VERSION 2.0 WORK IN PROGRESS: Summary of Public Health Workforce Development Expert Panel Recommendations

November 2019

The Public Health Accreditation Board (PHAB) held a Public Health Workforce Development Expert Panel meeting on November 21, 2019 in the PHAB office in Alexandria, VA. The purpose of the Expert Panel meeting was to review the current health department accreditation standards and measures related to public health workforce development capacity; to discuss any pertinent changes in public health workforce development and/or support for health departments' work in this area; and to recommend potential revisions in the accreditation standards and measures as PHAB prepares Version 2.0. In order to accomplish the purpose, PHAB received perspectives from the PHWINS surveys by ASTHO and the deBeaumont Foundation; perspectives on the public health workforce and implications for health department accreditation from the Public Health Foundation and the TRAIN program; and perspectives on public health workforce certification from the National Board of Public Health Examiners.

Overarching Recommendations for Proposed Changes to the PHAB Standards and Measures

• Continue to reinforce the strong connection between health department workforce development and addressing community needs and issues. Community needs drive health department workforce competency needs. Health departments need to have the capacity to be responsive to the community or shift workforce based on new needs identified. This concept requires a culture of learning that is related to the health strategist role of the health department in creating public value.

• Workforce development efforts, including competency development/use and the workforce development plan, need to support a culture of learning within the health department that is also responsive to the business of the health department (as well as the needs of the community). Alignment between workforce development and the health department's major plans (strategic plan, community health improvement plan, emergency operations plan, and the quality improvement plan) should be a goal of the health department in ensuring that culture of learning.

• Move away from a heavy focus on individual training and core competencies and focus on an organizational system of learning that addresses community needs, organization development, position/functional competencies and skill sets, and individual professional experiences and other strategies for competency development. The group reaffirmed the value of competencies but noted that every worker doesn't need every skill, but every organization needs the right complement of skills in their workforce.

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• Encourage health departments to embrace a culture of learning and organizational development that would be transformational. The community needs must drive the workforce needs so that the population is served by effective programs and policies that make up a healthy organization. Assessment of that culture of learning and its impact would be appropriate for reaccreditation. These concepts include ensuring availability (e.g., assessing competencies, workforce development planning, advocating) of professional development opportunities for the organization (e.g., training, mentoring, peer advising, coaching), as well as ensuring professional development opportunities throughout the organization.

• Working with state and local merit systems to change job descriptions remains a challenge. PHAB could give some guidance and best practices for how public health has worked to develop job-specific functional job descriptions that are less technical and more functional and relevant to public health roles. A recommendation was offered that health departments adopt department public health job descriptions that are supplemental to state or county job descriptions for their internal use.

• Academic health departments should be added, and credit given for those health departments with strong academic/service partnerships. However, some participants felt that health departments "give more and get less" from academic partnerships. PHAB should also keep in mind that many rural health departments do not have the same access to academic centers to create these partnerships.

• Gaps identified in the workforce assessments do not always have to be addressed with training. Sometimes, restructuring and replacing or changing positions is needed. The use of contractual employees may also be part of the strategies. PHAB should be flexible in encouraging other strategies as well as training, depending on the identified gaps. An expanded definition of learning could reinforce that these gaps can be addressed in a variety of ways.

• There was no consensus about the provision of workforce development for public health workforce external to the health department, but the concept should not be lost. It may be more appropriate for reaccreditation further into the future when additional information on how this could be measured has been developed.

• Staff engagement in planning workforce development is an emerging trend with enormous benefits that should be encouraged so that the plan is not developed in isolation.

• The group reaffirmed the value of the state-specific standard on supporting local health departments and tribes, and shared ideas for how this work could be strengthened.

Recommendations for Proposed Changes to the PHAB Standards and Measures

• The workforce development plan should include a requirement on how it's implemented and what impact it has had. It should align with the strategic plan, the CHA/CHIP, the emergency operations plan, and the quality improvement plan. A suggested timeline is within five years (like the CHIP and SP).

• The pipeline work is important, but it isn't always feasible for all health departments. If PHAB can broaden that measure, it would be helpful.

• Competency assessment is still a challenge but is needed and should be a separate measure. PHAB should clarify that because the core competencies are a long list and the health department may consider them as a menu to draw from and take those elements that apply and use them. It was also noted that working with core competencies sometimes "boxes us in" to an individual focus, when the focus needs to be on community and organizational needs. Competency assessment should be approached with the understanding that not all workers need all skills, but there are skills that the

organization collectively needs from its workforce and which should drive the health department toward a culture of learning.

• As workforce development is implemented, the impact of those activities should be measured. Strategies for learning should be multi-series and multi-modal (webinars, technical assistance, mentoring, peer-to-peer learning, etc.) to address complex challenges.

• Health departments are to use evidence-based strategies and initiatives for workforce development, where possible, as that evidence grows. Health department staff should also be supported to collect their own evidence for "action learning."

• Keep the focus on recruitment and retention, but enhance content to include capacity building and leadership development.

• PHAB should support a balance between solid adult learning principles and traditional training. Training does not necessarily equal development or mastery, but a well-trained workforce is needed for health departments to function. A broader definition of learning encompasses both.

• PHAB should be clear on how the results from the PHWINS surveys can be reviewed for relevancy and used to inform workforce development.

• The percent of employees who become CPH-certified could be used as one of the potential examples for documenting impact of professional development, staff engagement, recognition, and retention.

• The requirements should emphasize the need for the workforce to understand how to work in a cross-sectoral environment and in consideration of the social determinants of health and cultural competence/humility.

• For 8.1, PHAB should clarify competent workers rather than qualified. It would be more proactive.

• Measure 8.2.4, RD2, "recognition" is too prescriptive. RD 3 could be rolled into RD 1.

Recommendations Regarding Terminology and Definitions

Current Terms in PHAB Glossary	Existing Definition	Proposed Definition/ Recommendation/Notes
Public health workforce	The public health workforce, for purpose of accreditation, is defined as those individuals who are employed either full-time or part-time by the governmental public health department for the purpose of supporting the provision of the services described in the PHAB Standards and Measures. (Public Health Accreditation Board. Standards and Measures Version 1.0. Alexandria, VA, May 2011)	Is fine as it is. However, PHAB could note ask health departments to include contract staff in their development plans.
Workforce development plan	A public health workforce development plan sets forth objectives and strategies that are aimed at training or educational programs to bring public health employees up to the date on	A workforce development (plan) that facilitates organizational learning

	the skills necessary to do their jobs better or to train the next generation of public health workers and leaders (Rowitz, L. Public Health Leadership, 3rd Ed. Jones and Bartlett, 2014)	should represent a learning system that is: 1) built from an assessment of system/community, organization and individual needs; 2) results in processes and structures that work to connect individual learning to organizational priorities and performance; 3) a culture that promote reflection, inquiry and dialogue to challenges assumptions, mental models as well as facilitate systems thinking to problem solve relevant issues; 4) leadership who promotes a culture of learning; 5) learning results in demonstrated impact at the organizational and 'community' or external level (rather than only individual skill development); 6) regularly evaluates progress multiple levels of learning, e.g. individual competency; group assumptions and norms, and organizational changes in policy and procedures. Based on the following references: Miner, K. R., Childers, W. K., Alperin, M., Cioffi, J., & Hunt, N. (2005). The MACH Model: from competencies to instruction and performance of the public health workforce. Public Health Reports, 120(1_suppl), 9-15.)

		Processes and organizational structure that facilitate collaborative inquiry, dialogue, problem solving and learning often in the forms of teams (O¨rtenblad, 2004; David A. Garvin, Amy C. Edmondson, and Francesca Gino, 2008) Marquardt, M. J., Leonard, H. S., Freedman, A. M., & Hill, C. C. (2009). *Action learning for developing leaders and organizations: Principles, strategies, and cases*. American Psychological Association) Kirkpatrick, D., & Kirkpatrick, J. (2006). Evaluating training programs: The four levels. Berrett-Koehler Publishers.
Workforce capacity	None	Need to identify a solid definition for workforce capacity to implement HD objectives, including initiatives in the CHIP; adequate numbers of workforce; etc.

New Proposed Definitions

New Term	Existing PHAB Definition	Proposed Definition/ Recommendation/Notes
Learning organization	None	A learning organization is a company that facilitates the learning of its members and continuously transforms itself. It's an organization where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. https://hbr.org/1993/07/building-a-learning-organization

Organizational learning	None	Organizational learning is collective learning by members of the organization. Essential processes include the discovery of relevant new knowledge, diffusion of this knowledge to people in the organization who need it, and application of the knowledge to improve internal processes and external adaptation. Successful application of new knowledge includes institutionalizing it in a way that will ensure it is retained as long as it remains relevant." Yukl, G. (2009). Leading organizational learning: Reflections on theory and research. The leadership quarterly, 20(1), 49-53.
PHWINS	None	The Public Health Workforce Interests and Needs Survey (PHWINS) is the only nationally representative source of data about the governmental public health workforce. PH WINS captures individual governmental public health workers' perspectives on key issues such as workforce engagement and morale, training needs and emerging concepts in public health, and collects data on the demographics of the workforce. https://www.debeaumont.org/ph-wins/
Workforce assessment	None	Workforce assessment is the identification of gaps and strengths for how individual competency addresses organizational and community strategic goals. Miner, K. R., Childers, W. K., Alperin, M., Cioffi, J., & Hunt, N. (2005). The MACH Model: from competencies to instruction and performance of the public health workforce. Public Health Reports, 120(1_suppl), 9-15.)
Workforce capacity	None	Workforce capacity refers to an organization's ability to ensure sufficient staffing levels to accomplish its work processes and successfully deliver its products and services to its customers, including the ability to meet episodic or varying demand levels. http://www.baldrige21.com/BALDRIGE_GLOSSARY/BN/Workforce_Capacity.html

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VERSION 2.0 WORK IN PROGRESS:
Evidence Related to Public Health Workforce
November 2019

This document represents findings from a scan of the literature related to public health workforce-related activities by health departments. It is not meant to be an exhaustive search. If there are other resources on this topic of which you think PHAB should be aware, please contact Jessica Kronstadt at jkronstadt@phaboard.org.

Public Health Workforce Enumeration and Recruitment and Retention

One of the common subjects of research on workforce focuses on enumerating and classifying the public health workforce and describing turnover and workforce shortages.[1,2,3,4,5,6,7] According to 2017 data from state and Big Cities Health Coalition health departments, nearly half of the current workforce intend to leave their organization within the next 5 years; 22% due to retirement, and 25% for other reasons. The most common reasons cited for leaving are: inadequate pay (46%) and lack of advancement (40%).[8]

Findings like these have prompted many to call on health departments to prioritize comprehensive recruitment, retention, and succession planning efforts.[8,9] Despite this, studies have found that many health departments do not consider a full range of potential recruitment strategies and few have formal succession planning processes.[10,11] To the extent that health departments are engaging in activities to promote leadership development, successful strategies include: performance evaluation, leadership training, mentoring, stretch assignments, and periodic job rotations/cross-division training and opportunities.[10]

Various studies have sought to understand the reasons behind worker shortages and some have pointed to the salary gap between governmental and public health sector jobs.[8,12,13] Others have focused on the drivers of employee engagement. For example, analysis of PH WINS 2017 data from state health agency central offices found that while respondents generally agreed with statements about employee engagement measures, less than half agreed that "creativity and innovation are rewarded" and that "communication between senior leadership and employees is good." These findings are significant, because another analysis revealed that respondents who consider that creativity and innovation are rewarded were more likely to have higher job and organization satisfaction and less likely to report intent to leave their jobs.[14]

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These are areas where health departments can take action to improve. For example, the Boston Public Health Coalition used a PDCA cycle to address poor communication between leaders and employees and saw an improvement in their survey results related to satisfaction between 2014 and 2017.[15] Studies have also pointed to the need for a diverse and representative workforce to serve the public, and the necessity for leadership to cultivate that.[8]

Knowledge, Competencies, and Training

Understanding the gaps in public health workforce knowledge and competences[16] is another focus for research. For example, one study found that the fact that only 17% of state public health workers have a degree in public health, "demonstrate(s) a need for on-the-job-training and distance learning options for the public health workforce."[17] Another noted that even MPH graduates were "underprepared" for some aspects of their jobs, including quantitative data analysis, scientific writing, and management.[18] A recent study using the PH WINS 2017 data found that having a public health degree translated to lower odds of reporting a competency gap for 8 of 22 skills for employees in nonsupervisory roles.[19] This benefit of a public health degree decreased as employees moved into higher levels of management. At the supervisory/manager level, having a public health degree was associated with a reduced likelihood of having a skill gap among only 3 of 22 skills. At the leadership level, having a public health degree was not associated with a reduced likelihood of reporting any skill gap.

Other skill gaps that have been documented in the literature include:

- Budgeting /financial management;[20]
- Systems/strategic thinking;[20]
- Influencing policy;[21]
- Syndromic surveillance;[22] and
- Community design.[23]

The need for leadership competencies has also been noted.[24] One study recommended that "Leadership development initiatives should engage students at various levels and be practice-based, process focused, interdisciplinary, diversity based, adaptive, experimental, innovative, and empowering, and they should encourage authenticity."[25(ppS64)]

To help articulate the needed skills, there are a number of competencies sets that have been developed or are under development, including the Core Competencies for Public Health Professionals,[26] legal competencies,[27] public health preparedness and response competencies,[28] and competencies for CDC project officers.[29]

Outcomes Associated with Workforce Development Efforts

A 2012 systematic review found a lack of empirical studies about the association between public health workforce characteristics and effectiveness and population health outcomes.[30] The review found one study that noted increases in staffing were associated with decreases in cardiovascular disease mortality, but not other health outcomes.[31] However, workforce development has grown as an area of focus. As the public health field recognizes that as community health needs change, so must workforce training and competencies. "An empowered, satisfied, diverse, competitively compensated, well-trained workforce is arguably the key element that can enable agencies to drive improvements in health outcomes."[8]

Several recent studies have looked at the link between workforce development efforts and job satisfaction and retention in public health:

- In a survey of state health department employees, the item "supervisors/team leaders in my work unit support employee development" was associated with the highest mean Job in General Scale job satisfaction score among the supervisory support options. In multi-variate regression the Organizational Support Index (which includes several workforce development items including: employees have sufficient training to fully utilize technology needed for their work; my training needs are assessed) was associated with greater job satisfaction.[32]
- Among state health department employees, support for employee development is associated with higher job satisfaction, which in turn is associated with less intent to leave.[33]

Evaluations of specific training programs have found increases in self-reported competencies or knowledge. As examples:

- One study found that availability of evidence-based decision-making competencies increased more among participants of a training program than a control group. In addition, in a follow-up survey almost half the participants indicated that their agency had increased its used of evidence-based decision making.[34]
- A comparison of pre- and post-test data showed increases in knowledge following a workshop on community health assessments and data use. Furthermore, an evaluation administered nine months later showed more than 80% of participants had shared data with local health department staff and community health councils, and half had shared with hospitals.[35]
- Participants in the Linking Education and Practice for Excellence in Public Health Nursing Project had higher increases in perceived competencies over time than those who did not participate in the domains of linking, policy and planning, evaluating, and ensuring workforce.[36]
- Participants in the Great Plains Public Health Training Center's field placement program self-reported increases in three competency domains: policy development and program planning, communication skills, and community dimensions of practice.[37]

In addition, one study found that higher scores on a training environment index were associated with higher perceived business competencies.[38] A comparative case study noted that local health departments that were considered "high-capacity" reported better access to training than health departments deemed as low-capacity.[39]

Additional studies have explored:

- Workforce needs assessments, in particular, one study "found it important to seek input from all organizational levels, including frontline staff members, whose input ensured language and reading levels were appropriate."[40(pp20S)]
- Various components of workforce development plans and approaches;[41,42,43]
- Succession planning;[44]
- Formal training of public health graduates available to the workplace;[45]
- Projections for the retirement and loss of substantial numbers of senior leaders;[46]
- Training motivations, specifically personal growth as a key training motivator;[47]
- Effectiveness of workforce wellness programs;[48] and
- Incorporation of distance learning opportunities.[49,50]

Studies about Workforce and Accreditation

The inclusion of standards related to workforce in the PHAB Standards & Measures makes it likely that additional information about the public health workforce will be forthcoming.[51] For example,

one study looked at how accredited health departments are demonstrating conformity with accreditation measures related to workforce and identified common opportunities for improvement. [52]

In addition, analysis of the PH WINS survey of health department employees found a few areas where staff at accredited health departments indicated greater familiarity with several concepts, including QI for both state and local employees and health in all policies among state employees.[53]

An analysis of data from the 2014 Public Health Workforce Interests and Needs Survey found that employees of local health departments that were engaged in accreditation reported higher levels of job satisfaction than those who were not.[54] This finding is consistent with the evaluation of the PHAB beta test that found that the 30 participating health departments reported an increase in staff morale.[55] Several case studies highlight the effect that accreditation has in boosting staff pride[56] and removing silos and increasing collaboration within agencies.[57]
While the 2017 PH WINS data did not replicate that result, it also found no significant differences in burnout or intention to leave across accreditation status after controlling for individual and agency characteristics—thus debunking a concern that the pursuing accreditation would be seen as a burden.[53]

Evaluation data also points to the link between accreditation and workforce. In response to an evaluation survey sent to health departments one year after they were accredited,

- 90% reported that accreditation has improved their health department's ability to identify and address gaps in employee training and workforce development; and
- 75% reported that as a result of being accredited, they expanded staff training (written communication with M. Heffernan, April 9, 2019).

One commentary observed that accreditation has "jump-started" public health workforce development and noted the rise in the number of public health workers taking course related to Core Competencies for Public Health Professionals, among other topics.[58]

Interviews with several state health departments revealed that accreditation has helped drive the implementation of workforce development plans.[41] Similarly, one local health department described how accreditation prompted the agency to conduct an employee satisfaction survey and develop a plan to address the concerns that arose from the survey responses.[59] Another described how both staff and leadership felt that undergoing accreditation helped them to assess their workforce needs to plan for the future of public health.[10]

Furthermore, "accreditation is a driver for both academic programs and health agencies to develop formal affiliations."[60(pp295)] Indeed, there are some examples about how academic HDs have helped HDs prepare for accreditation.[61,62,63] Several studies have quantified the economic impact of forming these formal collaborations, or academic health departments,[64] while others have sought to characterize these academic-practice collaborations.[65,66]

A review of the workforce requirements in Version 1.0 of the Standards and Measures acknowledged the role of the accreditation standards in emphasizing the importance of workforce and recommended potential improvements, particularly around the strategic nature of workforce development planning and the need for references to workforce throughout the Standards and Measures.[67]

There have been several suggestions for the workforce requirements in PHAB, including:

- Asking health departments to include workforce goals and objectives in their workforce development plans and to report on progress towards those goals in their Annual Reports.[68]
- Using PH WINS data to develop system-wide workforce goals (e.g., focusing on innovation, improving retention rates, addressing identified training goals) and asking health departments to consider the national goals in their workforce development efforts. As Castrucci and Fraser explain, "This could be in addition to what is currently required providing a needed balance between national engagement and health department customization. Identifying and advancing specific national workforce development needs through PHAB brings consensus standards and some degree of uniformity and direction to workforce development efforts by moving multiple health departments in an aligned direction."[69(ppS185-S186)]

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VERSION 2.0 WORK IN PROGRESS:
Public Health Workforce – What Have We Learned from Accredited Health Departments?
November 2019

This document summarizes what PHAB has learned about how health departments (HDs) participating in accreditation are addressing public health workforce-related activities. In particular, it focuses on the reasons that HDs struggled with measures that relate to workforce. It also includes findings from Section II of accredited HDs' Annual Reports.

Below is a summary of the distribution of assessments for related measures. These data are for 179 HDs assessed under Version 1.0 and 146 HDs assessed under Version 1.5.

Measure	%Fully Demonstrated	%Largely Demonstrated	%Slightly Demonstrated	%Not Demonstrated	N
8.1.1	86.5%	9.5%	2.2%	1.8%	325
8.2.1 (ver 1.0)	59.2%	26.3%	11.2%	3.4%	179
8.2.1 (ver 1.5)	36.3%	45.2%	17.1%	1.4%	146
8.2.2 (ver 1.5)	38.4%	57.5%	4.1%	0.0%	146
8.2.2 (ver 1.0)	83.8%	11.2%	5.0%	0.0%	179
8.2.3 (ver 1.5)	74.0%	25.3%	0.7%	0.0%	146
8.2.4 (ver 1.5)	67.8%	26.7%	5.5%	0.0%	146
8.2.5 S	60.5%	13.2%	23.7%	2.6%	38
11.1.4 (ver 1.0)	76.0%	21.2%	2.8%	0.0%	179
11.1.5 (ver 1.0)	61.5%	36.3%	2.2%	0.0%	179
11.1.5 (ver 1.5)	47.9%	51.4%	0.7%	0.0%	146

Data are presented separately for health departments assessed under Version 1.0 and Version 1.5 of the Standards & Measures if there was a substantive change in the requirements. If the two versions are substantively the same, the aggregate data are presented. The numbering of some of the measures changed between Version 1.0 and Version 1.5. (For example, Measures 11.1.4 and 11.1.5 in Version 1.0 were consolidated into Measure 11.1.5 in Version 1.5.)

To better understand HDs' performance on these Measures, PHAB conducted an analysis of the conformity comments of HDs that were assessed as Slightly or Not Demonstrated (SD/ND) in at least 5% of the Site Visit Reports. The results of those analyses are shown below. For each Measure, the most common reasons for the assessment are listed, including the number of HDs for which that reason was indicated. One HD could have multiple reasons listed. The reasons are linked to specific required documentation (RD) listed in the PHAB Standards and Measures. For reference, please see: https://www.phaboard.org/wp-content/uploads/2019/01/PHABSM_WEB_LR1.pdf.

The Public Health Accreditation Board is a 501(c)3 nonprofit organization dedicated to improving and protecting the health of the public by advancing and ultimately transforming the quality and performance of state, local, tribal, and territorial public health departments.

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Measure 8.2.1: Workforce development strategies
Of the 52 HDs assessed as SD/ND, the most common challenges were deficiencies in documentation that demonstrated:

- RD1 (ver 1.5): Responsiveness to the changing environment & consideration of areas where technology advances quickly (17 HDs)
- RD1: A formal workforce development plan (15 HDs)
- RD1: Inclusion of adopted core competencies, against which staff are assessed (14 HDs)
- RD1 (ver 1.5): Description of barriers/inhibitors to the achievement of closing gaps (14 HDs)
- RD1: Training schedules & description of the material or topics to be addressed (13 HDs)

Measure 8.2.4: Work environment that is supportive to the workforce
This is a new Measure in Version 1.5. Of the 8 HDs assessed as SD/ND, the most common challenges with documentation were:

- RD2: A process for employee recognition (5 HDs)
- RD1: A comprehensive set of policies to provide a supportive environment for employees (4 HDs)

Measure 8.2.5 S: Consultation and/or technical assistance provided to Tribal and local health departments regarding evidence-based and/or promising practices in the development of workforce capacity, training, and continuing education
Measure 8.2.5 is a state-only requirement. Of the 11 HDs assessed as SD/ND, the most common challenge with documentation was:

- Training or TA provided did not address gaps in public health workforce or workforce development (3 HDs)

Annual Reports
Annual Reports (AR) were also reviewed to identify activities that HDs selected to report on in the "Emerging Issues" section. Of the Annual Reports submitted in 2018, more than 80% said they had conducted activities related to workforce. 12 of them provided more details about what they had done in this area, including:

- Multi-jurisdictional workgroup on workforce development;
- Core competencies assessments;
- Staff training (on such topics as management, leadership, Public Health 3.0, chief health strategist, systems thinking, applied marketing, employee engagement/retention, health equity, climate change);
- Individual development plans and the creation of a professional development catalog;
- Staff recognition activities; and
- Academic health department/internship programs.