based experiences that mutually benefit public health organizations and students through longer training and exposure to complex issues.
In the spirit of action, Regional Public Health Training Centers and PHLN have already begun to incorporate the Agenda actions and recommendations into their work creating and promoting high-quality, relevant, and accessible training opportunities for the public health workforce. Please sign up for Elevate, a periodic publication from the PHLN, to keep in touch and get engaged.

For questions related to the PHLN Strategic Workforce Agenda, please contact jmckeever@nnphi.org

OVERALL RECOMMENDATIONS

Out of this process, several recommendations emerged for PHLN partners. We encourage all who are engaged in workforce development to incorporate the following recommendations into programs, especially those who develop, provide, and evaluate learning:

1. **Expand the definition of “training” to include diverse approaches that reflect learning needs.**
   - Define different types of workforce development that may meet learning needs, including content or skill needs.
   - Employ diverse approaches to learning that integrate skills and cross-cutting competencies over time.

2. **Define learning as a comprehensive process, not as a single training event or series of events, but a holistic approach to addressing how to create systems change.**
   - Increase diverse learning opportunities that promote connection and learning from colleagues at all levels in the public health system.
   - Create learning communities around complex challenges.
   - Establish learning institutes to promote real-time, real-world reflection and application for integrating and applying knowledge and skills in practice over longer periods of time to allow for trial and error of application.

3. **Assess current availability of and best practice for diverse learning opportunities.**

4. **Expand learning opportunities on structural and social determinants of health and racism.**

5. **Find ways for the public health students and new public health workers to gain integrative skills for long-term contributions to public health systems, population health improvement, and equity.**

6. **Evaluate learning in practice to build approaches that address complex issues.**

7. **Evaluate the impact of different learning types on practice and ultimately, health outcomes.**
The PHLN Strategic Workforce Action Agenda project was designed, implemented, and presented by:

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