Exploring Decision-Making, Common Processes, and Perceived Benefits of Accreditation Among Small Health Departments

By

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DISSERTATION

Submitted as partial fulfillment of the requirements for the degree of Doctor of Public Health in Leadership in the School of Public Health of the University of Illinois at Chicago
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DEDICATION

This dissertation is dedicated to my family – Kyle, Marek, Henry, and Dexter.

To Kyle, for encouraging me to apply and supporting my decision to begin the DrPH program; for making me good coffee on Saturday and Sunday mornings while I worked on various assignments; for taking on more than your fair share of parenting for the first three years of our parenting journey; for making me laugh when I wanted to cry and reminding me that my temporary sacrifices now will be worth the learning, professional growth, and accomplishment in the end. You are more than I could have asked for in a life partner and I am grateful every day for you.

To Marek, for helping me realize that I can do hard things. You were born in the middle of my DrPH journey program and somehow, I still managed to complete my courses, write my portfolio and complete my research with a newborn, then a toddler. You are my reason for wanting to achieve great things and I hope when you are old enough to understand, you are proud of me, that I have been a positive role model for you, and that you know you can and should follow your dreams and do big and important things.

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CKS

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KEYWORDS (or) ABBREVIATIONS

AC	Accreditation Coordinator
ACAR	Accreditation Committee Action Required
AP	Action Plan
AS	Accreditation Specialist
ASI	Accreditation Support Initiative
ASTHO	Association of State and Territorial Health Officials
BOH	Board of Health
CDC	Centers for Disease Control and Prevention
CHA	Community Health Assessment
CHIP	Community Health Improvement Plan
DHHS	Department of Health and Human Services
EPHS	Core Functions and Essential Public Health Services
FTE	Full-Time Equivalent
HD	Health Department
HDD	Health Department Director
IOM	Institute of Medicine
LHD	Local Health Department
MLC	Multi-State Learning Collaborative
MLPHAP	Michigan Local Public Health Accreditation Program
NACCHO	National Association of County and City Health Officials
NNPHI	National Network of Public Health Institutes
NPHII	National Public Health Improvement Initiative
OSU	The Ohio State University
PHAB	Public Health Accreditation Board
RWJF	Robert Wood Johnson Foundation
SHD	State Health Department

I. BACKGROUND AND PROBLEM STATEMENT

a. Background and Context

i. Public Health in 'Disarray'

In the past several decades health, wellbeing, and longevity in the United States has improved principally due to large-scale public health interventions, healthcare reform with an increased focus on preventive services, and advancement of high-quality clinical care. Despite numerous improvements in health status, the infrastructure supporting the public health system's ability to respond to continuing and emerging threats has been deemed insufficient since the late 1980s. A report published by the Institute of Medicine (IOM, 1988) described public health as a profession lacking clear definition, support, and understanding. Problems of service delivery, financing, coverage, and quality of services provided through the public health system were deemed inadequate and failing to meet the needs of constituents. These cited deficiencies about the state of public health, coupled with the lack of agreement about mission, core functions, and the extreme variability among health departments' organizational structure, operations, and services contributed to what the IOM report called a "cause for national concern" (IOM, 1988). As a result, the field of public health was charged with addressing three basic recommendations – defining the mission of public health, describing the governmental role in fulfilling that mission, and identifying and assigning responsibilities to each level of government.

The mission of public health was defined by the authors of the 1988 IOM report as "the fulfillment of society's interest in assuring the conditions in which people can be healthy". This definition, while necessary, was broad and further contributed to the lack of clarity in roles and responsibilities among governmental public health agencies and their public health system partners in fulfilling this mission. One noteworthy development in the early 1990s that aimed to

address this confusion was the Core Functions and 10 Essential Public Health Services (EPHS). Since their adoption, the EPHS have been used to define roles and responsibilities of public health systems at all levels (i.e., national, state, local) and have served as the basis for several national public health initiatives, including Healthy People and the National Public Health Performance Standards, both of which have contributed improvements to public health infrastructure and population health (Centers for Disease Control and Prevention (CDC), 2014).

The Core Functions of the EPHS framework include three broad categories – Assessment, Assurance, and Policy Development – for which each public health system is responsible to achieve healthy communities. As shown in the left half of Figure 1, each of these categories include corresponding Essential Services that encompass key activities in which public health systems engage to ensure the public's health. It is important to note that the EPHS were not intended to be fulfilled solely by governmental public health agencies, but rather through collaborative and coordinated efforts of these agencies and the partners that comprise the public health systems in which they operate. The CDC (2018) defines public health systems as "all public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction." Per this description, coupled with the definition of EPHS, it can be inferred that responsibility for assessing community needs and assuring essential services are being delivered is that of the public health agency operating in that jurisdiction, but the delivery of such services is a shared responsibility among all organizations comprising the public health system.

In 2019, a taskforce of public health experts, led by the de Beaumont Foundation and the Public Health National Center for Innovations (PHNCI), began the process of revising the EPHS framework to align more closely with current and rising public health practice needs (PHNCI,

2020). The updated version of the EPHS framework, shown in the right half of Figure 1, illustrates continuity of many original elements of the framework have been transferred with language modifications. The revised EPHS is currently being integrated into practice and will be used to inform the future iterations of the national accreditation standards and measures.

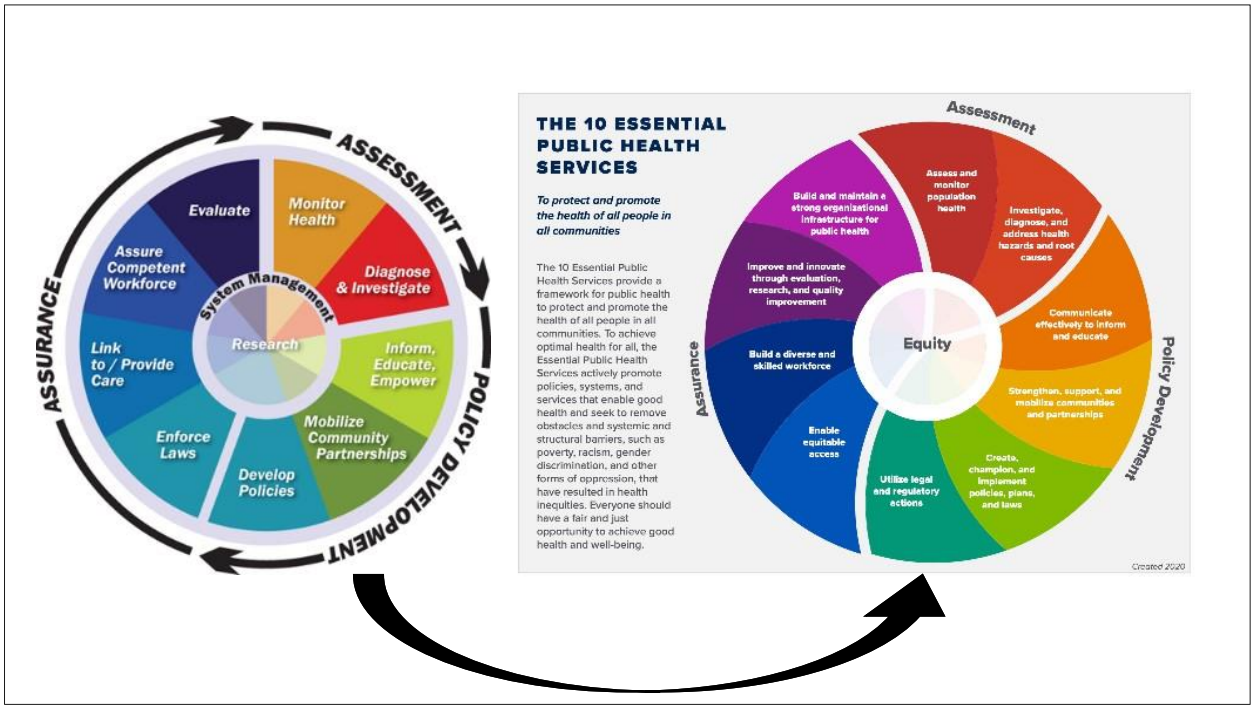


Figure 1. Core Functions and Essential Public Health Services, Original and Revised (CDC, 2018; PHNCI, 2020)

Despite having a logical framework and definition for public health in the original EPHS, major problems in public health infrastructure remained. This was particularly true regarding the establishment of a long-term, comprehensive, and sustainable plan for ensuring all public health systems have the resources and capacity to ensure delivery of EPHS within their jurisdictions (IOM, 2002). It is one thing to know and define what health departments should be doing; it is

another to have a process for systematically ensuring all health departments have the basic infrastructure, resources, and capacity to do so.

The variance in size, authority, organization, and capacity among state and local governmental public health agencies compounds the challenges of ensuring communities are being provided the public health services they need to achieve optimal health. Most health departments in the United States serve populations of less than 75,000, cover the geography of a single county, and have less than 50 staff, while others serve several million constituents and have hundreds, or even thousands of staff (NACCHO, 2016). The scope of health department authorities, responsibilities, programs, and services vary just as much as their jurisdictional characteristics. These are just some of the reasons why practitioners working in public health are all too familiar with the common sentiment attributed to governmental public health agencies - *if you've seen one health department, you've seen one health department.*

ii. Public Health Response

The IOM's dire assessment of public health infrastructure in the United States resulted in six proposed areas of action and change for the public health system. These areas included: (1) adopting a population health approach, (2) strengthening governmental public health infrastructure, (3) building a new generation of intersectoral partnerships, (4) developing systems of accountability to assure quality and availability of public health services, (5) making evidence the foundation of decision-making and measure of success, and (6) enhancing communications with the public health system (IOM, 2002). The proposed areas of action were linked specifically to committee findings which corresponded to recommended actions. These areas of change and recommended actions set into motion several initiatives that have contributed to improvements to the US public health system.

While many health departments adopted the EPHS as a means for defining their role and functions, some struggled to see how the broad framework applied directly to the work they were doing and services they were providing in their communities (Lenihan et al, 2007). In recognition of this disconnect the National Association of City and County Health Officials (NACCHO) initiated a process for clarifying the identity of local public health agencies. This process resulted in a product now known as the *Operational Definition of a Functional Local Health Department* (Operational Definition).

Very generally, the Operational Definition was intended to aid stakeholders, including members of the public and elected officials, in developing a shared understanding of what everyone should reasonably expect from an LHD, regardless of where that department operates (NACCHO, 2005; Lenihan et al, 2007). The Operational Definition included 10 overarching standards, each with sub-standards informed by the EPHS and the National Public Health Performance Standards (NACCHO, 2005). The overarching topic areas included:

- Monitoring health status and understand health issues facing the community;
- Protecting people from health problems and health hazards;
- Giving people information they need to make healthy choices;
- Engaging the community to identify and solve health problems;
- Developing public health policies and plans;
- Enforcing public health laws and regulations;
- Helping people receive health services;
- Maintaining a competent public health workforce;
- Evaluating and improving programs and interventions; and
- Contributing to and applying the evidence-base of public health.

Clarifying the definition and establishing standards by which LHDs could be assessed by their governing entities, consumers, and other stakeholders was a step toward addressing some of the IOM's recommendations and offered frameworks for acting on some of the designated action areas outlined in the 2002 IOM report. However, one missing piece was a means for systematically assessing LHDs against established standards to assure community and stakeholder needs were being met, that there was consistency among LHDs and the programs and services they provide, and that there was transparency between health departments and key stakeholders about their performance. As such, the 2002 IOM report noted a specific opportunity:

> '*The Secretary of DHHS should appoint a national commission to consider if an accreditation system would be useful for improving and building state and local public health agency capacities. If such a system is deemed useful, the commission should make recommendations on how it would be governed and develop mechanisms to gain state and local government participation in the accreditation effort. Membership in this commission should include representatives from CDC, the Association of State and Territorial Health Officials, the National Association of County and City Health Officials, and nongovernmental organizations*.' (IOM, 2002, p. 9)

This specific recommendation spurred convening of the Exploring Accreditation Committee, a group of public health leaders and stakeholders charged with determining whether and how a voluntary accreditation program could improve health department operations, and subsequently health outcomes, in the United States (Exploring Accreditation Steering

Committee, 2007). After a year of discussion and gathering feedback from the field, the Committee determined that an accreditation program for governmental public health departments was both desirable and feasible (Bender, 2007; Exploring Accreditation Steering Committee, 2007). Recommendations from the Committee indicated the need for a new, nonprofit entity with a governing board to oversee the accreditation program; that standards for the accreditation program should be based upon the Operational Definition and other existing state and local performance standards; that financing of the accreditation program should follow a phased approach, beginning with start-up funds provided by a consortium of funders; and that program evaluation based upon a provided logic model should be conducted (Bender, 2007).

iii. Accreditation of Governmental Public Health Agencies

The organization now known as the Public Health Accreditation Board (PHAB) was incorporated in 2007 following the Exploring Accreditation Steering Committee's recommendations and serves as the administering agency of the voluntary national accreditation program for governmental public health departments. PHAB accreditation assesses state, local, territorial, tribal, and now Army health departments against a set of practice-based standards and measures that have been vetted by public health practitioners and are grounded in the EPHS, the Operational Definition, and the National Public Health Performance Standards. The PHAB Standards and Measures put forth a framework for assessing health department capacity for delivering the EPHS and encompass 12 Domains against which governmental public health departments are assessed (PHAB, 2015). Table I provides an overview of the 12 PHAB Domains, ten of which clearly align with the original EPHS framework. The additional two Domains were added following the beta testing process and focus on administrative and

management capacity and the relationship between health departments and their respective governing bodies.

TABLE I. 12 PHAB DOMAINS
1. Conduct and disseminate assessments focused on population health status and public health issues facing the community;
2. Investigate health problems and environmental public health hazards to protect the community;
3. Inform and educate about public health issues and functions;
4. Engage with the community to identify and address health problems;
5. Develop public health policies and plans;
6. Enforce public health laws;
7. Promote strategies to improve access to healthcare;
8. Maintain a competent public health workforce;
9. Evaluate and continuously improve processes, programs, and interventions;
10. Contribute to and apply the evidence-base of public health;
11. Maintain administrative and management capacity; and
12. Maintain capacity to engage the public health governing entity (PHAB, 2013).

National accreditation standards and measures were released in July 2011 and the program officially launched in September 2011. Health departments choosing to engage in PHAB accreditation complete a seven-step process, starting with a preparation step. Initial accreditation decision occurs at step five and results in a five-year accreditation designation,

while steps six and seven refer to requirements accredited health departments must complete to maintain their status and engage in reaccreditation (PHAB, 2019d). Each step of the accreditation process and associated key activities are detailed in Table II below. The bulk of the initial work related to accreditation occurs during steps two, three and four, where health department staff are trained and then begin working with their colleagues to identify, select, and submit documents that are later assessed by the PHAB site visit team leading up to the on-site visit.

TABLE II. SEVEN STEPS OF PHAB ACCREDITATION (PHAB, 2019d)

Accreditation Steps	Key Activities
1. Preparation	• Readiness assessment • Online orientation
2. Registration and Application	• Registration in e-PHAB • Application submitted • Fee payment • Applicant training
3. Document Selection and Submission	• Health department selects documentation, uploads it to e-PHAB, and submits all documentation to PHAB.
4. Site Visit	• Site visit is completed by trained site visitors. • Site visit report is developed and submitted to PHAB Accreditation Committee.
5. Accreditation Decision	• PHAB Accreditation Committee reviews site visit report. • Decision on accreditation status of the health department is made.
6. Reports	• If accredited, the health department submits annual reports to PHAB for the first four years of its five-year accreditation cycle.
7. Reaccreditation	• As accreditation status nears expiration, the health department applies for reaccreditation.

Anticipated Benefits and Outcomes

Early anticipated benefits of national accreditation were based on findings from other service delivery fields, such as healthcare, education, social service and other public service industries. An assessment of other industries' accreditation benefits yielded evidence of

moderate positive changes in service quality, service outcomes, and operations of service providers within those respective industries (Mays, 2004). These findings were further applied to public health accreditation when Joly and colleagues (2007) presented a logic model for linking public health accreditation with potential outputs and outcomes. Many of the short-term and intermediate outcomes presented in the logic model in Figure 2 align with those reported by Mays (2004) for other public service industries.

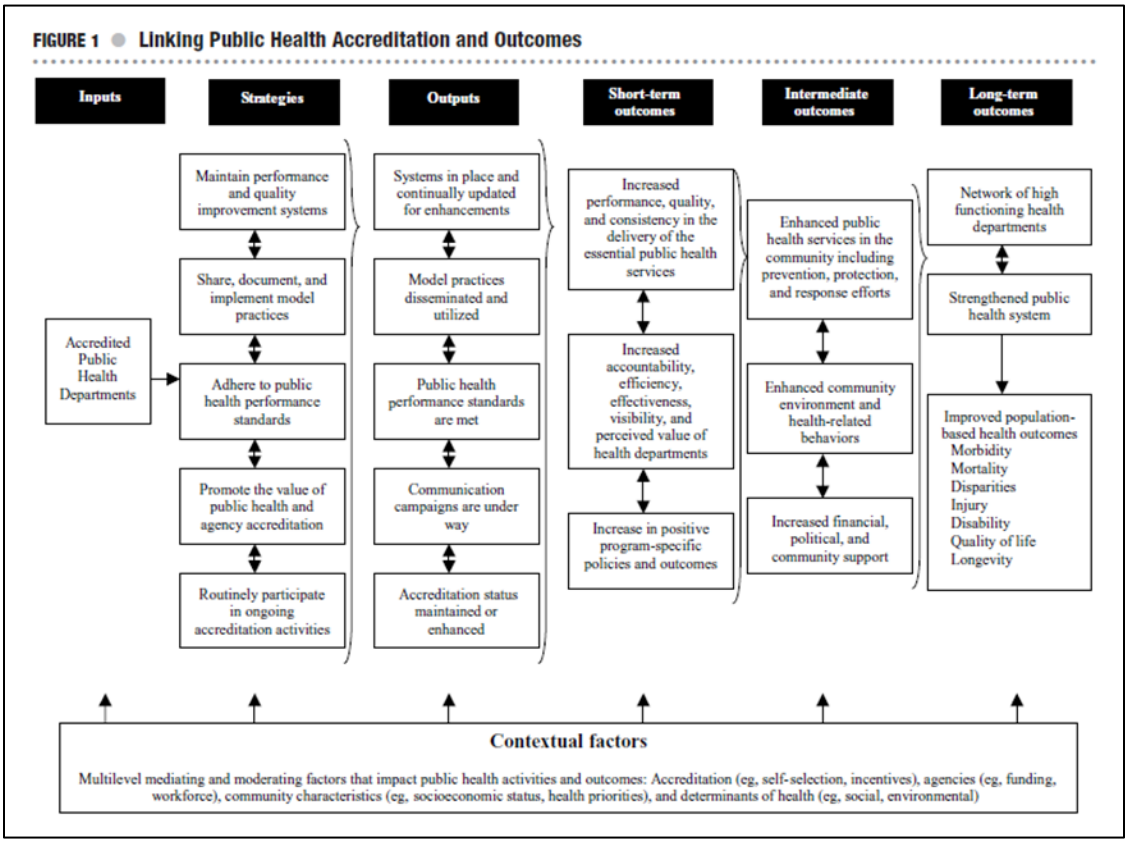


Figure 2. Logic Model for Linking Public Health Accreditation and Outcomes

(Joly et al 2007)

Beyond the anticipated benefits described in Figure 2, other national partner organizations and public health practitioners speculated about what accreditation could mean for public health departments early in the program's development and implementation. Russo (2007) outlined several obvious and less-obvious benefits of accreditation. Some of the more obvious

anticipated benefits of accreditation included benchmarking of health departments against standards for all communities; encouragement of ongoing quality improvement; increased accountability to the public and policymakers; and creating a more coherent public image and consistent identity for public health.

Additional, less-obvious outcomes of public health accreditation, per Russo (2007), were possible if it was 'done in the right way'. Some of these less-obvious outcomes described by Russo (2007) were focused on internal organizational changes like improved staff morale, better awareness of departmental activities, and improved collaboration and better alignment of efforts across health department units – a proverbial 'breaking of the silos.' Further, Russo (2007) noted possible improvements with information sharing and exchange within the field of public health, increased documentation and use of best practices, and the possibility for promoting regionalization across public health jurisdictions, where appropriate.

Documented Benefits and Outcomes

After nearly a decade of implementation, PHAB accreditation has been associated with benefits for both health departments and communities served by accredited health departments, confirming many of the anticipated benefits and outcomes put forth early in the program's development. In a recent special supplement of the Journal of Public Health Management and Practice, Kronstadt and colleagues (2018a) noted three broad categories in which accredited health departments have reported benefits - quality improvement and performance management, partnerships, and administration and management. For example, Siegfried et al (2018) found that health departments engaged in PHAB accreditation were more likely to report increases in quality improvement and performance management activities, and that these activities are reported at an even higher rate one-year following accreditation decision by PHAB among these

agencies. The emphasis on community health assessment and improvement planning in the PHAB accreditation process has helped to facilitate improved partnerships in communities served by accredited health departments as they focus on collaboratively identifying and implementing strategies to improve health outcomes, while the requirement of a workforce development plan and investment in improving staff competencies has contributed to improved job satisfaction among staff working in accredited health departments (Kronstadt et al, 2018b; Ye et al, 2018).

A formal external evaluation of the PHAB accreditation program has also helped build evidence in support of and to strengthen the case for public health accreditation. According to the report published by Meit and colleagues (2017), accredited health departments cite both internal and external benefits, changes, and outcomes because of their participation in the accreditation process. Internal benefits were defined by Meit and colleagues (2017) as benefits that improve the internal functioning of the health department and that have contributed to the department becoming a higher functioning and more efficient agency. Internally, accredited health departments have reported experiencing the following benefits because of the PHAB accreditation process:

- Strategic planning and assessment;
- Benchmarking against national standards;
- Improved operations, processes, and documentation;
- Changes in organizational culture;
- Workforce development and improvements in staff competencies;
- Increased quality improvement; and
- Improved capacity to deliver high quality services (Meit et al, 2017).

Accredited health departments have also consistently reported several external benefits of accreditation. Meit and colleagues (2017) defined external benefits as being related to the way in which the health department interacts with organizations and individuals outside of the organization, like community partners, members of the public, their governing entity, and other policy and decision-makers. The most reported external benefits observed among accredited health departments include:

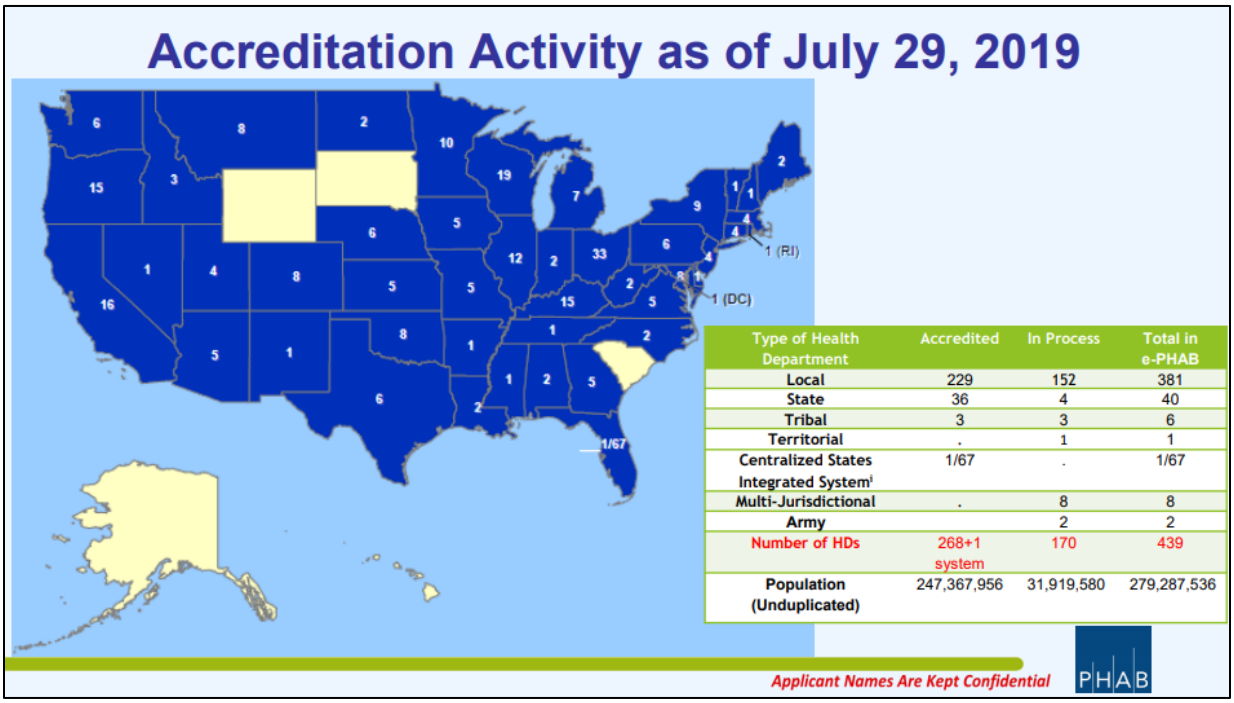
- Increased visibility, credibility, and accountability;
- Strengthened collaboration with partners;
- Increased knowledge of health department roles and responsibilities; and
- Improved health outcomes (Meit et al, 2017).

Many of these findings support the benefits and outcomes postulated by proponents of the public health accreditation program before and during its initial development.

iv. Continued Importance of National Accreditation

The first cohort of 11 health departments were accredited by PHAB in March 2013 (PHAB, 2013b). At the time this paper was written, 36 state, three Tribal, 228 LHDs, one Army public health installation, and one statewide integrated public health system have achieved five-year accreditation, while more than 150 additional health departments are currently engaged in earlier phases of the accreditation process, as shown in Figure 3 (PHAB, 2019a). Despite the early and widespread engagement of state health departments, large LHDs and mid-size LHDs in the PHAB accreditation process, there are still hundreds of LHDs – mostly serving small jurisdictions - and ten state health departments that have not yet become PHAB accredited

(PHAB, 2019a). These data highlight the continued importance and opportunity for PHAB accreditation to facilitate improvement of public health department performance in communities not yet served by an accredited health department, especially in communities being served by health departments considered ‘small’.



Type of Health Department	Accredited	In Process	Total in e-PHAB
Local	229	152	381
State	36	4	40
Tribal	3	3	6
Territorial	.	1	1
Centralized States Integrated System[i]	1/67	.	1/67
Multi-Jurisdictional	.	8	8
Army		2	2
Number of HDs	268+1 system	170	439
Population (Unduplicated)	247,367,956	31,919,580	279,287,536

Figure 3. PHAB Health Department Accreditation Activity, July 2019 (PHAB, 2019a)

According to NACCHO (2016), there are a total of 2,533 LHDs in the United States. LHDs differ on many characteristics and vary greatly in agency size, jurisdiction served, governance structure, and scope of services provided. Figure 4 provides a summary of accreditation activity by population size categories of LHDs.

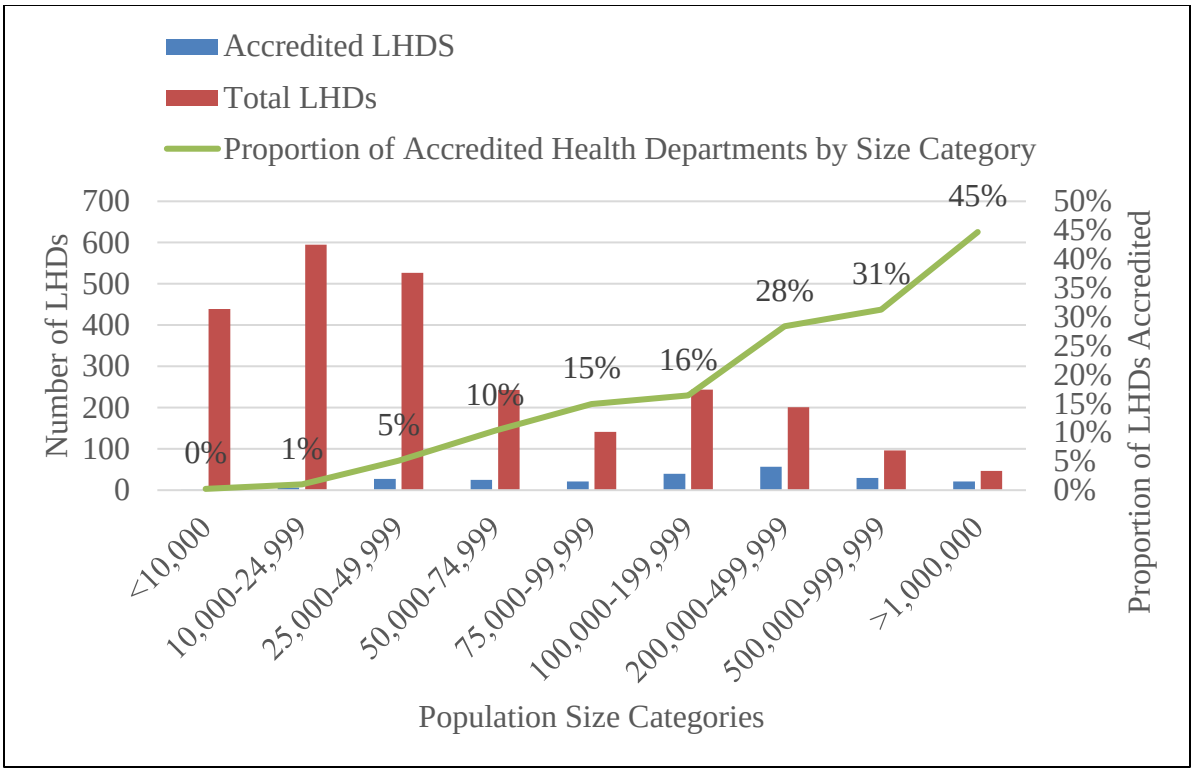


Figure 4. Proportion of Accredited Local Health Departments by Size of Population Served (PHAB, 2019e)

The jurisdiction size categories and data used in this analysis were adopted from NACCHO's National Profile of Local Health Departments (2016). Data regarding number of accredited health departments by category was provided by PHAB's Research and Evaluation Team. As of July 2019, there were 228 total PHAB-accredited LHDs. The 'Total LHDs' columns show the number of all LHDs within each designated category and the "Accredited LHDs" columns show the number of LHDs within each category that have achieved accreditation at the time this paper was written. One of the most important things to note in Figure 4 is the relatively high proportion of large LHDs (500,000 or more population served) and mid-size LHDs (between 50,000 and 499,999 population served) that have achieved PHAB accreditation when compared with small LHDs (50,000 or less population served). While the achievement of accreditation by mid-size and large LHDs is important and a great

accomplishment for PHAB and communities served by these agencies, the lower rate of engagement in PHAB accreditation by small LHDs cannot be ignored and warrants further exploration.

More than half of all LHDs are considered small (62%), but only about 2% of these departments are accredited by PHAB (NACCHO, 2016; PHAB, 2019e). Among accredited small LHDs, most serve rural or frontier counties or districts. Non-rural departments are also considered small LHDs in the NACCHO Profile per jurisdiction size definition, but are different because they often operate in small, more densely populated geographies. The types of jurisdictions served by accredited small LHDs are reflected in Figure 5. The most common characteristics of these departments are that they serve single counties or districts, have an average budget of $3,151,010, operate with an average of 29 staff, and serve an average population of just over 35,000 people (PHAB, 2019e).

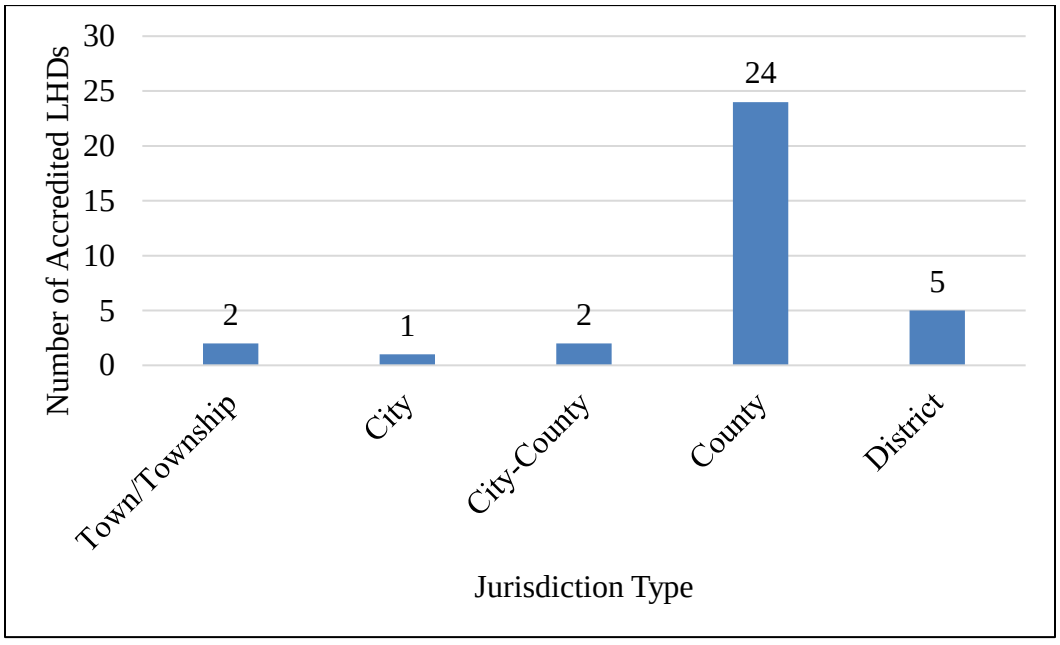


Figure 5. Number of PHAB-Accredited Small Local Health Departments by Jurisdiction Type, July 2019 (PHAB, 2019e)

Generally, small LHDs face different challenges and barriers, fulfill different roles, and address different needs than mid-size and large LHDs. Many of these barriers and challenges have been documented as sources of discouragement or as inhibiting engagement by small LHDs in the PHAB accreditation process. Shah et al (2015) reported a positive correlation between jurisdiction size and intent to engage in accreditation, meaning the smaller population served, the less likely a health department is to pursue PHAB accreditation. This finding is supported by available data on PHAB accredited small LHDs presented in Figure 4. One assumed explanation for this phenomenon based on the literature is the lack of human and financial resources that small LHDs can allocate toward accreditation-related efforts, thus making accreditation a low priority for small LHDs (Beatty et al, 2018; Gregg et al, 2018). However, there may be several other plausible explanations and/or contributing factors associated with this phenomenon.

More recently, researchers have started to rethink the jurisdiction size-based definition of small LHDs. There have been some attempts to further sub-categorize health departments that are considered small into more distinct groupings. Two studies used census-based or census tract data to classify small jurisdictions based on jurisdiction size and degree of rurality. Meit et al (2014) categorized LHDs into metropolitan and nonmetropolitan counties and provided sub-categories for each in a study focused on comparing mortality, risk factors, and healthcare access over time. Nonmetropolitan counties were otherwise referred to as 'rural' and included two sub-categories – micropolitan and non-core. Similarly, in an analysis of NACCHO Profile data from 2013, Beatty and colleagues (2018) classified all LHDs into three categories - 'urban', 'micropolitan', or 'rural' - based on Rural/Urban Commuting Area codes and assessed the role of structural and organizational factors affecting accreditation-seeking among health departments. Micropolitan communities, according to Beatty et al (2018) include census tracts with towns of

10,000 to 49,999 population and areas associated based on commuting, while rural communities include census tracts with towns of less than 10,000 and areas associated based on commuting. Beatty et al (2018) found 40% of all LHDs served rural communities, while about 20% were located within micropolitan communities.

While jurisdiction size and rurality are recognized in the literature as influential factors in accreditation-seeking behaviors by LHDs (Shah et al, 2015; Beatty et al, 2018; Harris et al, 2018), the field is beginning to look beyond these factors when defining small LHDs and assessing their readiness and likelihood to pursue PHAB accreditation. Additional factors of interest being explored include number of full-time equivalents (FTE), provision of direct services, lack of population-level activities, total spending, per-capita spending, AND spending per-square mile (Harris et al, 2016; Gregg et al, 2018). Each of these factors could have influence on accreditation-seeking among small health departments.

Currently, there is little available literature to help conceptualize, characterize, and describe the nuances between micropolitan and rural LHDs as it pertains to performance and accreditation-seeking. One study by Gregg and colleagues (2018) assessed accreditation readiness among LHDs in three states, each of which operated many LHDs known to serve rural populations. Participant health departments were classified according to the Kansas Frontier to Urban Continuum, which stratifies across five categories based on population per square mile (Governor's Behavioral Health Services Planning Council, 2014).

TABLE III. KANSAS FRONTIER TO URBAN CONTINUUM	
Category	Description
Frontier	Less than 6 people per square mile
Rural	6 - 19.9 people per square mile
Dense Rural	20 - 39.9 people per square mile
Semi-Urban	40 – 149.9 people per square mile
Urban	150 or more people per square mile

The findings from this study suggest a positive correlation with number of full-time equivalents (FTE) and accreditation readiness and intent to apply for accreditation. For example, only 3% of health departments with less than five FTE intend to apply for accreditation in the next two years and the accreditation readiness score for small FTE health departments was 58%, as compared with more than 70% of the largest FTE health departments intending to apply for accreditation within the next two years and an accreditation readiness score of 85% among these health departments (Gregg et al, 2018). This study further found that frontier health departments had the lowest accreditation readiness scores, and that as rurality decreased, the intent to apply for accreditation increased. There is variance between micropolitan and rural departments that needs to be further explored.

b. Problem Statement

PHAB was established in 2007 with the mission to improve and protect the health of the public by advancing and ultimately transforming the quality and performance of the nation's state, tribal, local, and territorial health departments (PHAB, 2019b). This mission is achieved through implementation of a peer-review process by which health department conformity with a set of standards and measures is assessed to determine whether the health department should be designated as a high-functioning public health department. PHAB accreditation is intended to

apply to all governmental public health agencies, regardless of jurisdiction size and other influencing contexts and characteristics. Since the accreditation program was launched in 2011, more than 260 health departments – mostly state, large and mid-size LHDs - have achieved PHAB accreditation, ensuring nearly 80% of the US population is served by an accredited health department (PHAB, 2019a). A large proportion of health departments eligible for accreditation but that have not yet engaged in the process are small health departments (serving a population of less than 50,000).

Over the course of its maturation, numerous positive outcomes, internal and external benefits of the accreditation process have been documented through formal evaluations, case reports, and peer-reviewed research. Internal benefits have included increased use of quality improvement and performance management processes; improved ability to identify organizational strengths and weaknesses; greater accountability and transparency within the health department; better documentation of the health department's capacity to deliver the core functions and essential services of public health; and greater collaboration across health departments and between health department units. External benefits reported by accredited health departments included improved credibility within the community; improved accountability to external stakeholders; and improved health department visibility and reputation among external stakeholders (Meit et al, 2019).

Despite knowing that many accredited health departments report experiencing positive benefits and outcomes associated with accreditation, it is unclear whether all accredited health departments are realizing these to the same degree, whether they are enough to motivate unaccredited health departments to engage in accreditation. Because most accredited health departments have been accredited for four or fewer years, it is also unclear whether documented

benefits are enough to encourage maintenance of accreditation through reaccreditation efforts. To date, benefits and outcomes seem to have facilitated engagement in PHAB accreditation for a majority of the large and mid-size health departments but appears to inspire less motivation among small LHDs. If the long-term goal is to increase the proportion of accredited health departments so that all communities are eventually served by accredited health departments, continued documentation of meaningful and motivating benefits and outcomes of the accreditation process and better articulation of the value of PHAB accreditation among unaccredited health departments, especially small ones, will be essential.

Most of the currently unaccredited health departments are small ones (serving populations of less than 50,000). This coupled with the fact that such a small number of small health departments have become PHAB accredited, it is logical to presume a strategic focus on gaining a better understanding of the decision-making and experience of accredited small health departments is needed. Specifically, exploring the factors behind the initial decision to pursue accreditation, how those factors influenced the processes, strategies and approaches used to achieve accreditation, and the perception of what it means to be an accredited public health agency and how that designation can set small health departments apart from their unaccredited counterparts are critical pieces of information for ensuring PHAB accreditation continues to pique the interest to small health departments and that these agencies are motivated to pursue accreditation in the future. Exploring and describing accredited small health department experiences of the PHAB accreditation process are important to the future of the accreditation program.

i. Study Questions

This study is intended to fulfill an exploratory and descriptive function, with the purpose of answering the following research questions:

1. Why did accredited small local health departments choose to pursue PHAB accreditation?
    a. What factors (motivators, incentives, barriers, and challenges) affected the decision of small accredited local health departments to pursue accreditation?
    b. How did the small accredited local health department's vision for accreditation's influence on their organization affect the approach used? (leadership versus compliance)
    c. How did the small accredited local health department's approach to accreditation influence their process, strategies, and outcomes?
2. What was most influential in facilitating successful achievement of PHAB accreditation among accredited small health departments?
    a. How did organizational readiness influence the accreditation process in small accredited local health departments?
    b. What processes and strategies were used by small accredited local health departments in the accreditation process?
    c. How did small accredited local health departments organize to achieve accreditation?
    d. How did small accredited local health departments use available resources for their accreditation efforts?

    e. What was the role of other organizations in supporting the accreditation process for small accredited local health departments?

3. How do accredited small local health departments describe the impact of perceived purpose, benefits, and outcomes of PHAB accreditation on maintaining their accreditation?
    a. What does it mean to be PHAB accredited among small accredited local health departments?
    b. What benefits do small accredited local health departments associate with being PHAB accredited?
    c. What outcomes do small accredited local health departments experience related to accreditation?
    d. What challenges do small accredited local health departments encounter when working to maintain their accreditation?

c. Leadership Implications and Relevance

The incorporation of PHAB as an organization and the accreditation program it administers were strategic responses to the disarray of public health described in the Institute of Medicine's 1988 and 2002 reports. Early enthusiasm and engagement in PHAB accreditation resulted in an array of documented benefits among accredited health departments, ranging from improved organizational processes to increased ability to leverage funding and improved ability of health departments to address community needs (NACCHO, 2014; Meit et al, 2017; Meit et al, 2019). Despite this, PHAB and its national partners have been faced with tough questions about the continued relevance and incentive for accredited health departments to maintain their accreditation and for currently unaccredited departments to engage in the process. This is especially true among small LHDs. Therefore, there is an opportunity.

An opportunity exists to change the narrative related to accreditation; to highlight the successes of accredited small LHDs that will resonate most with their peers and to describe and document how accredited small LHDs have used leadership approaches to initiate, manage, and maintain their accreditation efforts with longer-term goals of organizational growth, improvement, and change. This study has the potential to document and share promising practices for managing the accreditation process among small LHDs, specifically during the Document Selection and Submission and Site Visit steps of the accreditation process. This will ensure small LHDs choosing to pursue initial accreditation in the future have a 'blueprint' to guide and support success in their PHAB accreditation-related efforts.

Though PHAB, NACCHO, and others have documented and reported general benefits of PHAB accreditation to the field, questions of 'why accreditation' remain. This study explored what accredited small LHDs perceive 'being accredited' to mean in practice, with the intention

of helping explain what types of benefits and outcomes matter most among these agencies and what will most incentivize small LHDs to engage in accreditation. Capturing this information and linking it to previously reported benefits could strengthen justification for and messaging in support of accreditation among small LHDs. This information may also assist PHAB in reframing how and what is communicated with small LHDs exploring or considering engagement in the accreditation process.

Many of the biggest challenges facing small health departments contribute to the perception and sentiment that accreditation may not be appropriate, feasible or worthwhile for these departments because they are 'different'. In fact, among unaccredited health departments 34% report not pursuing accreditation because they believe the standards and measures exceed their capacity and nearly 20% state the standards and measures are not appropriate (Meit et al, 2017). Many small health departments, especially ones located in rural communities, serve a different function than their larger counterparts. They are often charged with filling healthcare service gaps and are working hard to serve populations that are spread across large geographies and that have widespread and differing needs all the while doing so being largely under-resourced. This study was an opportunity to engage directly with staff and leaders of accredited small health departments to better understand the contexts in which they are operating and what facilitated their efforts to overcome these known challenges and barriers. Health departments that participated in this study are evidence that PHAB accreditation is both feasible and, arguably worthwhile, for small health departments. Now the argument for accreditation needs to be strengthened to persuade others.

Lastly, in June 2019, PHAB and NACCHO convened a strategic Joint Taskforce on Small Health Department Accreditation, with the purpose of developing consensus on a clear

working definition of a small health department; gaining a better understanding the profile of small health departments in the United States; gaining a better understanding of barriers and facilitators of small health departments seeking and achieving accreditation; exploring small health departments' perception of reaccreditation requirements; and developing strategies for PHAB and NACCHO to support small health departments in their improvement efforts and in strengthening their infrastructure (K. Bender, personal communication, July 26, 2019).

Since then, PHAB has completed organizational strategic planning that has further brought the need for addressing small health department accreditation barriers to the forefront, making finding a solution an organizational priority for 2020. Together with the Joint Taskforce, PHAB staff have developed a proposal for a new accreditation-like product intended to alleviate some of these known barriers for small health department accreditation. The findings from this study can be used to inform elements of this new program's development, and to continue innovative engagement strategies for small health departments interested in pursuing national accreditation in its current form.

II. CONCEPTUAL AND ANALYTICAL FRAMEWORK

a. Literature Review

For this study's literature review, a systematic approach using Google, Google Scholar and the UIC Library journal search engine was used to search, identify, and summarize information relating to the study's core constructs and to inform development of the conceptual framework provided in this chapter. Information included in the literature review was derived from both grey and scholarly literature and addresses several of the critical components associated with the conceptual framework which was developed to guide this dissertation research. Literature was managed, organized, and queried using Microsoft Excel.

The literature review is organized into eight sections that correspond to key elements of the conceptual framework. These sections include: (1) an overview of public health accreditation and its associated benefits; (2) a discussion of known barriers, challenges, and facilitators for pursuing PHAB accreditation; (3) resources that influence PHAB accreditation activities; (4) supports known to influence PHAB accreditation, (5) processes and strategies for achieving accreditation; (6) approaches to PHAB accreditation; (7) challenges accredited health departments face maintaining accreditation; and (8) the relevance of this study to small health departments.

i. Overview of Public Health Accreditation

Accreditation can be broadly described as a process of validation whereby an institution is assessed against a set of standards that have been established and adopted by a profession. Though the idea of accreditation for public health departments had been on the radar of the public health profession for some time, it was not until the incorporation of PHAB in 2007 that the development of standards and measures for public health agencies was initiated. The

voluntary national accreditation program administered by PHAB was created with the goals to: (1) promote performance and quality improvement, (2) formally and nationally recognize high performing health departments, (3) provide a mechanism for illustrating accountability of health departments to decision-makers and the public, (4) clarify public expectations of health departments, and (5) increase visibility and awareness of the role and activities performed by governmental public health departments (PHAB, 2019f).

Efforts toward achieving these stated goals began when the first set of standards and measures were published in 2011, and health departments could begin submitting their applications for accreditation. To become PHAB accredited, health departments must document conformity with a practice-based set of standards and measures specific to their respective type of agency – local, state, tribal, or Army installation. Documented conformity with the PHAB standards and measures demonstrates a public health department's ability to assure the EPHS within the jurisdiction they serve and confirms their reputation as a high-functioning health department.

Health departments choosing to pursue PHAB accreditation submit their applications and requisite documentation for a formal review conducted by a team of PHAB-trained site visitors. Site Visitors are drawn from a pool of peer public health practitioners and are guided and supported throughout their review by a PHAB staff member who serves in the role of Accreditation Specialist. After the site visit team completes their document review and conducts an on-site visit, they submit a report which is reviewed by members of the PHAB Accreditation Committee. The Accreditation Committee is responsible for making the final decision about a health department's accreditation status. Once accredited, a health department retains that designation for a five-year cycle by submitting annual progress reports for four years and then

indicating intent to pursue reaccreditation in year five of the cycle (PHAB, 2015). When a health department's site visit report does not indicate they should be accredited upon initial Accreditation Committee review, they are asked to complete an additional step in the accreditation process – an Action Plan or Accreditation Committee Action Required (AP/ACAR). Through this step, health departments address a specific set of measures, as indicated by the Accreditation Committee, by gathering and submitting new or additional information for further review by PHAB. Upon completion of the AP/ACAR, most health departments are accredited. The requirement of the AP/ACAR step of the process is confidential, meaning only the health department, PHAB, and those personally notified by the health department know the department was required to complete an AP/ACAR as part of their accreditation journey.

A formal evaluation of the PHAB accreditation program highlights several benefits reported by health departments that have become accredited over the past several years. These benefits include both those experienced by the accredited health departments themselves, as well as the perceived impacts that PHAB accreditation has had on the broader field of public health. Accredited health departments report both internal and external benefits. Internal benefits of becoming accredited can be grouped into seven major areas, including: strategic planning and assessment; benchmarking and use of national standards; improved operations, processes, and documentation; changes in organizational culture; workforce development and staff improvements in public health competencies; increased use of quality improvement; and improved organizational capacity to deliver public health programs and services (Meit et al, 2017). For example, in the most recent publication of evaluation data, 69% of accredited health departments reported increased capacity to identify and address community health priorities,

while 88% of accredited health departments reported their agency had created a new or changed at least one existing organizational policy since achieving accreditation. Positive changes in organizational culture due to achievement of accreditation included enhanced collaboration and communication within the organization, stimulation of learning and innovation, improved transparency, and more (Meit et al, 2017).

Accredited health departments have also experienced external benefits as the result of their accreditation journey. These benefits have consisted of such things as increased visibility, credibility, and accountability; improved population health outcomes; increased knowledge of health department roles and responsibilities among partners and the public; and strengthened collaboration with partners (Meit et al, 2017). For example, nearly 90% of accredited health departments have reported increased credibility of their organization within their respective communities since achieving accreditation and more than 80% have experienced improved accountability to external stakeholders (Meit et al, 2017). Further, more than 50% of accredited health departments have attributed improvements in population health outcomes to activities and efforts undertaken in relation to the PHAB accreditation process (Meit et al, 2017).

Since 2013, more than 270 health departments have become accredited and more than 248 million Americans are now served by a PHAB-accredited health department (PHAB, 2019a). This equates to nearly three-quarters of the American population being served by a PHAB-accredited health department, a feat that has been largely realized due to early uptake of PHAB accreditation by large and mid-size LHDs and state health departments. Even with approximately 150 additional health departments currently seeking PHAB accreditation, a large proportion of the roughly 2,500 LHDs in the United States remain unaccredited and have not indicated intent to pursue (PHAB, 2019a).

ii. Known Barriers, Challenges, and Facilitators Underlying Pursuit of PHAB Accreditation

Variance among LHDs in demographic, political and environmental characteristics are common in public health practice and recognized as one of the contributors to the 'disarray' of the public health system (IOM, 1988, 2002). As such, there are contextual factors operating at various levels of influence in the public health system that can further affect health department decision-making related to accreditation at each step of the accreditation process. These factors can be organized according to the five levels outlined in the socio-ecological model, as depicted in Figure 7 below. The socio-ecological model is a framework which helps describe multiple levels of influence as it pertains to a given issue or phenomenon (National Institutes of Health (NIH), n.d.). The five levels of this model include public policy, community, organizational, interpersonal and individual levels. While typically applied as a model for understanding population health phenomenon like obesity and violence prevention, the interrelatedness of levels of influence described by the framework are relevant in this study for describing known contextual factors influencing health departments' decision-making and actions related to accreditation.

The author adapted the socio-ecological model to reflect how the framework applies to the topic of PHAB accreditation for this study (Figure 6). The adapted model includes a list of factors known to affect PHAB accreditation among LHDs and organizes them according to the level of socio-ecological model at which they best correspond. This organization of factors is depicted in Figure 6 and will be used to guide the discussion of literature as it relates to known contextual factors for this study.

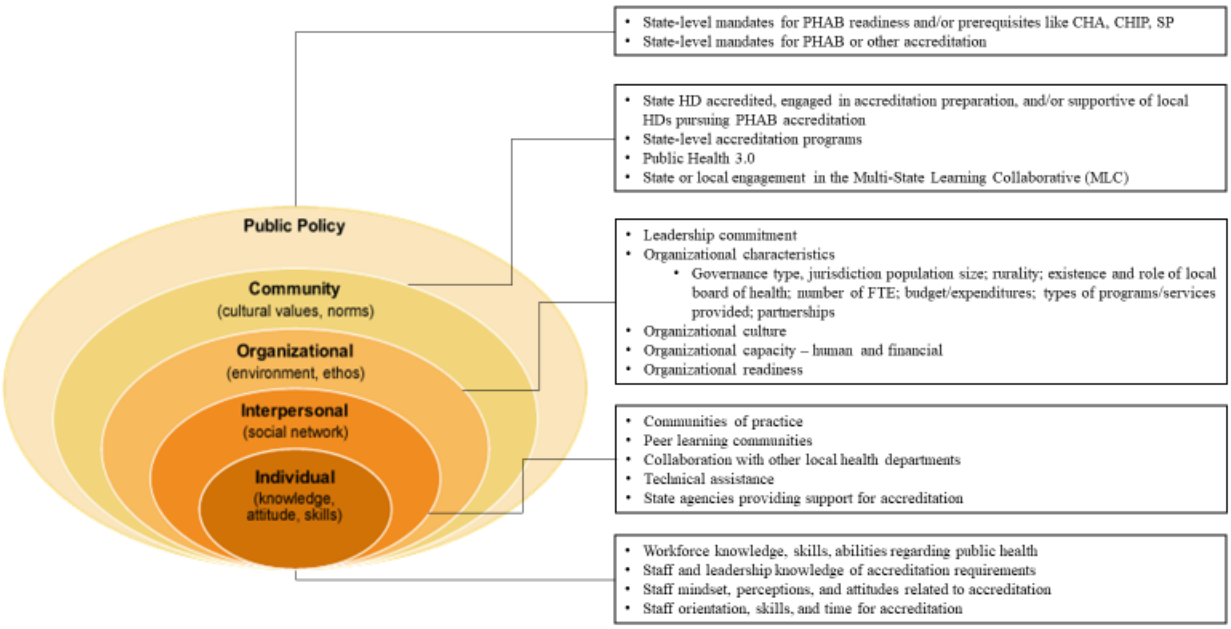


Figure 6. Socio-Ecological Model for Accreditation-Related Contextual Factors (adapted from NIH, n.d.)

Policy Factors

PHAB accreditation was developed and is currently being administered nationally as a voluntary program, meaning there is no national mandate for becoming accredited, nor are there specific negative consequences for health departments that choose to not pursue accreditation. However, Theilen and colleagues (2014) note there are several legal mandates in place to encourage accreditation or the completion of certain accreditation-related requirements, like a community health assessment, improvement plan, or strategic plan. Some of these are discussed further in the following paragraphs.

There are seven states that reference ‘accreditation’ in their public health-related laws, five of which specifically mention PHAB accreditation (CDC, 2013). Each of the five states identified by CDC – Colorado, Maine, Ohio, Oregon, and Vermont - as having specific reference

to PHAB accreditation in their body of laws have differing statements and requirements outlined in these laws. While some are more specific than others, the existence of accreditation language in a state's body of laws is unique and the influence on health department accreditation is worth consideration. All five of the state health departments in the states with reference to accreditation in their laws are PHAB-accredited and about 24% of all accredited LHDs are in these five states, however they are not evenly distributed, as shown in Figure 7 (PHAB, 2019e). The high number of accredited health departments in Ohio can be attributed to the active mandate for LHDs to achieve PHAB accreditation according to an established timeline. Specifically, Ohio's public health laws authorize the state health director to require all LHDs to apply for accreditation by July 2018, and to be accredited by July 2020 by a 'body approved by the director' (CDC, 2013). At this time, the accrediting body approved by the director is PHAB.

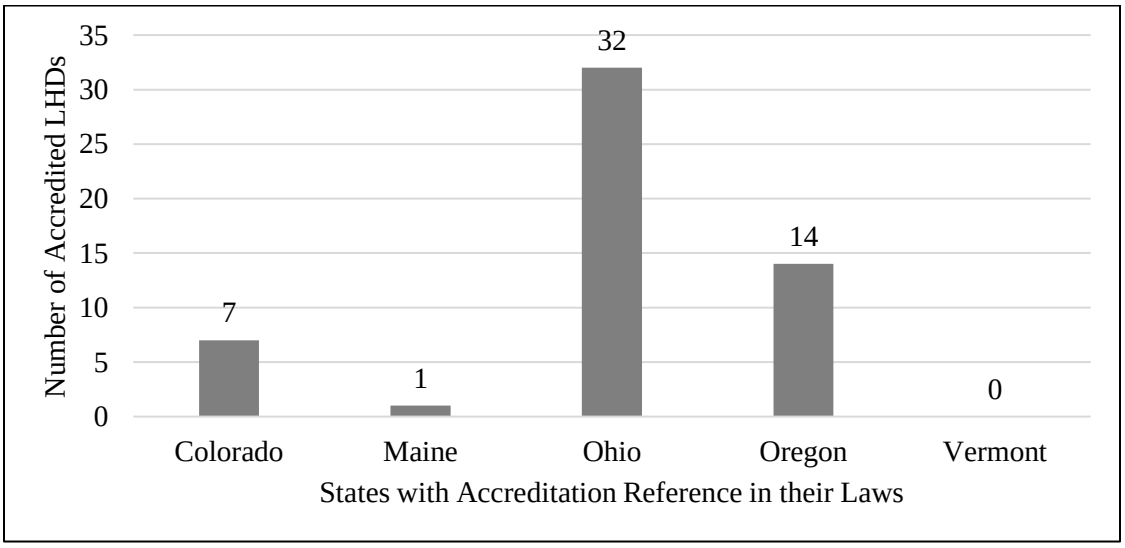


Figure 7. Number of PHAB-Accredited Local Health Departments in States with Reference to Accreditation in their State Public Health Laws, July 2019 (PHAB, 2019e)

Other states, including Florida, Illinois, New York, North Carolina, and Washington impose specific requirements for LHDs related to completion of community health assessments and improvement plans (CDC, 2015). These processes and resulting documents are two of the

three prerequisites[1] that PHAB originally required as part of the application process for accreditation and are necessary and important for a health department's successful achievement of accreditation. Complying with legal requirements and the potential impact on funding for public health departments – perceived or actual – appears to be an effective means for influencing a higher proportion of health departments operating within some of these states to engage in PHAB accreditation-related activities (Figure 8).

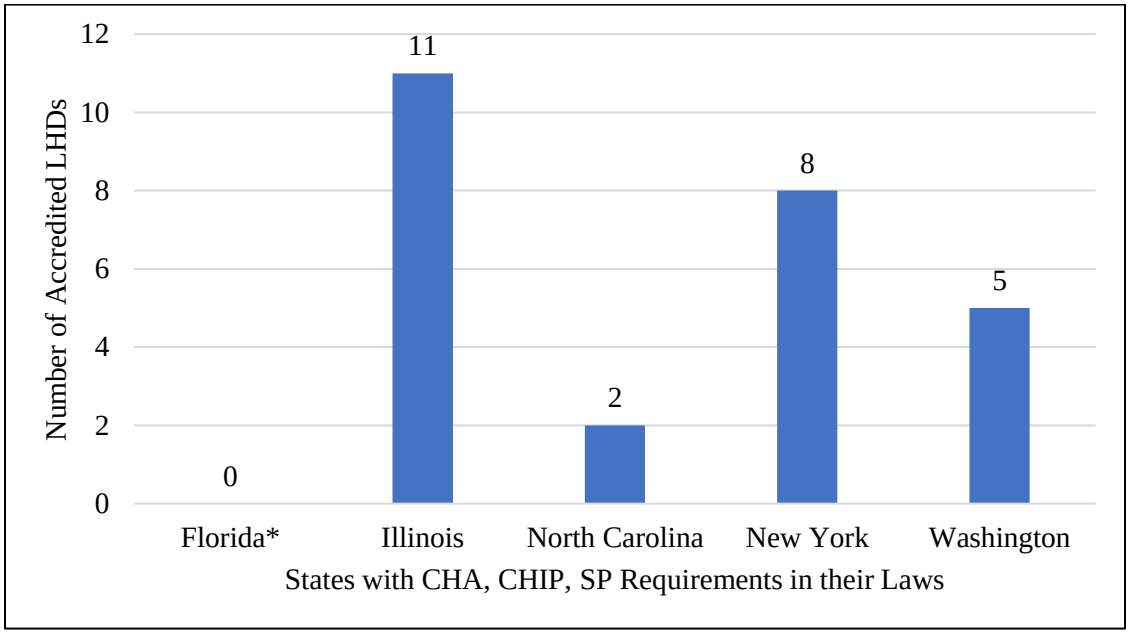


Figure 8. Number of PHAB-Accredited Local Health Departments in States with CHA, CHIP, SP Requirements in their State Public Health Laws, July 2019 (PHAB, 2019e)[2]

The imposition of state mandates for accreditation and/or accreditation-related activities creates opportunities and challenges for LHDs, regardless of size and other demographic characteristics. However, these opportunities and challenges seem to be exacerbated for small LHDs, many of which serve rural communities. A report published by Hale (2015) noted that

[1] Community Health Assessment (CHA), Community Health Improvement Plan (CHIP), Strategic Plan (SP)
[2] * All 67 local health departments in Florida are accredited as part of a single accreditation review of the centralized integrated public health system. Florida is the only integrated public health system to be accredited under this type of review process. It is no longer an option offered by PHAB for state public health systems.

rural health departments are limited in their capacity to ensure core functions and essential services are being delivered in their communities which contributes to their challenges in pursuing national accreditation. Small health departments tend to be funded for services which help to fill gaps in healthcare services and often lack the resources, or flexibility in resources, necessary to do more. Mandates for accreditation and/or accreditation-related activities force small health departments to expand the array of services and functions in which they engage, further stretching an under resourced public health agency to do more – often without the skillset, training, and financial means necessary for doing so (Hale, 2015). This may somewhat contribute to the hesitation of small health departments to pursue accreditation.

Community Factors

In the socio-ecological model, the community level refers to cultural norms and values established and operating within the context of the phenomenon of interest (NIH, n.d.). For the purposes of this study, the term 'community' refers to sectors and organizations within the local, state, and national public health system, all of which can influence LHDs' decisions to pursue accreditation. During the same time the Exploring Accreditation Committee was working to determine whether public health accreditation was something needed and feasible in the United States, the Robert Wood Johnson Foundation (RWJF) deployed a program called the Multi-State Learning Collaborative (MLC). This program originally convened five states that were currently implementing state-level accreditation programs or other forms of performance assessment of LHDs. The first phase of MLC included Illinois, Michigan, Missouri, North Carolina, and Washington and focused on allowing them to share their experiences and practices with each other while also informing the Exploring Accreditation Committee's work by providing real examples of how accreditation was already at work in public health (RWJF, 2014).

The first year of MLC was so successful that it led to a continuation of funding, technical assistance, and peer-sharing for the original five states and the program was expanded to include five additional states – Florida, Kansas, Minnesota, New Hampshire, and Ohio – in its second year (RWJF, 2014). Again, the focus was on supporting these states in the use of quality improvement techniques and to develop and expand their performance management-related efforts. The third and final round of funding for MLC was awarded in 2008 and resulted in a name change for the program, though the focus remained similar to what it had previously been. The ten states that had received funding during MLC-1 and MLC-2 were provided continued financial support, while seven additional states were also awarded funding. These new sites were Indiana, Iowa, Montana, New Jersey, Oklahoma, South Carolina, and Wisconsin. Interestingly, these 17 states were selected for the final round of funding because it was anticipated by the funder, RWJF, that they would be most likely to 'go earliest for national accreditation' (RWJF, 2014).

While states were the funding recipients of MLC, there was quite a large reach of the program among LHDs due to formation of mini collaboratives. Each state participating in MLC-3 had at least two, but an average of five to 10 LHDs engaged in quality improvement, performance management, and accreditation preparation efforts. Based on the evaluation report of MLC, there were many substantial impacts that influenced local public health departments regarding their attitudes and readiness for accreditation, as well as their ability and competency to use quality improvement methods and tools in practice – a core element of PHAB accreditation (RWJF, 2014). By the end of the MLC program the general sense among participants and national partners was that "the public health accreditation program will improve public health infrastructure and public health outcomes" (RWFJ, 2014).

The MLC had a lasting impact on creating an environment in participating states where state and LHDs were, and still are, encouraged and perhaps more ready to pursue PHAB accreditation than their counterparts in other states. To date, nearly half (48.7%) of all accredited health departments are state health departments or LHDs within states that participated in the MLC program for at least one of the three years (PHAB, 2019e). As shown in Figure 9, state health departments within 12 of the 17 MLC-participating states have achieved accreditation, as indicated by the light blue shading (PHAB, 2019e). The dark blue shading indicates state health departments in MLC-participating states that have not yet become PHAB accredited. Additionally, 115 LHDs and one integrated public health system[3]that have become accredited are also located within MLC-participating states, as highlighted in Figure 10. It is important to note that the exceptionally high number of accredited LHDs in Ohio is likely more attributed to the legal mandate for becoming accredited by mid-2020 than merely their participation as a funded state in the MLC.

[3] All local health departments within the state are accredited under one application – a system.

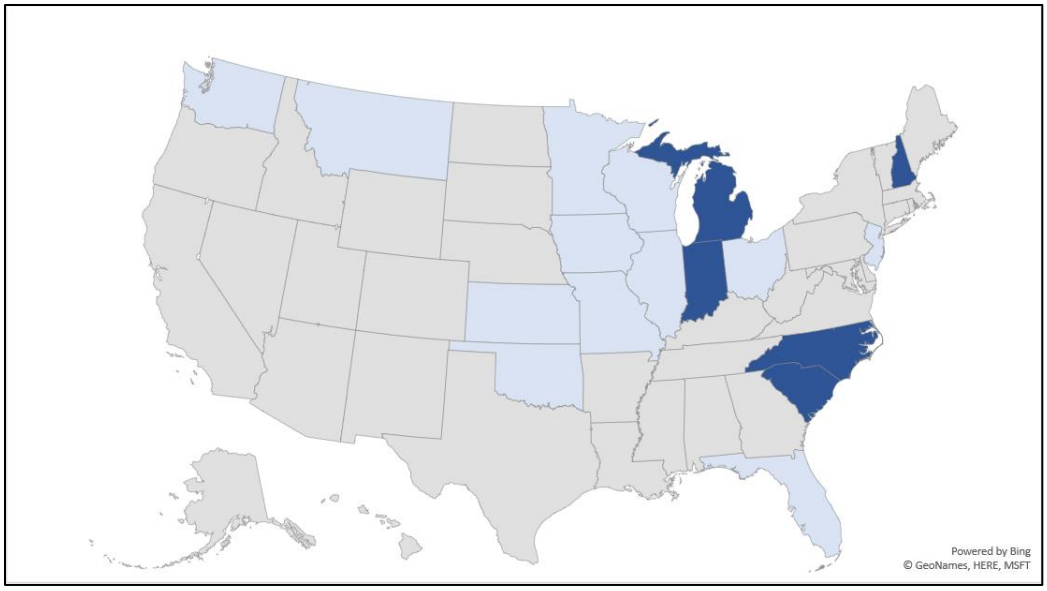


Figure 9. Map of MLC-Participating State Health Departments that have Achieved PHAB Accreditation, July 2019 (PHAB, 2019e)

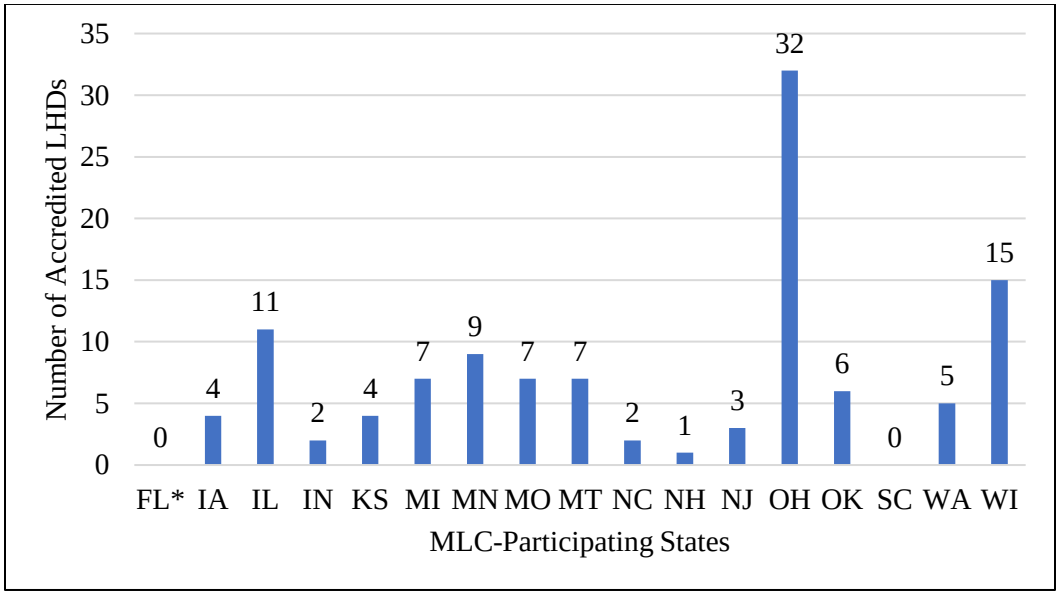


Figure 10. Number of Accredited LHDs by MLC-Participating States, July 2019[4] (PHAB, 2019e)

[4] *Note: Florida LHDs were accredited as an integrated public health system, and therefore all 67 counties within Florida were accredited at the same time under one accreditation review.

DeSalvo and colleagues (2017) more recently issued a call to action for public health to modernize and shift to fulfilling a role that goes beyond traditional public health department functions and programs, referred to generally as 'Public Health 3.0'. Part of this call to action included specific recommendations, a subset of which focused on infrastructure and accreditation. Many of these recommendations were aimed toward enhancing participation of state and LHDs in PHAB accreditation, with one specifically addressing the need to "enable pathways to accreditation for small and rural health departments" (DeSalvo et al, 2007). Through the publication of this report, the field of public health was challenged to view and use PHAB accreditation and its standards and measures as a means of measuring and guiding improvement of public health infrastructure, operations, and outcomes, and established PHAB accreditation as a desired norm within the field. One of the complicating factors obstructing progress toward implementation of some of the recommendations outlined in the Public Health 3.0 report is that it was released to the field just prior to a major shift in federal policies, priorities, and leadership resulting from the 2016 US presidential election. A notable consequence of this shift has been the lack of formal, widespread national strategy and investment for bringing Public Health 3.0 recommendations to action. Once again, public health was given a directive for change without the resources necessary for making them happen.

Beyond the findings associated with participation in MLC, other studies have found accreditation activity of the state health department where the LHD is located has been shown to influence LHDs' accreditation-seeking and preparation. The literature suggests an association between a variety of state-level accreditation activity ranging from state health department achievement of PHAB accreditation, state initiation of accreditation efforts, and/or provision of formal methods of supporting and encouraging LHDs in their endeavors toward achieving PHAB

accreditation (Theilen et al, 2014; Nolan et al, 2007). It seems that in states where the state health department is engaged in accreditation or is accredited, a norm has been cultivated wherein national accreditation is viewed as a worthwhile and meaningful process and that being nationally accredited has value. A sentiment repeated among health department directors interviewed by Theilen et al (2014) was that "state agencies best show support for local health department pursuit of accreditation by preparing for and seeking it themselves".

There are also a small number of states – Michigan, North Carolina, Washington, Missouri, and Illinois – that operate variations of state-level accreditation-like programs that predate PHAB accreditation (Robert Wood Johnson Foundation (RWJF), 2014). While these programs differ from each other and do not use the same standards and measures as PHAB accreditation, the presence of established accreditation programs within these states may be influential for LHDs as they consider PHAB accreditation. As shown in Figure 12, the actual influence of these state-level accreditation programs on LHD engagement varies. Four of the five states with state-level accreditation programs have at least five PHAB accredited LHDs, and two of these states have a lower rate of Action Plans than the rate for all LHDs, which is about 33% (PHAB, 2019e). The presumption here is that some of the existing state accreditation programs assist locals with building capacity and have helped to make accreditation a norm among health departments, while other state programs may provide enough rigor, credibility, and stakeholder accountability that LHDs in those states are deterred from seeking further review and a designation of accreditation from PHAB.

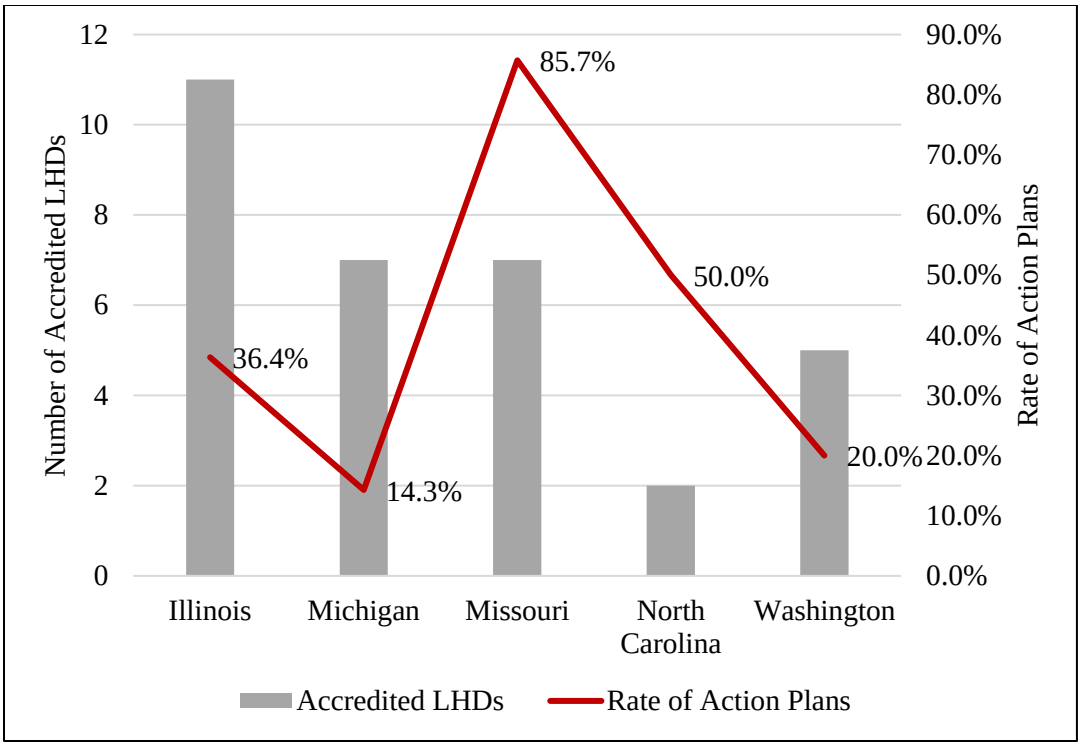


Figure 11. PHAB Accreditation Among Local Health Departments in States with State-Level Accreditation Programs, July 2019 (PHAB, 2019e)

While there may be momentum in many parts of the country changing cultural and social norms as it relates to the role of public health agencies in their communities and toward adoption of accreditation as common practice, there are contextual factors and nuances that can affect the extent and speed at which these types of changes occur, especially in smaller jurisdictions. For example, rural health departments receive nearly four times per capita funding for clinical services than their urban and micropolitan counterparts, indicating a fair amount of their funding is earmarked for clinical services (NACCHO, 2016). This one piece of information has a few implications for rural departments as it relates to community factors and accreditation. First, clinical services fall outside of PHAB's scope of acceptable programs and activities, meaning health departments cannot readily use examples and documentation from these programs to demonstrate conformity with the PHAB standards and measures. Second, it is not likely that

dollars allocated to these agencies for delivery of clinical services can be repurposed toward the goals outlined in Public Health 3.0 or for infrastructure and operational improvements that often are required for departments going through PHAB accreditation. This is just one example of how other levels of contextual factors may influence a health department's ability to engage in accreditation, even when necessary community factors are in place that could help to support or facilitate those efforts.

Organizational Factors

At the organizational level there are several factors cited in the literature as influencing health department pursuit of PHAB accreditation. These factors include organizational leadership, culture, capacity, and readiness. But, perhaps the most studied organizational factors and their relationship to accreditation are characteristics of the health department itself, such as governance type, rurality, jurisdiction size and type, existence of and relationship to a local board of health, health department budget, and staffing. Governance type refers to whether a health department operates within a state that has a local, state, shared, or mixed governance structure. These different types of governance for LHDs are described in Table VI below (Public Health Law Center, 2015). One study found that LHDs in states with state governance structures were 7.6 times more likely than those with local governance to be engaged in PHAB accreditation, while those operating in states with shared governance were 3.3 times more likely (Shah et al, 2015). What this seems to indicate is stronger state influence in local decision-making and operations can influence more locals within those states to engage in accreditation-seeking.

TABLE IV. DESCRIPTION OF LHD GOVERNANCE TYPES	
Governance Type	Description
Local	Local health departments are led by local governments (i.e. city, county, districts, etc.) that are responsible for most fiscal decisions.
State	Local health departments are units of state government; decisions for the local level are made by the state.
Shared	Local health departments are governed by both state and local authorities.
Mixed	Some local health departments are led by state government, while others are governed by local authorities

Boards of Health (BOH) are governing bodies that are comprised of appointed or elected officials. BOHs provide leadership, guidance, and oversight of public health service delivery in their respective communities, their authorities and regulatory powers are often delineated in state and/or local laws, and these authorities and regulatory powers can vary from jurisdiction to jurisdiction (Public Health Law Center, 2015). The existence of a BOH, or lack thereof, can impact likelihood of accreditation among LHDs. Yeager et al (2015) found that health departments with boards of health that lacked governing authority were slightly more likely than health departments with authoritative boards of health to engage in accreditation. In a similar study, Shah and colleagues (2015) noted that health departments that did not have a board of health were 1.5 times more likely to pursue accreditation than those with a board of health. Another study reported a positive correlation between higher-functioning BOHs and their tendency to encourage PHAB accreditation, meaning that higher-functioning BOHs may value accreditation as a means for improving services, administrative practices and operations. (Shah et al, 2018). This study also found that the size of BOHs seemed to influence accreditation activity, with BOHs with five or more members being more likely to demonstrate support for accreditation. The authors posited that larger BOHs may be more likely to include a member that serves as a champion of accreditation (Shah et al, 2018). This information suggests that factors

like existence of a BOH, size, and effectiveness of BOHs can play an important role in LHD accreditation-seeking.

Likelihood to engage in accreditation has also been shown to have a positive correlation with size of population served (Shah et al, 2015). Among all health departments, those serving larger populations in more urban jurisdictions are more likely to engage in accreditation than their smaller, more rural counterparts. In a recent study, researchers reported that 87% of urban health departments were seeking or intended to seek accreditation, as compared with only about 4% of rural and 9% of micropolitan health departments (Beatty et al, 2018). This finding is further supported by data extracted and analyzed directly from PHAB's information system which suggests about 85% of all currently accredited health departments serve populations of more than 50,000 (PHAB, 2019e).

The number of staff and the amount of revenue generated by health departments appears to influence likelihood of engaging in accreditation, as well. Completion, initiation, or likelihood of future engagement in accreditation is higher among health departments with more FTE, as discussed by Yeager et al (2015). For example, about 46% of health departments with up to 74 FTE and about 61% of health departments with more than 74 FTE reported being likely to engage in accreditation, as compared only about 17% of departments with between 10 and 24 FTE (Yeager et al, 2015). Beatty et al (2018) found that health departments more likely to seek accreditation generate an average revenue of about $46 million, which is about 7.5 times the average of those reporting no intent to seek accreditation, while another study reported a positive correlation between funding levels and accreditation engagement (Shah et al, 2015). When considering per-capita expenditures, Shah et al (2015) reported that health departments in the

lowest quartile of spending were only about 0.5 times as likely as those in the highest quartile to engage in accreditation.

Several studies have documented the criticality of leadership commitment and engagement in ensuring successful achievement of PHAB accreditation. As the primary leader and decision-maker for the organization, health department directors have an important role in influencing the decision to pursue accreditation and subsequently the health department's success in this endeavor. One early decision of health department directors in the accreditation journey is to ensure provision of necessary monetary, staffing and time resources for successful completion of the process. Accreditation is time intensive, especially during document selection and submission stage, is fee-based, and often requires development of new or significant revisions of existing processes, policies, and initiatives. These activities require substantial staff time, and sometimes necessitate engagement of external resources and expertise, like consultants or contractors. Leadership commitment to providing and sustaining adequate support for these activities can have a tremendous impact on a health department's decision to pursue, and ultimately their success in the accreditation process (Liu et al, 2017).

The Association of State and Territorial Health Officials (ASTHO) describes two additional roles of a health department leadership in accreditation: (1) setting and communicating expectations for accreditation, and (2) creating a vision for a culture of quality (2019). Liu and colleagues (2018) found that leadership, inclusive of health department directors and other management team members, who champion accreditation help to facilitate staff engagement and acceptance of the process and the organizational process changes that follow. In another study, researchers documented the relationship between leadership commitment to establishing and institutionalizing formal quality improvement processes and the strong predictive relationship

between having a formal quality improvement process and the likelihood of pursuing accreditation (Chen et al, 2015). This speaks to the important role organizational leaders play in building an organizational culture that is conducive to achieving PHAB accreditation, while also establishing the vision necessary to guide the process.

Organizational culture encompasses beliefs and values held by employees which includes expectations, attitudes, and norms (Liu et al, 2017). Organizational culture, specifically as it applies to quality, learning, and innovation is influential in a health department's pursuit of and successful achievement of PHAB accreditation. When a health department has achieved a culture of quality, employees at all levels and across all units and programs continuously consider how processes can be improved and incorporate quality improvement practices and principles into the way they do their work (NACCHO, 2019b). Quality improvement is one of the core tenants of PHAB accreditation. Several studies have demonstrated the relationship between formal quality improvement programs and health department intent to pursue PHAB accreditation. Shah, Beatty, and Leep (2013) found health department involvement in performance-related activities and use of quality improvement tools increased the frequency at which health departments indicated they planned to apply for PHAB accreditation. Similarly, Carman, and Timsina (2015) reported a significant association between health department engagement in QI activities and intent to pursue accreditation and noted health departments with quality improvement activity were 2.6 times more likely to have expressed intent to pursue accreditation than those with no quality improvement activity.

In 2014, Russo and Kuehnert described accreditation as a 'lever of transformation' for public health. Case studies like New Orleans Health Department and the Oregon Health Authority provide real-life examples of accreditation fulfilling this role. In Oregon, the state

health agency, in partnership with their coalition of local health officials used the PHAB standards and measures to transform the state public health system, whereby building capacity and capability of the state health agency and LHDs to pursue national accreditation. While the focus of this case study was transformation of the state public health system, resulting changes trickled down to LHDs. The 'trickle down' encouraged organizational changes through establishment of new plans, processes, and initiatives at the local level while also aligning state expectations for LHDs with those outlined in the PHAB standards and measures (Emer, Cowling, Mowlds, & O'Connor, 2014).

In 2011, New Orleans Health Department was in dire straits and highly motivated to transform into a high-performing health department capable of meeting the needs of those living within its jurisdiction. In this case, too, leadership facilitated major organizational transformation using PHAB standards and measures as a framework for guiding those efforts (Riccardo et al, 2014). In both the New Orleans and Oregon stories, transformation occurred because health department culture and leadership were flexible, motivated, and committed to growth and improvement, allowing accreditation to be a positive influence. However, as noted by Heifetz, Grashow and Linsky (2009), "*the structures, culture and defaults that make up an organizational system become deeply ingrained, self-reinforcing, and very difficult to reshape*" (pg. 51), which seems especially true in many health departments. The result of inflexibility and lack of willingness to change the way things are done among public health agencies continues to perpetuate the status quo, a reality that Fraser and Castrucci (2017) note will not support achievement of the health and environmental improvements that are so desired in this country.

Researchers have demonstrated that readiness, or perceived readiness, can influence whether health departments pursue PHAB accreditation. Like the role a culture of quality

improvement can play in accreditation-related decision-making, other major elements of the PHAB accreditation process like the community health assessment, health improvement plan, and agency strategic plan can be predictive of whether a health department has a higher likelihood to apply for accreditation. For example, Beatty and colleagues (2015) conducted a secondary data analysis of NACCHO Profile data to determine the relationships between Missouri state-level accreditation and accreditation prerequisites[5]. They found that LHDs without a CHA, CHIP, or strategic plan perceived the lack of these documents to be a barrier to Missouri state accreditation. Respondents that had a completed CHIP were more than 6 times more likely to be accredited than those without a CHIP, and those with a strategic plan were almost 8 times more likely to be accredited than those without a strategic plan (Beatty et al, 2015). Though this study assessed the relationship between accreditation prerequisites and Missouri's state-level accreditation, similar relationships have been found in studies of PHAB accreditation. In a secondary analysis of 2013 NACCHO Profile data, Beatty et al (2018) found that, among all LHDs, those with a completed agency strategic plan were more than 8 times more likely to seek PHAB accreditation than those who had not.

Not surprisingly, many health departments cite capacity, both human and financial, as major concerns associated with pursuit of accreditation. An exploratory case study by Liu et al (2017) identified funding and staffing as two key barriers to pursuit of accreditation. When they submit their application for PHAB accreditation, health departments are required to pay fees and identify an individual to serve in the role of Accreditation Coordinator (PHAB, 2015). The fees are tiered and include an initial accreditation review fee as well as an annual accreditation services fee. Health departments serving populations of less than 50,000 would be responsible

[5] CHA, CHIP, Strategic Plan

for the PHAB Category 1 fee schedule which requires an initial accreditation review fee of $14,000, and then an annual accreditation services fee of $5,600 per year until they apply for reaccreditation – a cost of nearly $31,000 over the four years (PHAB, 2016). For health departments with small budgets and inflexible funding sources, paying the initial and annual fees can be a major barrier. Challenges with limited funding or constraints on funding appear to affect more than 40% of health departments that have pursued PHAB accreditation (Meit et al, 2017).

The identification and assignment of an Accreditation Coordinator can be another added expense for health departments. Accreditation Coordinators are intended to serve as the primary point of contact and coordinator of accreditation-related activities for the health department throughout their accreditation journey. Some health departments choose to assign this role as an additional duty to an existing position within their agency, while others hire a new position to serve in this role. If assigned to an existing position, issues with staff capacity may arise since accreditation preparation is time intensive and can pull staff away from their other roles and responsibilities. Meit et al (2017) found that 65% of accredited health departments retrospectively reported staff time and other schedule limitations as a top barrier and more than 85% of applicant health departments (working on accreditation, not yet accredited) reported staff time and schedule as a barrier.

When health departments choose to create a new position for the role of Accreditation Coordinator, it may be done in order to eliminate some of the obvious time and capacity constraints for existing staff. However, hiring a new position inherently becomes a budget concern, whether temporary (contractor) or long-term (FTE). Many health departments engaged in the accreditation process report that the amount of work assigned to the Accreditation Coordinator role is equivalent to one or two full time positions (Meit et al, 2017). To further

complicate the capacity issue cited as a barrier to accreditation, turnover for the role of Accreditation Coordinator among health departments in the PHAB system appears to be high. In fact, more than 50% of accredited health departments and 41% of applicant health departments report staff turnover or loss of key staff as the second-most frequent barrier to accreditation. Though not well explained or empirically explored at this point, turnover appears to further exacerbate capacity issues for health departments, especially small ones that may have a harder time recruiting and retaining qualified staff for this type of position.

Interpersonal Factors

The term 'interpersonal' relates to the relationships or connections between people or groups. The role of a health department's peer support network has been demonstrated as an important source of influence among accredited and accreditation-seeking health departments (Thielen et al, 2014; Pestronk, 2014). One common model of peer support networks established at the national, state, and even regional levels has been in the form of communities of practice or learning communities. According to Wenger (1998), communities of practice define themselves according to three elements – what it's about, how it functions, and what it is has produced. Communities of practice form around topics or issues that matter to people and fulfill many functions, like exchange and interpretation of information, longer-term knowledge retention, competency stewardship, and they help to provide a continued sense of identity and belonging among members (Wenger, 1998).

National organizations like NACCHO have established communities of practice, like the Accreditation Coordinator Learning Community, to support LHDs pursuing PHAB accreditation. Many states and regions within states have followed suit to establish similar communities of practice. Theilen and colleagues (2014) found that health departments operating in states with

peer learning communities reported these communities are a powerful incentive for pursuing accreditation. They provide LHD staff a space for asking questions, learning, sharing examples of good practices, and can serve as a source of counsel for peers when challenges and barriers arise (Theilen et al, 2014).

Another factor shown to influence health departments' engagement in PHAB accreditation is the availability of technical assistance from local, state, and national organizations for readiness assessment and capacity building. Early in the lifecycle of PHAB, national associations like NACCHO, ASTHO, and others received funding to provide technical assistance for their members. For example, NACCHO began offering funding opportunities for LHDs through the Accreditation Support Initiative (ASI) in 2011. Funded agencies were supported in their quality improvement and accreditation readiness efforts through direct grant dollars and technical assistance from subject matter experts at NACCHO (2019). A study by Monteiro and colleagues (2014) assessed outcomes of the first year of the ASI funding, reporting that all 13 funded sites were able to make gains toward accreditation readiness that otherwise would not have occurred without the targeted funding and technical assistance they received through the NACCHO ASI.

The National Public Health Improvement Initiative (NPHII) was a different approach to capacity building and technical assistance that was funded by the CDC between 2010 and 2014 (CDC, 2017). Through this cooperative agreement, 73 agencies were provided flexible funding and technical assistance to improve in areas for which there is not often designated funding, such as collaborative planning, performance improvement, and accreditation readiness. This project established a national community of practice for awardees, but also encouraged awardees to support other health organizations, such as LHDs, in their accreditation readiness. NPHII helped

state agencies facilitate technical assistance, training, mini-grants and knowledge and resource sharing among the LHDs within their respective states (CDC, 2017). At the conclusion of the NPHII project in 2014, 97% of the awardees reported strengthened readiness for accreditation and 44% had already achieved accreditation or had submitted their application to PHAB (CDC, 2017). Despite the positive outcomes associated with formal technical assistance and communities of practice, monetary support for these projects and others like them has been drastically reduced or eliminated, making these types of social networks less robust or no longer available to support current PHAB applicants and those working toward reaccreditation.

Individual Factors

PHAB accreditation is not designed nor is it feasible to be a 'one-person' undertaking. While the designation of an Accreditation Coordinator is a PHAB requirement, many additional health department staff and leaders find themselves engaged in and contributing to the accreditation process at various steps. As noted above, leadership commitment and support are important but staff and management attitudes, knowledge, skills and abilities, as well as competency in public health and strategic management are critical for success. Many of the most frequently cited challenges and barriers facing health departments' pursuit of accreditation are related to individual-level issues within a health department like staff mindset, orientation, and skills (Liu et al, 2017).

Among applicant health departments, nearly 35% report the perceived lack of value or benefit of accreditation as a challenge (Meit et al, 2017). This perception held at the health department leadership level may dissuade pursuit of accreditation, but persistence of this perception and attitude at the staff level in a department that has initiated the accreditation process can create additional barriers and challenges to success. Staff who do not believe there is

value-added by pursuing accreditation may be less inclined to meaningfully engage in supporting the process within their own agency, and competing priorities then often take precedent over addressing accreditation requirements. Further, health departments with staff and managers that hold negative views toward pursuit of accreditation may also hold the belief that the accreditation standards exceed the capacity of their department, potentially creating more challenges for completing the process successfully.

It can be inferred that knowledge and awareness among staff and managers as it relates broadly to public health and accreditation may contribute to the perceptions and attitudes described above. A recent survey of United States public health practitioners indicated that health department employees are generally well educated but only 14% of the workforce has a degree in public health (deBeaumont Foundation, 2019). This has important implications for accreditation, as PHAB's standards and measures are grounded in the EPHS – the core tenants of public health practice. If most of the public health workforce does not have a basic understanding of or training in the EPHS, there is additional burden on health departments to invest time and resources in ensuring a basic understanding among staff and managers in the broad roles and responsibilities of public health so they can meaningfully play a role in accreditation preparation. If this investment is not made, barriers to achieving accreditation among health departments that employ staff lacking in public health knowledge may be compounded.

Even among public health practitioners with public health training, the field has shifted and evolved so much in recent years, with health departments considering Public Health 3.0 and national accreditation as guides for practice, that major changes in requisite skills for the workforce have emerged. As previously discussed, accreditation can be viewed as a means for organizational change, a process with requires some level of strategic and change management

skill by leaders and staff. Based on their assessment of PH WINs data, Bogaert et al (2019) found 56% of managers, 46% of top executives, and 46% of nonsupervisory staff reported skill gaps in systems and strategic thinking. Further, this study reported 50% and 43% of managers and nonsupervisory staff, respectively, noted gaps in developing a vision for a healthy community. These competency gaps, too, have implications for accreditation, as about half of staff and managers do not appear to have the skills necessary for leading a change process and establishing a vision for a change process within their organizations. The workforce issues are compounded for small health departments as they face even greater challenges with recruitment and retention of staff due to lower pay, less desirable geographies, and other factors.

iii. Resources that Influence PHAB Accreditation Activities

Over the past several years, numerous resources and supports have played a role in the successful accreditation of state, local, and tribal health departments. For this study, resources are described as commodities health departments have engaged with directly to aid in the accreditation journey, such as funding, consultants, and contractors. Cost, both to pay accreditation fees and to engage in accreditation readiness activities is a known and pervasive barrier for health departments interested in accreditation (Shah et al, 2015; Liu et al, 2017). To specifically address this barrier, the CDC invested $142 million over the course of four years to provide funding and technical assistance to health departments in advancing performance improvement efforts through a program called the National Public Health Improvement Initiative (NPHII) (CDC, 2017). Though NPHII funding was awarded mostly to state health departments, tribes, territories and a few county or city health departments that serve large jurisdictions, some awardees used their funds to provide mini-grants to support accreditation readiness activities by other health departments. NPHII helped to facilitate accreditation readiness among awardees,

with 97% of awardees reporting strengthened readiness as a result of the funding and 54% of awardees noting they had completed a community health assessment, health improvement plan, and strategic plan by the end of the initiative (CDC, 2017). Further, by the time funding ended in 2014, 10% of awardees had achieved accreditation and an additional 42% were formally seeking accreditation, having either submitted their letter of intent or application. NPHII is one example of how dedicated funding aided health departments in achieving readiness for accreditation in a relatively short period of time.

Another dedicated source of funding for supporting accreditation readiness efforts, this time aimed at any local, tribal, or territorial health department interested in improving accreditation readiness was the Accreditation Support Initiative (ASI), a program funded by CDC but administered by NACCHO. The ASI launched around the same time as PHAB accreditation in 2011, receiving almost 140 applications in its first year (Monteiro et al, 2014). The flexibility of the funds awarded through ASI allowed funded sites to build capacity for accreditation based on where they were in their journey, and up to a certain amount the funds could be spent on readiness activities or to offset the cost of initial PHAB fees. Monteiro and colleagues (2014) report that the first year of the project resulted in "some improvements in accreditation readiness… regardless of starting point and that flexible support for addressing health departments' unique needs can be a helpful strategy in accreditation preparation." The ASI is another example of how relatively small amounts of flexible funding (the ASI awards were between $14,000 and $40,000) can yield advancement toward accreditation readiness. Funding was discontinued for the ASI following the 2017-2018 award year (NACCHO, 2019a).

Anecdotally, the engagement of consultants and contractors to assist with various stages of the accreditation process appears to be quite common, especially when it comes to

development and implementation of major plans and associated processes like the community health assessment and improvement plan, strategic plan, and performance management and quality improvement. Though not formally studied, practice-based experience suggests use of external organizations or individuals as consultants or contractors within health departments to provide the expertise necessary for accomplishing a specific task, filling a staffing capacity gap that cannot be filled by the existing workforce, and to provide a 'second set of eyes' on accreditation materials before it is officially submitted to PHAB for review. The use of consultants/contractors by health departments has become so common that PHAB has started to host learning events, referred to as "Partners in Accreditation Trainings", specifically for those serving in an accreditation consultant role to ensure they are providing accurate guidance and services to their health department clients (PHAB, 2019g).

iv. Supports Known to Influence PHAB Accreditation

Supports, for this study, are similar but different from resources and are described as various types of accreditation-related technical assistance, support or peer networks, training, tools, templates, presentations, and human resources received from organizations outside of the health department like state health departments, public health institutes, national partner organizations, LHD peers and universities. Some of the funding resources previously described helped to establish some of the supports available to health departments for advancing accreditation readiness. National partner organizations, like NACCHO, ASTHO, the National Network of Public Health Institutes (NNPHI) and the Public Health Foundation have established and maintain numerous trainings, webinars, templates, toolkits, and document repositories to aid health departments in their accreditation journeys. For example, NACCHO developed and maintains accreditation-related content, like their *Journey to Accreditation Webinar*, which

features the accreditation stories of health departments pursuing initial accreditation that can be accessed on-demand by other practitioners (2019c). On a bigger scale, NNPHI has been funded by the Robert Wood Johnson Foundation for the past several years to host the Open Forum for Quality Improvement and Innovation in Public Health. This convening of public health practitioners fulfills many purposes, ranging from peer-to-peer networking, sharing of knowledge and resources, and capacity and skill building related to accreditation readiness (NNPHI, 2019a).

Many national partners facilitate forums focused on accreditation readiness and preparation for peer networking, such as NACCHO's Accreditation Coordinator's Learning Community and NNPHI's Public Health Performance Improvement Network, both of which provide opportunities for health department staff working on accreditation to network, share promising practices, and support each other's efforts (NACCHO, 2019d; NNPHI, 2019b). State and regional peer support networks have also been established in several states, facilitating further collaboration and partnership among between the state health departments and locals in their accreditation preparation efforts (Theilen et al, 2014).

Universities can serve as an additional source of support for health departments pursuing accreditation through provision of technical expertise in facilitating accreditation-related activities like the community health assessment and developing templates and resources, but also through the provision of 'man-power' in the form of interns or graduate students. The Ohio State University College of Public Health's Center for Public Health Practice (OSU) has engaged in a project, the Ohio Local Public Health Accreditation Support Project, whereby they are collaborating with the state health department to aid LHDs in various aspects of their accreditation journey (The Ohio State University, 2016). Through this project, OSU has aided

LHDs with developing workplans for achieving accreditation, has developed and deployed no-cost trainings and toolkits to health departments for accreditation-related activities, and provide technical assistance (OSU, 2016). Though the OSU story is an exemplar case of a university engaging in accreditation-related support, universities across the country are engaged in providing support for health departments in various ways, ranging from technical assistance to assignment of interns to help fulfill accreditation requirements.

v. Processes and Strategies for Achieving PHAB Accreditation

Processes and strategies are the tasks and activities that health departments engage in to complete each step of the process to achieve PHAB accreditation. General guidance for getting started and document preparation are provided by PHAB to prospective applicant health departments through several resources posted to their website, like the *Guide to National Public Health Department Initial Accreditation* (Guide; PHAB, 2015) and the *Accreditation Coordinator Handbook for Public Health Department Initial Accreditation* (Handbook; PHAB, 2018). In these documents, PHAB recommends the formation of an Accreditation Team and offers basic strategies and suggestions for project, team, and communications management as it relates to the accreditation process. While health departments do appear to use the Guide and Handbook to plan and implement their processes and strategies for achieving accreditation, there is a substantial gap in the peer-reviewed literature related to what aspects of the Guide and Handbook are most frequently used and what seems to work 'best' for applicant health departments.

One study explored smart practices that aided accredited LHDs in their efforts toward achieving PHAB accreditation. In this qualitative study, eight accredited LHDs were asked to identify and share their perceptions regarding practices which helped them to be successful in

their accreditation journey. Through thematic analysis, the researcher identified six common practices, which included: use of mock drills; systematic document review and selection; use of established tools and/or consultants to fill competency/capacity gaps within the health department; strategic leveraging of existing programs and processes (i.e. don't create something new if you don't have to); engagement of staff and leaders to promote shared ownership; and asking for help or guidance from peers (Marthy, 2016). To the researcher's knowledge, this is the only study that has documented practices specifically identified by accredited health departments as important in their successful achievement of PHAB accreditation.

vi. Approaches to PHAB Accreditation: Leadership Versus Compliance

The processes and strategies used to achieve accreditation can be largely influenced by the approach a health department is using to guide their efforts. For this study, the term 'approach' refers to how health departments design and implement their processes and strategies for achieving accreditation and the primary underlying objective for achieving accreditation. The design and implementation aspect of this definition relates to whether a health department designs and implements their approach to address accreditation through a technical or adaptive lens, while the underlying objective element relates to whether the primary underlying objective is organizational change and improvement or merely the receipt of the accreditation designation by PHAB. Two distinct approaches are defined for the purposes of this study - compliance and leadership.

Compliance is defined as "*conformity in fulfilling official requirements*." (Merriam-Webster, n.d.) The compliance approach to PHAB accreditation for the purposes of this study includes the following elements: (1) lack of clear long-term vision for accreditation's influence on the health department and (2) design and implementation of processes and strategies that

address accreditation as a primarily technical issue. Health departments can and have become accredited using a compliance approach because they are being assessed by their assigned site visit team based on their ability to demonstrate conformity with PHAB standards and measures. As such, PHAB accreditation can and is often approached as a technical issue (i.e. establishing a CHA/CHIP because the department doesn't currently have a CHA/CHIP and having a CHA/CHIP is an accreditation requirement), despite the actual purpose and mission of PHAB accreditation being organizational transformation and improvement. This leads one to posit PHAB accreditation is a process that could and should be addressed as an adaptive challenge - meaning health departments can have a more successful initial and long-term experience with accreditation if they commit to an approach which facilitates changes in people's priorities, beliefs, and habits as described by Heifetz, Grashow, and Linsky (2009). Further, it is plausible that health departments viewing or approaching PHAB accreditation through a compliance lens are more likely to have staff and leaders who place low priority on becoming accredited, fail to see the value of accreditation to their organization, and encounter staff and other stakeholders perceptions of accreditation as a process of 'checking boxes' or 'doing things only for accreditation'.

The leadership approach to accreditation for this study more closely aligns with the mission and purpose of PHAB, which is to advance and transform the quality and performance of health departments. The researcher describes the leadership approach to accreditation as an approach in which (1) a clear and long-term vision for accreditation and its associated activities is established, communicated and understood by all key stakeholders; (2) the PHAB standards and measures are perceived as a blueprint, or framework, for becoming a high-functioning and quality-driven agency, not just a means to an end (i.e. achievement of accreditation); and (3) the

design and implementation of processes and strategies to achieve accreditation address the process as a primarily adaptive issue. This means health departments using a leadership approach to accreditation are willing and able to recognize the need for and embrace needed changes and improvements to the current structures, processes, and ways of doing things in order to advance toward necessary improvements (Heifetz, Grashow, & Linsky, 2009). The key elements of the leadership approach outlined here are hypothesized to positively influence the processes and strategies used by a health department as it works through the requisite accreditation steps. With that, it is expected that health departments using a leadership approach will experience better long-term staff and leadership engagement, buy-in, and ownership of the various elements required for accreditation and overall a more positive perception of accreditation and its value to the health department and field of public health.

vii. Challenges Maintaining Accreditation

Since the first health departments were accredited in 2013 only a few cohorts have reached the point at which they are required to consider the reaccreditation process. While reaccreditation is not a focus of this study, it is important to note the challenges health departments may experience in maintaining their accreditation status over the course of the accreditation cycle. As of July 2019, there were nine LHDs that had successfully achieved reaccreditation, while one decided not to submit their application and is now considered to have let their accreditation expire (PHAB, 2019a).

This is another area in which the literature is sparse, and it is hard to anticipate what, if any, different challenges health departments may be facing beyond those already encountered and documented during the initial accreditation process. However, since health department behavior related to reaccreditation can potentially influence health departments that have not yet

engaged in initial accreditation, it is important to be aware of this as a potential influencing factor, even though it is not well understood or researched at this time.

viii. Relevance to Small Health Departments

Available literature has documented facilitators, barriers, benefits, and outcomes to accreditation for governmental public health agencies of all sizes, but only a few studies have considered the nuances of accreditation as it relates to small health departments and their pursuit of PHAB accreditation. The studies that have considered small health departments have generally focused on conducting secondary data analysis of existing datasets, like the NACCHO Profile (2016) to explore what factors seem to underly accreditation-seeking behavior among LHDs, while others have engaged small groups of health departments in qualitative studies to explore one facet of the accreditation experience, like barriers and challenges (Beatty et al, 2016; Beatty et al, 2018; Gregg et al, 2018).

There is no doubt that accreditation is a significant undertaking that requires resources, manpower, and a leadership vision that supports the process as being more than a 'checkbox' and more than a short-term task assigned to one person. While studies have documented challenges across the spectrum of health departments in pursuing and achieving accreditation, it can be surmised that many of these challenges are likely encountered by and, possibly, even exacerbated among small LHDs due to the contexts in which they operate. For example, the issues of time, funding, health department capacity, influence of governing entity on health department autonomy and decision-making, and others are known challenges for all departments, but likely present differently in smaller jurisdictions simply due to the influence of contextual factors like those described in this literature review and the conceptual framework (Figure 14).

Further, PHAB and its national partners, like NACCHO, know there is interest and desire among small LHDs to pursue and achieve PHAB accreditation. In 2015, PHAB convened a process for exploring challenges and opportunities related to accreditation of health departments serving populations of less than 50,000. Over the course of the calendar year, representatives of small health departments, PHAB staff, and national partner organizations like NACCHO and CDC formed a Think Tank to explore the possibilities and different avenues – referred to as a 'different but related' set of standards and process - for departments that were interested in engaging in quality improvement but viewed the entirety of accreditation as out of their reach (PHAB, 2015). In June 2017, the PHAB Board of Directors, based on numerous sources of feedback throughout the Think Tank's efforts, decided the best approach for supporting small health department performance improvement efforts, including accreditation-seeking, at that time would be to work closely with NACCHO and other appropriate partners to provide targeted technical assistance (K. Bender, personal communication, August 8, 2019).

Similar concerns and challenges related to small health departments and performance improvement efforts have risen to the level of importance yet again more recently. A Joint Taskforce has been convened, co-led by PHAB and NACCHO, to revisit this issue and determine what more can be done to support small health departments in their journey. The focus is on finding a better understanding of small health departments and to facilitate their efforts toward performance improvement, accreditation, and modernization to fulfill some of the roles that Public Health 3.0 describes should be filled by health departments.

b. Conceptual Framework

The conceptual framework provided in Figure 12 illustrates the complexities that affect small LHDs' decisions to initiate the accreditation process; the barriers, challenges and

facilitators that contribute to their decision; the processes, strategies, resources and supports used to implement accreditation efforts and the frame, or approach, through which these are selected and used; and the influence that contextual factors at varying levels of the socio-ecological model can have on each health departments' unique accreditation experience. The author-adapted socio-ecological model is included at the top left of this conceptual framework to help delineate the various levels of influence and factors attributed to each level. The purple dotted line encompassing the remaining elements of the conceptual framework are intended to communicate the idea that these factors can impact accreditation at each step of the process, from initial decision to pursue accreditation through receipt of accreditation decision and beyond. There may also be intersections between these factors which further complicate issues described in the provided literature review.

The conceptual framework is meant to be read from left to right, showing a process flow from initial decision to pursue accreditation through the point in the process where a health department is accredited, can report perceived and documented benefits and outcomes of their respective experience, and anticipates how that experience and perceived benefits and outcomes influence the challenges these departments may face in maintaining their accreditation status.

Each of the colors used in the process flow part of the conceptual framework – blue, green, and orange – aligns with one of the research questions outlined in Chapter 1, as shown in the key at the bottom left of the framework. Blue corresponds with research question 1, green with research question 2, and orange with research question 3. This color-coding scheme also carries over to the measurement table that has been developed for use in this study and can be viewed in Appendix 1.

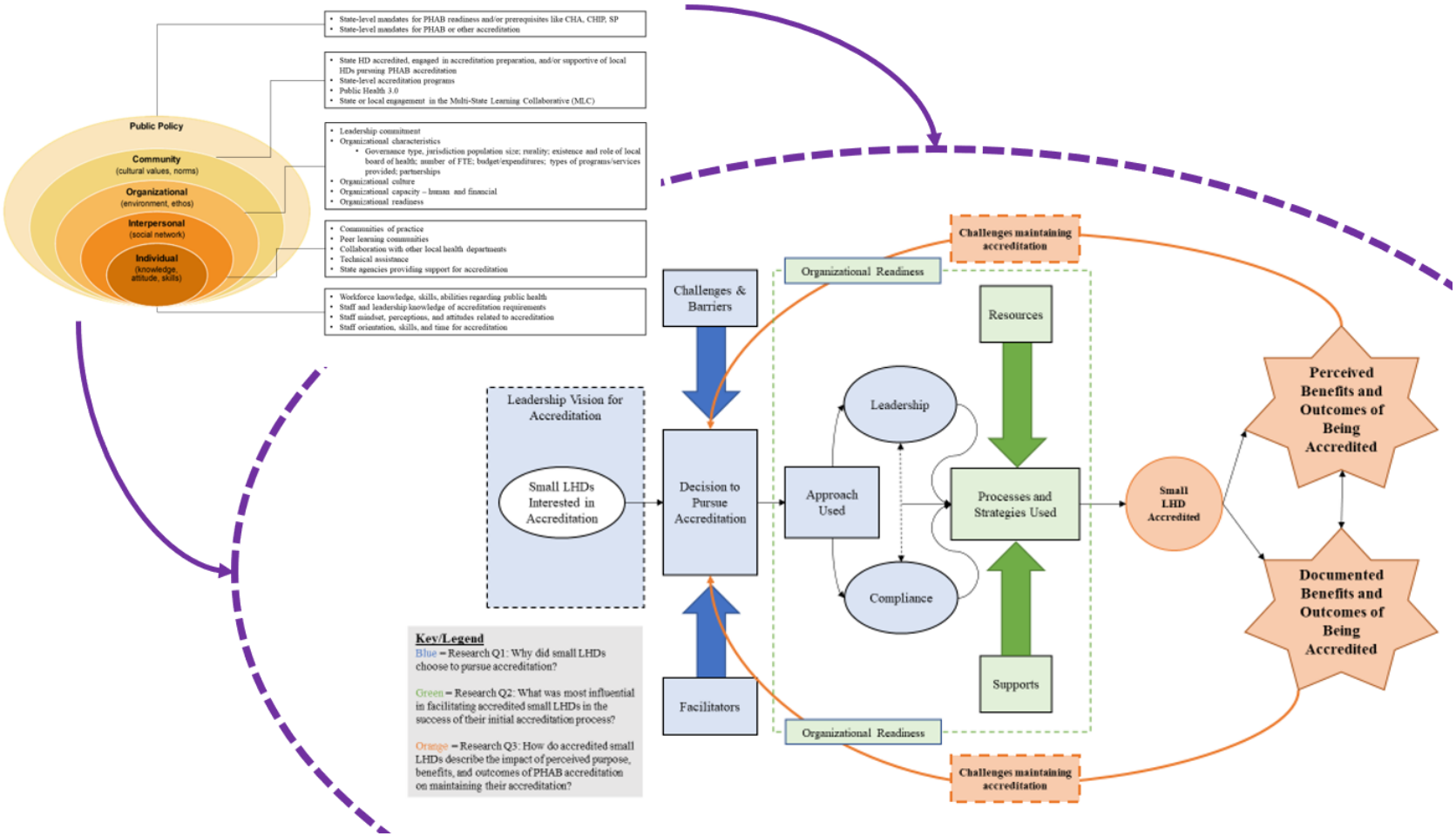


Figure 12. Initial Conceptual Framework

III. STUDY DESIGN, DATA, AND METHODS

a. Analytical Approach

A retrospective, mixed-methods, multiple case study research design was used to address the three primary aims of this study. These include: (1) exploring and describing factors that influenced small accredited LHDs' decision to pursue PHAB accreditation, (2) documenting and describing approaches, processes, strategies, resources and supports used by small accredited LHD staff and leaders to achieve PHAB accreditation, and (3) gaining a better understanding of small accredited LHD perceptions of what it means to be accredited, how they perceive the designation differentiates them from non-accredited LHDs, and what incentives and benefits may be most influential in encouraging other small LHDs to engage in PHAB accreditation. A total of eight cases were engaged in the inquiry.

A concurrent, two-phased approach comprised the methods for this study (Figure 13). Phase 1 methods included analysis of secondary data and review of documents such as organizational charts, annual reports submitted to PHAB by accredited health departments, *Accreditation Works!* stories, and other relevant documents as they were identified and available. Secondary data included PHAB administrative data, including organizational characteristics, about accredited health departments collected from PHAB's web-based information system, e-PHAB[6]. Secondary data was used to produce descriptive statistics about the case health departments, quantify and highlight themes in case health department site visit reports, inform data collection tool development, the case selection process, and was used to pre-populate some elements of the interview guide. This was done prior to each interview to help expedite discussion pertaining to some elements of the semi-structured interviews, especially related to

[6] e-PHAB is the information system used by PHAB to store and maintain data for each applicant and accredited health department.

health department characteristics. Phase 2 data collection of this study involved collection of primary data through semi-structured interviews with Health Department Directors, Accreditation Coordinators, and other staff and managers identified by the case health departments as playing a meaningful role in the initial accreditation process.

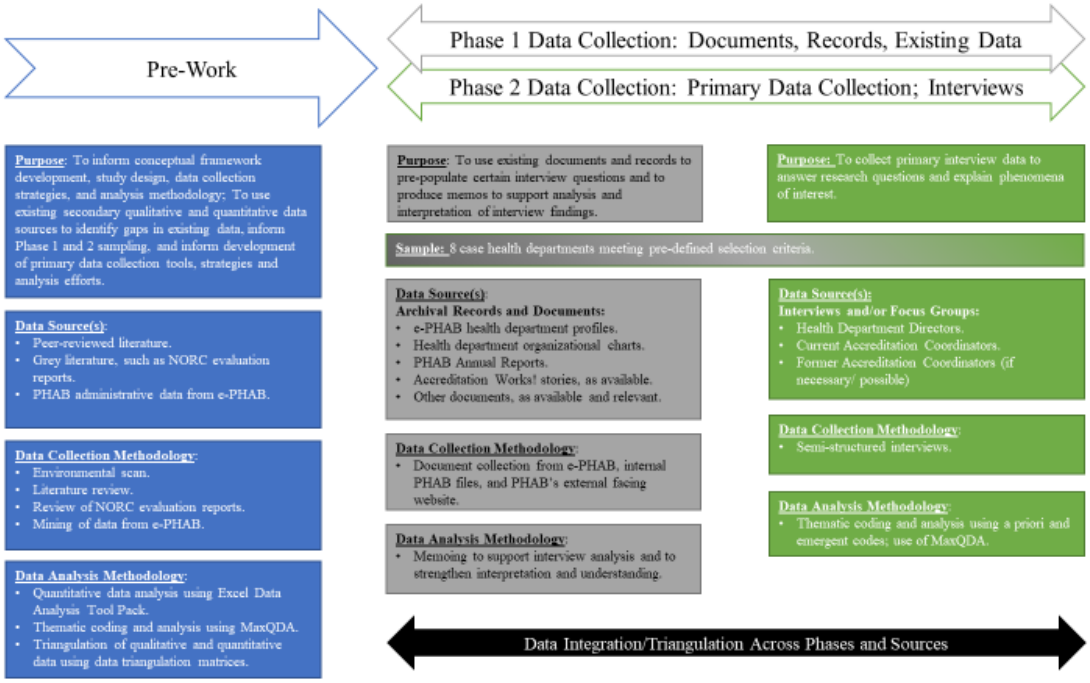


Figure 13. Concurrent, Two-Phased Research Methods

i. Research Rationale

A mixed-methods case study research design was selected for this study because it offers the opportunity to use methods for both exploring and defining different aspects of LHD experiences as they relate to accreditation. Per Yin (2009), the case study approach is preferred when the 'desire is to study some contemporary event' and relies heavily on 'direct observations and interviews of persons who were or may still be involved in those events'. Another benefit to this approach is that it uniquely uses multiple types of evidence, as relevant, such as interviews, records and documents (Yin, 2009). The case study research design provided an opportunity to

capture multiple perspectives from within case health departments regarding their experiences related to the decision to pursue accreditation, how accreditation was achieved, and the benefits and outcomes case health departments perceive they've experienced as a result of their accreditation efforts.

A concurrent, two-phased approach was used to allow review of documents, collection of interview data, and review of both for each case as the research study unfolded and analysis occurred. For example, the role of the document review phase of this research was largely to help pre-populate interview guides, streamline the interview process, and to support, corroborate and/or further explain findings that emerged from interviews. By using a concurrent approach, the researcher was able to review relevant documents and data before interviews to inform the interview guide while simultaneously writing memos to capture key observations based on these documents. During the interview process, and after, the concurrent approach allowed the researcher to revisit documents and their accompanying memos with new understanding and context, when necessary. This helped fill any gaps in knowledge gained from interviews and supported a more comprehensive analysis process.

A multiple case study design with multiple units of analysis was initially chosen as a means for collecting multiple perspectives from each case and across the population of accredited small LHDs. The original intent of the study was to conduct at least two interviews per case with individuals at different levels of the health department (i.e. the Health Department Director and Accreditation Coordinator) to accomplish this. However, overall staffing levels among case health departments and the compounding influence of the coronavirus pandemic response on LHD staff availability made achievement of multiple units of analysis for each case

difficult. Therefore, health departments were included in the study as cases if their Health Department Director or Accreditation Coordinator could participate in an interview.

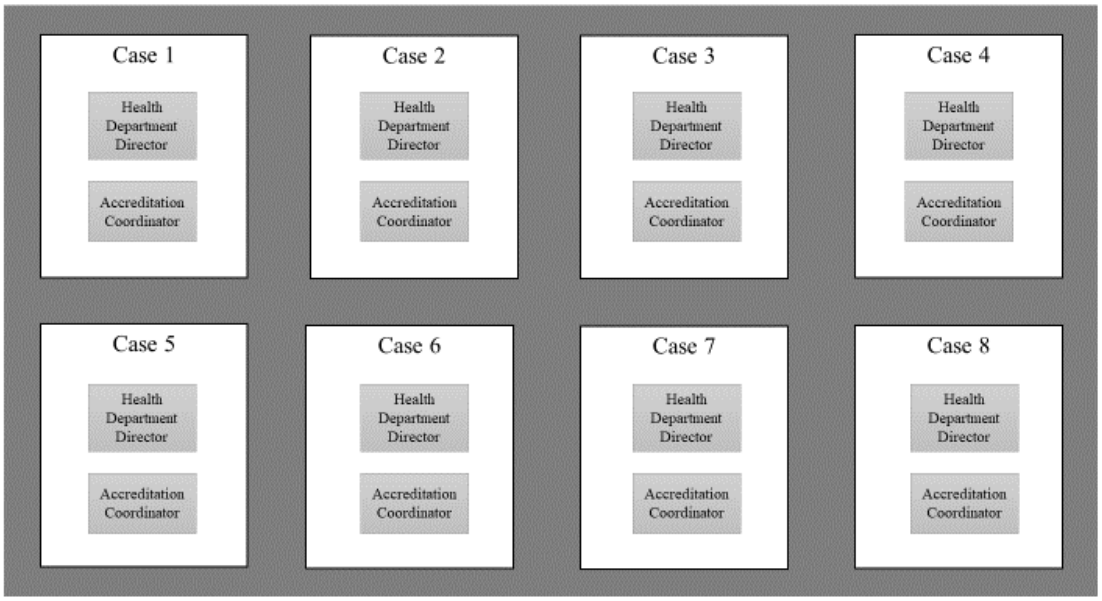


Figure 14. Planned Multiple Case Study with Multiple Units of Analysis Per Case

ii. Case Selection

Per Yin (2009), a multi-phased approach to case selection for this study was used to identify cases that best fit within the study's case definition and boundaries. At the time of case selection, there were 268 health departments and one public health system that were PHAB accredited (PHAB, 2019a). Administrative data about accredited health departments from e-PHAB was used to guide the case selection process outlined in Figure 15. Phase 1 of the case selection process started with all health departments that were accredited at the time of case selection and was filtered to remove all health departments that were designated as something other than LHDs in the dataset. The first phase of the case selection process led to removal of accredited state health departments, Army public health installations, tribal health departments and integrated public health systems from the sampling pool.

Phase 2 filtered all LHDs operating in the state of Ohio from the sampling pool. The removal of Ohio-based LHDs was done to reduce the likelihood of skewed findings for this study due to the anticipated effect Ohio's accreditation-related legislative mandate and associated requirements (CDC, 2013). Phase 3 of the case selection process removed LHDs that serve populations greater than 50,000 populations, and Phase 4 removed all LHDs accredited prior to calendar year 2016. The Phase 4 filter was applied because the initial accreditation process would have occurred in a more recent timeframe so staff and leaders would hopefully have a clearer recall of the process and their recall would be less confounded with reaccreditation efforts, which are not the focus of this study. At the conclusion of the case selection process, there were 19 small LHDs meeting all case selection criteria. Figure 15 provides a visual illustration of the case selection process for this study.

Each of the 19 LHDs meeting case selection criteria were listed in descending alphabetical order and assigned a number (1-19). A random number generator was used to determine the order in which they would be invited to participate in the study. If a selected health department declined to participate in the study after receiving and invitation to the study, the next health department on the list was invited in the order determined by the random number generator. This process was followed until the minimum desired number of total cases (8) were secured for the study.

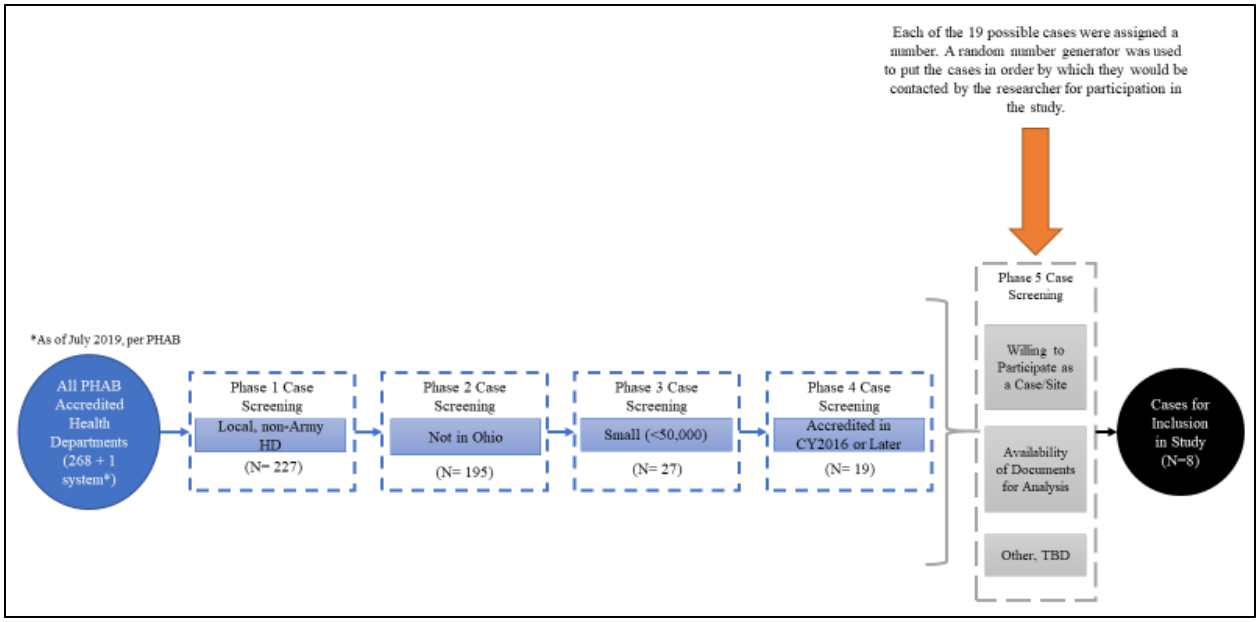


Figure 15. Detailed, Step-by-Step Case Selection Process

b. Data Sources, Data Collection, and Data Management

Data collection for this study included secondary administrative data, document review, and semi-structured interviews with health department leaders and staff, mostly representing the roles of Accreditation Coordinator and Health Department Director for eight (8) accredited small health departments. Measurement tables aligned with the study's conceptual framework were used to guide the data collection processes (Appendix 1).

The University of Illinois at Chicago Institutional Review Board (IRB) approved this study in February 2020. The IRB's approval included the study's research protocol, informed consent document, study recruitment procedures and email communications to potential case health departments, and the semi-structured interview guide. With limited risk to participants and the organizations they represent, this study met criteria for exemption as defined by the US Department of Health and Human Services Regulations for the Protection of Human Subjects [45 CFR 46.104(d)] (Appendix 2).

The process of gathering documents appropriate for document review began shortly after receipt of the exemption letter from the IRB, as did the initial analysis of administrative secondary data to identify potential case health departments. The first interview occurred on February 26, 2020 and the final interview conducted for this study was completed on September 17, 2020. The expanded timeline for primary data collection was the result of reduced health department staff availability due to their role in the response to the coronavirus pandemic, which began in March 2020.

i. Secondary Administrative Data

Secondary data used in this study was queried and downloaded from PHAB's information system, e-PHAB, and was obtained by the researcher from PHAB's Research and Evaluation Team. Requested data was provided via Microsoft Excel spreadsheet and included several fields of information for each accredited health department, including: health department name and state; version of PHAB Standards and Measures under which the health department was accredited; date of accreditation; whether the department was required to complete an Action Plan (AP) or Accreditation Committee Action Required (ACAR); and health department characteristics like budget, population served, number of employees, jurisdiction type (urban, suburban, rural, frontier), and jurisdiction structure (city, city-county, county, district, town/township, etc.). The purpose of using the administrative secondary data in this study was two-fold. First, it provided a means for identifying all health departments which met case selection criteria used in the case selection process described in Figure 15 and to pre-populate a subset of interview questions. Second, it was used to produce descriptive statistics for health department characteristics such as staffing, population served, and agency budget for the eight case health departments included in the study.

ii. Document Review

Documents reviewed for this study were gathered from a few different sources. First, general information about each health department, such as organizational charts, their initial accreditation site visit reports, action plan reports (if applicable), and annual reports were gathered from e-PHAB by the researcher with permission from participating health departments. Other documents, like *Accreditation Works!* were gathered from publicly available sources like PHAB's website, if they were available. Case health department websites were also reviewed, as appropriate, to confirm items like the health department's organizational vision and mission. Documents were used to pre-populate interview questions related to health department characteristics such as population served and number of staff. Interviewees were asked to validate the accuracy of that information during their interview. Documents, particularly the initial site visit reports, were used to identify high-level themes across the cases, such as the measures most frequently scored Slightly Demonstrated or Not Demonstrated, Areas of Excellence, Opportunities for Improvement, Overall Impressions of the health department and whether the department was required to complete an AP/ACAR. Annual reports, if available, were used to determine how case health departments have worked to maintain their accreditation-related progress and to identify challenges they may be facing in sustaining these activities.

iii. Interviews

The primary source of data for this study was gathered through semi-structured interviews with health department representatives, particularly those serving in the roles of Health Department Director, Accreditation Coordinator, and others identified by the health department who played a key role in the initial accreditation process. These semi-structured

qualitative interviews allowed for deeper discussion and exploration of the research questions including factors influencing decision-making around accreditation, facilitators and barriers to success, and small health department perceptions about the benefits, outcomes, and meaning of accreditation.

Interviews were conducted with staff and leaders representing eight accredited small LHDs. Case health departments were selected from a narrowed pool of accredited LHDs in states outside of Ohio, that had achieved accreditation between January 2016 and July 2019, and served a population of 50,000 or less. Due to the small sample from which cases could ultimately be drawn (n=19), random sampling was applied using a random number generator. Among health departments that agreed to participate, the researcher attempted to engage both the Health Department Director and the Accreditation Coordinator and/or representatives who played a key role in the initial accreditation process. When primary data collection concluded, each case health department had at least one interview with at least one interviewee, though nearly all cases had more than one interview participant.

Interview Guide

A semi-structured interview guide was developed and used to direct the discussion with each case health department. The guide was organized into four sections – interviewee and organization characteristics and interviewee's role in the accreditation process; perceptions related to benefits, outcomes, and maintenance of accreditation; the accreditation process; and vision and decision-making related to accreditation (Appendix 3). Each of these four sections were aligned with the study's research questions and conceptual framework with the intent of focusing the discussion in those areas, however the guide was flexible in allowing follow-up questions and for gaining clarification as the conversations progressed.

The interview guide was pilot tested in late January and early February 2020 with two small LHDs that achieved accreditation before January 2016. These departments were selected for pilot testing because they were accredited outside of the case selection timeframe for the study. These interviews were excluded from the study sample. The purpose of the pilot testing was to determine whether elements of the interview guide needed to be revised or rearranged to promote flow, clarity, and completeness of the interview. Pilot testing the interview guide also confirmed the estimated length of time needed for each interview, assuring the researcher would schedule enough time for interviews conducted as part of the study. No changes were made to the final interview guide as the result of the pilot interviews.

Interview Procedures

An initial 'lead' email was sent to all possible cases by PHAB's President and CEO in early February 2020 before case recruitment for the study began. This communication was intended to make all possible cases aware they may receive an email from the researcher requesting their participation in this study, that PHAB was supportive of the study, and that a health department's decision to participate or not participate in the study would have no bearing on their accreditation status or relationship with PHAB (Appendix 4).

Following the communication from PHAB's President and CEO, the researcher used a random number generator to assign each of the 19 possible case health departments an order by which they would be contacted by the researcher. Each possible case's Health Department Director and Accreditation Coordinators' names and email addresses were collected via e-PHAB. Health Department Directors and Accreditation Coordinators for the first ten health departments identified through this process were invited by the researcher to participate in individual or small group interviews (Appendix 5). A copy of the study overview and consent

form were included as an attachment to the initial recruitment emails sent to both Health Department Directors and Accreditation Coordinators (Appendix 6). Emails to Health Department Directors and Accreditation Coordinators were sent separately and each included a date by which the recipients should reply. If a reply was not received by that date, the researcher followed up once more via email. If the health department declined to participate or was unable to be contacted, the next group of possible cases were sent the recruitment email and attachments. This process was repeated until eight health departments were secured and at least one interview with those health departments was completed. When a Health Department Director, Accreditation Coordinator, or other appropriate stakeholder or group of stakeholders agreed to participate in an interview for the study, a Doodle poll link was emailed to them to schedule the interview date and time.

All interviews were conducted by conference call. The study's purpose, research goals, the researcher's affiliations with both University of Illinois at Chicago and PHAB, and consent to participate and to have the interview recorded were reviewed at the beginning of each interview. The consent forms reinforced that no interviewee or health department names would be used in association with the research, or any publications associated with the research. Interviews were recorded using Open Voice audio, mp3 files of the interviews were downloaded and saved to a password-protected computer. These files were later uploaded for transcription using the artificial intelligence transcription program, Otter.ai. Transcripts were reviewed and cleaned by the researcher before they were qualitatively coded using 'big bucket codes' using MaxQDA. The interviews lasted between 37 and 121 minutes, with an average length of interview at 101 minutes. The shortest interview was a targeted series of questions with one Health Department Director used to fill gaps in the knowledge of staff who participated in a full-

length interview. During this one staff interview, participants identified their inability to answer some of the questions about decision-making related to pursuing accreditation because they were not yet working at the health department at the time that decision was made but knew their director could.

iv. Description of Context During Data Collection

The intent of the interview process at the outset of the study was to conduct a total of 16-24 interviews with eight case health departments (2-3 interviews per health department), with a focus on gathering both the leadership and staff perspectives of the accreditation process. A total of 11 interviews involving 22 individuals from eight accredited small health departments were completed for this study. Inclusion of eight total cases was achieved despite major challenges with health department availability for scheduled interviews after the coronavirus pandemic began to overtake the US public health system in March 2020 and health department staff across the country were pulled into response activities.

The goal of conducting two or three interviews per case health department was revised early in the recruitment process based on two key learnings from the first group of health departments invited to participate. First, it became apparent through responses from both Health Department Directors and Accreditation Coordinators that capacity of accredited small health departments to participate in two separate interviews was a barrier. Second, and perhaps more importantly, most of the participating health departments indicated leadership team members were heavily involved in, or even led, the Accreditation Team for their health department and therefore it wouldn't make sense to hold two separate interviews – each would involve many of the same staff members. Since the same interview guide was being used for both Health

Department Director and Accreditation Coordinator interviews, it made sense when possible, to combine the interviews.

Seventeen of the 19 possible case health departments were ultimately contacted and invited to participate during the recruitment phase of the study before the goal of eight total participating health departments was achieved. Two health departments did not reply to repeated efforts to make contact and three others directly declined to participate. Several health departments initially agreed to be interviewed, scheduled time to speak with the researcher but ultimately had to cancel or delay their interviews by lengthy periods of time due to their limited availability amid the coronavirus pandemic response. By the end of the extended data collection period, a total of 11 interviews involving 22 individuals representing eight accredited small LHDs were completed and included in the analysis for this study.

v. Memos

Memos were generated during and after the review and analysis of secondary administrative data from e-PHAB, as documents were being reviewed for each case health department, and as interview data were being coded and analyzed. Memos served a variety of purposes for this study, such as the primary method for documenting decision-making for codebook modifications during the inter-coder reliability testing process and more broadly to capture contextual insights, observations, and themes noted throughout the entirety of the research process. Memos developed during the review and analysis of secondary administrative data from e-PHAB, document review, and interview analysis were included in the thematic analysis process and contributed to overall research findings. Memos were created in and saved as individual Microsoft Word files. Figure 16 below shows how the various data inputs contributed to memos, which were used to guide the analysis process.

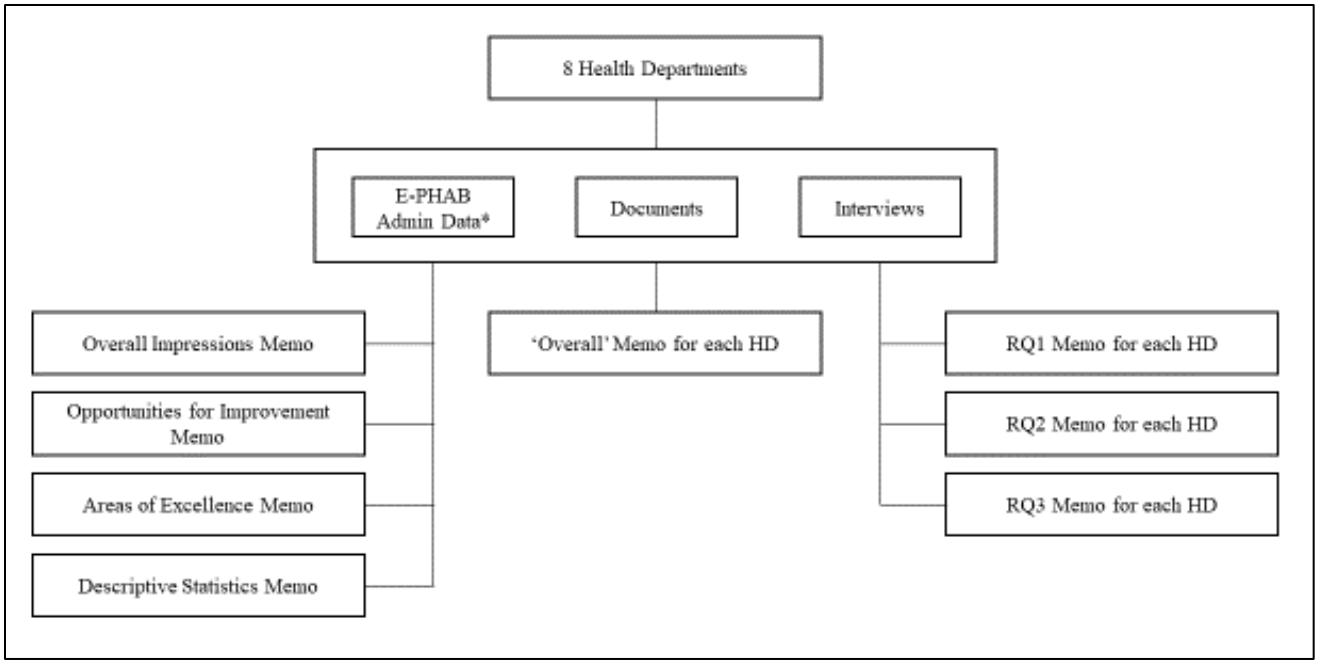


Figure 16. Visual Representation of How Raw Data Translated into Memos Used in Analysis

vi. Data Management

A network folder stored on a password-protected computer was used to store all collected data for each case health department. Each health department was assigned a number (e.g., HD1, HD2, etc.) and that number was used to label each piece of data associated with the given health department. Health department names were not used when data was stored. Each piece of data stored in this file was also labeled with the type of data it was (e.g. Annual Report, Interview Audio, Interview Transcript, Electronic Data, etc.), and from who it was collected (e.g. Leadership vs Accreditation Team), as appropriate. Each piece of data collected for this study had backup storage or access, if necessary. This is reflected in Table V below.

Secondary data used in this study was provided directly to the researcher in an Excel file via email after a data request was submitted to PHAB's Research and Evaluation team. A copy of the raw data was stored separate of data that was used in the analysis to ensure a backup copy was available, if necessary. Interviews with health department stakeholders were recorded

through Open Voice and the audio recordings were stored in mp3 format in the password protected account of this platform belonging to the researcher. These audio files were also downloaded and stored in the network folder with other data sources, and then uploaded and stored in the artificial intelligence transcription program Otter.ai, of which the researcher also has a paid and password-protected account. Transcripts of each interview were produced and stored in Otter.ai but were also downloaded and stored in the network folder and in MaxQDA prior to coding and analysis.

TABLE V: DATA SOURCES AND MANAGEMENT PROCEDURES				
Category of Data	**Type of Data**	**Primary Storage**	**Backup Storage/Access**	**Data Security Measures**
Secondary Data	e-PHAB	Network Folder	PHAB Research and Evaluation Team	Password protected computer
Documents	Annual Reports	Network Folder	e-PHAB	Password protected computer, e-PHAB access
Documents	*Accreditation Works*! Stories	Network Folder	PHAB website	Password protected computer
Documents	Electronic Data/ Document Review	Network Folder	e-PHAB	Password protected computer, e-PHAB access
Interviews	Interview Audio	Network Folder	Open Voice, Otter.ai	Password protected computer, Open Voice account, and Otter.ai account
Interviews	Interview Transcript	Network Folder	Otter.ai, MaxQDA	Password protected computer, Otter.ai account and MaxQDA

c. Data Analysis

Data analysis followed several steps, most of which focused on identifying themes and patterns in each type of data used. Secondary administrative data was used to describe the overall group of health departments participating in the study and identify high-level themes in their

initial accreditation review per their site visit reports. Document review and theming of data collected through semi-structured interviews allowed for initial analysis for each case health department. After this was completed, cross-case analysis was conducted to identify themes and patterns among all case health departments. Table VI describes the analysis strategy used for each data source and more in-depth description of the analysis process used in this study is provided in subsequent sections of this report.

TABLE VI. DATA ANALYSIS STRATEGY BY SOURCE

Data Source	**Analysis Strategy**
Secondary Administrative (e-PHAB) Data	• Descriptive statistics for organizational characteristics of health departments (Microsoft Excel) • Describe patterns in Site Visit Report measure scores (Frequency of measures scored Slightly/Not Demonstrated across cases and identify patterns using Microsoft Excel) • Theme data from Site Visit Reports (Overall Impressions, Greatest Strengths, Greatest Opportunities for Improvement; manual review in Microsoft Excel and corresponding memos) • Pattern matching analysis
Health Department Documents	• Theme data from Annual Reports (manual review in Microsoft Excel and corresponding memos) • Theme data from Accreditation Works! (manual review in Microsoft Excel and corresponding memos) • Theme data from other documents (manual review in Microsoft Excel and corresponding memos) • Pattern matching analysis
Semi-Structured Interviews (n=11)	• Coded transcripts (10% with second coder) and finalized codebook. • Theme data (manual review in Microsoft Excel and corresponding memos) • Pattern matching analysis

Each of the research questions guiding this study were not answered by all three data sources. Rather, it is important to point out that semi-structured interviews were the main source of data necessary for answering most of the research questions. Documents and e-PHAB data served as a supporting source of data and contributed additional insights for a subset of research questions and helped to highlight similarities and differences among the case health departments, as described in Table VII below. Because data from e-PHAB was used for sampling and contextual descriptive purposes and did not directly answer the study's research questions, it is omitted from Table VII.

TABLE VII. RESEARCH QUESTIONS AND CORRESPONDING DATA SOURCES

Research Questions (RQs)	**Corresponding Data Source(s)**	
	Semi-Structured Interviews	**Documents**
RQ1: Why did accredited small local health departments choose to pursue PHAB accreditation?	X	
a. What factors (motivators, incentives, barriers, and challenges) affected the decision of small accredited local health departments to pursue accreditation?	X	
b. How did the small accredited local health department's vision for accreditation's influence on their organization affect the approach used?	X	
c. How did the small accredited local health department's approach to accreditation influence their process, strategies, and outcomes?	X	
RQ2: What was most influential in facilitating successful achievement of PHAB accreditation among accredited small health departments?	X	
a. How did organizational readiness influence the accreditation process in small accredited local health departments?	X	
b. What processes and strategies were used by small accredited local health departments in the accreditation process?	X	
c. How did small accredited local health departments organize to achieve accreditation?	X	

TABLE VII. RESEARCH QUESTIONS AND CORRESPONDING DATA SOURCES		
Research Questions (RQs)	**Corresponding Data Source(s)**	
	Semi-Structured Interviews	**Documents**
d. How did small accredited local health departments use available resources for their accreditation efforts?	X	
e. What was the role of other organizations in supporting the accreditation process for small accredited local health departments?	X	
RQ3: How do accredited small local health departments describe the impact of perceived purpose, benefits, and outcomes of PHAB accreditation on maintaining their accreditation?	X	X
a. What does it mean to be PHAB accredited among small accredited local health departments?	X	
b. What benefits do small accredited local health departments associate with being PHAB accredited?	X	X
c. What outcomes do small accredited local health departments experience related to accreditation?	X	X
d. What challenges do small accredited local health departments encounter when working to maintain their accreditation?	X	X

i. Secondary Administrative Data

Secondary administrative data from e-PHAB included data on a number of health department characteristics for each case, such as health department name and state; version of PHAB Standards and Measures under which the health department was accredited; date of accreditation; whether the department was required to complete an AP/ACAR; and health department characteristics like budget, population served, number of employees, jurisdiction type (urban, suburban, rural, frontier), and jurisdiction structure (city, city-county, county, district, town/township, etc.). Descriptive statistics for the eight case health departments were generated using the Data Analysis Tool Pak in Microsoft Excel for number of employees, population served, and health department budget. Microsoft Excel was also used to analyze e-

PHAB data for patterns in accreditation measures that were scored 'Slightly Demonstrated or 'Not Demonstrated' among case health departments, to conduct manual thematic analysis on the following pieces of data for case health departments - Overall Impressions, Greatest Strengths, and Greatest Opportunities for Improvement sections of case health department Site Visit Reports - and to explore patterns in AP/ACAR measures for case health departments that were required to complete an AP/ACAR before achieving accreditation.

ii. Document Review Analysis

Documents for each case health department including Annual Reports, electronic data, and *Accreditation Works*! stories were reviewed if they were available. Some health departments had more documents to review than others. Memos with key observations made from the review of these documents were produced for each individual case using the ORID (Objective, Reflective, Interpretive, Decisional) method. These memos were then used in conjunction with detailed memos produced from interview analysis to identify themes and patterns among case health departments' accreditation processes and overall experiences.

iii. Semi-Structured Interview Analysis

Codebook

Semi-structured interviews were analyzed according to a multi-step process, the first of which included a coding process guided by a codebook comprised of deductive codes. The initial codes were grounded in the literature, researcher's practical experiences, and the conceptual framework developed as part of this study (Appendix 7). While most of the codes used in the study were a priori codes, a hybrid approach to coding was used to allow for the addition of emergent codes as they were identified (Braun & Clarke, 2006; Patton, 2014). One notable emergent code added to the codebook after interviews were underway was a code for capturing

comments related to case health departments' perceptions of how accreditation impacted their ability to respond to the coronavirus pandemic. Other changes to the codebook occurred during the process for establishing inter-coder agreement with a second coder. These changes included merging a few of the a priori codes and expanding or refining code definitions to ensure clarity when coding transcripts. After the inter-coder agreement process concluded, there were no additional changes to the study's codebook.

Coding Protocol

The coding protocol involved application of a priori codes to large chunks of narrative contained in the interview transcripts. This protocol was conducted using MaxQDA.

Inter-Coder Reliability

The second coder was a doctoral level professional with expertise in qualitative research and a fellow University of Illinois DrPH in Public Health Leadership program alumni. The second coder had experience using MaxQDA. Both researchers independently reviewed and coded two full interview transcripts to test the codebook's applicability. This process followed a stepwise approach. The first step involved the researcher and second coder each coding the same interview transcript independently and then meeting to discuss agreement in code application. As the researcher and second coder reviewed their independently coded transcripts, data segment by data segment, discussions between the two resulted in resolution of all coding disagreements. Prior to the joint review and discussion of the first transcript, the researcher hand-calculated a coding agreement rate of 47% for this first interview. However, by the conclusion of the review and discussion, and consensus was reached regarding which codes should be applied throughout the transcript. Modifications were suggested and made to codes and/or code definitions to improve future agreement.

The second step of this process researcher and second coder each coded the same second interview transcript independently using the refined codebook and again met to discuss agreement in code application. As the researcher and second coder reviewed their independently coded transcripts following the same process as the first cycle of review, discussion between the wo again resulted in resolution of all coding disagreements. While an improved coding agreement rate was expected, this cycle resulted in a slightly lower – 42% - hand-calculated coding agreement rate. Upon further discussion, it became clear much of the coding disagreement between the researcher and second coder was due to use of practice-related jargon in the interview transcripts, health department accreditation-specific processes of which the second coder was unfamiliar, and a general a lack of familiarity with health department accreditation by the second coder. After brief explanations of these items by the researcher, the second coder agreed with coding adjustments to the transcript, though the increased rate of agreement was not calculated.

The second coder was used for two full-length interview transcripts, which was 18% - or two of 11 – total interviews conducted for this study. After the second double-coded interview, the researcher and second coder agreed the codebook was refined enough to apply to the remaining nine interview transcripts (Miles, Huberman, & Saldana, 2014).

Memos

Memos were used to document discussions between the researcher and second coder as it related to modifications to the codes or code definitions, as well as when a potential new code was identified (Miles, Huberman, & Saldana, 2014). For example, a memo was written by the researcher when comments relating to the relationship between accreditation and coronavirus or a case health department's response to coronavirus began to emerge. Another memo was written

when the decision to add a coronavirus-related code was made and to help with determining its definition in the codebook.

Codes and Subcodes

First cycle coding was conducted for each interview transcript in MaxQDA using a priori, 'large bucket' codes defined in the initial codebook. These coded segments were then transferred into Microsoft Excel spreadsheets based on the large bucket codes, as shown in Figure 17. Each case had its own Microsoft Excel workbook with various worksheets corresponding to the big bucket codes, such as vision, organizational readiness, approach, barriers and challenges, facilitators, etc.

As coded text segments were reviewed for each case applicable emergent subcodes, or themes, for each large bucket code were applied using the Microsoft Excel spreadsheets. Figure 17 shows an example of a 'barriers and challenges' worksheet for one case, with themes of competing priorities, funding, lack of public health knowledge/training, scope/breadth of programming, and others identified and applied to text segments.

Case	Interview	Barriers and Challenges Themes	Supporting Quotations from Interview	Notes
2	L	Competing priorities	HDD 1:04:53: Hmm. Um, gosh, I mean, it's hard to To think about like the future like that, I think that Gosh, **just being able to tie it more to modernization would have been great. I don't think we were at a place statewide where modernization was a fully formed idea when we started doing our accreditation journey. But I think, you know, knowing what we know now and being a state that is involved in the public health modernization process, it would be nice to tie those two concepts a little more tightly together. Like if we could have done some, if we could have created some of the documents we created for accreditation with the lens of modernization, I think that that would have been a huge benefit but who could have known?** // Chelsey Saari 1:05:48: right? Yeah. Is there like just for my benefit, like I have a very like, scratching the surface knowledge of the public health modernization stuff, but is there a lot of alignment between kind of what you're being asked to do for that. And, and like accreditation standards and measures? // HDD 1:06:09: Um, yes and no, I think that some of it is a little bit more like, it's basically trying to get everything up to the population health levels. So on that, in that framework, yes. I think that there's some of the foundational public health services that are still involved in modernization that aren't used in accreditation. // Chelsey Saari 1:06:32: Okay. So there's some alignments, but there's still quite a bit of difference there. So that makes sense. Are there any... // HDD 1:06:41: and I think..	
2	L	Funding	Chelsey Saari 05:43: So this is this is I probably probably know how you're going to answer this. But what do you think the biggest the biggest challenges that your agency has faced recently? // HDD 05:56: Well, I think probably everyone at this point is saying **staffing and funding um, I think those are, those are some of the big ones. Thinking kind of outside that box, we have trouble recruiting people because housing is just awful here is terrible to try and find housing.** // Chelsey Saari 06:15: Is it because there's like a lack of lack of housing or affordability or both. // HDD 06:21: We're a tourist town. So a lot of it gets bought up and turned into vacation rentals. And it's just not affordable. There's a huge lack of affordable housing. Because you see these houses that just empty like nine months out of the year, and yet we've moved candidates all the time because they can't find housing. // Chelsey Saari 06:41: Oh, wow. Yeah, that's a unique challenge. For sure. // HDD 06:44: I think that's tough. We have an aging population too. So you know, **it can be difficult recruiting younger professionals out here because there's less of those like social supports. So it can be a little bit of a tough sell that way. But I think, you know, public health in the state of Oregon is traditionally underfunded as well**. And so fighting an uphill battle with that can be difficult and then kind of, you know, communicating how things can look a little bit different in grant funded programs that are standardized across the state to our partners at the state who are providing that funding can be a challenge as well.	
2	L	Funding	Chelsey Saari 50:13: Okay. And so they're shifting their focus to accommodate the ones that are active in the network setting. Yeah, that makes sense. Do you think that there's anything that so kind of related to the question I asked about gaps and resources, like the PHAB training, do you think that there's still gaps in the types of support that would help health departments move through the process? So thinking about support being like, you know, the tools or templates or programs or funding, mentoring, that kind of thing? I mean, do you think that there are big gaps in that stuff or small health departments that are still kind of thinking about applying or maybe in the process but are kind of struggling? // HDD 51:00: **Well, you know, I think fundings a big barrier for the for the smaller health departments. And I think it's not going to get any better with the COVID-19 happening either, you know, with a ton of resources redirected.** // Chelsey Saari 51:13: Yeah. // HDD 51:14: And so I think that that's always going to be an issue. I think that if there was, you know, an accreditation coordinator mentorship training, that could definitely help some smaller health departments feel a little bit more confident, even if you had folks who have been accredited or accreditation coordinators from smaller communities. Kind of participating in something like that to help other health departments build that skill set. Because you do find a lot of like generalists in smaller health departments, or folks that are, you know, just have moved up in a job into a role that larger health departments would require different qualifications for something like that, and so I think they're absolutely capable of doing it, but I think that they need some support in developing those skills before they feel confident in making that type of investment.	
2	L	Lack of public health knowledge/training	Chelsey Saari 50:13: Okay. And so they're shifting their focus to accommodate the ones that are active in the network setting. Yeah, that makes sense. Do you think that there's anything that so kind of related to the question I asked about gaps and resources, like the PHAB training, do you think that there's still gaps in the types of support that would help health departments move through the process? So thinking about support being like, you know, the tools or templates or programs or funding, mentoring, that kind of thing? I mean, do you think that there are big gaps in that stuff or small health departments that are still kind of thinking about applying or maybe in the process but are kind of struggling? // HDD 51:00: Well, you know, I think fundings a big barrier for the for the smaller health departments. And I think it's not going to get any better with the COVID-19 happening either, you know, with a ton of resources redirected. // Chelsey Saari 51:13: Yeah. // HDD 51:14: And so I think that that's always going to be an issue. **I think that if there was, you know, an accreditation coordinator mentorship training, that could definitely help some smaller health departments feel a little bit more confident, even if you had folks who have been accredited or accreditation coordinators from smaller communities. Kind of participating in something like that to help other health departments build that skill set. Because you do find a lot of like generalists in smaller health departments, or folks that are, you know, just have moved up in a job into a role that larger health departments would require different qualifications for something like that, and so I think they're absolutely capable of doing it, but I think that they need some support in developing those skills before they feel confident in making that type of investment.**	
2	L	Scope/breadth of programming	HDD 1:06:44: I don't where this will fit into your interview, but it's just a general slice of feedback that I think it would be nice **if PHAB in general could like loosen the requirements just a little and realize that like some of the things that are done in Like WIC and maternal child health are population health. They might look a little bit different, but they're serving the population in just the same way as a lot of our other population health services. I feel like we tried to put a population health spin on some of our documents and they got thrown out just because they were in a WIC program, even though we felt like they were population health.**	
2	L	Staff knowledge/understanding	Chelsey Saari 50:13: Okay. And so they're shifting their focus to accommodate the ones that are active in the network setting. Yeah, that makes sense. Do you think that there's anything that so kind of related to the question I asked about gaps and resources, like the PHAB training, do you think that there's still gaps in the types of support that would help health departments move through the process? So thinking about support being like, you know, the tools or templates or programs or funding, mentoring, that kind of thing? I mean, do you think that there are big gaps in that stuff or small health departments that are still kind of thinking about applying or maybe in the process but are kind of struggling? // HDD 51:00: Well, you know, I think fundings a big barrier for the for the smaller health departments. And I think it's not going to get any better with the COVID-19 happening either, you know, with a ton of resources redirected. // Chelsey Saari 51:13: Yeah. // HDD 51:14: And so I think that that's always going to be an issue. **I think that if there was, you know, an accreditation coordinator mentorship training, that could definitely help some smaller health departments feel a little bit more confident, even if you had folks who have been accredited or accreditation coordinators from smaller communities. Kind of participating in something like that to help other health departments build that skill set. Because you do find a lot of like generalists in smaller health departments, or folks that are, you know, just have moved up in a job into a role that larger health departments would require different qualifications for something like that, and so I think they're absolutely capable of doing it, but I think that they need some support in developing those skills before they feel confident in making that type of investment.**	

Figure 17. Illustrative Example of Analytical Spreadsheets

iv. Within and Cross-Case Analysis

Within Case Analysis

Within case analysis was conducted for each case to explore the individual accreditation experience of each health department participating in the study. This was accomplished through review of big bucket codes, subcodes, and analytic memoing guided by each of the three primary research questions and their corresponding sub-questions (Miles, Huberman, & Saldana, 2014). Additionally, within case analysis contributed to development of visual representations of the organizational structure and key activities used by health departments to guide their initial accreditation activities. These visuals were used to help identify roles, relationships, and delineation of responsibilities between roles among small LHDs which were later used to determine patterns between cases. An example of this visual is provided in Figure 18 below.

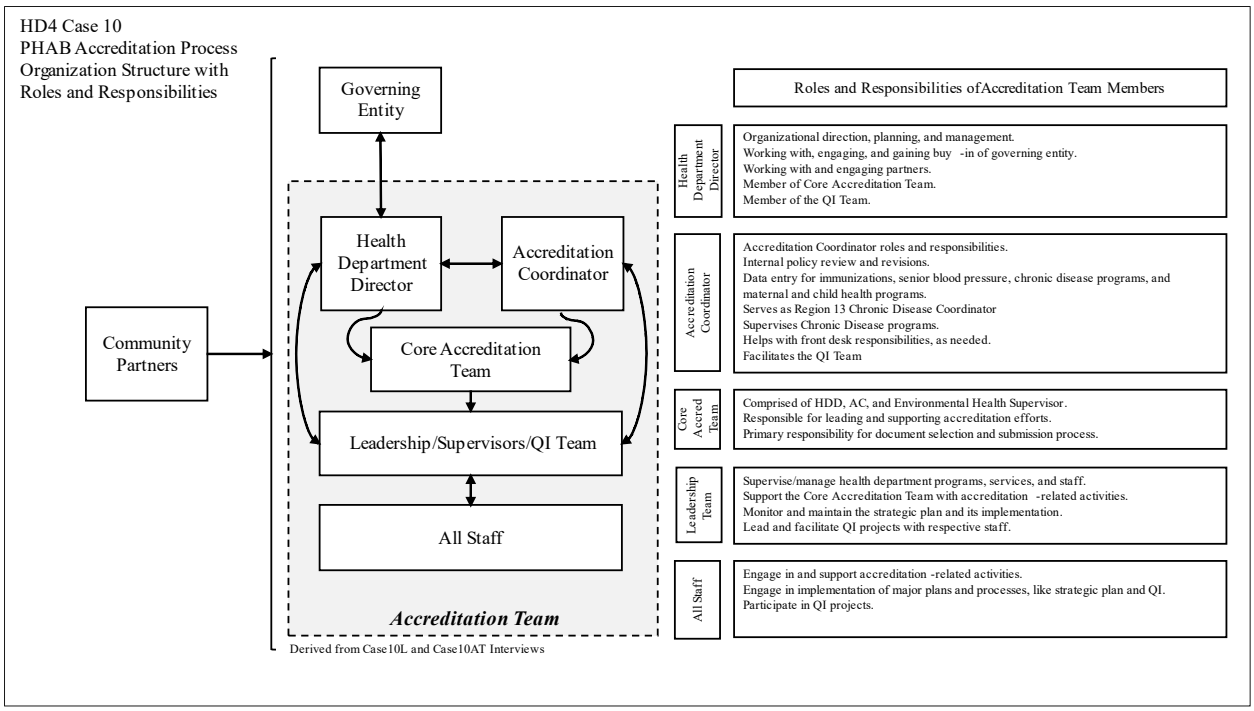


Figure 18. Illustrative Example of Accreditation Roles, Responsibilities, and Organizational Structure Analysis

Cross-Case Analysis

Cross-case analysis using metasynthesis was the primary means of producing results presented in Chapter 4 (Miles, Huberman, & Saldana, 2014). Using the within case Microsoft Excel worksheets produced in the first step of analysis (see Figure 17 for example), cross-case pattern matching was performed to identify themes across cases. Code frequency across cases was used to determine key findings associated with each key construct. Summary tables were created in Microsoft Excel and used to identify the most common themes across cases for each key construct. An example summary table of themes for the facilitators construct is provided in Figure 19 for illustrative purposes. This shows how funding support and organizational readiness were two of the most frequently identified facilitators of accreditation across the 8 cases, and therefore are presented as key findings in Chapter 4.

Theme	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Totals
Funding Support	0	1	1	1	1	1	1	1	88%
Organizational Readiness	1	1	1	1	1	0	1	1	88%
Availability of Resources	0	1	0	0	1	1	1	1	63%
External Pressures	1	1	1	0	1	1	0	0	63%
Leadership Motivation	1	1	0	1	1	0	0	1	63%
Support of Governing Entity	1	1	1	0	0	0	1	1	63%
Competition	1	1	0	1	0	0	1	0	50%
Opportunity for Improvement	1	1	0	0	0	1	0	0	38%
Credibility	0	0	0	1	0	0	1	0	25%
Demonstrating Excellence	0	0	0	1	0	0	0	1	25%
Promise of future funding	1	1	0	0	0	0	0	0	25%
Being a 'larger small'	0	1	0	0	0	0	0	0	13%
Demonstrating Impact	0	0	0	1	0	0	0	0	13%
Influence from other public health leaders	0	1	0	0	0	0	0	0	13%
Lack of Understanding	0	0	0	0	1	0	0	0	13%

Supports-Resources Source | Supports-Resources GAPS | Vision | Organizational Readiness | Barriers and Challenges

Figure 19. Illustrative Example of Cross-Case Themes Summary Table

Analytic Memoing

Analytic memos were used throughout the analysis process when reviewing interview data (Miles, Huberman, & Saldana, 2014). The primary purpose of using analytic memos was to aid the researcher in the analysis process by documenting key observations, patterns, and conclusions drawn within and between cases for each research question. Because interviews were conducted over such a long period of time (February to September 2020) and the national context was changing and evolving rapidly due to the coronavirus pandemic, there were some topics that emerged or were discussed in greater detail in later interviews that were not captured or discussed in as great of detail in earlier interviews. The importance of noting this situational

factor now is to both acknowledge and explain some gaps in evidence for key themes identified in Chapters 4 and 5 among a subset of participating case health departments. For example, if a theme was not identified or observed in the coding and analysis of a case, this does not necessarily mean that the theme is not present or applicable to that case; rather, it may be that particular theme did not emerge during the interview and the researcher did not further prompt on the issue because it had not yet been identified as a key or emerging theme or pattern across the dataset.

Further, for some cases, staff and leaders participating in the interviews may not have been working for the case HD during the initial steps of the accreditation process or may not have been in the roles they are now, and therefore may not have had sufficient background knowledge or firsthand experience to comment in as great of depth about process steps or decision-making related to engaging in accreditation. This does not mean these departments did not engage in the same or similar activities or follow the same or similar decision-making for initial accreditation as the other departments in this study; rather those providing data for this study may have been unable to speak on some topics or issues because they were either not with the case HD at the time of initial accreditation or were in a different, less-directly related role.

d. Validity Considerations

There were several limitations to consider regarding this research study. Many of the limitations and quality concerns related to difficulty with case selection and engagement of health departments that met desired case selection criteria; limited sample size; self-report bias; and researcher bias. Since the focus of this study is small LHDs, findings do not account for the unique considerations associated with health departments excluded through the case selection

and sampling processes, like tribal and territorial health departments and health departments serving jurisdictions larger than 50,000 residents.

Sample size may be considered a limitation of the study's design. The inclusion of eight cases is a relatively small number when the total number and diversity of accredited health departments is taken into consideration. However, since the focus was accredited small LHDs, the sample from which those eight were drawn was much smaller (N=19), which makes the issue of sample size less of a concern. The eight total cases included in this study account for more than 40% of small accredited LHDs meeting case selection criteria.

Interviews inherently carry with them the risk of self-report bias. To address this unavoidable limitation, triangulation of qualitative sources of data was implemented whenever possible. Most of the health departments participating in this study had more than one interview participant, allowing for a more comprehensive view of each health department's experience than would have been captured by interviews with one health department representative. Further, if they were available, documents were reviewed and analyzed to clarify or corroborate findings gathered through the interviewing process for some of the research questions.

The primary researcher has a vested interest and professional history working as an Accreditation Coordinator, Site Visitor, and now as an Accreditation Specialist for PHAB. Therefore, this study must make note of the risk for researcher bias. The primary researcher acknowledged they hold their own assumptions and biases toward this topic. They were aware at the outset of the research that this fundamentally posed a risk of biasing data collection, analysis, and reporting processes. Every effort was made to reduce the influence of researcher bias as this study was conducted. For example, the researcher designed and employed a specific and rigorous methodology for selecting cases and made use of qualitative data source triangulation methods

for connecting and comparing various sources of data and information as much as possible. Case reports for each participating health department were produced by the researcher and provided to interview participants for their factual review prior to final analysis to assure data collected for each case was being represented as accurately as possible. Finally, the use of an independent second coder during the data coding step of the study helped to improve consistency in coding of interview data to reduce risk of researcher bias in the way the data was coded.

To address construct validity, this study used multiple sources of data, and when possible multiple perspectives for each case, to answer research questions and define key constructs. The analysis process used a multi-layered analysis process. This included the development of analytic memos for each case health department's interviews and document review, use of these memos to identify themes and patterns, and production of case reports for each health department. These reports formed the basis for cross-case comparison of themes and patterns, which informed the general findings of this research. This process is displayed in Figure 20.

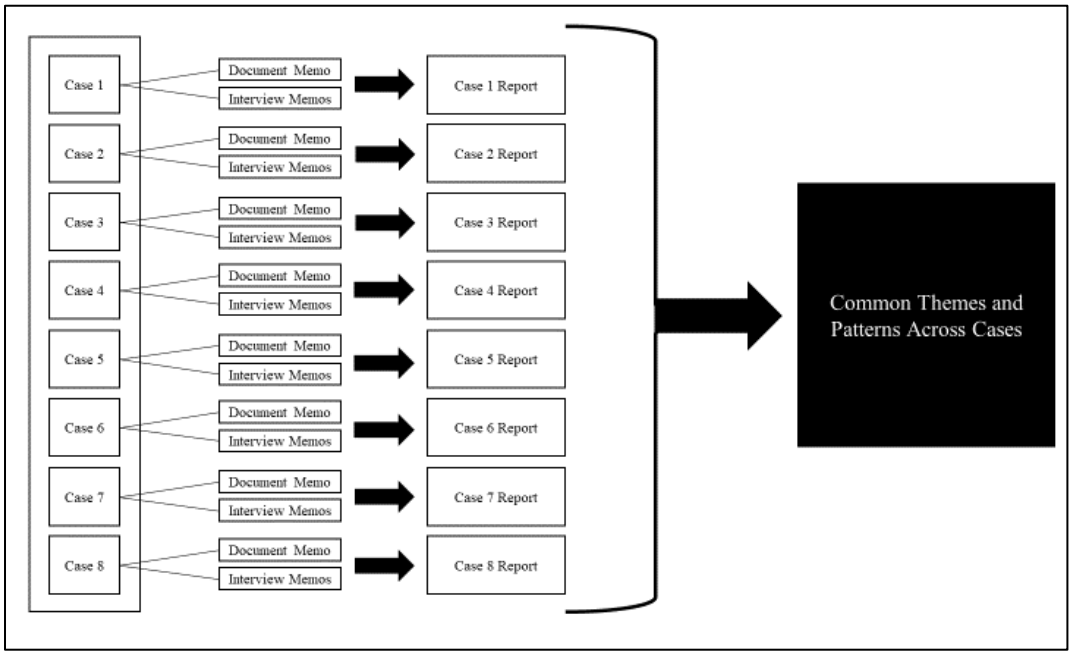


Figure 20. Multi-layered Analysis Process

Lastly, with case study approaches, external validity can be a concern because of small sample size and the lack of broader applicability or generalizability of findings. This study included eight cases, representing more than 40% of accredited small health departments meeting case selection criteria. While not broadly generalizable, the findings of this study are may be more applicable to the broader field of accredited small health departments than if this were a single case study.

IV. RESULTS

This chapter begins with an overview of the study sample and general characteristics of the small LHDs participating in the study. Results of the study are then presented via four manuscripts prepared for submission to peer-review journals. An overall synthesis of study findings across the four papers is provided in Chapter 5.

a. Characteristics of Study Sample

Eight accredited LHDs that achieved accreditation between 2016 and July 2019 participated in this study. When the sample for this study was drawn, there were 19 LHDs that met initial study sample selection criteria described in Chapter 3.

b. Characteristics of Participating Health Departments

Of the eight participating health departments, five were accredited under Version 1.5 of the PHAB Standards and Measures, while the remaining three were accredited under the earlier Version 1.0. Five health departments were in the US Census Midwest Region and three were in the US Census West Region. Three of the health departments were accredited without an AP/ACAR, while the other five were required to complete an AP/ACAR before achieving accreditation. The average number of full-time equivalents among participating health departments was 21, the average population served was 30,344, and the average budget at the time they went through accreditation was $1,882,203.50. Table VIII provides a description of each health department that participated in the study.

TABLE VIII: STUDY PARTICIPANTS BY GEOGRAPHIC REGION, AP/ACAR, FTE, BUDGET, AND POPULATION SERVED					
Health Department	**Geographic Region[1]**	**AP/ACAR Required**	**Full-Time Equivalents (FTE)**	**Budget**	**Population Served[2]**
Health Department 1	West	No	21-30	>$3 million	>40,000
Health Department 2	Midwest	Yes	21-30	>$3 million	>40,000
Health Department 3	Midwest	No	11-20	<$1 million	20,000-40,000
Health Department 4	West	Yes	11-20	Between $1 and $3 million	<20,000
Health Department 5	Midwest	Yes	<10	<$1 million	20,000-40,000
Health Department 6	West	Yes	21-30	Between $1 and $3 million	20,000-40,000
Health Department 7	Midwest	No	>30	>$3 million	>40,000
Health Department 8	Midwest	Yes	<10	<$1 million	<20,000
Note 1: Geographic Region: Based on US Census Region Divisions[7] [West, Midwest, South, Northeast] Note 2: Populations are less than 50,000.					

c. Characteristics of Health Department Stakeholders Interviewed

Health department stakeholders were identified based on the contact information provided in PHAB's information system, e-PHAB, for the Health Department Director and

[7] https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

Accreditation Coordinator roles. In addition, when email invitations were sent to Health Department Directors and Accreditation Coordinators, they were asked to invite up to three other health department staff or stakeholders who had played a role in the initial accreditation process and could contribute to the conversation. Some interviews were with one health department representative, while others ended up as small focus groups with up to four staff.

The original intent of the interview process was to conduct two to three interviews per case to capture independent perspectives of the accreditation process from multiple stakeholders at each health department. However, this process was revised to adapt to learnings that occurred during the recruitment stage of the study. The outcome of this adaptation was five different types of interviews – Health Department Director only, Accreditation Coordinator only, Leadership Team, Accreditation Team, and Combined. Details regarding the types of interviews per case health department are described in Table IX below.

TABLE IX. HEALTH DEPARTMENT INTERVIEWS BY TYPE AND NUMBER OF PARTICIPANTS

Health Department	**Type of Interview**	**Number of Participants**
Health Department 1	Health Department Director Only	1
Health Department 2	Accreditation Team	2
	Leadership Team	4
Health Department 3	Leadership Team	3
Health Department 4	Leadership Team	2
	Accreditation Team	2
Health Department 5	Combined	2
Health Department 6	Health Department Director Only	1
	Accreditation Team	2
Health Department 7	Accreditation Coordinator Only	1
Health Department 8	Combined	2

Definitions:

1. Health Department Director Only: The interview was conducted with the current Health Department Director and no others.
2. Accreditation Coordinator Only: The interview was conducted with the current Accreditation Coordinator and no others.
3. Leadership Team: The interview was conducted with the current Health Department Director and former Health Department Director OR other members of what the Health Department Director considers members of their leadership/management team.
4. Accreditation Team: The interview was conducted with the current Accreditation Coordinator and other members of what the Accreditation Coordinator considers members of their Accreditation Team.
5. Combined: The interview was conducted with the Health Department Director and Accreditation Coordinator.

d. Commentary on Papers

To present the findings of this research, four papers have been prepared for submission to peer-reviewed journals. Table X delineates how each of the four papers addresses one or more research questions and includes a title, purpose statement, and lists journals under consideration for submission.

TABLE X. SUMMARY OF PAPERS BY RESEARCH QUESTION(S), PURPOSE, AND PROPOSED JOURNAL AND FORMAT

Paper	Research Question(s)	Title and Purpose of Manuscript	Proposed Journal and Format
1	***RQ1: Why did accredited small local health departments choose to pursue PHAB accreditation?*** 1a: What factors affected the decision to pursue accreditation? 1b: How did vision for accreditation influence the organization's approach? ***RQ2: What was most influential in facilitating successful achievement of PHAB accreditation among small local health departments?*** 2a: How did organizational readiness influence the process?	***Facilitators, Challenges, and Barriers: The Accreditation Experience of Small Local Health Departments*** Purpose: To explore and identify common challenges and barriers, facilitators, and the role of leadership in small LHD accreditation among a subset of small accredited LHDs.	Journal of Public Health Management and Practice Research Brief
2	***RQ1: Why did accredited small local health departments choose to pursue PHAB accreditation?*** 1c: How did approach influence process, strategies, and outcomes? ***RQ2: What was most influential in facilitating successful achievement of***	***A blueprint for achieving and maintaining accreditation: Organizational readiness factors and common process steps followed by***	Journal of Public Health Management and Practice Full Research Report

TABLE X. SUMMARY OF PAPERS BY RESEARCH QUESTION(S), PURPOSE, AND PROPOSED JOURNAL AND FORMAT			
Paper	**Research Question(s)**	**Title and Purpose of Manuscript**	**Proposed Journal and Format**
	PHAB accreditation among small local health departments? 2a: How did organizational readiness influence the process? 2b: What processes and strategies were used in the accreditation process? 2c: How was the process organized? 2d: How were available resources used? 2e: What was the role of other organizations in supporting the process?	***accredited small health departments.*** Purpose: To retrospectively explore elements of organizational readiness and common practices used by accredited small LHDs to organize and conduct their initial accreditation process.	
3	***RQ3: How do accredited small local health departments describe the impact of perceived purpose, benefits, and outcomes of PHAB accreditation on maintaining their accreditation?*** 3a: What does it mean to be PHAB accredited? 3b: What benefits are associated with being PHAB accredited? 3c: What outcomes result from PHAB accreditation? 3d: What challenges are encountered when working to maintain accreditation?	***Exploring What Matters: Lessons from Accredited Small Health Departments*** Purpose: To investigate the nuances in small LHDs' perceptions of accreditation, the benefits and outcomes they've experienced because of accreditation, and challenges they've faced when working to maintain accreditation status.	Journal of Public Health Management and Practice Research Brief
4	***RQ2: What was most influential in facilitating successful achievement of PHAB accreditation among small local health departments?*** 2d: How were available resources used? 2e: What was the role of other organizations in supporting the process?	***Essential Accreditation Supports and Resources for Small Local Health Departments*** Purpose: To identify and describe the primary sources and types of resources and supports small LHDs leveraged during their efforts to become accredited.	American Journal of Public Health Brief Article

e. Paper 1: Facilitators, Challenges, and Barriers: The Accreditation Experience of Small Local Health Departments

Introduction

National accreditation by the Public Health Accreditation Board (PHAB) is a mechanism for assuring health departments (HDs) of all sizes are delivering quality essential public health services to those within their jurisdiction. However, small local HDs (LHDs) - departments serving populations of 50,000 or less and often afflicted with higher risk for poor health outcomes - are largely underrepresented among nationally accredited HDs. Sixty percent of all LHDs in the US are categorized as small, yet only about 2% of these are accredited, signifying a gap in uptake of PHAB accreditation among these LHDs.[1,2]

While most HDs experience real and perceived challenges and barriers to accreditation, these appear to be intensified for small LHDs due to factors like lower funding, staff turnover and capacity, and competing priorities.[3,4,5,6] Studies have also found small LHDs report additional functional and operational challenges and barriers, that they may serve different public health roles within their communities, and they are often addressing different community needs as compared with larger LHDs.[3,9] Therefore, finding ways to increase uptake of accreditation to assure quality and breadth of public health services may very well help these communities overcome equity issues that have long prevented better health.

Even with the odds against them, there are 41 small LHDs that have achieved accreditation as of November 2020.[2] This study identified common challenges, barriers, and facilitators of accreditation among a subset of PHAB accredited small LHDs using an exploratory design with qualitative methods.

Methods

Semi-structured interviews were conducted to identify and describe common challenges, barriers, and facilitators to small LHD accreditation. Participants LHDs were randomly selected from a group of LHDs meeting the following inclusion criteria: (1) identified as an LHD in PHAB's dataset, (2) not located in Ohio because of a legislative mandate requiring LHD accreditation, (3) serves a population of 50,000 or less, and (4) became accredited between 2016 and 2019. This criterion was established as a strategy to reduce recall bias. Interviews were conducted via telephone, recorded with participant permission, and later transcribed. Codes were applied to each interview transcript within MaxQDA and 10% of interviews were validated with a second coder. Pattern matching analysis was conducted within and across cases and findings were determined based on code frequency across cases.[10]

Findings

Eleven interviews with a total of 22 directors, staff, and Accreditation Coordinators representing 8 accredited small LHDs were conducted. Participants represented LHDs from 6 decentralized states and jurisdiction size ranged in population from under 10,000 to just over 46,000. A summary of facilitators, challenges, and barriers to accreditation among these accredited small LHDs is provided below.

Factors Facilitating National Accreditation

Small LHDs described facilitators for pursuing national accreditation. Themes and example interview quotes are summarized in Table 1. The most common facilitators were leadership motivation and commitment, accreditation readiness, access to resources, support of the governing entity, perceptions about accreditation becoming mandatory, influence of the state health department (SHD), and competition among LHDs to become accredited.

The most influential facilitator was the role of **leadership** in pursuing accreditation. Motivation to pursue accreditation often came from the director and for most small LHDs the director played a substantive role in helping cultivate and nurture a culture of learning, improvement, and ongoing staff engagement. Leadership in this process was not limited to the director in most cases. Rather, many LHDs also had an 'Accreditation Champion' that provided additional leadership for accreditation.

Elements of **accreditation readiness** were common among participants, and most often referred to 'front loading' the process with documentation development and/or LHD leadership participation in accreditation readiness capacity building efforts at the state or national level. The 'front loading' process was consistently described as developing major plans and conducting self-assessments or gap analyses to determine documentation availability for accreditation measures. Leadership involvement in capacity building efforts at the state and national level included director participation in committees, trainings, or initiatives sponsored by state or national partners like the SHD for improving competency relevant to accreditation, like quality improvement and performance management.

Access to resources, specifically funding support, was cited by nearly all small LHDs and appeared to come through a variety of sources. For example, in some cases the governing entity supported flexible use of local tax dollars to pay for accreditation fees while others relied on external funding sources. Most external funding came through state-supported accreditation readiness efforts like mini grants, though at least one LHD was permitted to reallocate excess preparedness funding for accreditation fees. Non-monetary resources included SHD consultants and local partners, like academia, who provided training and/or filled specific gaps in LHD capacity like data collection and analysis.

External forces influencing small LHDs accreditation were also discussed. For some, concerns about accreditation becoming mandatory and a desire to 'be ready' was influential. For others, expressed value of accreditation by SHDs and/or competition among LHDs pressed some to pursue accreditation. For example, the SHD making a 'big deal' about being accredited and giving special recognition to accredited LHDs was a facilitator, while others were inspired by peer LHDs working on accreditation or becoming accredited. Some LHD leaders expressed desire to be the first accredited in their state, but this did not appear to be the primary driver.

Challenges and Barriers to Accreditation

Small LHDs described issues encountered at various stages of the accreditation process, especially before applying and during documentation selection. Table 1 summarizes themes and illustrative quotes pertaining to challenges and barriers reported by small LHDs.

Community influences, like politics and competition for resources affected small LHDs' accreditation experience. For example, one LHD described challenges overcoming the governing entity's efforts to reduce overall government spending which posed a threat to LHD leadership's need for additional investment to realize the vision of improving organizational performance through accreditation. Another small LHD discussed how accreditation highlighted opportunities for improvement but found it difficult to address them because of their inability to compete against larger jurisdictions for additional funding.

Small LHDs also discussed how **peer pressure** affected perceptions of accreditation among LHDs at the macro level. For example, one small LHD expressed concerns about their agency's ability to be successful in the accreditation process due to observations and stories of challenges experienced by larger, more well-resourced LHDs.

Many small LHDs expressed **staff capacity** as a challenge when going through accreditation. Some experienced issues allocating staff time necessary for developing and implementing accreditation-related activities they weren't formerly doing, like quality improvement, because staff were already stretched beyond capacity. Others discussed how small staff size and organizational structure made it difficult to organize and implement accreditation-related processes, especially during documentation submission.

Costs associated with accreditation were noted by LHDs as a challenge, especially direct costs, like PHAB application fees. However, one LHD director expanded on this issue, noting financial challenges with accreditation are bigger than fees and staffing costs. Rather, these issues are a consequence of chronic underfunding of public health across the country which has negatively impacted capacity of LHDs to deliver the breadth of programs and services necessary for achieving accreditation.

Staff buy-in for accreditation was and continues to be a challenge for some small LHDs. While some have overcome this to successfully engage staff, the issue has persisted for other LHDs, particularly with staff turnover. This challenge relates to issues with staff knowledge and understanding about accreditation and public health more broadly.

Another commonly reported issue among participants related to **required documentation**. LHDs expressed frustration about not having enough examples, inadequate documentation, and struggles in telling their LHD's story for certain measures. This was especially true for program and services areas for which the LHDs rely on partners or the SHD to provide in their jurisdiction. Many LHDs also reported how they had to 'decipher' and 'translate' the PHAB requirements to help staff understand them. This required a lot of additional time, effort, and some LHDs were still left wondering if they were providing the 'right' documents.

Table 1. Qualitative Themes and Example Quotes

Theme		Subthemes and Example Quotes
Facilitators	**Leadership Motivation and Commitment**	*Leadership Motivation and Commitment* appeared important in LHDs getting started with accreditation but remained a critical piece of nurturing a culture of learning and improvement and ongoing staff engagement. "*I had a professional and personal stake when it comes to making sure that we got it right and that I will be able to lead our public health agency to stronger and better days… I think for last 10 years, most folks would have said that I had been drinking the 'Kool Aid' as quickly as I can… I have learned and know that when it comes to the fact that if we do not work on prevention and have a longer-term vision of what we are trying to do with the health of our community, and the people we serve, we're really going backwards… It just makes sense for us to have something [accreditation] as a roadmap to ensure that I'm able to guide and push us through…and as long as I'm over here, we're going to continue to lead because this just seems like good organizational practice. And, when it comes to focusing on our mission, which is to improve the health of individuals, families, and communities, it gives us great tools to try to do that work.*" [Case 2] "*I wanted us to be important and valued and what we do here to be understood and valued and I think this [accreditation] has done this for us. Whether people really get that or not, the people who do understand that what we do has value."* [Case 5]
	Accreditation Readiness	*Accreditation Readiness*, either through early and frequent engagement of LHDs in state and national efforts to build knowledge, skills, and capacity in accreditation-related areas like QI and PM or through intentional 'front loading' of the process to assure major elements were in place before applying. "*...And a lot of the stuff we had in place before accreditation, like strategic planning and community assessment. We did that a long time ago. And it was because we had different grants. Those things were in place over. I think we had those in place probably 10 years before accreditation."* [Case 4]
	Access to Resources	*Availability and access to funding and/or non-monetary support* for completing major plans, offsetting cost of initial accreditation fees or paying the salary of an Accreditation Coordinator, and/or access to technical assistance or expertise. *"…we had funding that came through Ebola, that we were told we could spend on anything we wanted to, and we used that money to pay for our fees and used that money to pay for our accreditation specialist ... So, we just did it*." [Case 5]
	External Forces	*Support of and trust by the governing entity* in the LHD's desire to pursue accreditation. *"…and I think you know, they [the Board] think highly of all our staff and what we do here, they do. They really support pretty much anything we do, because they know that we are putting research into it or, you know, basing it on sound reasons, and not just because we feel it's the right thing to do…"* [Case 8]
		Perceptions about accreditation becoming mandatory in the future and the LHD being proactive about that anticipated future requirement. *"And there was some discussion about whether or not accreditation was going to be required. So, we felt like if it was going to be required, we could get some help to achieve that then definitely."* [Case 5] *""I think one of the - I'll be really honest - one of the things was that we thought that you wouldn't be eligible for federal funding if you didn't get accredited as things move forward...That historically is how things have worked for hospitals and other systems that became accredited. And so, we just didn't want to get pushed to get accredited to be able to get federal funding…"* [Case 6]

Theme		Subthemes and Example Quotes
		Influence of state health departments' expressed value and commitment to accreditation among LHDs in their state. *"And actually [our state] spent, actually a couple of years digging into, what could this mean, why would we do that? How could we do it? How could we help other counties they hired a consultant to really look at a lot of that stuff."* [Case 3]
		Competition among LHDs to become accredited, either because they wanted to be 'the first', they didn't want to be 'left behind', or they wanted to prove they were 'just as good' as their neighboring LHDs and/or larger LHDs in their state. *"I know my boss, who's our, like, Organization Development Manager, she asked to do it for a couple years and he [the Director] was resistant, and then he's extremely competitive and one other department got it [accredited] and they're like, 'Okay, we got to be the second, we got to be the second, we're gonna do this' and they just kind of jumped."* [Case 7]
Challenges and Barriers	***Community Influences***	*Community influences*, like major events or incidents, politics, and competition against larger jurisdictions for resources. *"... You know, when we are looking for grants, we do have people who have the same issues as anywhere else. But once again, it might be 200 versus 200,000. And so the ones that are giving grants want to get their biggest bang for their buck, and they'll often overlook us because they'll say they don't, you know - we use our data the best we can to prove that we have an issue and sometimes we are fortunate to be the ones picked and then there's times where we almost don't even bother to take the time because we know we're fighting against [larger metro areas]… but there are a lot of people that think those two places get everything because they're bigger, have more, you know, resources and stuff so, so resources and population and then asking for resources, we will many times fail just because we don't have you know, we have issues but if we go along with it, one of the other things that we came up with..."* [Case 3]
	Peer Pressure and Misperceptions	*Peer Pressure and misperceptions about small LHD's inability to overcome accreditation-related challenges* experienced by other small LHDs, as well as the challenges they have observed larger LHDs encounter. *"…a lot of our smaller public health departments, when they saw the struggles that larger health departments were having with it, they were like, 'okay, y'all, if you guys can't do it, then why would we even try? Like, what is the point? You know, like?' So, I think if anything that probably kind of made a negative thing towards some of them, I think in a certain way, like, even if, if theoretically, they understand, 'oh, yeah, it's great to be accredited.' But when you think about it, and you are like, we do not have the capacity. So, if anything is almost like, oh, just another way of separating the big Metro from us rural communities, which is a real thing."* [Case 2]
	Staff Capacity	*Staff capacity* for reallocating staff time to accreditation, small number of FTE and the organizational structure of small LHDs. *"I think the size of our department, I mean, just the, when I say the size of our department is the employees, I mean, we don't have, like, our supervisors are also not, I mean... we're not like multi-level the way that a bigger department would be and so our, our, um, you know, the people who would be classified as supervisors also have, they don't just supervise staff, they're also doing all of the technical work as well in addition to supervising you know, X number of staff people. And so, we're when we say we're all doing it, like we're literally every single one of us is doing all the pieces...So the smaller the department, the harder it is, I would say."* [Case 4]

Theme		Subthemes and Example Quotes
	Cost	*Cost* of accreditation, both direct (accreditation fees) and indirect. "*Well, it would be - it's [accreditation] quite expensive - and so that expense getting accredited would be a burden on small health departments, which have been I mean, underfunded, probably across the nation, but certainly within [our state]. So, I think that's a barrier and then it's not just a fee, but the fact that we're underfunded we don't have capacity…*" [Case 2]
	Staff Buy-in and Knowledge	*Staff buy-in, knowledge and understanding* of accreditation and public health. *"I didn't know anything about it because I was brand new. Like, when I first figured out about PHAB it was my like, research for my job interview… I mean, they [the LHD] kept hearing about it. I think there's probably some, like discussion at conferences and different presentations about it. Just kind of that dull roar, the larger health department's talking about doing it. And a lot of word of mouth, I think."* [Case 7]
	Documentation	*Documentation Challenges*, especially having enough examples for certain measures, challenges with PHAB's scope of authority and limits that puts on acceptable documentation and being able to effectively document activities for measures the LHD is not responsible for implementing, or for which they have shared responsibility with other entities, such as the state health department. *"…if PHAB in general could like loosen the requirements just a little and realize that like some of the things that are done in like WIC and maternal child health are population health. They might look a little bit different, but they're serving the population in just the same way as a lot of our other population health services. I feel like we tried to put a population health spin on some of our documents and they got thrown out just because they were in a WIC program, even though we felt like they were population health."* [Case 1] *"…there's a lot of confusion about what was expected. That wasn't as clear, you know, trying to [understand] the wording, that kind of stuff… so it's like, could I go back to the beginning of accreditation and have much more confidence and say, 'Hey, guys, you hired me because I did accreditation for somebody else. I know it all. Let's just get this going. And I'll get it all worked out really well for you.' So that's the only thing I could think of is if I knew all those things and could go back to the beginning it would be much easier, much faster..."* [Case 3]

Implications for Policy and Practice

- Adequate, flexible, and consistent funding – as recommended in Public Health 3.0[8] - for LHDs of all sizes and geographies for the provision of core programs and services, including dollars for infrastructure building could facilitate greater uptake and engagement of small LHDs in performance improvement efforts, as well as in their pursuit of national accreditation.
- Workforce challenges experienced by small LHDs that make pursuit of accreditation more difficult pertain to current staff knowledge about public health and difficulties recruiting new employees. Strategies to address both are needed.

- There is an opportunity for state health departments to play a more direct role in supporting small LHDs in their pursuit of accreditation, particularly with documentation for service areas in which the state has authority or shares authority with the LHDs. This could alleviate some documentation challenges expressed by small LHDs and help facilitate broader engagement in accreditation, strengthen relationships between the state and LHDs and improve public health infrastructure within states.
- Taking the time to build organizational readiness before applying for PHAB accreditation appeared to be a key to success for small LHDs that have become accredited.

Discussion and Conclusion

While many of the challenges, barriers and facilitators discussed in this study coincide with those reported among accredited LHDs of all sizes, there do appear to be nuances affecting LHDs serving small jurisdictions differently.[9] For example, when considering resource challenges, small LHDs are under resourced but also at a disadvantage when seeking additional resources. This is partially because they are competing against larger jurisdictions for the same funding opportunities. Assuring adequate, flexible, and consistent funding for LHDs of all sizes and geographies like suggested in Public Health 3.0 or designing funding opportunities specific to small jurisdictions, may incentivize smaller LHDs to work toward accreditation.[8]

PHAB accreditation is grounded in the Essential Public Health Services (EPHS), but only 14% of the US public health workforce has formal training in public health.[11] In this study, small LHDs discussed staff knowledge about public health and accreditation as a contributing challenge to staff buy-in for accreditation. Other research has shown small LHDs have a harder time recruiting and retaining staff with formal public health training.[1,6] There is a workforce development opportunity to train members of the current small LHD workforce in the EPHS,

while also finding ways to incentivize graduates of public health training programs to work for small LHDs.

Another major challenge for small LHDs in this study related to documenting conformity with certain accreditation measure requirements, particularly in program areas for which they have shared authority or rely on other agencies to implement. This has not been documented as an overarching challenge for larger LHDs. Small LHDs indicated readily available documentation from their SHD to address documentation gaps could be helpful in overcoming some of these challenges. Providing documentation support could be a low effort and low-cost opportunity for SHDs to play a more direct role in supporting accreditation among LHDs in their state.

Many facilitators noted in this study align with those previously reported among accredited LHDs of all sizes.[9] However, some appear more influential among small LHDs. These include availability and access to resources to support or offset direct and indirect accreditation costs, the SHD's involvement in supporting LHD accreditation efforts, and organizational readiness to engage in accreditation.

The accreditation experience of small LHDs offers a unique perspective on lessons learned and what matters most when pursuing accreditation. Finding ways to assure facilitators while providing resources and support necessary for overcoming barriers and challenges will be important in facilitating accreditation among small LHDs across the US.

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f. Paper 2: A blueprint for achieving and maintaining accreditation: Organizational readiness factors and common process steps followed by accredited small health departments

Introduction

National accreditation for governmental public health agencies via the Public Health Accreditation Board (PHAB) was established in 2011 with a set of practice-based standards and measures intended for universal applicability. However, concerns have been raised over the years about the ability of some health departments (HDs) to demonstrate conformity with select PHAB measures. For example, 28% of PHAB applicants have indicated difficulty demonstrating conformity, while 12% have noted some measures are not applicable to their HD.[1] Since only 2% of all PHAB accredited HDs serve jurisdictions of less than 50,000 people, it can be surmised these challenges are especially relevant among applicants representing these communities.[2]

Organizational readiness, though complex and multifaceted, is a key ingredient for change.[3] The PHAB accreditation process can facilitate a myriad of organizational changes partly because of the in-depth self-assessment of strengths and opportunities related to conformity with the PHAB Standards and Measures. As a result, HDs implement new or enhance existing policies and practices to assure they are in conformity, though this can lead to broader organizational changes in the way they 'do business.' One challenge in this is ensuring HDs are ready at the outset of their accreditation process for organizational changes that will need to occur for achievement of accreditation.[4,5] Another is the supports necessary for sustaining these changes are available to these HDs in the long-term.

To aid in assessing and supporting readiness, PHAB provides a suite of guidance materials for current and future applicant HDs. Some key resources include readiness checklists, a handbook for the Accreditation Coordinator to aid with organizing the process for their department, a web-based education portal, attendance at a required Applicant Training, access to an Accreditation Specialist at PHAB, and various other topic-specific tip sheets and guides.[6,7,8] Beyond official PHAB resources, national and state partner organizations, state and regional learning communities, and less formal partnerships among peer HDs provide additional avenues for accessing more targeted guidance and support for HDs working toward accreditation. However, because such a small proportion of accredited HDs represent small jurisdictions, most of the lessons-learned and experiences available to the field are those shared by larger, more well-resourced HDs. Therefore, it is likely these resources are not always as helpful to small HDs and there are far fewer options for peer mentors from accredited small HDs to support other small HD applicants.

This study used qualitative methods to retrospectively explore elements of organizational readiness and common process steps used by accredited small HDs to organize and conduct their initial accreditation process. The intention in collecting and reporting this information is twofold. First, to identify readiness elements and practices that worked for accredited small HDs and second, to distill this information into a blueprint for guiding efforts of other small HDs interested in pursuing accreditation.

Methods

Semi-structured interviews were used to identify and describe common inputs used and actions taken by 8 accredited small HDs during their initial accreditation processes. Participants were randomly selected from LHDs meeting the following criteria: (1) identified as a small local

HD in PHAB's dataset, (2) were not located in Ohio, and (3) were accredited by PHAB between 2016 and 2019. Small was defined as serving a population of 50,000 or less. Small HDs in Ohio were excluded because of the legislative mandate for accreditation in that state, and HDs accredited before 2016 were omitted to limit recall bias among participants. Interviews were conducted via telephone, recorded with participant permission, and later transcribed for review, coding, and analysis. Codes were applied to each interview transcript within MaxQDA, with 10% validated by a second coder. Subthemes were identified and pattern matching analysis was done within and across cases and findings were determined based on code frequency across cases.[11]

Results

Interviews with 22 HD leaders, staff, and Accreditation Coordinators representing 8 accredited small LHDs were conducted. HDs operated in 6 decentralized states and served jurisdictions ranging in size from under 10,000 to just under 46,000. Results are organized in two sections – organizational readiness factors and common process steps. Within the common process steps section, findings specific to each step of the accreditation process as defined in this study – pre-application, documentation selection and submission, site visit preparation, and maintaining accreditation - are described.

Organizational Readiness Factors

Organizational readiness factors preceding or influencing LHD accreditation processes were identified and are detailed in Table 1. The most discussed factors were internal, such as staff and leadership working knowledge of accreditation; buy-in and support from the governing entity, staff, and community; dedicated resources; accreditation groundwork; leadership; and organizational culture. However, some LHDs did describe notable external factors they had little

ability to control or change. These impacted their accreditation process substantially and included factors like pressure or encouragement from the state health department (SHD), time-sensitive external resource availability, and political influences. Each LHD reported being influenced by at least five organizational readiness factors described in Table 1.

Common Process Steps

Each LHD named and described major steps and practices used during their initial accreditation process. While PHAB's initial accreditation is formally defined as a seven-step process[3], the findings from this study were grouped into four steps – (1) pre-application, (2) documentation selection and submission, (3) site visit preparation, and (4) maintaining accreditation status. For most LHDs, the pre-application work in which they engaged prior to applying for accreditation intentionally occurred over a timeline of at least 12 months, but for most it was longer.

1. Pre-Application

In this study the pre-application step included all accreditation-related activities small LHDs engaged in prior to attending PHAB's Applicant Training. Seven common activities were identified as important to pre-application efforts. Table 2 shows frequency of each activity across cases and provides example quotations. While some LHDs did not specifically report use of some activities in Table 2, it is important to note this does not explicitly mean that activity did not apply to their experience. Rather, it may be that the topic was not specifically discussed during the interview. Activities most often described included the LHD's completion of a readiness assessment, gap analysis, translating PHAB measure requirements, efforts to train and engage staff, completing some or all major plans and processes before going to PHAB Applicant Training, and securing resources necessary for accreditation.

Readiness Assessment. Readiness assessment and gap analysis were differentiated in the analysis because 'readiness assessment' generally referred specifically to use of PHAB's Readiness Checklist tool. While most small LHDs used this tool, there were mixed reviews about its utility and accuracy in assessing readiness for accreditation. As noted in Table 2, some LHDs noted results of their Readiness Checklist gave them a 'false sense' of preparedness as they embarked on their accreditation journey. For example, one LHD described how they said 'yes' to having a community health assessment (CHA) and improvement plan (CHIP) because they had gone through several cycles to address state-level requirements. However, when gathering documentation and assessing it against PHAB requirements, they found their CHA and CHIP did not address all requirements. This suggested they weren't as ready as previously thought.

Gap Analysis. The gap analyses used by small LHDs in this study were more in-depth self-assessments against PHAB requirements. All but one LHD reported a gap analysis and completed it before deciding to apply for accreditation. Sometimes results helped determine whether more preparation time was needed. The gap analyses provided greater insight on measure conformity because LHDs were gathering and assessing documents against measure requirements rather than saying 'yes' or 'no' to items on a list.

Translating Measure Requirements. Several LHDs discussed how staff expended substantial time and effort in translating PHAB measure requirements into more plain language so staff could better understand what was required and how to present or 'package' it. LHDs noted concerns about PHAB terminology, applicability of some measures to the LHD's specific context, and determining what documentation was needed from partners outside the department, like the SHD, to document assurance of public health activities not directly provided by the LHD. These were challenges encountered and that needed to be overcome throughout the

accreditation process, but especially during preparation and documentation selection and submission steps.

Staff Training/Engagement. Building readiness for accreditation required targeted efforts to train and engage staff in what accreditation is and the importance of it to the LHD. More than half of LHDs reported this was an important element of their pre-application activities. Some efforts included formal education and training, while others focused on motivation and incentives for engagement and rewards for progress. For example, one LHD held learning sessions with staff about major plans, how they related to each other, and the application of these plans to their department. A few others found publicly posting progress trackers and friendly competition among staff to be effective staff engagement methods.

Some or All Major Plans Complete. All LHDs confirmed some or all major plans were complete before going to PHAB Applicant Training. Some were well-positioned because of state-level requirements for LHDs to complete a subset of plans, like a strategic plan, CHA, and CHIP. Other LHDs intentionally 'front-loaded' to assure these elements were ready. This action was often based on feedback from peers and/or self-recognition this would reduce burden in developing these later. Though not unique to small LHDs, the practice of front-loading the accreditation process appeared to be especially important for these departments.

Securing Resources. Almost all LHDs specifically discussed how they secured resources necessary to move forward. In most cases, this referred to the financial resources for paying initial accreditation fees. A smaller subset of LHDs referenced importance of securing non-monetary resources to support their accreditation activities. For some this meant hiring new staff or allocating existing staff time to serve in the Accreditation Coordinator role. Others had interns, volunteers, or temporary staff or contractors available for support. While financial

resources are important for LHDs of all sizes, non-financial resources appeared to be quite impactful among small LHDs.

2. Documentation Submission and Selection

Though many LHDs begin the process of documentation selection and submission earlier, this step formally begins after LHDs attend PHAB's Applicant Training. It is at this point they gain access to e-PHAB, PHAB's electronic documentation management system. Actions taken by LHDs to complete this step were consistent across cases in this study and included hiring or appointing an Accreditation Coordinator, organizing human resources, brainstorming and gathering initial documents, organizing documents and tracking progress, filling documentation gaps, and document preparation. These actions and their general chronology are delineated in Figure 1. Key themes in documentation selection and submission for initial accreditation are also summarized with example quotations from interviews in Table 3. One unexpected finding was low use of the commonly used organizational structure for accreditation among small LHDs – Domain Teams.

Hiring or Appointing an Accreditation Coordinator. The role of Accreditation Coordinator was particularly important in this step of accreditation. In at least two cases, the LHD specifically hired a new position to serve as Accreditation Coordinator with a longer-term plan for the position to have expanded responsibilities. This was one unique way some small LHDs were able to secure additional human resources. Many expressed an inability to hire a full-time accreditation-only position.

For LHDs unable to hire a new position, most assigned a non-support staff employee as the Accreditation Coordinator. Though PHAB requires one person to be formally designated for this role, nearly all LHDs used a collaborative, team-based approach to Accreditation

Coordinator responsibilities. While larger LHDs often engage many staff in the accreditation process through Domain Teams, the team-based approach to the Accreditation Coordinator role appears to be unique to small LHDs. In some cases, this included support of interns, AmeriCorps VISTAs, or temporary employees or contractors.

Organizing Human Resources. While often a common strategy among larger LHDs to organize and delegate accreditation-related work, few small LHDs reported establishing Domain Teams. Rather, most organized around leadership of the Accreditation Coordinator and/or LHD Director. They used varying organizational structures supported by existing management and/or staff teams to initiate and progress through later steps of the accreditation process. In most cases, there was an expectation that all staff would have a role in the small LHD's accreditation.

Brainstorming and Gathering Initial Documents. While brainstorming and initial efforts to gather documents may have started in the preparation step, it became more urgent and formal after staff went to PHAB Applicant Training. Approaches to how this was accomplished differed. For example, some LHDs started with Domains for which they knew stronger documentation existed, while others started with Domains and measures pertaining to the major plans because they had worked to complete these before applying. Additionally, some small LHDs described reliance on other agencies for documentation. For example, some must coordinate with SHD staff to identify and collect documentation for activities the LHD itself does not perform, such as those addressed in Domains 2 (investigation) and 6 (enforcement). Therefore, documentation of these PHAB requirements had to be gathered from SHDs or other agencies responsible for performing these actions on behalf of small LHDs, which was challenging at times.

Organizing Documents and Tracking Progress. Most LHDs used internal file systems and spreadsheets to organize information, track progress, and further identify gaps in existing documentation. One small LHD specifically talked about how they started out using e-PHAB to manage their documents but found that an inefficient strategy. Using e-PHAB before documentation was finalized for submission was not conducive to the uploading, removing, and reuploading of documents required. Rather, most relied on low or no-cost tools like internal folder systems and spreadsheets to manage their accreditation progress.

Filling Documentation Gaps. As documentation was gathered, LHDs generally used their own staff to assess what had been gathered against PHAB requirements. When gaps were identified, staff were assigned to develop or locate requisite documentation. Most were able to assign staff with a specific interest or subject-matter expertise to fulfill this task.

Document Preparation. When gathered documentation was determined to address PHAB requirements, evidence was prepared for upload to e-PHAB. Preparation of documents included highlighting relevant pieces of information and preparing coversheets and/or narratives to accompany the documents. While now a requirement for all applicants, many small LHDs were using coversheets as an element of documentation preparation before it was required. Another important element of documentation preparation was double-checking documents for appropriateness and completeness before it was submitted to PHAB. Most small LHDs did this internally, but some were able to engage peers or their SHD to do this type of review.

3. Site Visit Preparation

Most LHDs engaged in a mock site visit to prepare for their site visit, though the entity providing the mock site visit varied. Some LHDs relied on accredited or in-process peer LHDs that, while others had access to staff from state HDs or state regional office staff. These visits

included either document reviews, mock interviews, or a combination of both with feedback. The LHDs that did not engage in mock site visits engaged staff and stakeholders in different ways to prepare them for the site visit. For example, one Accreditation Coordinator explained how their LHD acknowledged gaps, identified anticipated questions pertaining to those gaps, and made sure staff were prepared to speak about the LHD's ongoing efforts to address those gaps.

4. Maintaining Accreditation Status

After becoming accredited, LHDs have continued to focus on improvement and addressing gaps in performance. Themes across cases in maintaining accreditation status are summarized with example quotations in Table 4. Broadly, these included addressing Action Plan requirements; completing PHAB Annual Reports; beginning to prepare to reaccreditation; review, revision, and updates to major plans and associated processes; and ongoing staff development and engagement in accreditation-related work.

Addressing Action Plan Requirements. Among small LHDs in this study, five were required to complete an Action Plan before achieving accreditation. Continued effort in specific areas included in their action plan was their first step in continued improvement.

PHAB Annual Reports. After becoming accredited, small LHDs continued to address deficiencies identified through site visit reports or through ongoing internal improvement efforts. Some accreditation measures, depending on score in the site visit report, require specific updates by LHDs in Section I of the PHAB Annual Report until they have been sufficiently addressed. For example, one small LHD discussed their initial challenges in addressing measures in Domain 7. The PHAB Annual Report requirements helped ensure focus on that deficiency and the LHD persevered to strengthen their performance in assessing and assuring access to healthcare services in their jurisdiction.

Preparing for Reaccreditation. At least one small LHD mentioned they were beginning to prepare for reaccreditation by reviewing requirements and thinking about what they will need to do in the future. Along with this, the LHD highlighted concerns about maintaining accreditation, recognizing the work that went into initial accreditation must minimally be maintained, but that those efforts will likely evolve and require substantial ongoing attention and resources.

Review, Revision, and Updates to Major Plans and Associated Processes. Some LHDs were deliberate in integrating their accreditation-related efforts and improvements into agency operations via their initial accreditation work, while others have used the time after their initial decision to update, improve and continue their work toward integration.

Ongoing Staff Development and Engagement. Small LHDs expressed the importance of ongoing staff development and engagement in accreditation-related work. This applied to existing staff to ensure forward progress on performance improvement was not stalled but was especially important for LHDs where staff turnover was evident. The burden of bringing new staff up to speed on the LHD's accreditation, particularly related to major plans established through the process, was discussed.

Tables

Table 1. Qualitative Organizational Readiness Themes and Example Quotes

Themes		Subthemes and Example Quotes
Internal	**Working Knowledge**	**Accreditation Coordinator with knowledge of or previous experience with accreditation.** "I feel like I came in with a fairly good idea of like, the process in general, and like the core documents because I was working in health promotion, so you know, you kind of are touching on some of those larger documents, and I had a background in QI…" [Case 1] **Health Department Director engagement in learning and accreditation capacity building for the department (such as about accreditation, QI/PM)** "I think it probably took about at least two or three years with different activities we did when it comes to trying to prepare us to learn more about it [accreditation] to know that this was the right track, this is the right roadmap. These are the tools that we'll need now and, in the future, from my perspective, when it comes to moving forward…" [Case 2]

Themes		Subthemes and Example Quotes
		"...we were part of the Turning Point for Robert Wood Johnson Foundation. Turning Point project goes way back, but honestly being a part of that kind of help set our foundation, I think that was critical to getting us the foundation to move forward. I learned so much from that. And the performance management system was created [using] Turning Point. And so, we were a part of all of that. So that was a huge, huge piece. Then we were part of the Multi-State Learning Collaborative, so a lot of quality improvement, training..." [Case 4]
	Buy-in and Support	**Buy-in and support from the governing entity.** "..."...we did have the buy in from our Commissioners, and then also our Board of Health. And our partners were very supportive in the whole thing. Whether they really, truly understood it or not, you know, it's beside the point. They were supportive that we were going to be going after this status. So that was helpful." [Case 4] "…our Board was behind us and supportive, but they had no idea what they were getting themselves into when they said, 'Okay.' We rely on them to really, although our Board's been very supportive, we were going to ask them to be very engaged. They weren't opposed to it they just weren't sure how to help." [Case 5] **Buy-in and support from staff.** "I think that as a part of a small health department you kind of get used to being a little bit of a 'jack of all trades.' And so, I think people are willing to pitch in outside of their comfort zone and do some of this work that may have been unfamiliar to them just because they've done it in the past as part of a staff member for a rural health department." [Case 1] "…as much time as I spent on my own on PHAB, you can't have someone and not have those domain leads. You know, you need to spread it out, you need to have everyone involved. Otherwise, it's just not cohesive within the department." [Case 7] **Buy-in and support from the community.** "So, I think that's one thing that sets us apart from even other small rural communities, we have great leadership and stakeholders. Even though the health department is behind the accreditation process, we wouldn't have been able to do it without all our other partners and the buy in from them." [Case 5]
	Dedicated Resources	**Staff time allocated specifically for the Accreditation Coordinator role.** "I'd say those two or three years of preparing and the site visit, she [the Accreditation Coordinator] was increased each time as she went along, but I think she was a good 50% [FTE] for the last year and a half to two years of time." [Case 3] "Hiring me was a big step. I haven't heard of many health departments actually hiring a full FTE to coordinate PHAB, and I think that is a huge factor in our success. Just, you know, I mean, the different teams juggled alongside their normal work, but I was 100% in PHAB until the day we submitted." [Case 7]
	Groundwork	**State-level requirements or opportunity for earlier efforts toward subset of major plans (like CHA, CHIP, strategic plans).** "...we were doing health assessments, strategic planning, health improvement planning well before PHAB came along. And so, um, we had those processes sort of under our belts already and I would say that accreditation sort of fine-tuned those." [Case 4] "We were able to do that [the CHIP] with our [state organization], which is kind of how [state] did health reform, and we had an opportunity to work with them to do the community health assessment and community health improvement plan. So, I think that was the timing was good and it was helpful…" [Case 6] **Foresight to complete most plans before applying.** "We really took additional time to make sure we had plans in place because we had heard feedback from other departments that they had kind of jumped in and needed to write a lot of plans at the last minute. So, we tried to get a lot of the bigger stuff done… when we were doing those plans, before we applied [the Accreditation Coordinator] and others were studying the

Themes		Subthemes and Example Quotes
		public health accreditation standards, even when we were not required, and we tried to follow that format so we would be in a better position when we actually applied." [Case 2] "I know that my boss used the PHAB guidelines for a year or two before we achieved accreditation just to form those plans…she used a lot of that framework just to make sure they were hitting all the checkmarks that we were going to need once we went for accreditation…she had been kind of preparing for this journey which, without that we would have just been drowning. So, I think she put a lot of footwork into getting us ready, whether she had the approval or not to get accredited she was preparing for when that time came. That helped." [Case 7]
	Leadership	**Leadership vision for accreditation.** "We've had leadership support from the beginning, and I think that that's probably crucial… She sees these as important things that she wants for our department. She has a lot of vision." [Case 2] "...our former administrator was very forward thinking. And she operated a lot more as a business model than a typical public health model in our department... and she has always been encouraging of, you know, learning and growth and improvement and focusing on the impact and I think a lot of the stuff in the accreditation standards is focusing on your impact." [Case 4] **Accreditation champion, sometimes the health department director, sometimes another staff member.** "I'll give credit to the person who's gone [the Accreditation Coordinator], that she did a better job. She kept saying, 'we can do this, we can do this, it doesn't matter that we're small, we can do this.' So, she made the charge to get going." [Case 3] "I think it's really important to have one, at least one person who's the champion and who can at least be documenting everything and pushing the button, all of that. I mean, I think you definitely need somebody to be on top of that, and I also think of equal importance is having support from staff and leadership for that role." [Case 6] "…she had been kind of preparing for this journey, which, without that we would have just been drowning. So, I think she put a lot of footwork into getting us ready, whether she had the approval or not to get accredited she was preparing for when that time came. That helped." [Case 7]
	Organizational Culture	**Organizational characteristics.** "…we are so much more nimble than larger health departments. I think just having a smaller department, we can make those decisions quickly, our communication tree is a lot shorter, our approval processes are shorter. I think our Board of Commissioners has a lot of trust in our department that we've built over the years. So those are all huge advantages… smaller health departments have less bureaucracy." [Case 1] "One thing that we discussed that we've seen through this process is that a lot of us are from this town, so our collaboration is amazing and it's a little more informal. We have that rapport already built with a lot of these other organizations and we're also able to just kind of pick up the phone and help each other out. So, I think that's one thing that sets us apart from even other small rural communities, we have great leadership and stakeholders." [Case 5] **Culture of learning, growth, and continuous improvement.** "I think I think it's a good educational tool for our staff. For some of us more senior people, staff a lot of this stuff was new to us and we came more from the homecare side of things and it's, I don't know how to describe it, but it's just very different than the way I was brought up in public health. I have heard other directors of my age say the same thing, and of course we have bought into it, so it taught us a lot. And it is teaching our staff, especially those who don't have the public health background - we have a lot of people that have little to no knowledge of what public health is. And so, it has given us the opportunity to really educate our staff on what public health is." [Case 2]

Themes		Subthemes and Example Quotes
		"...as the director of the health department, you just have to really educate yourself. Don't wait for somebody else to come and give you a checklist that will be the magic recipe. I really think the administrator or director have, this has to be something they really want, and they have to be able to get out there and engage and learn themselves." [Case 4] "I think there was there was so much work we did; I think just the educating of staff and our governing body about what it was and why it was relevant and then changing our practices. I mean, we spent a lot of time changing our practices to fit the accreditation standards. I would say that we, we weren't already there and just had documents to submit. We really worked to change our practices to meet the standards, and then move forward from there. I think that really is how it, it looked to me is like, this is the way we need to be doing it as a public health department. So, you know, let's, let's change how we work, and then we can apply. And so that's kind of the way I've always I've looked at it." [Case 6]
External		**Political influences** "...we're surrounded by a lot of counties that have a totally different view of public health. You know, when you compete with that, it's really hard to show people that we do different things than just give shots." [Case 4] "…he [Commissioner] voted to withdraw from the district… there was considerable public outcry…the public outcry was huge about withdrawing from public health, but at that point, we had started going through the accreditation process and we had the documents and process we needed to really respond to show our value. I guess that was just really, really helpful to us. And, you know, while it was super discouraging to our staff, and to me, we stuck with it and we thought we can prove our worth. We are valuable, and we've got the documentation to do it. And we just persevered. And we're in a much better position now." [Case 6] **State encouragement/pressures** **"**I think it was definitely leadership and also some pressure from the state. I think there were three states [ours included] … [putting pressure] on counties to get accredited. And so, I think that they kind of felt some pressure from the state level that they were going to lose funding if they didn't go for it. And yeah, so I think that definitely ignited the fire." [Case 1] **"…**we have a community health conference that's a statewide one… and once you're accredited, you get to put your banner up. And that sounds weird, but that's a big deal. And that also, when your banners not up there, and everybody else's is up there, that's, that's kind of a big deal among leadership, you know, and stuff like that…" [Case 2] **Time-sensitive resource availability** The other thing that several of us did was we wrote grants. The state actually offered some grants and I'll tell you, that's the only reason why we really ended up going [for accreditation]. A lot of people said they were going to be 'accreditation ready'- and we were that way - but we managed to get a grant that actually paid for the majority of the cost of the accreditation bill, and so if we were going to do it, we needed to do it now." [Case 3] "Yeah, they [major plans/processes] were just in place. It was March and then we went to training in April. We put together an aggressive timeline, and it was all based on when we could get in and when, because we only had [our Accreditation Coordinator] for a year. And so, we were going to cram as much into his year as possible." [Case 5]

Table 2. Common Pre-Application Activities and Example Quotes

Pre-Application Activities	Cases								Example Quotes from Interviews
	1	2	3	4	5	6	7	8	
Readiness Assessment									*"When I think about this, I think this is a wonderful example of when you don't know you don't know. Like when we were initially answering those questions, we were thinking, 'check, check, we got this,' and as we went deeper and deeper, and further along this*

Pre-Application Activities	Cases								Example Quotes from Interviews
	1	2	3	4	5	6	7	8	
									journey, we really realized, 'no, we're not meeting this' and then had to go back and really look at it…" [Case 2] "*I had printed off all of that stuff from the PHAB website and we went through it. Yes. We were like, 'yes, yes, we have this. We have this. We have this. Yes. Yes. We're good to go.' It was more of like, let's just let's just double check to make sure. So, we did a lot of those checklists and different things like that.*" [Case 4] *"…how do I want to say this? I think it [PHAB's Readiness Checklist] told us we were more ready than we really were."* [Case 5]
Gap Analysis									*"…we did a couple self-assessments, which is different than using PHABs checklist tool… we did a more detailed self-assessment in spring of 2015. The [state health department] required every health department in the state to self-assess on the hundred PHAB measures and they basically like translated…they summarized what each measure was supposedly about. And so, you had to answer for each of the hundred, fully partially or not met on a three-point scale. So, we did that in spring of 2015 as part of our preparing process. That really helped kick off a lot of our work to get it really going*." [Case 2]
Translating Measure Requirements									"*So, one of the things I think of right off the bat is the terminology related to the different domains and breaking those down where we're different. I think we interpreted them one way and we really had to break those down and figure out how to apply those to what we do daily and how they apply. So how did those domains apply to what we already knew? So, making them manageable. I think and we did that in the very beginning, we went through each domain, and you know, broke them down into a language that everybody in the staff could understand and make sense of how it applies their area*." [Case 5] "*…we started out with having meetings on a very regular basis. We talked about and had the PHAB accreditation guide and we just went through that and said, 'you know, what does what does this mean to us? What do we think this means? What does this look like in our in our area?' And so, we just started having lots of discussions*." [Case 8]
Staff Training/ Engagement									*"… she [Accreditation Coordinator] always highlighted the work that had been accomplished, including saying 'out of this many measures, we have done 42, and we have, you know, this many left'… she also did displays for our staff to see the progress. She had fun UNO-related displays, and then also, at one point I want to say she had printed all the measurements out, so she had a long sheet in her office, outside. So, when you walked back, you could see things highlighted that we are accomplishing. And I'm not sure if it's a scientific tool, but it's a motivational tool and gave staff a sense of accomplishment that we're moving forward, especially during times when it's been overwhelming… I think I would want to highlight that*

Pre-Application Activities	Cases								Example Quotes from Interviews
	1	2	3	4	5	6	7	8	
	■	■		■		■		■	*and underscore that those type of things along with food and fun went along way.*" [Case 2] "*There was there was so much work we did, I think just the educating of staff and our governing body about what it was and why it was relevant and then changing our practices. I mean, we spent a lot of time changing our practices to fit the accreditation standards… we weren't already there and just had documents to submit. We really worked to change our practices to meet the standards, and then move forward from there. I think that that really is how it, it looked to me is like, this is the way we need to be doing it as a public health department. So, you know, let's, let's change how we work, and then we can apply*." [Case 6] "*And we spent lots of hours in a very small room, getting stuff together and again, holding those meetings. Probably it was at least once a week with all staff. So, you know, that's not a lot, but it's still just keeping that that momentum going by including everyone and keeping them motivated…we tried to do a lot of personal incentives, so we had little coffee mugs with our picture made that said 'PHABulous' and PHAB gave us permission to use the PHAB logo and we did like a little survival kits and just tried to just have fun with it.*" [Case 8]
Some or All Major Plans Complete	■	■	■	■	■	■	■	■	*"We really took additional time to make sure we had plans in place because We had heard that feedback from other departments that they had kind of jumped in and needed to write a lot of plans at the last minute. So, we tried to get a lot of the bigger stuff done"* [Case 2] *"…as soon as we got our 'six pack' ready we submitted and got accepted and did our [PHAB Applicant] training…"* [Case 8] "*I think we had almost all those in place, or they were getting to be completed… not that we thought they shined like crazy, but obviously they met the match. But we had we had the big things in place.*" [Case 3]
Securing Resources		■	■	■	■	■	■	■	"*I knew our County Council wasn't going to just say, 'Oh, yes, spend this money'… but we had funding that came through Ebola, that we were told we could spend on anything we wanted to, and we used that money to pay for our fees and also used that money to pay for our accreditation coordinator and one of our other staff.*" [Case 5] "*Well, it depended on where we were in the process of how much time I spent. And I mean, there were times maybe at the beginning, maybe I'd say 20%. And then there were times like I spent 90% of my day just doing accreditation. So, for me, it varied."* [Case 8]

Table 3. Themes in Documentation Selection and Submission and Example Quotes

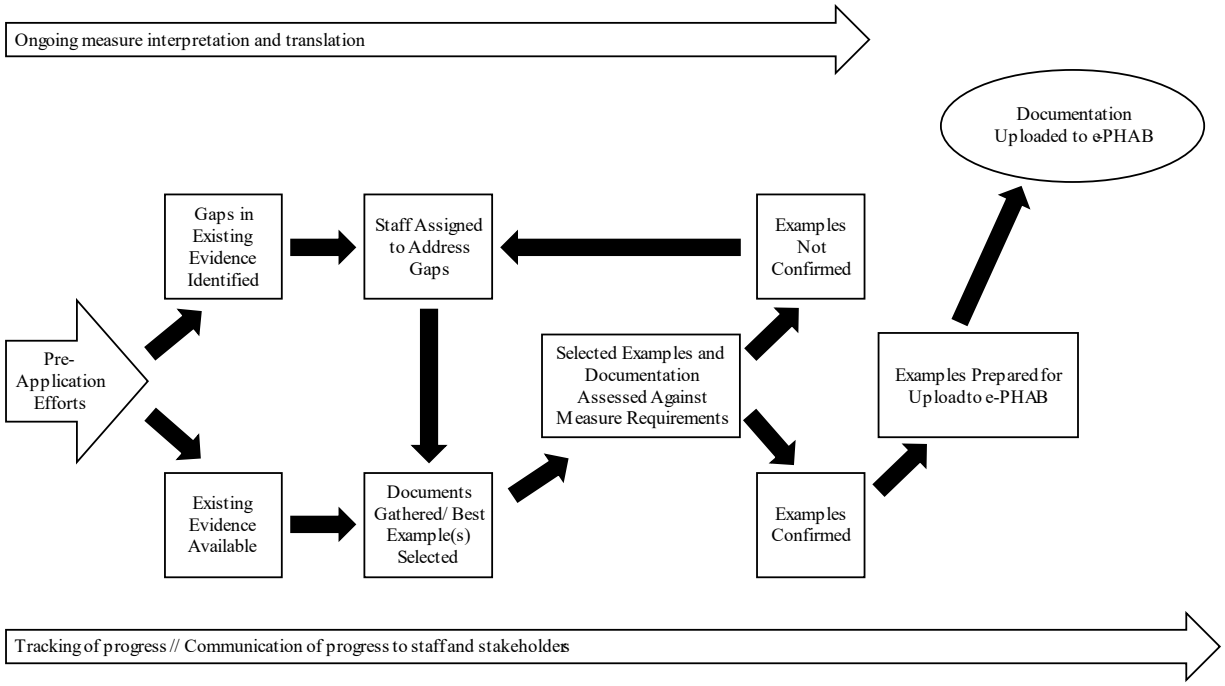
Themes in Documentation Selection and Submission	Subthemes and Example Quotes from Interviews
Hiring/ Appointing Accreditation Coordinator	Some LHDs hired new employees as the role of Accreditation Coordinator with a longer-term plan for the role to partially transition into a broader scope after accreditation was achieved. *"…hiring me [Accreditation Coordinator] was a big step. I haven't heard of many health department's actually hiring a full FTE to coordinate PHAB and I think that is a huge, you know, factor in our success. Just, you know, I mean, the different teams juggled alongside their normal work, but I was 100% in PHAB until the day we submitted*." [Case 7] Many LHDs appointed existing staff to shepherd the process and they took on the Accreditation Coordinator responsibility in addition to their other job duties.
Organizing Human Resources	Most small LHDs did **not** use the common Domain Team structure used by larger HDs, but rather relied on existing groups or staff and managers to fulfill this role. "*…we had a team that did it. I've always in the past had kind of a leadership team of staff members …we sort of have an informal supervisor level within the department. I [the HDD] utilized that team quite a bit to go through and say generally 'what, how can you support these areas? So, we kind of went through each of the standards and the leadership team provided input*." [Case 4] In some of the smallest LHDs, all staff had a role in facilitating progress. "*I just feel like because we're small and we work very closely, and it maintains our buy in that, you know, I feel like we're all accreditation coordinators."* [Case 8]
Brainstorming and Gathering Initial Documents	LHDs started with their strengths when gathering documents. "*We started with the easier domains first where we knew we were really strong. And we decided to go that route instead of doing the really hard ones first and moving forward*." [Case 8] Some small LHDs had to coordinate with external agencies to gather documentation for some measures, specifically in Domains 2 (investigation) and 6 (enforcement). This was sometimes challenging. "*We rely on [SHD] for epidemiology investigations and for food, pools, lodging, routine inspections, and investigations. We rely on the land use management department for our public health nuisances, and our well water program. And I think before accreditation, I would not have even been able to say that sentence that I just said to you. I mean, we just stated they did it. We don't do it. It's taken care of, and accreditation asked us to explain it. I would tell my friends it's like being told to document the air traffic control processes at the airport, but you don't work at the airport... They're asking for stuff and you don't understand what they're asking. So, when it was services that that the state or others provide on our behalf because we're a small jurisdiction, it was hard to know what to ask them [the SHD] for*." [Case 2]
Organizing Documents and Tracking Progress	LHDs devised internal organization systems using network folders, spreadsheets, and other tools to organize the documentation and track progress. *"I think we did kind of like the poor man's version of organization, like all of our stuff was just a well-organized hard drive and like Excel spreadsheets*." [Case 1] *"…we set up on our internal drive in the department, we set up individual little folders for each Domain, Standard, and Measure where we would keep our documentation…"* [Case 8]

Themes in Documentation Selection and Submission	Subthemes and Example Quotes from Interviews
	"I had spreadsheets for each Domain, and then every Required Documentation had if I had it or if I didn't or if they [other staff] had it, but it wasn't ready for me. So pretty much like a status for each Require Documentation…" [Case 7] e-PHAB did **not** appear to be a useful tool at this stage of the process, and most small LHDs did not upload documentation until it was in its final form and ready for submission to PHAB.
Filling Documentation Gaps	Small LHDs tried to make best of the resources at their disposal, assigning tasks to staff based on their interests and subject-matter expertise. "*When we were going through the process at the beginning on uploading documentation, we involved all staff, we assigned certain domains to staff depending on their primary role. So, the food investigations or clinical investigations, we had our nurse and environmental health specialists working on. We tried to make it applicable for them, so they all felt valuable that they were doing something that meant something to them, as well*." [Case 5]
Document Preparation	Documentation was highlighted and coversheets and accompanying narratives were prepared to ensure measure requirements were easily located by reviewers. "*…we also decided to put a cover sheet on everything, so we had kind of a way to double check that the documents that we were attaching address the standards and measures appropriately*." [Case 1] "*… I had a standard coversheet for absolutely everything we submitted, and the coversheet gave what I called the "PHAB address." So, the Domain, Measure, and the Required Documentation number. I titled each document or each piece of evidence, I gave a short synopsis of why it fit - just like two or three sentences - and then I had a section on notes. So, where to look for in the document to see where it meets the criteria. And then every piece of Required Documentation had the coversheet and the following documents… they were bookmarked in Adobe, so it went directly to the pages that they [reviewers] needed to reference and then I highlighted every section they needed to read…*" [Case 7] Double and triple-checking documents to make sure they were appropriate for addressing requirements, but also for more technical requirements like acceptable timeframes and file types and that they were uploaded in the correct measure were important for accuracy. "*…we would go through the guidance again and we'd talk about what guidance we wanted, we'd look at it [documentation], make sure that it was dated, authenticated, tried to make sure that you know we checked it again and again to make sure it had all the pieces or the criteria for the documents and met the guidance… we'd do all that, and then we'd go back and we'd look at e-PHAB, and we'd look at that document again. And if we felt it was good, we'd put it in there. And right before we submitted, we went back into e-PHAB, again, tried to make sure that all our dates were still within the time parameter for those documents that required it*." [Case 8] Some small LHDS used external reviewers to do a pre-review of their documentation before submitting it officially to PHAB. "*We hosted an external mock review a month before we submitted and brought in people from other health departments to sit down and like actually open up all of our documentation, and they made lots of helpful suggestions*." [Case 2]

Table 4. Themes in Maintaining Accreditation Status and Example Quotes

Themes Maintaining Accreditation Status	Subthemes and Example Quotes from Interviews
Addressing Action Plan Requirements	*"Right off the bat, we had an action plan…and then that action plan was for a year. So, during that time, period, I mean, we were extremely busy continuing to create and then accreditation was still on our mind. So, then it was, you know, making sure we were implementing. Because we knew that we would have to explain how we've implemented and that kind of thing... and so then we were implementing some of the things that we had already started."* [Case 2]
PHAB Annual Reports	*"You know, I think that it was kind of we actually got a fairly long list of things that we needed to work on in our first year of being accredited. And so, I think we had a really good starting point of saying, okay, so these are some areas that we really need to strengthen and improve, which translated really nicely into like not losing momentum in keeping that going."* [Case 1] *"That was the other hardest piece of accreditation for us was we really don't have a lot of access to care because we are so rural… and that's been a focus now for us… we're improving on that, but it took us how many years after. It was our last thing we had approved and we will be into report number four in September. We fought to have an access to care committee and we did some major work this year, but it took this long to actually try to move the needle."* [Case 3]
Preparing for Reaccreditation	"*I can tell you that I'm going through reaccreditation right now. Just being able to look at stuff and trying to jot down ideas for narratives can be a little bit of a challenge because that's a that's a big undertaking, to be able to maintain accreditation*." [Case 8]
Review, Revision, and Updates to Major Plans and Associated Processes	"*So, we've done the community health assessment and we're building our profile now and going through the process with the CHIP… in a year, we'll probably be looking at our strategic plan again, because those were five-year plans and we're getting at the end of those five years… we are already, maybe not as well as we'd like to be, but still reviewing things annually, or when need be for the other parts. So, our workforce development, our QI, performance management plans as well. So, it's never ending, we've realized we know we continue that…"* [Case 5]
Ongoing Staff Development and Engagement	"*…when you when you get a new person, and you have to go back really from the beginning and teach them about, you know, health assessments and impact and documenting things and strategic planning and performance management. Like that, in and of itself is exhausting because you're starting from square one on all of that when, you know, the rest of us have been working on it for many, many years. And so, to get that person up to speed and you know, actively participating is definitely a challenge. Because, again, they have regular job tasks, and so do the rest of us..."* [Case 4]

Figure 1. Common Steps in Documentation Selection and Submission



Implications for Policy and Practice

- Assuring the health department is well-prepared and fully aware of accreditation requirements before formally applying to PHAB appears to be influential in facilitating initial accreditation success and may also be important in maintaining accreditation status.
- Small LHDs interested in pursuing accreditation should consider a realistic timeline for the process, recognizing there is significant work that should occur before they formally apply. At minimum, this includes having completed major plans often referred to in the field as the 'six pack'.
- Guiding an LHD through accreditation provides a unique opportunity for practitioners to grow knowledge, skills, and abilities. Selection of the Accreditation Coordinator may be a strategic decision with future consequences for an LHD. Appointing a staff member with a skillset inclusive of project management, in a position with some authority, and

leadership potential could be a development and succession planning strategy for small LHDs.

Discussion and Conclusion

Small LHDs in this study focused on establishing organizational readiness before applying for accreditation. The most prominent readiness factors reported were internal. For example, leadership - either from the LHD Director or from an Accreditation Champion, foresight to lay the groundwork for accreditation (especially for major plans), gaining buy-in and support from key stakeholders, dedicating resources, and cultivation of an organizational culture of learning, growth, and continuous improvement each had importance among small LHDs. Many small LHDs alluded to external factors influencing the timeline and approach to accreditation like politics, pressure, or encouragement from the SHD, and time-sensitive resource availability such as mini-grants.

Though many small LHDs completed the PHAB Readiness Checklist as part of their preparation efforts, some noted the results were not helpful and, in some cases, provided a 'false sense' of readiness. This suggests the existing PHAB Readiness Checklist tool does not accurately measure organizational readiness of HDs and the time may be right to revisit how this could be refreshed for more meaningful use among future applicants.

The PHAB Guide to National Public Health Department Initial Accreditation states that the most important component of the accreditation process is the documentation selection and submission step of the process.[7] While this may be true in that what is submitted to PHAB is what gets reviewed and assessed, learnings from small LHDs in this study appear to point to the preparation step as most critical to success. Moving forward prematurely and without the

previously described organizational readiness elements in place is unlikely to lead to the desired outcome of being an accredited LHD in a position to maintain that status long-term.

While recommended as a general practice for organizing the process by PHAB, very few small LHDs used the Domain Team approach to organizing accreditation efforts.[7,9] This is just one example of how a 'one-size fits all' approach to accreditation is not appropriate, especially for agencies with a smaller workforce. The findings presented in this study should help small LHDs recognize other approaches for organizing and managing the accreditation process and that these can be tailored based on organizational readiness, capacity, and needs of the LHD. One key strategy can be utilizing existing structures within the LHD and ideally appointing an Accreditation Coordinator with skills in project management.

Lastly, accreditation should be considered a long-term investment from the very outset of preparation. The up-front commitment of financial and human resources and the changing of processes may seem like a heavy lift for the immediate pay-off of merely being recognized as an accredited HD, but the possibilities of what this process can do for LHDs in the long-term is worth so much more.[1,10] As LHDs begin to explore accreditation as a means for improving organizational performance and health in their communities, planning for the long-term by establishing strong and integrated plans, processes, and procedures and a commitment to implementation, evaluation, and revision will be critical in maintaining the level of performance LHDs achieve when they are initially recognized through PHAB accreditation.

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g. Paper 3: Exploring What Matters: Lessons from Accredited Small Health Departments

Introduction

Though over 300 health departments (HDs) have achieved accreditation by the Public Health Accreditation Board (PHAB) since 2011, only 41 are small local health departments (LHDs).[1] Studies have documented various expected and unexpected benefits and outcomes experienced by PHAB accredited HDs, many of which relate to quality improvement, performance management, partnerships, improved staff competency and job satisfaction, as well as strengthened administrative and management practices.[2-5] A formal, ongoing evaluation of the national accreditation program has also documented numerous internal and external benefits and outcomes accredited departments attribute to the process.[6] These have included changes in organizational culture, improved capacity to deliver high quality services, increased visibility and credibility, increased knowledge of HD roles and responsibilities in the community, and improved health outcomes. Despite a wide array of positive benefits and outcomes associated with accreditation, it is unclear whether they are being realized to the same degree among all accredited HDs and whether these are enough to motivate future engagement in PHAB accreditation.

To date, documented benefits and outcomes seem to have facilitated engagement in PHAB accreditation for a majority of the large and mid-size HDs but appear to inspire less motivation among smaller HDs.[7] A better understanding of the small LHD experience, perceptions, and most-valued benefits and outcomes may help facilitate greater uptake of PHAB accreditation, thereby improving ability of small LHDs to assure the essential public health services and reduced health inequities in their communities. This study employed qualitative

methods to investigate the nuances in small LHDs' perceptions of accreditation, the benefits and outcomes they've experienced because of accreditation, and challenges they've faced when working to maintain accreditation status.

Methods

Semi-structured qualitative interviews were conducted to investigate perceptions, benefits and outcomes, and challenges maintaining accreditation among accredited small LHDs. Participants were selected based identification as an LHD serving a population of 50,000 or less, being located outside of Ohio because of the legislative mandate for LHD accreditation in that state and achieving PHAB accreditation between 2016 and 2019. This timeframe was selected to reduce recall bias. Telephone interviews were conducted, recorded with participant permission, and transcribed for review, coding, and analysis. Codes were applied to each interview transcript within MaxQDA, subthemes were identified, and 10% of interviews were validated with a second coder. Pattern matching analysis was done within and across cases, and key findings were determined based on code frequency across cases.[7]

Findings

Interviews with 22 health department leaders, staff, and Accreditation Coordinators representing 8 accredited small LHDs were completed. Participants LHDs served jurisdiction sizes ranging from under 10,000 to just over 46,000 in six decentralized states.

Perceptions of Accreditation

Small LHDs alluded to four themes in perceptions related to PHAB accreditation, which are summarized with illustrative quotes in Table 1. Table 1 summarizes the frequency by which these perceptions were specifically described by LHDs. It is important to note that this does not suggest the others do not hold these perceptions, but rather they did not specifically state these

perceptions during the interviews. First, nearly all small LHDs described their perception of PHAB accreditation the **practice standards** for HDs. By achieving accreditation, they demonstrated achievement of these standards.

Second, more than half of small LHDs indicated becoming accredited **validates the quality** of work they do. One LHD explained how quality validation occurs only through the formal, external peer review which is a foundation of PHAB accreditation. As they noted, simply using the standards and measures to self-assess as being 'accreditation ready' is not enough.

> *So, I think the experience of doing it [formally going through accreditation] - and because when I've had people that have said we're just going to be accreditation ready - you really can't say you're 'accreditation ready' until you've had a site visit and you've really had that critical look at your stuff, right? ... So, there is a difference between being 'accreditation ready' and being site visited... [Case 3]*

LHDs also noted that becoming accredited raised their **credibility** among peer HDs, within the community, and among other stakeholders like healthcare systems.

Third, small LHDs appeared to have mixed feelings about the **voluntary nature PHAB** accreditation. While most agreed making accreditation in its current form mandatory was not appropriate, they did have thoughts about how, if circumstances were different, there could be benefits to having an accreditation requirement for all HDs. There was not consensus on what this might look like, but some suggestions were to allocate funding to HDs specifically for accreditation, taking a more systematic approach to restructuring public health funding to make resources and capacity more equitable across HDs, and considerations for a tiered or scalable accreditation program based on LHD characteristics, such as FTE or jurisdiction size.

Some LHDs also described experiences or observations which negatively influenced or led to **misperceptions about accreditation**. One small LHD shared how challenges larger LHDs within their state experienced contributed to uncertainty about ability to achieve accreditation among smaller LHDs. The misperception among staff about the amount of work required to become accredited and maintain that status was discussed by one LHD, and another shared the prior experience of pursuing accreditation in a different health-related profession initially dissuaded her from considering PHAB accreditation.

Observed Benefits and Outcomes of Accreditation

Five key benefits and outcomes of accreditation were described by small LHDs and are summarized by frequency with example quotes in Table 2. Table 2 summarizes the frequency by which these benefits and outcomes were specifically described by LHDs. It is important to note this does not suggest the other LHDs have not experienced these benefits and outcomes, but rather they did not specifically discuss these during their interviews. First, all LHDs described how accreditation has **instilled or helped enhance a culture of quality, growth, and learning** within their departments. The greater focus on quality, growth, and learning impacted quality of programs and services and some LHDs noted accreditation confirmed they were 'doing what they were supposed to be doing' because they met national standards for public health practice. This has also contributed to better staff understanding of public health overall and has facilitated growth and development in emerging areas like health equity.

Many small LHDs alluded to **improved partnerships** with community organizations like healthcare systems, health improvement coalitions, and members of their emergency response network due to accreditation. The community's ability to respond to ongoing and emerging public health issues has grown and evolved.

Improvements in documentation, including policies and procedures, were also described as benefits/outcomes among small LHDs, and an unanticipated benefit/outcome among small LHDs was the value placed upon **being viewed as a leader** among peers. Small LHDs reported motivating and assisting other LHDs, being recognized by their state health departments for accreditation, and believing they are 'just as good' as their larger peers.

The fourth benefit/outcome reported by small LHDs was the **improved preparedness** for responding to the COVID-19 pandemic. The pandemic was mentioned in several interviews, as data was collected during mid-2020. Small LHDs expressed how accreditation improved their response plans and strengthened key partnerships with response partners. Some even found they were leading the way for other county departments or being called upon by their state or larger counties for guidance.

Challenges in Maintaining Accreditation

Each LHD expressed a variety of concerns about maintaining their accreditation status which are summarized in Table 3 with example quotes. Table 3 summarizes the frequency by which challenges in maintaining accreditation were specifically described by LHDs. It is important to note that this does not suggest have not experienced these challenges, but rather these challenges were not specifically discussed during their interviews. Some of the most common challenges are what HDs of all sizes experience, like **gaps in capability and capacity**, **competing priorities**, and concerns with **documentation and maintenance** of major plans and processes.

Another issue affecting many accredited small LHDs is accreditation appears to **lack recognition and/or value** outside of governmental public health. Some LHDs described how they did not perceive being accredited set them apart from other non-accredited LHDs, especially

when considering funding opportunities or other formal means of 'standing out' among peers. Others shared experiences of receiving congratulatory messages from other HDs across the country, but recognition among local partners and the public, despite the LHD's attempts to communicate the achievement, was lacking.

Table 1. Key Qualitative Themes, Subthemes, and Supporting Example Quotes Regarding Perceptions of PHAB Accreditation

Key Themes and Subthemes									Example Quotes from Interviews
Perceptions	Cases								
	1	2	3	4	5	6	7	8	
Practice Standards									"So, we are ensuring that we're meeting national standards, you know, of what an excellent health department would be doing. And that relates to all sorts of different things… what our stakeholders expect and can expect from us. And then continuous quality improvement. We know that nobody meets these standards perfectly - no HD does - we're always continuously improving and we're adopting continuous quality improvement processes as part of accreditation and using those." [Case 2]
Validates quality and elevates credibility									"My boss wanted the quality that comes with it [accreditation], you know, to get us up to par. So, I think each person was different as far as what they were planning to get out of it and what it meant. She wanted to be in that upper echelon of where we're good. We're hitting all those benchmarks we are a high functioning health department." [Case 7]
Voluntary vs Mandatory									"From my perspective, in order to move it to something else, there would have to be major restructuring and funding and resources and support in order for any size organization to go through something like that [accreditation]... So, my answer right that would be no, but if there were changes, and all resources and supports are put in place…it is a certainly a path for better health for everybody. But things would need to be different to make it mandatory." [Case 2] "So I, for one feel like Ohio is doing the right thing by making the state statutes that they have to because again, it's really, you know, it's not a punishment for us. It's meant to help us and promote our practice and if public health changes and what that looks like, I think it's really important for states to be on board with that. Because otherwise, people are going to be left behind and really who's the ones that suffers? It's not us. It's the population that that suffers." [Case 8]
Misperceptions									"My background is in long term care. I was a nursing home administrator. So, I'll have to say when I very first heard about accreditation, I wasn't a huge fan because in long term care I find that the inspection, the system of inspecting nursing homes or long term care is not always the best, you

									know, it creates some disincentives to do unique things. And depending on the state it can, it can actually hurt you financially. You know, so I have to say initially with accreditation, I wasn't a huge fan, I was a little nervous that it would turn into something like that." [Case 4]

Table 2. Key Qualitative Themes, Subthemes, and Supporting Example Quotes Regarding Benefits and Outcomes of PHAB Accreditation

Benefits and Outcomes	Cases								Example Quotes from Interviews
	1	2	3	4	5	6	7	8	
Organizational Culture of Quality, Growth and Learning	Quality								
									"I mean, it [being accredited] is also just a sense of pride, you know, for our community, but then also for us… we can prove that we are doing great things. Like we know we are doing great things, and there's lots of great things out there. But it is almost just another way of being able to prove that and I think it's also a badge of honor that we wear proudly, kind of a thing." [Case 2] "…we've really had this culture for a long time. So, I think it just enhanced it. You know, I think it validated all the work that we do, and I think it's the staff feel now like, wow, yeah, we are a cut above, you know, before we were doing the work and they knew it was important, but now it's like, wow. So, we're part of an accredited team. I think it may have elevated their what they think of themselves and of public health in general to have accreditation. They're proud. They're proud of the work they do, and they are a cut above." [Case 4] "… we know we're a PHAB accredited health department, but it really adds more umph to it [grant applications] when it says, that we are high functioning health department, says a PHAB site visitor, you know, on the report." [Case 7]
	Learning and Growth								
									"...I've been blown away by the dedication of the staff here and how much they love what they do. They see their role in the bigger picture, and I think that's attributed to [HDD] and the work that they all did together to become accredited. You ask anyone about like the strategic plan or accreditation, they don't look at you like with a blank stare in their eyes. They know what you're talking about because they were a part of the process. I think that's pretty neat because I've worked in a lot of other small offices, and that's not always the case - the bigger picture piece. You know, [people usually] have their heads buried in their program, but I think these folks understand how they fit into the bigger picture of the department they work for and that's pretty neat." [Case 4] "I think probably one of the values that we took away from accreditation was in the importance of health equity, cultural competence, and access to care kinds of issues. And so, I think that those are really, you know, prevalent in all the coalition's that we're in, even if we don't facilitate it, I think we're good about advocating for those vulnerable

									populations and what health equity looks like in our rural community…" [Case 8]
Recognized Leader Among Peers									"I think it has set us up as a leader… and in [our region within the state], we have our little regional meetings, and we have a large county that [a large city] is in which tends to be a leader, and everybody goes to them to ask what they should do. And it's just made people sit up and take notice that [our LHD] knows what we're doing, too. And because the other smaller counties can relate to us - and if we can do it - then maybe they could do it also." [Case 2]
Improved Community Relationships									"One of the are areas we needed to improve was our collaboration with our emergency management team who is actually based out of the sheriff's office. We contract their time. And so, you know, unknowingly, we got to spend a year leading up to COVID-19, focusing on making that relationship better, and strengthening our relationship with our emergency management team, getting our public health annex of our EOP in a better place. Really increasing our meetings, increasing our drills, our tabletop exercises and increasing like public health presence in their emergency management scope, and vice versa, like incorporating their team more into the public health world. So, we got to do that for a year before COVID-19 hit which is kind of incredible if you look back on it and go, 'alright, well, that really helped.'" [Case 1] "One group that comes to mind is our Local Wellness coalition. It's revamped really since we've been through the accreditation process, and we're really utilizing those partners for our as our stakeholders for the Community Health Needs Assessment, and the CHIP, because they are the agencies that are representative or representative through those initiatives. So, they're taking ownership of that, which they hadn't in the past so that's amazing. We have developed work plans and committees to address those initiatives, which was lacking in the past. It was just more kind of a meet and learn or like a lunch and learn type meeting. So now they're action-based groups." [Case 5]
Improved Policies, Procedures, and Documentation									"… but these tools and plans, when it comes to the strategic plan, workforce development plan, quality improvement plan, those are basic tools that businesses have used for years. So, it [accreditation] was a challenge but also an opportunity to provide some additional structure for our agency in places that we just haven't had it. And we've just, you know, we've just done it, and I've never [done this] as strategically and thoughtfully that we can do it now." [Case 2]
Improved Preparedness (COVID-19)									"…when larger counties are looking to what we're doing here in rural [county], as part of our COVID response, and we're sharing our documents and our resources and our processes. I think that that really speaks volumes about the work we did leading up to an event like this to get all those pieces in place, and a lot of those tie back to accreditation." [Case 1] "…having all of our preparedness documents and going through that, that has been super helpful. So, while it's

									[COVID-19] been challenging having those in place has been great." [Case 5]

Table 3. Key Qualitative Themes, Subthemes, and Supporting Example Quotes Regarding Maintenance Challenges Associated with PHAB Accreditation

Maintenance Challenges	Cases								Example Quotes from Interviews
	1	2	3	4	5	6	7	8	
Gaps in Capability and Capacity									"…like [staff] had domains] two and six and the people she has with her never were here. She's the only one who has any experience [with accreditation], so we have to reestablish those groups with the people that make sense and we're pulling everybody back into that culture of 'let's look at what we're supposed to do. What's the standard? Are we still doing it? Do we need to revisit? do we need to revive something? Are we forgetting something? Are we not doing something?' And the person that's working with me on some of my domains wasn't here either." [Case 3]
Documentation and Plans									"I guess it's gonna depend on all this [COVID-19] but our timeline has been pushed back a little. In a year, we'll probably be looking at our strategic plan again, because those were five-year plans and we're getting at the end of those five years. So, we'll be revamping those… we are already, maybe not as well as we'd like to be, but still reviewing things annually, or when need be for the other parts. So, our workforce development, our QI, performance management plans as well. So, it's never ending, we've realized we know we continue that, and we just got our email last week about our first annual report to PHAB that we'll be working on this year as well." [Case 5]
Value of Accreditation									"…our County Commissioners, I think are very proud of being able to say we're accredited on the one hand; however, on the other hand, they compare us to these other counties and [ask] why are we doing all these things that the neighbors don't do? … almost like it's a bad thing sometimes. You know, 'why are you doing all this and the other counties [are not]? How can they afford this?' Well, they can't, but do you want a government county that does the bare minimum or a county that actually does public health? That's my answer to them." [Case 4] "…we got tons of congratulations [from other health departments] when we found out we were accredited... honestly, it's not something that's really recognized by anyone that's not a health department… you know, even like when we did the press release, like, 'oh, we're nationally accredited', just normal folks didn't care, which is fine. We really tried to, you know, put it in terms of like, 'this is what we went through this is how long it took…' But I don't think PHAB is at a point where it's identified outside of the public health department realm. I do think it looks awesome on grant applications. I think it's great for networking. But I would say personally that a huge amount of the benefit is just our internal culture." [Case 7]

Competing Priorities									"… in our state we have to do what's called a [state] review every five years …so we're really in combination doing both things at the same time." [Case 3] "Everything has kind of been delayed, as you know, because of COVID…" [Case 6]

Implications for Policy and Practice

- Small LHDs have expressed using the PHAB Standards and Measures to self-assess as being 'accreditation ready' is not the same as formally engaging in accreditation. There is notable value in the external peer review for identifying opportunities for improvement and facilitating actions to address those opportunities. Reinforcing the 'value-add' of the external review provided through PHAB accreditation will be important for the future of the program.
- Being viewed as a leader among peers was a benefit/outcome of accreditation that appears unique to small LHDs. A deeper understanding of why this is important to small LHDs and finding ways to facilitate greater leadership or storytelling by accredited small LHDs among peers is an opportunity for PHAB, national partner organizations, and state health departments.
- While recognition and perceived value of accreditation among those outside of governmental public health continues to be a challenge, the time has never been more appropriate to advocate for increased investment in public health improvement. With a renewed focus on public health across the country due to COVID-19, there is an opportunity to advocate for accreditation as a national strategy for facilitating public health improvement, consistency in service delivery, and accountability to quality and performance.

Discussion and Conclusion

A clearer understanding of perceptions held by small LHDs about accreditation is important to the future of the PHAB accreditation program. Leider and colleagues recently conducted a market analysis and confirmed the largest remaining market for the accreditation program is small LHDs.[8] To engage more of these LHDs in accreditation, efforts should be tailored to emphasize learnings about perceptions of accreditation highlighted in this study, specifically that PHAB Standards and Measures are a standard of practice for public health and the external review provided through accreditation is necessary for performance improvement. PHAB may also consider exploring modified versions of the accreditation program to accommodate real and perceived challenges among small LHDs about their ability to demonstrate conformity with accreditation requirements as they are currently written.[6] This could still facilitate improvement without overwhelming LHDs still not at a stage of readiness for the full accreditation program.

Many of the benefits and outcomes cited by small LHDs coincide with those reported in PHAB program evaluations.[6] One additional benefit of becoming accredited among small LHDs is the opportunity to lead among peers across the country. Many small LHDs do not have the resources or capacity necessary for sharing their success stories in ways that larger LHDs do. Finding new and meaningful ways to assure opportunities for storytelling by accredited small LHDs may be worth further exploration.

Nearly all accredited HDs have confirmed improvements within their agencies and communities, including the small LHDs in this study.[6] Despite consistently positive feedback about accreditation's role in facilitating performance improvement, several small LHDs indicated accreditation appears unrecognized and unvalued by those outside of governmental

public health. The significance of having (or not having) a high-functioning HD in every community has become part of a national conversation following the fragmented response to COVID-19 in this country. As the accepted practice standards for assuring essential public health services are being delivered, PHAB and its partners have a timely opportunity. This opportunity begins with strategies for leveraging the spotlight under which the US public health system has been for the past year due to COVID-19. That spotlight can be used to increase awareness about accreditation and the value it brings to accredited HDs to a wide array of stakeholders.

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h. Paper 4: Essential Accreditation Supports and Resources for Small Local Health Departments

Introduction

Public health department (HD) accreditation was established in part to respond to well-documented governmental public health infrastructure challenges.[1] Though more than 80% of the US population is now served by an accredited HD, many of the smallest jurisdictions serving some of the most vulnerable communities remain unaccredited[2]. As a result of inequitable resources and inconsistent approaches, the US public health system continues to struggle handling emerging issues like the coronavirus, but the same is true for ongoing public health challenges like obesity and heart disease. This suggests there is more work to be done in addressing infrastructure challenges and inequitable health outcomes in the US.

One reason for the widespread population coverage by PHAB accredited HDs is the accreditation of 36 state HDs and local health departments (LHDs) serving some of the largest US population centers. Studies have shown the strongest predictor of accreditation-seeking by HDs is jurisdiction size and type, with small rural LHDs less likely than urban jurisdictions to pursue accreditation.[3,4] Small rural LHDs tend to have fewer staff and larger geographies to cover, have a harder time paying for basic infrastructure, and face challenges providing a comprehensive set of essential public health services.[5] Fewer staff means less capacity and staff time overall, but especially for the accreditation-related activities essential to infrastructure improvements.[3,7] Struggles to cover basic infrastructure costs implies availability of dollars to allocate toward payment of accreditation fees is unlikely and, further, justification for spending dollars in this way can be another hurdle for HDs to overcome.[8,9] Small rural LHDs are often challenged to provide programs and services across the full spectrum of essential public health

services. Their work is guided largely by the funding they receive, which does not always support the population-based programs and services necessary for accreditation.[6] These factors can each influence an LHD's decision and ability to become accredited and small LHDs may necessitate additional support to overcome these challenges and barriers. However, there is a gap in the literature regarding what types of supports may be helpful in doing this.

Even with the odds against them, there are 41 small LHDs that have become accredited and 34 of these LHDs serve small, rural jurisdictions.[2] This study uses qualitative methods to identify and describe the primary sources and types of resources and supports small LHDs leveraged during their efforts to become accredited.

Methods

Semi-structured qualitative interviews were used to identify supports and resources that facilitated PHAB accreditation among small LHDs. Cases were randomly selected from LHDs meeting a series of inclusion criteria. These included, (1) identification as an LHD, (2) not located in Ohio because of the legislative mandate for LHD accreditation, (3) population size of 50,000 or less, and (4) accredited between 2016 and 2019. This timeframe was imposed to reduce recall bias. Interviews were conducted via teleconference, recorded with participant permission, and later transcribed for review, coding, and analysis. Codes were applied to each interview transcript using MaxQDA, and 10% of interviews were validated with a second coder. Pattern matching analysis was conducted within and across cases and findings were determined based on code frequency across cases.[14]

Results

Eleven interviews with directors, staff, and Accreditation Coordinators representing 8 accredited small LHDs were conducted. LHDs were in 6 decentralized states and served

populations ranging from under 10,000 to just over 46,000. Participants identified partner organizations, specifically peer LHDs, state health departments (SHD), national organizations, and local universities as key sources of support during initial accreditation.

Technical Assistance. All participants described how peer LHDs were important during various steps of the accreditation process. Peer LHDs appeared to be a particularly strong source of technical assistance for activities like developing or selecting documentation, conducting mock site visits, and for facilitating formal and informal networking and peer learning communities.

SHDs were also important partners in the initial accreditation of most small LHDs. In some states, the SHD facilitated peer learning communities, provided assistance for small LHDs with required documentation and examples for accreditation, conducted mock site visits, and/or assured access to knowledge and expertise of SHD staff for accreditation-related work like community health assessments, improvement planning, or strategic planning.

Financial and Human Resources. For many small LHDs, the SHD provided some level of funding support, either directly for the development of major plans or by allowing carryover state dollars to be spent on accreditation fees. More than one-third of small LHDs leveraged additional human resources by working with local universities. Universities provided interns to assist with different aspects of the accreditation process, partnered with the LHD to deliver needed training, or provided expertise necessary for addressing documentation or capacity gaps, such as data collection and analysis. One other notable resource mentioned several participants was the assignment of Ameri-Corp VISTAs to their LHDs, which also provided additional staff capacity for completing accreditation process steps.

Tools, Templates, and Training. Small LHDs cited several national partners from which they used resources or accessed support during their initial accreditation process. The most frequently used resources were tools and templates for planning efforts, like strategic planning, and help with accreditation readiness assessment. Several small LHDs specifically mentioned PHAB Applicant Training as critical to their efforts and one-quarter of small LHDs mentioned accreditation-related trainings and conferences sponsored by other national partners as vital to their learning and networking.

Resource Gaps. The most frequently cited resource gap was lack of applicability of existing resources and supports for small LHDs, as most are intended for larger LHDs. LHDs also noted a lack of morale support for small LHDs going through accreditation and lack of documentation and example repositories specific to small LHDs. Further, the need for additional guidance on measure interpretation among small LHDs and assistance understanding requirements and collecting documentation for program and service areas in which small LHDs have little or no authority from those responsible for delivering those services in the jurisdiction were resource gaps.

Discussion

Evaluations of the PHAB accreditation program have consistently identified cost, time, and capacity as barriers to accreditation[9]. Most small LHDs in this study obtained financial resources and all received non-financial support from peer LHDs, their SHD, national partners, and/or local universities to support initial accreditation. This suggests flexible financial investment in small LHD accreditation readiness efforts and provision of non-financial support by partner organizations can encourage small LHDs to pursue accreditation. The availability of financial resources for supporting accreditation readiness has declined in recent years as funding

streams like CDC's National Public Health Improvement Initiative[10] and NACCHO's Accreditation Support Initiative[11] – both of which infused dollars into performance improvement at the state and local levels – are no longer available. Given the success of these programs in facilitating uptake of accreditation among SHDs and larger LHD jurisdictions, there is an opportunity to revive strategic investment in infrastructure and performance improvement, especially among small and rural LHDs, which may help improve engagement of these agencies in accreditation.

Small LHDs in this study bolstered human resource capacity through low or no-cost to the LHD options like interns, partnerships with academic institutions, or by hosting an AmeriCorp VISTA member. While every small jurisdiction may not have a university campus nearby, the opportunity for leveraging interns and strategic academic partnerships established through formal agreements, like an Academic Health Department, could help increase capacity and address staff competency gaps in small LHDs. Academic and practice partnerships could be facilitated through grant applications, as well.

This study also confirmed findings from another recent study which showed the positive impact peer LHD and SHDs can have on pursuit of accreditation.[12] While peers certainly have an important role in collaboration, morale support, and collective learning, SHDs also have an opportunity to take a stronger leadership role in facilitating accreditation among small LHDs. LHDs in this study alluded to resource gaps that could be addressed for little or no cost by SHDs. For example, SHDs could create a repository of state-based documentation for use by all LHDs within that state. More SHDs could require LHDs to develop and implement planning processes, like health assessments, strategic plans, and quality improvement that align with accreditation requirements.[13] SHD review, feedback, and technical assistance to LHDs in these areas could

establish a standard level of local infrastructure, performance improvement, and readiness across their respective states.

Public Health Implications

Small LHDs can be successful in achieving accreditation if adequate resources and supports are made available. Many of the current, non-financial gaps in supports and resources for small LHD accreditation could be addressed for little or no cost by SHDs and local university partners.

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V. DISCUSSION AND CONCLUSION

Between July 2019 when administrative data was downloaded from e-PHAB to inform case selection for this study and December 2020 when the draft of this chapter began to come together, 33 additional health departments achieved PHAB accreditation, but just eight of these were small LHDs. There are still fewer than 50 accredited small LHDs despite the nearly 1,500 LHDs serving populations of less than 50,000 people in the United States (PHAB 2019e, NACCHO, 2016). What this suggests is that the uptake of accreditation among small LHDs continues to be low and findings from this study will be an important piece of the puzzle for influencing and engaging additional small LHDs in accreditation.

Chapter 5 summarizes and integrates research findings presented across the four papers included in Chapter 4 using a logic model to organize and recap key research findings. A commentary pertaining to how findings from this study did or did not align with the conceptual framework shown in Chapter 2 then follows and includes minor revisions to the original conceptual framework. The second section of Chapter 5 focuses on implications and recommendations for practice, centering on four groups of stakeholders – the Public Health Accreditation Board, public health system partners, state health departments, and small LHDs. Next, recommendations for future research, study limitations, and a formal conclusion are provided.

a. Summary and Integration of Findings: A Logic Model

To summarize and integrate key findings communicated through the four papers presented in Chapter 4, a logic model for linking accreditation readiness, strategies, and immediate outcomes of accreditation identified by small LHDs was developed (Figure 21). A narrative summary describing each column of the logic model is described below.

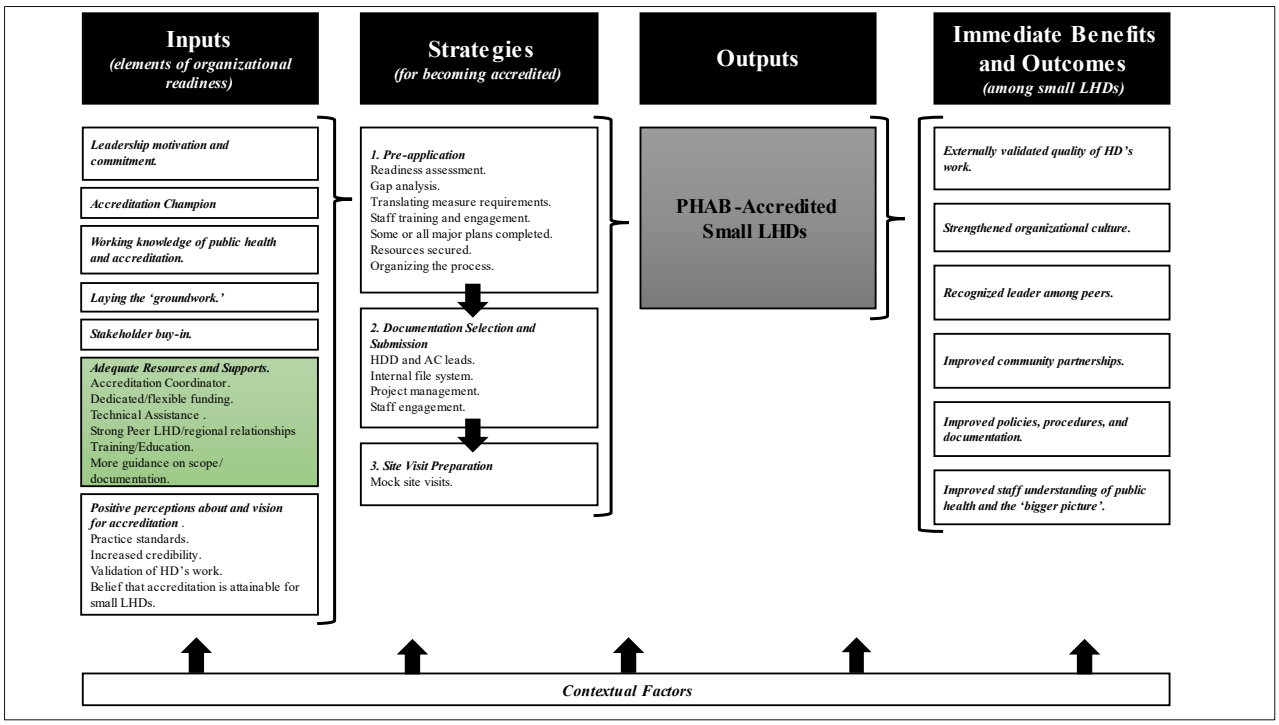

Figure 21. Linking Accreditation Readiness, Process Strategies, and Public Health Accreditation of Small LHDs

Inputs

Inputs in this logic model are organizational readiness factors identified among small LHDs in this study as important to have in place before formally applying for accreditation and attending the PHAB Applicant Training. In this study, this phase of the accreditation journey was referred to as 'pre-application.' Interviewees discussed the critical nature of leadership motivation and commitment to accreditation, as well as the importance of other factors like having an Accreditation Champion, a working knowledge of public health and of accreditation among LHD staff and leaders, spending time 'laying the groundwork' for their accreditation journey, stakeholder buy-in, positive perceptions about and vision for accreditation, and access to adequate supports and resources to their pre-application readiness building efforts. Each of these organizational readiness factors are detailed further below.

Leadership Motivation and Commitment. Leadership motivation and commitment from the HDD was important for first initiating the accreditation process, but also appeared essential in facilitating and maintaining forward momentum through later steps of the process. As stated by an LHD representative in Paper 4b, "*we've had leadership support from the beginning, and I think that that's probably crucial… She sees these as important things that she wants for our department. She has a lot of vision*." [Case 2] For most of these LHDs, the HDD's motivation and commitment for becoming accredited resulted in their ongoing, direct, and often quite substantive involvement in all aspects of the process. This ranged from setting a big-picture vision for what accreditation would mean for the organization to details of the process like preparing and uploading documentation (Papers 4a, 4b).

Accreditation Champion. Some small LHDs in this study identified additional staff within their departments who provided leadership from a level other than the HDD's role, which is consistent with findings in another recent study (Yeager et al, 2020). Many small LHDs conferred the importance and influence of having someone who they termed an 'Accreditation Champion.' These individuals were often in the official role of Accreditation Coordinator or HDD for the department, but sometimes they were not. In these cases, the Accreditation Champion was another LHD staff, group of staff, or member of the governing entity who believed in what accreditation could do for the agency and wanted to see it to fruition (Papers 4a, 4b).

While having formal leadership support and buy-in is important for taking the first formal step – applying and committing funding for accreditation fees - the Accreditation Champion role appears to be critical to the success of small LHDs in both the pre-application step and beyond. Accreditation Champions for the small LHDs assured their departments were building readiness

even without the promise of applying for accreditation because they saw the value and knew accreditation would benefit their respective agencies (Paper 4b).

Working Knowledge of Public Health and Accreditation. As discussed in Paper 4a, a lack of staff knowledge and leadership understanding about public health and accreditation was viewed as a barrier to accreditation for many small LHDs. While the lack of public health-specific knowledge among LHD staff is not unique to small LHDs, challenges recruiting and retaining staff with public health knowledge is exacerbated among small LHDs. As one recent study noted, some of the issues contributing to this challenge is remote geographic locations of many small LHDs, lower salaries, and competition between small LHDs and healthcare systems for skilled healthcare professionals like nurses (Leider et al, 2020).

All LHDs in this study discussed the importance of a *working* knowledge about public health and accreditation among leadership and staff, meaning their willingness to learn was critical to engaging in and completing the accreditation process (Papers 4a, 4b). Some HDDs became more interested in accreditation as they learned more about public health as a profession. Since so many public health practitioners come into the field without formal public health training, many of the HDDs in this study took it upon themselves to learn about public health, which led them to a greater understanding of why accreditation would be good for their department, but also for their community (de Beaumont Foundation, 2019; Paper 4b).

Many of the HDDs reported having early and frequent engagement in state or national efforts that were geared toward building knowledge, awareness, and accreditation readiness well before they applied for accreditation (Papers 4a, 4b). For example, one HDD discussed how she and one of her Board of Health members were involved in state-level quality improvement work associated with the Multi-State Learning Collaborative work sponsored by the Robert Wood

Johnson Foundation (RWJF), while another noted her HD's involvement in another RWJF-sponsored endeavor, explaining, "*...we were part of the Turning Point for Robert Wood Johnson Foundation. Turning Point project goes way back, but honestly being a part of that kind of help set our foundation, I think that was critical to getting us the foundation to move forward. I learned so much from that. And the performance management system was created [using] Turning Point. And so, we were a part of all of that. So that was a huge, huge piece. Then we were part of the Multi-State Learning Collaborative, so a lot of quality improvement, training*..." Other LHDs discussed how their state health department facilitated committees with focus on performance improvement capacity building for local health officials (Papers 4a, 4b).

LHDs in this study also expressed the positives of having an Accreditation Coordinator with a good basic understanding of both public health and familiarity with accreditation. As noted by an Accreditation Coordinator in Paper 4b, her prior work experience at another accredited LHD helped her 'jump in' to the work that needed to be done at her current LHD saying, "*I feel like I came in with a fairly good idea of like, the process in general, and like the core documents because I was working in health promotion, so you know, you kind of are touching on some of those larger documents, and I had a background in QI*…" [Case 1] This is not to say that other staff will be unsuccessful in the role if they lack formal public health training or experience with accreditation. The learning curve may just be a bit steeper and could lengthen the timeline necessary for the accreditation process.

Laying the 'Groundwork'. Laying the groundwork for accreditation often involved the LHD's completion of what the field refers to as the 'six pack', a group of major plans and processes including the community health assessment, community health improvement plan, strategic plan, emergency operations plan, quality improvement plan, and performance

management system before formally applying to PHAB. This helped the LHDs feel more confident and prepared for the journey, as one LHD put it, "*we really took additional time to make sure we had plans in place because we had heard feedback from other departments that they had kind of jumped in and needed to write a lot of plans at the last minute. So, we tried to get a lot of the bigger stuff done… when we were doing those plans, before we applied [the Accreditation Coordinator] and others were studying the public health accreditation standards, even when we were not required, and we tried to follow that format so we would be in a better position when we actually applied*." [Case 2] (Papers 4a, 4b)

Stakeholder Buy-In. Key stakeholders for which buy-in was essential were identified by small LHDs in this study as LHD staff, members of the governing entity, and community partners (Papers 4a, 4b). Staff buy-in was particularly important because of LHD staff size and the need for involvement by most, if not all, in the accreditation process. The average number of full-time staff employed by these LHDs was 21 but ranged from three to 43. One LHD specifically talked about how, without staff involvement in the process it would be very challenging, if not impossible for smaller agencies to achieve PHAB accreditation in a way that would be cohesive throughout the department. From another perspective, the HDD for another LHD talked about how staff of smaller agencies are generally willing to pitch in to help with new undertakings because it is the norm. She said, "*I think that as a part of a small health department you kind of get used to being a little bit of a 'jack of all trades.' And so, I think people are willing to pitch in outside of their comfort zone and do some of this work that may have been unfamiliar to them just because they've done it in the past as part of a staff member for a rural health department*." [Case 1] (Paper 4b)

Another stakeholder from which support and buy-in was essential for these small LHDs was the governing entity (Papers 4a, 4b). Many of the LHDs in this study had strong relationships with their governing entities, which was helpful when it came to gaining the support of this group to engage in accreditation. Despite maybe not having a great understanding of what accreditation meant for the LHD, the governing entity generally trusted and supported the LHDs in their decision to pursue accreditation. It seemed the biggest obstacle some LHDs faced in getting their governing entity's support was justifying the cost of accreditation fees and means for paying them.

Support from community partners was also important in small LHD pursuit of accreditation (Paper 4b). Because of their size, many small LHDs partner closely with, and may even relinquish leadership of major efforts like the community health assessment and improvement planning processes to other organizations within their community. As such, helping partners understand accreditation and gaining their support in the process helped LHDs assure any community-based efforts would still align with accreditation requirements, even if the LHD was a partner and not a lead in those efforts.

Adequate Resources and Supports. As described in Paper 4c, external resources and supports for the accreditation process were important to each of the small LHDs. Peer health departments, state health departments, national partner organizations, and local universities were cited as the most frequently accessed sources of resources and support for accreditation among this group of LHDs. Peer LHDs of all sizes were noted as key source of informal direct assistance (i.e., the LHDs would call and ask for help), conducting mock site visits, and for facilitating or participating in networking and/or peer learning communities. Peer LHDs also served as a source of motivation for small LHDs because competition was influential. Many

LHDs expressed their desire to be 'just as good' as their larger peers or to 'not be left behind' within their state among LHDs of all sizes.

The importance and role of the SHD in the accreditation process of small LHDs presented in a wide variety of ways (Papers 4a, 4b, 4c, 4d). Simply stated, overt expression of value and commitment to accreditation and encouragement of LHD engagement in accreditation by SHDs was influential in the decision to pursue accreditation among small LHDs in this study (Paper 4a). Many of the small LHDs in this study benefited from funding support, technical assistance, and learning communities or networking opportunities facilitated by their SHDs. State-level requirements and support from the SHD for developing elements of the 'six pack' helped facilitate accreditation readiness among these departments, as well (Paper 4d).

Two other key sources of support for accreditation among small LHDs in this study were national partner organizations and local universities (Paper 4d). National partners were cited most often for tools, templates, training, and technical assistance, while local universities were more likely to support the LHDs through increased human capacity or helping to fill specific gaps in LHD capacity. One other specific resource discussed by several of the small LHDs in Paper 4d was the assignment of Ameri-Corp VISTAs.

Positive Perceptions about and Vision for Accreditation. Nearly all small LHDs expressed the standard of practice established through the accreditation standards and measures as key reason underlying the decision to pursue accreditation. When most HDDs were considering accreditation for their department, they focused on how the standards and measures are based on the Essential Public Health Services and establish a standard for practice for the public health profession (Paper 4c). Many discussed how they used their accreditation process as a means of assuring their LHD was delivering the expected breadth and quality of programs

and services within their jurisdiction. At least two departments referred to accreditation as a 'good business practice' and used the standards and measures to guide improvement of agency operations. One HDD noted by going through accreditation, "…*we are ensuring that we're meeting national standards, you know, of what an excellent health department would be doing. And that relates to all sorts of different things… what our stakeholders expect and can expect from us. And then continuous quality improvement. We know that nobody meets these standards perfectly - no HD does - we're always continuously improving and we're adopting continuous quality improvement processes as part of accreditation and using those*." [Case 2]

The perception accreditation would validate quality and elevate credibility of these small LHDs among stakeholders locally, within their state, and across the country was also influential (Paper 4c). Some interviewees discussed their history of being a viewed as a quality LHD but wanted this perception to be validated by an external entity. Accreditation was a means through which this could be achieved. One HDD pointed out that some HDs in their state were working to address the PHAB standards and measures but had no plans to formally apply for accreditation. The HDD went on to discuss how, while using the standards and measures to guide LHD efforts is a good starting point, there is a difference between being 'accreditation ready' and formally going through the accreditation process and being reviewed by peers. She said, "*I think the experience of doing it [formally going through accreditation] - and because when I've had people that have said we're just going to be accreditation ready - you really can't say you're 'accreditation ready' until you've had a site visit and you've really had that critical look at your stuff, right? ... So, there is a difference between being 'accreditation ready' and being site visited...*" [Case 3]

A unique and notable perception expressed by LHDs in Paper 4c was the need to overcome the misnomer among many that accreditation is unattainable for small LHDs. One HD shared the following sentiment in seeing larger, more well-resourced HDs in their state struggle through the process, "…*a lot of our smaller public health departments, when they saw the struggles that larger health departments were having with it, they were like, 'okay, y'all, if you guys can't do it, then why would we even try? Like, what is the point?*" [Case 2] The fact small LHDs have become accredited, one with as few as three full-time equivalents, is evidence to the contrary of this misperception in the field.

Strategies

Paper 4b describes the common steps and activities used by small LHDs during their initial accreditation journey. While PHAB generally describes its accreditation process as a seven-step process, Paper 4b condensed them into four steps – pre-application, documentation selection and submission, site visit preparation, and maintenance. The first three of these steps are included in the logic model because they contribute directly to the model's outcome of 'accredited small LHDs'.

Pre-application encompassed all activities LHDs engaged in before going to their formal PHAB Applicant Training and appeared to take the longest amount of time. Most of the small LHDs reported taking at least 12 months – usually longer – in the pre-application phase. There were seven common activities small LHDs engaged in during pre-application, some of which related to building organizational readiness such as training and engaging staff, securing resources to pay accreditation fees and to appoint an Accreditation Coordinator, identifying gaps in readily available documentation, and assuring that most – if not all – major plans and processes were completed. One unanticipated finding was the uncommon use of Domain Teams

as a way of organizing staff and delegating responsibility for the next step of the process, documentation selection and submission.

After attending PHAB's Applicant Training, most of the small LHDs followed very similar steps to gather and prepare their documentation for the selection and submission step of the accreditation process, as shown in Figure 1 in Paper 4b. Most small LHDs used internal file systems or organize data and track their progress and many LHDs had most, if not all, staff engaged in the process because of their staff size.

Site visit preparation was largely comprised of mock site visits. As described in Paper 4b, six of the eight cases in this study engaged in a mock site visit, which consisted of document reviews, mock interviews, or a combination of those activities. They were performed by peer health department or state health department staff. One small LHD noted their mock site visitor was a trained PHAB site visitor who worked for their state health department. The two cases that did not use a mock site visit still engaged staff in preparation activities before their site visit.

Key Output and Immediate Outcomes Reported by Small LHDs

The logic model suggests that when small LHDs have many, if not all, of the organizational readiness elements in place when they decide to pursue accreditation and they engage in most, if not all, of the strategies listed, these small LHDs should be well-positioned to achieve accreditation. Per Paper 4c, many of the small LHDs in this study identified immediate benefits and outcomes of their accreditation journey. These included having their work externally validated by the review process, strengthening their organizational culture, becoming recognized as a leader among peers, improving community partnerships, improving policies, procedures, and documentation processes, and improving staff understanding of public health

and the ‘bigger picture’ of the health department’s programs, services, and impact in the community.

The benefits and outcomes discussed by small LHDs in this study largely align with and support what was forecasted as anticipated benefits and outcomes of accreditation by Joly et al (2007) before the accreditation program was launched and what has been reported as benefits and outcomes by accredited HDs of all sizes through PHAB program evaluation efforts over the past several years (Meit et al, 2017). Table XI summarizes the overlap between findings of this study, PHAB program evaluation data, and the anticipated benefits and outcomes proposed by Joly et al more than 10 years ago. Only one item was uniquely identified as a benefit/outcome by accredited small LHDs - being recognized as a leader by peers. This was specifically mentioned by six of the eight small LHDs in this study, with one sharing the following sentiment, “*I think it [accreditation] has set us up as a leader… and in [our region within the state], we have our little regional meetings, and we have a large county that [a large city] is in which tends to be a leader, and everybody goes to them to ask what they should do. And it's just made people sit up and take notice that [our LHD] knows what we're doing, too. And because the other smaller counties can relate to us - and if we can do it - then maybe they could do it also.*” [Case 2] Recognition as a leader among peers resulting from their accreditation status may be more important to small LHDs because it can afford them greater credibility and name recognition than they may have had prior to being accredited, both within their state and nationally. Further, small LHDs are not as likely to have the resource and staff capacity or availability to attend conferences, broadly share best practices, or disseminate their work in other wide-reaching ways as compared with larger HDs.

TABLE XI. COMPARISON OF ACCREDITATION BENEFIT AND OUTCOME FINDINGS ACROSS SOURCES			
Key Benefits and Outcomes	**Source of Reporting or Forecasting**		
	This Study: Accredited Small LHDs	**Meit et al (2017): Accredited HDs of all types and sizes**	**Joly et al (2007): Anticipated for HDs of all types and sizes**
Externally validated quality of HD's work	X	X	X
Strengthened organizational culture	X	X	
Recognized leader among peers	X		
Improved community partnerships	X	X	X
Improved policies, procedures, and documentation	X	X	X
Improved staff understanding of public health and the 'bigger picture'	X	X	X

b. Revisiting the Conceptual Framework

Individual elements of the conceptual framework presented in Chapter 2 (see Figure 12) and their suggested relationships to or influence on one another were based on available literature and data from overarching and generalized experiences of accredited HDs of all sizes and types. This study specifically assessed whether these factors, activities, or the experience of becoming accredited as a small LHD diverges from what has been more widely documented for all HDs.

Most key elements of the original conceptual framework were supported through this research as being applicable to the small LHD experience, though some appeared more specifically influential or presented somewhat differently for small LHDs when compared with what is documented in the literature. Elements of the conceptual framework that stand out as points of interest or divergence from the existing literature are highlighted in the following paragraphs.

Contextual factors identified as affecting accreditation for HDs of all sizes still apply in the context of small LHDs. Most of contextual factors included in the original conceptual framework are applicable to small LHDs, though some were more commonly described by the LHDs in this study than others. For example, many of the small LHDs discussed how state-level requirements for LHDs to complete major plans and processes included in the 'six pack' helped them be more prepared for accreditation than they would have otherwise been (Papers 4a, 4b), yet did not specifically reference the influence of Public Health 3.0 on their work as hypothesized in the original conceptual framework.

While important to the accreditation process for all HDs, it may be that a clear and well-communicated leadership vision for accreditation is particularly important for small LHDs. Other studies have documented the importance of leadership commitment to the accreditation process in the sense of ensuring adequate resources and staff time to complete the work necessary to become an accredited HD (Liu et al, 2017). This study's findings support the notion leadership commitment goes beyond assuring provision of human and financial resources. Leaders within these small LHDs set and communicated expectations for accreditation by helping staff and other stakeholders understand the process was more about organizational improvement than earning the status. This aligns with what national partners describe the role of leaders to be in the accreditation process, as well as what other researchers have found among HDs of all sizes – not just small ones - that have found success in achieving and maintaining accreditation (ASTHO, 2019; Liu et al, 2017).

Some of the more obvious anticipated challenges or barriers to accreditation, such as organizational size, staffing capacity, and budget did not seem to be as influential as expected. Prior research and PHAB program evaluations have identified organizational and staff capacity

and cost as key barriers to accreditation for HDs of all sizes and types (Beatty et al, 2018; Shah et al 2013; Shah et al, 2015). The expectation at the outset of this study was these barriers would be present, and perhaps even exacerbated among small LHDs because of their obvious resource constraints (Leider et al, 2020). While cost and capacity were certainly mentioned by small LHDs in this study, other important challenges and barriers among these departments discussed in Paper 4a related to documentation challenges such as being able to provide the required number of examples, deciphering PHAB's scope of authority, and finding ways to effectively document programs and services for which they do not have direct authority, but are required by PHAB (such as investigation (PHAB Domain 2) and enforcement (PHAB Domain 6) activities).

Staff knowledge and understanding of public health and accreditation was discussed in Paper 4a as a barrier to accreditation, as well. Since PHAB accreditation is founded in the Essential Public Health Services, health departments lacking staff with basic public health training or knowledge would likely experience a longer and more intensive preparation process before ever engaging in accreditation. This could be a daunting task for a small staff, especially if the health department has trouble recruiting and retaining staff in the first place, which is a documented issue in small rural LHDs (Leider et al, 2020).

A 'compliance approach' to accreditation among the small LHDs in this study was not evident. As described in Chapter 2, one hypothesis underlying this research was that some HDs approach accreditation from a compliance lens, while others approach accreditation from a leadership perspective. Among the small LHDs in this study, it was clear that each approached accreditation from a place of performance improvement or necessity for change. As discussed in Paper 4c, many of the small LHDs perceived PHAB accreditation as practice standards for public health or as a blueprint for structuring their agency for optimal business operation. This

diverges from the researcher's own personal experience of guiding a larger LHD through the initial accreditation process, which was largely driven by leadership's desire to be the first accredited in the state. While this could have been an underlying factor for pursuing accreditation among the small LHDs in this study, it did not appear to be the primary driver for any of them (Paper 4a).

Organizational readiness is an important precursor to establishing the vision for accreditation. In the literature review provided in Chapter 2, organizational readiness was pretty narrowly defined as having some or all key plans and processes complete or in process at the time of application and securing adequate human and financial resources to facilitate the accreditation process and pay the accreditation fees. What became clear in this study is that organizational readiness is broader than these components and should be well-established before an HD engages in the accreditation process. Paper 4b describes numerous readiness factors – both internal and external – that can affect a small LHD's decision-making, and actions taken in their accreditation journey. One factor that stands out is the importance of staff and leadership knowledge broadly about public health and more specifically about accreditation. Lack of knowledge and understanding about public health and/or accreditation can affect the leadership approach to accreditation, as well as the subsequent leadership vision established for an HD seeking accreditation. The way in which that leadership vision is communicated to staff and stakeholders at the outset of the accreditation effort sets the precedent for perceptions and attitudes among staff and stakeholders for the entire journey. A lack of knowledge and understanding of public health and accreditation has the potential to 'make or break' buy-in among stakeholders and to make the process more or less arduous for those working to shepherd the HD to the finish line and in maintaining their performance improvement progress long-term.

While small LHDs experience many of the same benefits and outcomes of larger HDs, being viewed as and sought after as a leader among peers appears to be important to small LHDs. As described in Paper 4c, many of the benefits and outcomes reported through PHAB evaluations of accredited health departments appear applicable specifically to small LHDs. However, one outcome that appears unique to small LHDs was the external benefit of being viewed as a leader among other LHDs in their states and across the country. Many of these LHDs discussed how becoming accredited verified that they were 'just as good' as larger neighboring counties or that they were able to 'blaze the trail' or set an example for other small LHDs. While this finding does not contribute a change in the conceptual framework presented below, it is included here because it was a divergence from benefits and outcomes recorded in existing literature.

Modifications to Contextual Factors

In the updated conceptual framework (see Figure 22), contextual factors most often reported by small LHDs in this study are represented in bold font. Other factors from the original contextual framework were left in the graphic because they are still relevant to the accreditation process of small LHDs. This change demonstrates how factors at the organizational level, like culture and leadership, factors at the interpersonal level, such as relationships with peer LHDs and access to learning communities, and individual level factors, like staff and leadership knowledge and understanding of public health and their perceptions and attitudes toward accreditation may have greater impact on small LHDs than some of the other factors in the model.

Modifications to Approach

The original conceptual framework depicted in Chapter 2 included two hypothesized approaches to accreditation, described as 'compliance' and 'leadership' approaches. In the revised conceptual framework (see Figure 22) the 'compliance' approach was removed because evidence of this approach being used among the eight small LHDs interviewed for this study was not apparent. Rather, findings from this study suggest that at least some of the three elements comprising the 'leadership' approach to accreditation described in Chapter 2 were present in each of the eight case health departments.

Modifications to Organizational Readiness

The final modification made to the conceptual framework during the revision was to expand the scope of organizational readiness from being important during the decision to pursue accreditation and the actual process of accreditation to also include vision-setting and pre-engagement in accreditation. This change was made to reflect the gravity of organizational readiness for accreditation in the small LHD accreditation journey. Many of the LHDs in this study spent considerable time and resources in assessing and building readiness for accreditation long before they attended PHAB's Applicant Training or formally engaged in the process. The expansion of the green organizational readiness box in the revised conceptual framework is intended to convey the critical nature of organizational readiness at all steps in this journey, even before the first 'formal' step of making the decision to pursue accreditation is taken.

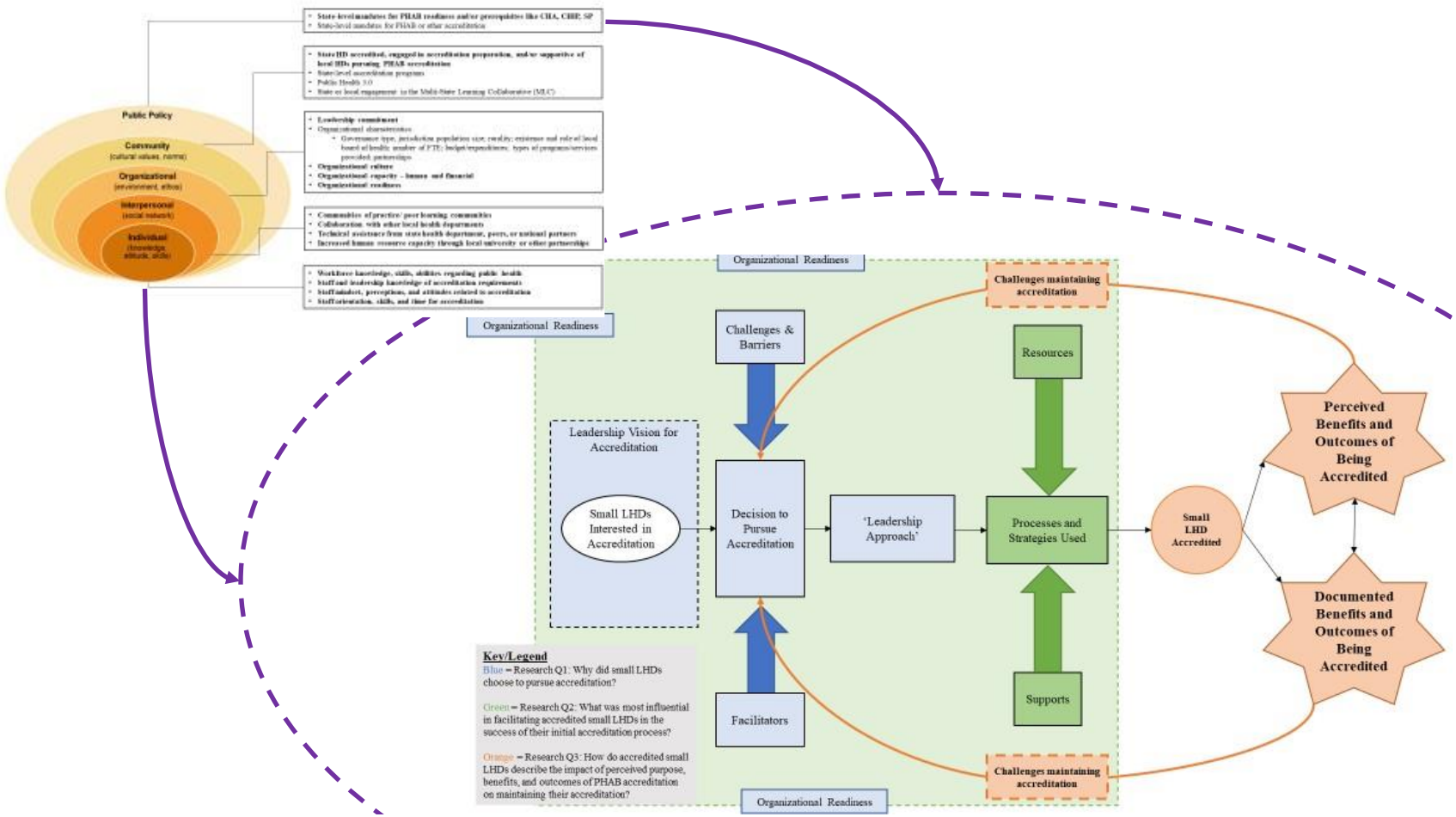

Figure 22. Revised Conceptual Framework for Accreditation among Small LHDs

c. Implications and Recommendations for Practice

This study provided a unique and timely opportunity to learn from the experiences of several PHAB-accredited small LHDs. Through this research, four key implications for practice were identified. While the focus of this study was to document and better understand the experience of small LHDs specific to their national accreditation journey, the findings reiterated many of the broader public health system challenges which underly the hesitancy, resistance, or perceived inability to pursue national accreditation among small LHDs. These broader challenges - relating to funding, workforce, organizational readiness, and messaging about the value of accreditation – are packaged as implications for practice and are described in greater detail below, starting with a summary (see Table XII) which delineates the four implications and the key stakeholder groups that may have a key role in addressing them.

TABLE XII. SUMMARY OF KEY IMPLICATIONS/RECOMMENDATIONS FOR PRACTICE AND PUBLIC HEALTH SYSTEM PARTNERS WITH PROPOSED OR ANTICIPATED ROLES

Implications/Recommendations	**PHAB**	**Public Health System Partners**		**SHDs**	**Small LHDs**
		Universities/ Academia	**National Partners**		
Advocating for adequate, flexible, and consistent funding for public health infrastructure improvements (4a, 4c, 4d)	**X**		**X**	**X**	**X**
Training, recruitment, and retention of a qualified public health workforce (4a, 4b)		**X**	**X**	**X**	**X**
Facilitating or building organizational readiness of small LHDs for accreditation (4a, 4b)	**X**	**X**	**X**	**X**	**X**
Improved and tailored messaging for various stakeholder groups* about the purpose and value of public health accreditation (4c)	**X**		**X**	**X**	**X**

*** Various stakeholder groups may include, but are not limited to small LHDs, governing boards or bodies, community members, organizations within the public health system at various governmental levels, funders, etc.**

Advocating for Adequate, Flexible, and Consistent Funding for Public Health Infrastructure Improvements

Many of the accredited small LHDs in this study accessed financial resources like mini grants aimed at accreditation readiness activities from their SHDs, national partners, or were supported by their governing entity and funders in spending leftover federal dollars to pay for aspects of their accreditation process (Paper 4a). Several organizational plans, processes, and associated activities reviewed when a health department pursues accreditation are foundational to strong public health infrastructure. However, infrastructure of the public health system in the United States from the national level to the local level has been cited as a shortcoming and opportunity for improvement since the late 1980s (IOM, 1988; IOM, 2002). This continues to be a point of concern more than 30 years later, particularly considering the most recent documented challenges associated with inconsistent and inadequate response to the COVID-19 pandemic in this country (Maani & Galea, 2020; Daszak et al, 2021). As noted in Chapter 1, there have been several attempts over the years to define public health as a profession and to conceptualize the minimum level of services all HDs should be providing for the communities served, regardless of size (CDC, 2014; NACCHO, 2005; Lenihan et al, 2007). However, it is one thing to know ***what*** they should be providing, it is a much larger challenge to assure HDs have the infrastructure and resources for ***how*** those services will be provided.

Recent studies have focused on the structural deficits in the US public health system and the reasons behind them, which are largely based in challenges pertaining to the way in which public health, and subsequently HDs, are funded (Bekemeier et al, 2018; Resnick et al, 2017; Leider et al, 2018). Most HDs rely on funding from a variety of local, state, and federal sources which are often earmarked for use in delivery of specific programs or activities. This is

compounded with chronic underfunding of core services and reactionary and temporary funding for emerging issues (Maani & Galea, 2020). Together, existing funding mechanisms and the lack of additional investment rarely provides any funding focused on needed updates and improvements to the infrastructure. Strong basic infrastructure is critical and underlies the public health system's ability, or inability, to effectively deliver on the overarching mission of preventing disease and injury and promoting health.

Many of the reported benefits of PHAB accreditation demonstrate accreditation's ability to facilitate infrastructure improvements at the individual HD-level. Some of these benefits, such as increased use of strategic planning and assessment, benchmarking against national standards and peers, improved operations, processes and documentation, and improved capacity to deliver high quality public health services indicate improvements to individual HD infrastructure (Meit et al, 2017). It can be hypothesized that more accredited HDs in the US should lead to improved infrastructure across the country because all HDs, regardless of size or location, are held to the same set of practice-informed standards - the PHAB Standards and Measures. However, public health system-level improvements at the state and national levels resulting from the national accreditation program have not yet been documented. Measuring and reporting system-level impacts of accreditation on public health infrastructure continues to be a research focus outlined in PHAB's official research agenda. (PHAB, 2017)

HDs of all sizes face challenges with both the financial costs of accreditation as well as ensuring staff capacity to take on the work associated with going through initial accreditation (Beatty et al, 2018; Shah et al, 2013; Shah et al, 2015). As confirmed by small LHDs in this study, cost and capacity issues are exacerbated among small LHDs based on their organizational size and core budget alone and many seek additional external resources to support their

accreditation efforts. As discussed in Chapter 4 (Paper 4a), financial resources like mini grants supporting accreditation readiness activities from SHDs, national partners, or support by the governing entity and funders in spending leftover federal dollars to pay for aspects of the accreditation process facilitated accreditation for many of the small LHDs in this study. These types of resources have all but dried up in the past several years, making it more challenging for HDs, but especially small LHDs, to secure resources critical to their pursuit of accreditation.

In 2016, the US Department of Health and Human Services launched the Public Health 3.0 initiative, which was focused on addressing social determinants of health to improve health to facilitate long-term health improvements for all Americans. Some of the key recommendations from this report were to enhance and modify current funding mechanisms for public health and to assure every person in the United States is served by a nationally accredited HD. While past efforts to introduce public health infrastructure funding bills to Congress for a vote have been unsuccessful (S. 4740 (116th)), the findings of this study provide further justification of the need for improved, sustainable, and more equitable funding streams to support infrastructure improvements for HDs of all sizes, including small LHDs.

PHAB and its national, state, and local partner organizations like NACCHO, ASTHO, and others have a key role in building the case and advocating for needed, and long overdue, improvements in funding the public health system in the United States. As recently as February 12, 2021, PHAB and hundreds of public health system partners have demonstrated their commitment to securing long-term, investment in public health infrastructure by proposing a $4.5 billion annual increase in infrastructure and modernization of federal, state, local, tribal, and territorial public health agencies by signing on to a letter urging Congress to pass legislation to this effect (Trust for America's Health, 2021).

While time will tell whether this new funding stream will come to fruition, **other shorter-term opportunities remain for national partners to consider reviving funding and technical assistance programs known to be effective in building accreditation readiness among health departments or for SHDs to offer flexibility, to the extent possible, in the use of dollars allocated to LHDs within their states infrastructure improvements to support accreditation readiness may be achieved.** For example, between 2011 and 2018 NACCHO managed the Accreditation Support Initiative, funded through the CDC's Office for State, Tribal, Local and Territorial Support. This program provided dollars to fund activities critical for building PHAB accreditation readiness among Tribal, Territorial, and local HDs, including the ability to use funding to offset up to half of the initial accreditation fee. (NACCHO, 2019a). Early evaluation of this program showed all sites self-reported accreditation readiness gains that would not have been attained without HD participation in the program. (Monteiro et al, 2014).

Training, Recruitment, and Retention of a Qualified Public Health Workforce for Small LHDs

This study began to explore the link between known workforce challenges of small LHDs and their accreditation decision-making and associated activities. As noted in Chapter 4 (Papers 4a, 4c), workforce knowledge of public health and accreditation was considered a facilitator or challenge/barrier to engaging in accreditation and has influence in small LHD efforts to maintain accreditation status. It is no secret that public health as a profession faces numerous and wide-ranging workforce challenges. Though generally satisfied with their jobs, many public health practitioners report dissatisfaction with salary, few opportunities for advancement, and the workplace environment (de Beaumont Foundation, 2019). Nearly half of the US public health workforce has reported they are considering leaving their organization in the next five years.

And, while two-thirds of the public health workforce has at least a bachelor's degree and 30% an advanced degree, only 14% have formal training in public health (de Beaumont Foundation, 2019). These workforce challenges are even more substantial in small and rural communities due to their often-remote locations and increased competition for skilled positions, like nursing, with healthcare systems in the area that can offer higher salaries, better benefits, and other incentives (Leider et al, 2020).

What this suggests is **there is a need for innovative and coordinated efforts among national, state, and local public health entities to improve and increase public health competency among the current and future workforce and to devise better strategies for recruiting and retaining qualified public health practitioners in small LHDs**. One potential strategy for bringing this recommendation to action could be investment by national, state, and/or local partners to aid HDs in building capacity for meeting PHAB accreditation requirements related to workforce development. Domain 8 in the PHAB Standards and Measures aligns with the Essential Public Health Service for building a diverse and skilled (public health) workforce and includes requirements for engaging with partners to promote public health as a career choice, assessing staff capacity and competency in public health knowledge and skills, and assuring strong human resources infrastructure for recruitment, selection, and retention. (PHAB, 2013c)

Training. Small LHDs are more likely to be considered part of the clinical care safety net in their jurisdictions when compared with larger LHDs, meaning many of their staff are required to have clinical training and experience, not necessarily training in public health to do their jobs (Bolin et al, 2015; Meit and Knudson, 2009). Other staff, such as environmentalists, clerical staff, and even HD administrators/directors may come to work in HDs without public health

training and minimal knowledge of the profession. Therefore, **public health system partners, SHDs, and small LHDs have an opportunity to engage HD staff and leaders in basic public health training to assure they have a basic understanding of how their work fits into the bigger public health 'picture.'** This recommendation can be implemented for low to no cost by requiring new and existing HD staff 'public health 101' as part of orientation and professional development requirements and by providing staff access to a menu of free public health training courses, such as that compiled in the TRAIN Learning Network, a system powered by the Public Health Foundation for providing training to public health professionals. (TRAIN, 2021). For HDs with resources available to invest in public health competency-building, supporting attendance at public health conferences, paid training programs or courses, and offering to offset cost of longer-term commitments for continuing education such as tuition reimbursement for public health degree or certificate programs can help increase general staff competency. Each of these suggestions, intended to build staff knowledge and competency in public health, can also be incorporated into existing or future workforce development policies and plans. If using the PHAB Standards and Measures to guide workforce development policy or plan development, HDs will simultaneously improve accreditation readiness by creating or updating a plan core to the accreditation process.

Budget and time constraints associated with some of these strategies may be prohibitive for small LHDs – especially degree programs, however the growing interest across the country in the Academic Health Department model, or other less formal relationships between governmental public health and academic institutions, may be one approach for overcoming some of these barriers. The Academic Health Department model essentially establishes a formal partnership between an HD and an academic institution which facilitates the equivalent of a

'teaching hospital' relationship between the participating entities. (PHF, n.d.) This type of arrangement may yield benefits beyond just training and development programs for small LHD staff; it could also establish growth opportunities for staff like teaching courses, mentoring students or interns, or engaging in research with academic partners which could contribute to job satisfaction and retention.

According to findings in the 2019 NACCHO Profile, less than 10% of small LHDs have staff serving as faculty in academic institutions or have a formal relationship with academic institutions for provision of training or professional development for staff. Further, only about 11% of small LHDs collaborate with academic institutions on research studies and 30% of small LHDs do not engage with academic institutions in any capacity. The most common relationship between small LHDs and academic institutions appears to be accepting interns, trainees, or volunteers (66%) but even this occurs at a much lower rate when compared with medium (91%) and large LHDs (93%).

The 2019 NACCHO Profile data underscores the currently missed **opportunity for LHDs to establish formal or informal partnerships with academic institutions to improve access to training and development opportunities for staff and managers working in small LHDs.** The mutual benefits and resources resulting from a formal Academic Health Department agreement or less formal agreement with an academic institution for some elements of the Academic Health Department model could be deployed to LHDs and communities that would benefit most, especially communities served by small LHDs.

Recruitment. Recruitment of qualified public health practitioners can be a challenge in any community but seems particularly challenging in jurisdictions served by small and rural LHDs (Leider et al, 2020). As previously cited, low salaries and competition with larger

institutions like hospitals create difficulties in hiring staff in these LHDs. Data suggests the median age of the public health workforce is 42 years, with many planning to retire or leave their organization in the next few years. Despite being the largest group in the overall US workforce, Millennials are largely underrepresented in the public health workforce which may have major implications for HDs (de Beaumont Foundation, 2019).

As the public health workforce continues to age and retire, those positions will need to be filled by younger generations, like Millennials, which may pose new and different challenges to recruitment for all HDs, but even more so for small LHDs. Some key characteristics of Millennials in the US workforce are that they are diverse, highly educated, and 'drowning' in student loan debt (Deloitte, 2015). Both the high level of education and looming student loan debt may compound issues currently observed in the public health workforce pertaining to salary, and diversity of this population may make relocating to small or rural communities even less appealing because of the lack of diversity in many of those communities.

Taking these factors into consideration, **small LHDs and SHDs have an opportunity to work with academic institutions to facilitate opportunities for students in degree programs relating to public health careers to gain exposure and experience in public health while they are still being trained and to promote working in public health as a desirable career choice.** However, promoting public health as a career choice alone will not be enough. There are larger systemic changes that will need to be considered to engage younger generations in public health careers for the long-term, especially those with specialized training that can make more money working in other sectors, like healthcare.

Higher, more competitive base salaries for public health workers are an obvious option for improving recruitment of new and qualified employees, but without an influx of sustainable

funding from federal, state, and local sources this may not be feasible – at least not soon. Other suggested options for overcoming the challenge of recruiting younger generations to work in public health may require ways of offsetting the burden of student loans. For example, **public health system partners, particularly those at the federal level, could consider establishing a program like that of the National Health Service Corps Rural Community Loan Repayment Program (US Department of Health and Human Services, 2021) to provides loan forgiveness for public health practitioners willing to relocate and serve rural jurisdictions may be a feasible option for improving recruitment.**

There are non-financial approaches to recruiting Millennials that may merit consideration, too. Studies have found this segment of the workforce values collaborative work culture, flexible work schedules, mentorship and coaching from their supervisor, work-life integration, and working for an organization with an opportunity to make the world a 'better place' (Asghar, 2014). **While many of these approaches can be implemented directly by the employer, the role of public health system partners in supporting HD capacity to design and implement these changes will be important, as some will require significant organizational and culture shifts** in agencies that can sometimes be considered very rigid and slow-to-change governmental systems.

Retention. While some turnover in public health will be attributed to retirements in the next several years, there is concern about non-retirement loss of employees, as 25% of HD workers report plans to leave their organization in the next five years for reasons other than retirement (de Beaumont Foundation, 2019). The most common reasons for this departure are low pay, lack of advancement opportunities, and workplace environment. In recent years, strategies like **offering financial and non-financial incentives and opportunities for growth**

and advancement have been identified possible ways to retain staff (Yeager et al, 2016). Public health system partners, especially those at the national or federal level have an opportunity to influence investment in public health to support financial incentives but finding ways of cultivating advancement and growth for employees largely falls with their direct employer. Partnerships, like Academic Health Department arrangements may support these types of opportunities at low financial cost to small LHDs. Other options may include increased support for staff attendance at national conferences, in leadership development programs, or active membership in professional organizations.

Facilitating or Building Organizational Readiness of Small LHDs for Accreditation

Organizational readiness was a critical factor among participants' achievement of accreditation in this study (Papers 4a, 4b). As depicted in the revised conceptual framework (see Figure 22), organizational readiness for accreditation should be considered before a small LHD engages in the process. PHAB, public health system partners, SHDs, and small LHDs all have a role in helping other small LHDs improve their readiness to pursue accreditation.

As the agency responsible for administering the accreditation program, there are several ways in which PHAB could better support small LHDs in their quest to become accredited. **For example, PHAB could update and test the utility of the Readiness Checklists and other publicly available accreditation preparation materials, provide potential applicants with earlier access to an Accreditation Specialist for consultation about accreditation requirements, offer PHAB Applicant Training earlier in the process, and could consider ways of enhancing the direct technical assistance provided to health departments throughout the process.** Since PHAB maintains scored documentation for accredited HDs within a centralized system and can compile highly scored example documents from these

departments, **they may consider developing a documentation repository that is sortable by jurisdiction size to address the gaps in available examples** cited by small LHDs in this study.

All small LHDs may not be in a situation, now or ever, where pursuing PHAB accreditation is feasible. This should not preclude these agencies from engaging in performance improvement and an external review process to validate their work as high-quality. **PHAB has an opportunity to innovate a means by which these small LHDs can still demonstrate to their community and stakeholders that they are providing quality services.** Establishing a new recognition process or product, whether as a separate recognition, pathway to future PHAB accreditation, or a different or combination of these options, exists. Efforts to develop, operationalize, pilot test, and launch such a product are currently underway.

Academic partners were identified by small LHDs in this study as being a source of human resources and technical support which contributed to their organizational readiness for accreditation (Paper 4d). For example, some small LHDs worked with faculty and students to fill gaps in staff competency, through provision of training for LHD staff, working with the LHD directly in efforts like conducting focus groups or analyzing secondary data, or internships to support accreditation-specific activities. In one state, a local university was even the convener of the LHD learning community focused on improving accreditation readiness. Each of these actions taken by academia in partnership with small LHDs in this study could be duplicated and leveraged in other communities across the country. Some universities may be more well-positioned for this than others, but nonetheless **there is a major opportunity for increased collaboration between academia and public health for building accreditation readiness.** This could be accomplished in communities where there is an obvious academic-LHD

opportunity due to geographic proximity but could be extended to more remote communities through university extension offices or through partnerships where the SHD serves as a conduit.

State health departments played an influential role in facilitating readiness for accreditation among the small LHDs in this study in a variety of ways. Much of what was learned through this research about state requirements for major plans and processes, provision of financial resources and technical assistance, and convening peer learning communities could be learned from, improved upon, and applied systematically in each state to yield additional LHD applicants for accreditation. For example, there are several states which have requirements for LHDs to complete community health assessments, community health improvement plans, and strategic plans, but as learned through this study, those requirements do not always align with what is required to demonstrate conformity with PHAB accreditation measures. **SHDs with existing state requirements for plans and process could revise and expand them to assure alignment between these requirements and the PHAB measure requirements for the 'six pack. SHDs without existing state requirements could consider implementing some that correspond with PHAB measure requirements.** Both approaches would increase technical readiness for accreditation as the plans which comprise the 'six pack' are sometimes the heaviest lift, but also one of the greatest predictors of LHD engagement in PHAB accreditation (Yeager et al, 2020; Beatty et al, 2018).

Much of the funding provided to small LHDs by their SHD in this study was likely available because of pass-through dollars from federal funding streams like the National Public Health Improvement Initiative (NPHII), which no longer exist. **SHDs may not have the same 'pots' of money available today, but there are opportunities in which they could allow flexibility in how dollars are spent by LHDs to facilitate greater engagement in**

performance improvement-type activities. They could also consider providing small amounts of money to help small LHDs develop plans and processes necessary for accreditation. As found in this study, investments – even small ones – in this type of work can be motivating for small LHDs to move forward with accreditation. **SHDs can also enhance LHD readiness within their states by convening peer learning communities, developing documentation repositories, and providing more direct technical assistance to LHDs that request it, such as document review or mock site visits.**

Small LHDs in this study all indicated the importance of peer LHDs in their experience of becoming accredited, from informal check-ins, sharing of documents, participation in learning communities, and conduct of mock site visits (Paper 4d). While these types of relationships continue, many accredited peer LHDs are mid-size or large and cannot account for the variable context and experiences of small LHDs. Therefore, support and sharing of documents by larger LHDs may not be as helpful to small LHDs as if it were coming from other accredited small LHDs. As such, one remaining challenge is the capacity of currently accredited small LHDs to provide support to others who are in progress toward accreditation may be limited. **PHAB should consider ways to efficiently collect and share the stories, experiences, lessons-learned, and possibly documentation examples from these LHDs to facilitate peer support among small LHDs without the added burden of asking the small subset of accredited small LHDs to engage directly with other small LHDs in process**.

Improved and Tailored Messaging for Various Stakeholder Groups about the Purpose and Value of Public Health Accreditation

One of the more surprising findings in this study was the lack of perceived value of accreditation among stakeholders both within and outside of the public health system, as

described in Chapter 4 (Paper 4c). Over the years, various attempts at communicating the value and impact of PHAB accreditation have been made, but it appears the message is not 'landing' with the target audiences (Meit et al, 2017; PHAB, 2020). Since the focus historically has been largely on communicating value of accreditation based on the individual HD experience (i.e., workforce improvements, improved operations, etc), the broader impact of accreditation to the US public health system (i.e., intermediate, and long-term outcomes anticipated by Joly et al, 2007 – see Figure 2) has not been addressed or communicated in a way easily digestible by various stakeholder groups. Finding new ways to convey the importance and impact of PHAB accreditation to individual health departments, but also to their communities, decision-makers, and the broader public health system in the United States will be critical to increasing uptake of accreditation among other LHDs, including small ones.

PHAB and national public health system partners have an opportunity to communicate with policymakers about how national accreditation provides a set of practice standards for public health that can be applied to health departments of all sizes to assure communities served by those agencies are receiving basic, yet quality public health services. However, for this to happen, adequate and sustainable resources must be allocated to communities of all sizes and types to assure necessary infrastructure and workforce for building accreditation readiness in these communities.

Summary

In summary, the implications and associated recommendations for practice described in this section of Chapter 5 are interconnected and, if taken up by public health system leaders and their constituencies in a systematic way, may improve the public health system infrastructure in the United States and lead to increased uptake of PHAB accreditation among all HDs, including

small ones. Figure 23 illustrates the relationship between and among the implications presented in Chapter 5, positing one overarching implication for practice - **we will be challenged to increase uptake of PHAB accreditation among any health departments if we do not first address the chronically inequitable and inconsistent funding of the public health system by all levels of government and the consequences this has had on public health infrastructure and workforce in the United States.** This implication is applicable to HDs of all types and sizes but is particularly relevant for small LHDs as the challenges they face related to insufficient infrastructure and workforce are even more acute.

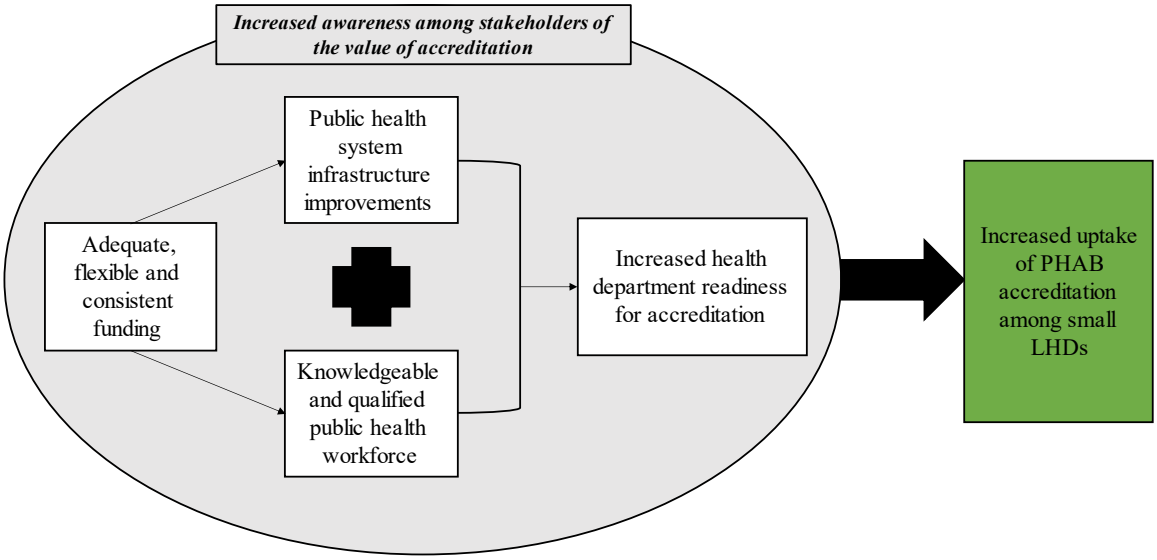

Figure 23. Relationship between and among Implications for Practice

d. Recommendations for Future Research

Based on what has been learned through this study and the implications for practice described in the previous section of this chapter, several avenues for future research to strengthen

and expand the literature pertaining to small LHD accreditation and broader public health system considerations are identified below.

- Because recall bias has been identified as a possible limitation among the small LHDs that participated in this study, future research could replicate this study with small LHDs with a shorter gap between initial accreditation being awarded and the interviews being conducted.
- SHDs were identified as particularly influential facilitator in the accreditation journey of small LHDs participating in this study, but the activities and support provided was inconsistent from state-to-state. Further exploration of the extent to which SHDs are supporting LHDs in their respective states and the influence this has on LHD accreditation readiness and eventual uptake of accreditation is needed.
- Several of the small LHDs in this study expressed their commitment to accreditation and the impact it had on their respective agencies, however many noted that accreditation could not be made mandatory because in its current form, national accreditation is not readily attainable for all small LHDs. The legislation being introduced for consideration in Congress for public health infrastructure funding includes accreditation as a mechanism for assuring accountability for that funding stream, should it come to fruition. To avoid equity issues with allocation of this type of funding, it may be advisable to explore what a more attainable variation of accreditation may encompass, and formally assess interest, capacity, and likelihood of small and under resourced LHDs to engage in such a variation of accreditation.
- This study began to uncover 'what matters' to small LHDs when deciding to pursue accreditation, namely that national accreditation establishes practice standards for

their agencies and that small LHDs that achieve accreditation are viewed as leaders among other LHDs. Further inquiry into how these 'benefits', and others, can be used to encourage other small LHDs to engage in accreditation may help increase uptake of accreditation among these departments.

- As previously discussed, the benefits and outcomes of accreditation with respect to individual HDs and the communities they serve have been well-documented over the course of the accreditation program's lifecycle. However, the impact of accreditation to the larger public health system within states and at the national level has not been articulated. There is an opportunity for future research to assess if and how accreditation of individual LHDs and states has contributed to broader system improvements for public health.

e. Study Limitations

Several limitations were considered, and mitigation strategies were implemented where possible when planning and executing this research. These included limitations with case recruitment and data collection efforts, reporting bias, recall bias, and researcher bias. Each specifically identified limitation and corresponding mitigation strategies used are summarized in Table XIII below.

One additional note of importance for this study was the timing of data collection and the influence of the COVID-19 pandemic in the United States. Data collection for this study mostly occurred during the early months of the COVID-19 pandemic, between March and July 2020. At the time of their interviews, many HDs made brief references to COVID-19 and how going through accreditation positively influenced their ability and readiness to respond. Had data collection occurred later in 2020 or even in early 2021, it is likely there would have been greater

time for reflection by HD staff and leaders regarding accreditation's influence on their response efforts. Several limitations described in Table XIII refer to the challenges encountered during this study that can be attributed to COVID-19.

TABLE XIII. STUDY LIMITATIONS AND MITIGATION STRATEGIES		
Study Limitation	Brief Description	Mitigation Strategies
Recruitment	Sampling: At the time the sampling was conducted for this study, there were only 19 small LHDs meeting inclusion criteria.	Clear inclusion/exclusion criteria were established and followed during the recruitment stage of this study. Additionally, random sampling among small LHDs meeting inclusion criteria was implemented.
	Participants: Challenges engaging and retaining case HDs in the study due timing of COVID-19 in the US was unexpected. This also affected the ability to engage multiple embedded units for some cases and led to a need for flexibility in interview participation and scheduling.	Where possible, the researcher tried to implement the desired recruitment of multiple stakeholders for each case. Those agreeing to an interview were afforded flexibility in scheduling (and rescheduling), as necessary, which helped assure 8 total cases.
	Limited Representation: The cases included in this study were all located in the Midwest or Pacific West US Census region. This is another possible consequence of the random selection process used in the recruitment process and the dropout effect of COVID-19 in this study.	While the geography of LHDs may have been limited, the staff size, budget, and jurisdiction size for the cases was diverse. All cases met inclusion criteria established in the study protocol.
Data Collection	Timing: Data collection was planned to occur during February and April 2020, but due to COVID-19 and its effect on the availability of small LHD staff and leaders, the timeframe was drastically expanded (to Sept 2020).	The timeframe for data collection was expanded to reach the minimum desired case inclusion for the study (8), which was met.
	Content: Despite having no questions in the interview guide specific to COVID-19, many LHD staff and leaders spoke about COVID-19 which could have skewed their responses to some of the questions about accreditation or shifted how they perceived the questions being asked.	This was unexpected and unavoidable. The researcher stuck to the interview script and redirected participants if they went down a rabbit hole for too long about COVID-19. This was not a huge issue in the interviews.

TABLE XIII. STUDY LIMITATIONS AND MITIGATION STRATEGIES		
Study Limitation	Brief Description	Mitigation Strategies
Reporting Bias	LHD staff and leaders provided self-reported accounts of their experience going through the initial accreditation process. Sometimes there was only one person available from the LHD to participate in the interview.	All but one LHD had multiple stakeholders participate in their interview process. Sometimes together in a joint interview, others in multiple interviews.
	For some LHDs, the director and AC participated in one joint interview. This may have led to untruthful or incomplete accounts of the accreditation experience.	The original research design called for individual interviews with leaders and ACs to allow for triangulation, but due to COVID-19 and another lesson-learned about leaders being heavily involved in their accreditation efforts, it didn't always make sense (and the HD did not have capacity) to participate in two separate interviews.
	For some LHDs, the staff who led the accreditation process were no longer working at the LHD, so the story shared by those who participated in the interview may have been incomplete or inaccurate.	In some cases, the former HDD was engaged by the new one so the researcher could have a clear picture of the accreditation process. In other cases, members of the accreditation team participated and provided as much input as they could. In one case the AC had become the HDD so she provided a perspective from the AC more than the HDD.
Recall Bias	Interview responses relied on knowledge and recall from interviewees about decisions, plans, and processes in which they engaged over the course of several years – some more than four years ago. (Miles, Huberman, & Saldana, 2014)	Where possible, the researcher tried to have multiple interviewees for each LHD to corroborate stories, though this was not always possible. For many of the process-related questions, additional documentation to support or triangulate was not available.
	For many of the process-related questions, additional documentation to support or triangulate was not available so the interviews were the primary source of data.	Multiple interviewees/ multiple perspectives, as possible
	Recall of details may have been challenging and turnover of some key staff may have impacted this as well.	Multiple interviewees/multiple perspectives, as possible

TABLE XIII. STUDY LIMITATIONS AND MITIGATION STRATEGIES		
Study Limitation	Brief Description	Mitigation Strategies
	Some of these LHDs were already thinking about reaccreditation and changes they had made after initial accreditation which may have also influenced recall.	Reminders/prompts throughout the interview specific to initial accreditation; Clarification requested by the researcher when it was unclear whether the interviewee was discussing reaccreditation vs initial accreditation efforts
Researcher Bias	Qualitative research – inherent potential for biases (Miles, Huberman, & Saldana, 2014)	Second coder for nearly 20% of transcripts, updating codebook accordingly
	The primary research has a vested interest and vast experience working in national accreditation as an Accreditation Coordinator, Site Visitor, and now as an employee of PHAB.	Reflective memoing to identify biases and assess other perspectives; the researcher acknowledges her own potential for bias as the primary researcher due to her role as a PHAB employee and former Accreditation Coordinator and Site Visitor.

f. Conclusion

This study was conducted to explore and describe the experience and perceptions of national public health department accreditation among small health departments that have achieved accreditation. The purpose of gathering, analyzing, and drawing conclusions from this information was multi-faceted. First, to understand what motivates and/or facilitates small health departments to pursue accreditation when the literature suggests there are numerous barriers and challenges. Second, to document the key process steps, supports, and resources that were influential in the success among these departments in achieving accreditation. And third, to capture feedback pertaining to the benefits and outcomes of accreditation that 'matter' among small health departments.

A series of 'inputs' may be necessary for building the level of organizational readiness required for success in the national accreditation process. Some of the keys to building this

readiness include leadership motivation and commitment, an Accreditation Champion, working knowledge of public health and accreditation, spending time 'laying the groundwork', stakeholder buy-in, provision of adequate supports and resources, and positive perceptions about and vision for accreditation. These inputs help to solidify a foundation that can then support use of key strategies that can be employed by small health departments to achieve and maintain accreditation.

One of the national public health department accreditation program's goals is to facilitate continuous performance improvement by establishing and assessing health departments against agreed-upon standards of practice. If we are to expect health departments of any size – particularly those classified as small and under resourced – to pursue accreditation in the future, system level improvements to the United States' public health system will be critical, particularly as it relates to flexible, adequate, and sustainable funding to provide EPHS and ensuring the public health workforce is knowledgeable about public health.

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APPENDICES

Appendix 1	**Measurement Table**
Appendix 2	**IRB Approval**
Appendix 3	**Interview Guide**
Appendix 4	**PHAB-CEO Lead Email for Case Recruitment**
Appendix 5	**Recruitment Email**
Appendix 6	**Study Overview and Consent**
Appendix 7	**Codebook**

APPENDIX 1 – MEASUREMENT TABLE

Measurement Table

Research Question 1: Why did accredited small local health departments choose to pursue PHAB accreditation?

Key Questions for Analysis:

A. What factors (motivators, incentives, barriers, and challenges) affected the decision of small accredited local health departments to pursue accreditation?
B. How did the small accredited local health department's vision for accreditation's influence on their organization affect the approach used?
C. How did the small accredited local health department's approach to accreditation influence their process, strategies, and outcomes?

Constructs, Definitions, & RQ Alignment	Subconstructs, Definitions, & Parent Codes	Working Definition, Keywords and Possible Child Codes	Data Source(s), Sampling & Rationale	Data Collection, Organization, Analysis, and Integration/Triangulation Plan	Analysis Notes
Construct 1: Decision-Related Factors *Operational Definition:* factors relating to health department decision to pursue PHAB accreditation **RQ Alignment: 1A**	**1a Facilitators** *Operational Definition:* internal or external factors that supported or influenced the HD's decision to pursue accreditation	• Quality Improvement • Staff Training and Development • Management and Leadership Processes • Accountability and Transparency • Organizational Assessment • Cross-Unit Collaboration • Organizational Capacity • Use of Evidence-Based Practices • Credibility • Funding • Consistency of PH Practice • Shifting Focus of the Field of PH • Other (Meit et al, 2017; Meit et al, 2019)	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015)	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

Measurement Table					
Research Question 1: Why did accredited small local health departments choose to pursue PHAB accreditation? **Key Questions for Analysis:** **A. What factors (motivators, incentives, barriers, and challenges) affected the decision of small accredited local health departments to pursue accreditation?** **B. How did the small accredited local health department's vision for accreditation's influence on their organization affect the approach used?** **C. How did the small accredited local health department's approach to accreditation influence their process, strategies, and outcomes?**					
Constructs, Definitions, & RQ Alignment	**Subconstructs, Definitions, & Parent Codes**	**Working Definition, Keywords and Possible Child Codes**	**Data Source(s), Sampling & Rationale**	**Data Collection, Organization, Analysis, and Integration/Triangulation Plan**	**Analysis Notes**
			on the overall process and context.)	• Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **<u>Integration/Triangulation</u>** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-	
	1b Barriers/ Challenges *Operational Definition:* factors or events that were considered an obstacle or that contributed to continued struggles with accreditation.	• Time • Staff-Related Issues • AC-Related Issues • Political Issues • Support • Staff Engagement • HD Funding Issues • PHAB Fees • Competing Priorities • Not a Priority • Perceived Value/Benefit • Issues with Standards and Measures • Other (Meit et al, 2017; Meit et al, 2019)			

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				level reports with interviewees via email and soliciting feedback.	
Construct 2: Vision for Accreditation *Operational Definition:* relating to the 'why' behind the HDD decision to pursue accreditation for their organization and the outcomes/ benefits they anticipate as the result of being an accredited health department. **RQ Alignment: 1B**	***None identified***	• Vision • Performance • Quality • Consistency • Accountability • Efficiency • Effectiveness • Visibility • Perceived value • Program-specific policies • Program specific outcomes • Services • Response • Community environment • Health-related behaviors • Financial support • Political support • Community support • High functioning health department	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

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		• Strengthened public health system • Population-based health outcomes • Other (Joly et al, 2007)	on the overall process and context.) **Document Review** (**Sample:** 8 case HDs; **Rationale:** documents, like the HD strategic plans may include information about how pursuit of accreditation aligns with the agency's broader mission and vision)	• Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-	

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				level reports with interviewees via email and soliciting feedback.	

Construct 3: Approach to Accreditation *Operational Definition:* relating to the impetus for and selected design and approach of accreditation preparation (i.e. what was the approach followed to achieve accreditation?) **RQ Alignment: 1C**	**3a. Approach** *Operational Definition:* elements of HDD reasoning and strategy for achieving accreditation. This may demonstrate presence or absence of leadership in decision-making, which could present as an approach based in the desire to engage in organizational change and improvement or as an approach focused on achieving compliance (i.e. checking the box).	***None identified; will use deductive coding to identify emergent codes***	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective on the overall process and context.)	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

				in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-level reports with interviewees via email and soliciting feedback.	

Measurement Table					
Research Question 2: What was most influential in facilitating successful achievement of PHAB accreditation among accredited small local health departments? **Key Questions for Analysis:** **A. How did organizational readiness influence the accreditation process in small LHDs?** **B. What processes and strategies were used by small LHDs in the accreditation process?** **C. How did small LHDs organize to achieve accreditation?** **D. How did small LHDs use available resources for their accreditation efforts?** **E. What was the role of other organizations in supporting the accreditation process in small LHDs?**					
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Construct 4: Organizational Readiness *Operational Definition:* relating to the health department's perceived ability or inability to plan, implement, and manage strategies and initiatives required for PHAB accreditation; this may relate to completion of prerequisites, the accreditation preparation process itself, or other	**4a. Internal Readiness** *Operational Definition:* relating to organizational culture, operations, and/or technical readiness for pursuing accreditation.	• Organizational culture • PHAB 'Champion' • Perceived value of accreditation • Funding/Resources • Capacity • Workforce • Time • Completion of prerequisites • Documentation • Other	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective	**<u>Collection and Organization</u>** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **<u>Analysis</u>** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015)	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.
	4b. External Readiness *Operational Definition:* relating to external factors affecting readiness for pursuing accreditation, such as political, influences.	• Political environment • Governing entity support • State-level support for accreditation • Other			

Measurement Table					
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Constructs, Definitions, & RQ Alignment	**Subconstructs, Definitions, & Parent Codes**	**Working Definition, Keywords, and Possible Child Codes**	**Data Source(s), Sampling & Rationale**	**Data Collection, Organization, Analysis, and Integration/Triangulation Plan**	**Analysis Notes**
related topics/activities. **RQ Alignment: 2A**			on the overall process and context.) **Document Review** (**Sample:** 8 case HDs; **Rationale:** documents, like the HD strategic plans may include information about how pursuit of accreditation aligns with the agency's broader mission and vision)	• Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy,	

Measurement Table					
Research Question 2: What was most influential in facilitating successful achievement of PHAB accreditation among accredited small local health departments? **Key Questions for Analysis:** **A. How did organizational readiness influence the accreditation process in small LHDs?** **B. What processes and strategies were used by small LHDs in the accreditation process?** **C. How did small LHDs organize to achieve accreditation?** **D. How did small LHDs use available resources for their accreditation efforts?** **E. What was the role of other organizations in supporting the accreditation process in small LHDs?**					
Constructs, Definitions, & RQ Alignment	**Subconstructs, Definitions, & Parent Codes**	**Working Definition, Keywords, and Possible Child Codes**	**Data Source(s), Sampling & Rationale**	**Data Collection, Organization, Analysis, and Integration/Triangulation Plan**	**Analysis Notes**
				completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-level reports with interviewees via email and soliciting feedback.	
Construct 5: Processes and Strategies *Operational Definition*: relating to the steps and activities undertaken by the health department across the seven steps of the PHAB accreditation process.	**5a. Accreditation Steps** *Operational Definition:* relating to the seven steps of the accreditation process, as outlined by the PHAB.	• Pre-Application • Application • Document Selection and Submission • Site Visit • Accreditation Decision • Reports • Reaccreditation (PHAB, 2019d)	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the	**<u>Collection and Organization</u>** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **<u>Analysis</u>**	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.
	5b. Accreditation Activities *Operational Definition:* relating to activities, tasks, and actions the	• Readiness checklists • Documentation process • Tools/templates • Mock drills • Other			

Measurement Table					
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RQ Alignment: 2B, 2C	health department engaged in/used to accomplish each step of the accreditation process.	(PHAB, 2015; Marthy, 2016)	accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective on the overall process and context.) **Document Review** (**Sample:** 8 case HDs; **Rationale:** documents, like the HD strategic plans may include information about how pursuit of accreditation aligns with the agency's broader mission and vision)	• Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to	
	5c. Accreditation Organization *Operational Definition*: Relating to the way in which the health department organized staff/leaders/stakeholders to accomplish each step of the accreditation process	• Staffing/roles • Teams/structure of teams (PHAB, 2015; Marthy, 2016)			

Measurement Table					
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Constructs, Definitions, & RQ Alignment	**Subconstructs, Definitions, & Parent Codes**	**Working Definition, Keywords, and Possible Child Codes**	**Data Source(s), Sampling & Rationale**	**Data Collection, Organization, Analysis, and Integration/Triangulation Plan**	**Analysis Notes**
				reduce bias in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-level reports with interviewees via email and soliciting feedback.	
Construct 6: Type of Resources/ Supports *Operational Definition:* relating to the type of support/resource(s) (what) the HD	**6a. Funding** *Operational Definition:* relating to resources associated with receipt of grants, flexible funding, or new funding that supported the health department at any phase	• Dedicated funding • Flexible funding • Grants/mini-grants • Other	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play	**<u>Collection and Organization</u>** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study.

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received to facilitate their accreditation activities and process. This could include the format in which resources and supports were received, such as but not limited to technical assistance, training, sharing of examples, funding, etc **RQ Alignment: 2D-E**	of their accreditation process.		an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective on the overall process and context.) **Document Review** (**Sample:** 8 case HDs; **Rationale:** documents, like the HD strategic plans may include information about how pursuit of accreditation	• Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **<u>Analysis</u>** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question.	(2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.
	6b. Communities of Practice/Peer Networks *Operational Definition:* relating to health department participation in communities of practice or learning for supporting accreditation. These could be at the national, state, regional and/or local levels.	• Local • Regional • State • National			
	6c. Human Resources *Operational Definition:* relating to the health department's use of 'human resources' to	• Interns • Volunteers • Temporary Employees • AmeriCorp • University faculty/staff • Other			

Measurement Table					
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	support their accreditation efforts.		aligns with the agency's broader mission and vision)	• Analytic memoing according to the two-layer analysis process. **<u>Integration/Triangulation</u>** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-level	
	6d. Training *Operational Definition*: relating to health department participation in training for supporting accreditation efforts. This could include in-person, web-based, or other training formats.	• Webinars/Training • Conference Presentations • Other			
	6e. Other *Operational Definition*: relating to other types of resources/support received by health departments from support organizations.	• Formal technical assistance • Developing resources • Setting an example by going through accreditation themselves. • Toolkits • Templates			

Measurement Table

Research Question 2: What was most influential in facilitating successful achievement of PHAB accreditation among accredited small local health departments?

Key Questions for Analysis:

A. **How did organizational readiness influence the accreditation process in small LHDs?**
B. **What processes and strategies were used by small LHDs in the accreditation process?**
C. **How did small LHDs organize to achieve accreditation?**
D. **How did small LHDs use available resources for their accreditation efforts?**
E. **What was the role of other organizations in supporting the accreditation process in small LHDs?**

Constructs, Definitions, & RQ Alignment	Subconstructs, Definitions, & Parent Codes	Working Definition, Keywords, and Possible Child Codes	Data Source(s), Sampling & Rationale	Data Collection, Organization, Analysis, and Integration/Triangulation Plan	Analysis Notes
				reports with interviewees via email and soliciting feedback.	

Construct 7: Source of Resources/ Supports *Operational Definition:* relating to assistance, guidance, or other support offered by local, state, and/or national partners that enable or support local health department accreditation efforts. **RQ Alignment: 2D-E**	**7a. Source of Support** *Operational Definition:* relating to the organization or organizations from which the health department received support during their initial accreditation efforts.	• State Health Department • PHAB • National Partner Organizations • Public Health Institutes • Universities/ Public Health Training Centers • Peer Health Departments • Other	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective on the overall process and context.) **Document Review** (**Sample:** 8 case HDs; **Rationale:** documents, like the HD strategic plans may include information about how pursuit of accreditation aligns with the agency's broader mission and vision).	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

				• **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias in coding and establish credibility of analysis. • **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing completed interview-level reports with interviewees via email and soliciting feedback.	

Construct 8: Gaps in Resources/ Supports *Operational Definition:* relating to specific examples of resources and supports that would have been helpful, if they existed during the participant's accreditation process OR specifically identified gaps in resource/support or ways current resources/supports could be expanded/improved upon to better aid small HDs through accreditation. **RQ Alignment: 2D-E**	***None identified***		**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective on the overall process and context.)	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case. • Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

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Measurement Table

Research Question 3: How do accredited small local health departments describe the impact of perceived purpose, benefits and outcomes of PHAB accreditation on maintaining their accreditation?

Key Questions for Analysis:

A. What does it mean to be PHAB accredited among small accredited local health departments?
B. What benefits do small accredited local health departments associate with being PHAB accredited?
C. What outcomes do small accredited local health departments experience related to accreditation?
D. What challenges do small accredited local health departments encounter when working to maintain their accreditation?

Constructs & Definitions	Subconstructs, Definitions & Parent Codes	Working Definition, Keywords, & Possible Child Codes	Data Source(s), Sampling & Rationale	Data Collection, Organization, Analysis, and Integration/Triangulation Plan	Analysis Notes
Construct 9: Perceived Meaning of 'Being Accredited' *Operational Definition:* relating to health department perceptions of what it means to be accredited. **RQ Alignment: 3A**	**9a. Perceptions of 'Being Accredited'** *Operational Definition:* relating to health department staff perceptions of 'being accredited'	• Credible • Accountable • High functioning health department • A resource for other health departments • A leader in public health • Other	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the most in-depth perspective	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

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				completed interview-level reports with interviewees via email and soliciting feedback.	
Construct 10: Benefits and Outcomes of Accreditation *Operational Definition:* relating to positive changes or improvements health departments have experienced as a result of going through initial accreditation. **RQ Alignment: 3B, 3C**	**10a. Internal Benefits/Outcomes** *Operational Definition:* relating to changes or improvements health departments have experienced as a result of going through initial accreditation that affect their internal programs, processes, and/or policies.	• Additional funding/ resources • Strategic planning and assessment • Benchmarking and comparing to national standards • Operations, processes, and documentation • Changes in organizational culture • Other • Workforce development and improvement in staff competencies • Quality Improvement • Performance Management • Performance Improvement	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the	**<u>Collection and Organization</u>** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **<u>Analysis</u>** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

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		• Capacity to deliver high quality public health services • Other	most in-depth perspective on the overall process and context.)	• Analytic memoing explaining each case, including analysis by research question and sub-question. • Analytic memoing according to the two-layer analysis process. **Integration/Triangulation** (Patton, 2015) • **Triangulation of Qualitative Sources:** capturing multiple perspectives from each case (i.e. HDD and AC) will allow for comparison of findings within each case from differing points of view. • **Analyst Triangulation:** a second coder will be used for 10% of interviews to reduce bias in coding and establish credibility of analysis. **Review by Inquiry Participants:** Interview and case-level reports will be shared with study participants to capture their feedback on findings and interpretation and to increase accuracy, completeness, fairness, and perceived validity of data and findings. This will involve sharing	

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				completed interview-level reports with interviewees via email and soliciting feedback.	
	10b. External Benefits/Outcomes *Operational Definition:* relating to changes or improvements health departments have experienced as a result of going through initial accreditation that affect their external reputation, collaborations, and community impact.	• Visibility • Credibility • Accountability to stakeholders • Collaboration/Partnerships • Public awareness of LHD roles and responsibilities • Governing entity awareness of LHD roles and responsibilities • Health outcomes • Other	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the	**<u>Collection and Organization</u>** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **<u>Analysis</u>** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

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				completed interview-level reports with interviewees via email and soliciting feedback.	
Construct 11: Maintaining Accreditation *Operational Definition:* relating to experiences, positive or negative, associated with the health department's efforts to maintain their accreditation status. **RQ Alignment: 3D**	***None identified; will use deductive coding to identify emergent codes***	***None identified; will use deductive coding to identify emergent codes***	**Interviews with HDDs, Accreditation Team (including AC), or a combination interview (Sample**: 8-16 interviews; **Rationale:** HDDs play an important role in decision-making related to accreditation and can play an important role in the process, especially in smaller agencies with fewer staff and resources; ACs are the designated by their respective HDs to coordinate and lead the accreditation efforts for their agencies. These individuals (and their co-ACs or teams) will have the	**Collection and Organization** • Audio-recorded telephone interviews using Open Voice conference program and its recording feature. • Download mp3 files to Otter.ai for transcription from verbal to written data. • Clean transcripts and download to MaxQDA for theory-driven (a priori) coding. • First cycle coding using a priori parent codes. • Second cycle coding using a priori codes child codes and emergent codes. **Analysis** • Two-layer analysis process: (1) within case analysis and (2) overall analysis and findings. • Qualitative analysis following a hybrid approach that includes a priori and emergent codes (inductive and deductive). (Braun and Clarke, 2006; Patton, 2015) • Analytic memoing describing each case.	Two-layer analysis process: (1) **Within-Case Analysis**: a within-case analysis conducted to describe, understand and explain ***each individual case*** included in the study. (2) **Overall Findings**: a cross-case analysis conducted to describe, understand, and explain themes and patterns occurring ***across all cases*** included in the study.

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				completed interview-level reports with interviewees via email and soliciting feedback.	

APPENDIX 2 – IRB APPROVAL

Exemption Granted

February 4, 2020

Chelsey Saari
Health Policy and Administration
Phone: (810) 569-2395

RE: **Protocol # 2020-0120**
"The Experience of PHAB Accreditation Among 'Small' Accredited Local Health Departments: An Exploration of Decision-Making Factors, Processes, and Perceived Benefits and Outcomes"

Dear Mx. Saari:

Your application was reviewed on **February 4, 2020** and it was determined that your research meets the criteria for exemption as defined in the U.S. Department of Health and Human Services Regulations for the Protection of Human Subjects [45 CFR 46.104(d)]. You may now begin your research.

Please note that your informed consent overview document has been administratively revised to include contact information for the faculty advisor and to correct the contact information for the UIC IRB. Although this document is not stamped, as it has been reviewed at an expedited level, the revised document has been uploaded into your protocol file on OPRSLive and must be the document used to enroll participants.

Exemption Granted Date: February 4, 2020
Sponsor: None

The specific exemption category under 45 CFR 46.104(d) is: (2)

You are reminded that investigators whose research involving human subjects is determined to be exempt from the federal regulations for the protection of human subjects still have responsibilities for the ethical conduct of the research under state law and UIC policy.

Please remember to:

- → Use your research protocol number (2020-0120) on any documents or correspondence with the IRB concerning your research protocol.
- → Review and comply with the policies of the UIC Human Subjects Protection Program (HSPP) and the guidance ***Investigator Responsibilities***.

UNIVERSITY OF ILLINOIS AT CHICAGO
Office for the Protection of Research Subjects
201 AOB (MC 672)
1737 West Polk Street
Chicago, Illinois 60612
Phone (312) 996-1711

We wish you the best as you conduct your research. If you have any questions or need further help, please contact me at (312) 996-2014 or the OPRS office at (312) 996-1711. Please send any correspondence about this protocol to OPRS via OPRS Live.

Sincerely,

Sandra Costello
Assistant Director, IRB #7
Office for the Protection of Research Subjects

cc: Lisa Powell, Health Policy and Administration, M/C 923
Elizabeth Jarpe-Ratner (faculty advisor), Health Policy and Administration, M/C 923

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Chicago, Illinois 60612
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APPENDIX 3 – INTERVIEW GUIDE

INTERVIEW GUIDE

Date of Interview:	
Role of Interviewee:	1. Accreditation Coordinator (AC) 2. Health Department Director (HDD) 3. Other (explain)*:
Turnover/Interviewee Categorization:	1. No Turnover in HDD/AC 2. Turnover in HDD 3. Turnover in AC 4. Turnover in both HDD/AC
Interviewee's Name, Agency, City, State:	
Start Time:	
End Time:	
Other Notes:	

Purple Text: Data can be obtained/validated using publicly available documents or information housed in PHAB's online information system e-PHAB.
Orange Text: Decision/selection should be made in preparation for interview (i.e. identify role of interviewee, whether the HD is in a state that participated in MLC, etc) OR reminder to refer to interviewee's prior response in interview (if applicable)

Introduction

Thank you for agreeing to participate in this interview; it will serve as a key source of data for my dissertation research. As you know from previous communications, I am both a staff person at PHAB and a doctoral student at UIC. For this interview, I am serving solely in the role of UIC doctoral student.

You were identified and selected for this interview based on your experience and **[current/former]** role as a _____ **[HDD/AC/Accreditation Team member]** within a PHAB accredited small health department. The goals of this research are to:

- Explore why small accredited health departments chose to pursue PHAB accreditation,
- Document and describe approaches, processes, strategies, supports and resources used by small accredited health departments to achieve PHAB accreditation, and
- Understand perceived purpose, benefits, and outcomes of PHAB accreditation among small accredited health departments and explore the challenges they are experiencing as they work to maintain their accreditation.

I will be interviewing Health Department Directors, Accreditation Coordinators, and in some cases Accreditation Team members from up to 12 small accredited health departments. Data collected through these interviews will be aggregated and used to identify themes and patterns among participating health departments. There will be no findings attributed to any specific department or interviewee as the result of this study, and your relationship with PHAB will not be affected by your participation or responses.

All data collected and analyzed for this study will be kept secure and stored on a password protected computer. The names of interviewees, used for scheduling and tracking purposes, will be stored separately from the data itself. Data will be accessed only by myself and a second coder, and the data will have been deidentified before being viewed by the second coder.

Do you have any questions before we proceed?

I would like to audio record this interview if it's okay with you.

Before I get into more specific questions, I'd really **like to know what you think of** when you hear people talk about public health accreditation.

- What is the purpose of accreditation?
- Are accredited health departments benefiting from this process?
- Why did the field establish an accreditation process?

- Do you think it makes sense for it to be voluntary?

Agency, Position, Interviewee Role in PHAB Accreditation Process

For the rest of the interview, I have a series of questions I will be asking but what I hope to achieve through this process is a conversation that allows you to share your organization's accreditation story from your perspective.

1. To do this, I would like to start by asking you about **[Name of agency: _____]** and your role there.
    a. What is your role/title/position?
        i. **How long have you been there?**
        ii. What are your primary responsibilities?
        iii. What role did you play in the accreditation process for your agency?
            1. What were some of your key responsibilities for accreditation?

    b. When your health department applied for initial accreditation it employed **[__] FTE** and served a jurisdiction of **[Jurisdiction/service area size: _____]**. Is this still accurate?
        i. **What is the mission of your agency?**
        ii. What are some of its primary functions?
            1. Clinical vs population-based programs and services?

2. As a small health department, what are some characteristics or features that set you apart from other health departments in your state?
    a. What are some of the biggest challenges your agency has faced recently?
    b. What are some of the biggest opportunities your agency has faced recently?
    c. Can you talk a bit about if/how you think being a small department influenced these challenges and opportunities?

Perceived Benefits and Outcomes of Accreditation and Maintaining Accreditation

1. When you think about being a PHAB-accredited health department, what does that mean to you?
    a. How does being accredited set you apart from other departments that are not yet accredited?

2. From your perspective, how do you think your health department has changed since achieving PHAB accreditation?
    a. What are a few of the most influential internal/organizational changes you've observed?
        i. Internal process improvements – documentation, strategic planning, data use
        ii. Changes in organizational culture
        iii. Workforce – competency, development, retention, satisfaction, morale
    b. Considering the changes you described a moment ago, like [**Restate responses to question 2a**] can you describe how/what you/your staff have worked to sustain or build upon some of these changes?

So far, we've discussed mostly internal/organizational changes that you've observed in your department since becoming accredited.

    c. What are some of the biggest changes you've noticed related to relationships or interactions with partners, peer health departments, the governing entity, and/or other stakeholders since becoming accredited?
        i. Additional funding/resources, more efficient/different use of resources
        ii. Visibility, credibility, accountability
        iii. Partnerships expanded, enhanced, increased
        iv. Public/governing entity awareness of what public health is/does
        v. Seen as a leader among peers, sought after for TA/support/guidance

It is no secret that pursuing initial accreditation is a huge undertaking, one that often comes with expected and unexpected challenges.

3. What are some of the biggest challenges you/your staff have encountered as you've worked to maintain or build upon the work you did to become accredited?

Accreditation Process

1. How did you know your health department was ready to apply for PHAB accreditation? What do you think most contributed to the sense of readiness or decision to 'go for it'?
    a. Dedicated staffing?
    b. Leadership support/engagement?
    c. Dedicated or flexible funding?
    d. Others?

2. Knowing what you know now, before applying for PHAB accreditation, **do you think your department would have benefited from taking more time** to:
    a. Prepare core elements (i.e. CHA, CHIP, SP, etc)? Why?
    b. Implement core elements? Why?
    c. Assess and/or prepare documentation? Why?
    d. Gain buy-in? Why?
    e. Other?

3. PHAB has developed 'Readiness Checklists' for potential applicants to use before applying for accreditation. **Are you familiar with them**? **Did your HD use these in your efforts**?
    a. How did your department use the readiness checklists?
    b. Did the results of the checklists influence how your department prepared for or approached the accreditation process? How?

4. There are seven key steps to the accreditation process, starting with pre-application, application, document selection and submission, site visit, accreditation decision, annual reporting, and reaccreditation.

a. Do you recall what the major elements of 'preparation' looked like for your health department prior to submitting its application?
b. How long do you think your department discussed/considered PHAB accreditation before registering in e-PHAB and/or submitting its application?
c. What was the timeline for developing and implementing major required plans (like the SP, CHA, CHIP, WFD, QI and PM)?
    i. Did you have these in place before deciding to pursue accreditation, or did you have to develop them after the decision was made?

5. As you know, PHAB accreditation at minimum requires assignment of an Accreditation Coordinator to organize the process and serve as a point of contact between the health department and PHAB. Can you describe the role of the AC in your department's accreditation process?
    a. Who fulfilled the AC role (one or multiple staff?)?
    b. How important do you think the role of accreditation coordinator is to the accreditation process?
    c. What percent FTE is the AC?
    d. Is accreditation the primary role of the AC?
    e. After becoming accredited, did the role and responsibilities of the AC change? **If yes**, how?
    f. I know that your department **(did/ did not)** experience **(number)** AC turnover during your initial accreditation process.
        i. How did that influence the process?
        ii. What are some of the reasons you think the AC role has turned over?

6. To the best of your recollection, how did you/your staff approach the selection and submission of documentation for initial accreditation?
    a. Can you describe how staff organized the process to collect, organize, and prepare documentation?
    b. Did your department make use of tools or templates either created internally or borrowed from others to assist in the documentation selection and submission process?
        i. If so, what did you find most useful? Why?
        ii. What did you find least useful? Why?

c. What type of governance structure was used to coordinate the accreditation process? (i.e. Accreditation Team)
d. Beyond the AC, who were the key staff engaged in the accreditation process?
    i. How did these staff contribute to the accreditation process?
    ii. What were their roles and responsibilities?
e. I know your department **(did/ did not**) experienced turnover in its HDD during initial accreditation.
    i. How do you think the change in leadership influenced the process?

7. Did your health department do anything special, like host a 'mock site visit' to prepare for your site visit?
    a. If so, can you describe who participated and what that process looked like?
    b. Was there an associated cost? If so, how were you able to fund it?

8. Can you speak a bit about the types of resources that were most important or influential in supporting your health department's accreditation efforts?
    a. Dedicated Funding
    b. Communities of Practice/ Learning Communities
    c. Contractors
    d. Training/Staff Development

9. You said that your department made use of [**response of resources used from previous question**]. Can you describe a bit more specifically how these resources supported your accreditation efforts?
    a. How were these resources helpful/useful to your department's accreditation efforts?
    b. How do you think these resources be improved or enhanced?
    c. In your experience, **what gaps in resources** still exist for departments currently pursuing accreditation or those who may pursue it in the future?

10. There are several national, state, and local organizations that have produced tools, templates, and other types of support and tools for health departments pursuing accreditation. **Did your health department engage with any of these types of organizations or use their tools/templates?**
    a. If yes, how did they support your accreditation efforts?
    b. **What organizations did you work with**, specifically?
        i. [PHAB, NACCHO, PHF, local universities, other local health departments, the state health department, other]
    c. What **type of support did you receive** and how was it provided?
        i. [tools, templates, guides, training, technical assistance, funding, mentoring, other]
    d. Did the support you received help **increase your health department's ability to achieve accreditation**? Can you describe an example of how?
    e. How could the support from these other organizations be improved or enhanced?
    f. In your experience, **what gaps in support still exist** for departments currently pursuing accreditation or those who may pursue it in the future?

Vision and Decision to Pursue Accreditation

1. What did you know about PHAB accreditation before your department formally applied?

2. Tell me about the time leading up to your health department deciding to submit its application for PHAB accreditation. **What do you recall being the most significant 'driving force'**?
    a. Was it a quick decision, or was it one that the department considered for a while before moving forward?
        i. How did incentives, like the promise of additional funding or improved credibility influence your department's decision to pursue accreditation?
        ii. What challenges/barriers did your department encounter when making the decision to pursue accreditation?
    b. What else was happening in your department and/or community around that same time?
    c. Were there specific events or challenges that come to mind?
    d. Who were the key people who were involved?
        i. What were their roles?

ii. Have those roles changed?
iii. Have those people left the department?

e. What level of support did key stakeholders have for the decision to pursue accreditation? (i.e. HD managers, staff, partners, governing entity members)
f. How was this decision communicated to key stakeholders (i.e. HD managers, staff, partners, governing entity members)?

3. The MLC was a project funded by the RWJF in the early to mid-2000s which funded state and local health departments to build their capacity in quality improvement and accreditation readiness. Did your agency participate in the Multi-State Learning Collaborative (otherwise known as Lead States in Public Health Quality Improvement?)
    a. **Participating states: FL, IA, IL, IN, KS, MI, MN, MO, MT, NC, NH, NJ, OH, OK, SC, WA, WI**
        i. If so, can you describe briefly your experience and how you think it contributed to your department's readiness and motivation to pursue PHAB accreditation?

4. What do you think the primary goal or goals for pursuing accreditation might have been back when the initial decision was made?
    a. Did you think it would help with general improvements in the way the department does business? Like better policies, documentation, etc?
    b. Did you think it might lead to more staff knowledge and involvement in performance improvement efforts like QI/PM, strategic planning, and community assessment/planning?
    c. Did you think it would contribute to new and enhanced collaborative efforts, better alignment of services and programs in the community, or improvements to health outcomes? (systems improvement)
    d. Were there other goals?

5. Did any of these desired goals or outcomes have a stronger influence on the decision than the others? Why?

Conclusion

1. You mentioned that your department's overall goal(s) for accreditation was/were to **[… refer to/cite responses from earlier in interview]** Was that vision realized?
    a. If yes, how?
    b. If no, why not?

2. Considering your overall experience with PHAB accreditation:
    a. What are some of the things you may have done differently if you were going through the process now?
        i. Preparation
        ii. Document selection and submission
        iii. Site visit
        iv. Other
    b. What do you wish you would have known when going through accreditation that you now know, but didn't then?
    c. What tips would you share with other small health departments considering PHAB accreditation?
    d. As the representative of a small health department, what do you think is the most influential incentive for encouraging more small departments to engage in accreditation?
        i. From your perspective, how do you think other health departments might answer this question?

3. I've spent a fair amount of time in this interview asking you to think about the process you used for achieving initial accreditation. Before we end our conversation, I'd like to ask you to briefly describe if/how you/your staff have begun your reaccreditation efforts.
    a. What are some of the challenges/barriers you have encountered or anticipate for your reaccreditation efforts?
    b. Is there information, tools, or technical assistance you think would be helpful to your department and others as you work toward reaccreditation?

Thank you for your time and input today.

Would you be interested in participating in future input opportunities with PHAB on the topic of small health departments and their accreditation processes?

Is there anything else you would like to add that we have not already talked about today?

APPENDIX 4 – PHAB CEO LEAD EMAIL FOR RECRUITMENT

Email Subject: Notice: PHAB Staff Conducting Dissertation Research

To: All Small Accredited Health Department Directors and Accreditation Coordinators

Good Morning/Afternoon:

In the December 2019 edition of the PHAB e-Newsletter we shared the exciting news that one of our Accreditation Specialists, Chelsey Saari - a student in the DrPH program at the University of Illinois at Chicago - had successfully defended her dissertation proposal and would be initiating her research on the topic of exploring the experiences of small accredited health departments early in the new year.

As a small PHAB-accredited health department, Chelsey may be contacting you over the next few months to determine whether key staff are willing and able to participate in telephone interviews that will serve as data for her dissertation study. The purpose of her study is to explore and describe the small health department experience as it relates to pursuing, achieving, and maintaining national accreditation. She hopes to do this by interviewing Health Department Directors, leadership team members, Accreditation Coordinators, and Accreditation Team members from small PHAB-accredited health departments.

Please know that my email is in no way intended to sway your involvement in Chelsey's dissertation study, but rather to let you know that PHAB is aware of and supportive of this work. Additionally, it should be made clear that your decision to participate or not participate in this project will not affect your relationship with PHAB now or in the future, nor will it influence your accreditation status. While information gathered through Chelsey's study will be shared with PHAB's Research and Evaluation Team for possible future use, identifiable data (i.e. names or other identifying data concerning participant health departments) collected by Chelsey for the purposes of this study will not be shared with PHAB.

Thank you in advance for the consideration of lending your department's story to the 'small' accredited health department narrative.

Sincerely,

Paul Kuehnert, DNP, RN, FAAN
President & CEO
Public Health Accreditation Board
1600 Duke St., Suite 200
Alexandria, VA 22314
703-778-4549, ext. 103 (office)
207-441-8366 (cell)
pkuehnert@phaboard.org

APPENDIX 5 – RECRUITMENT EMAIL

Email Subject: Request for Interview: Small Health Department Accreditation Experience

Attachments: Saari Study Overview of Informed Consent

To: Health Department Director (HDD) and Accreditation Coordinator (AC) of Small Accredited Health Department

Dear Names of HDD and AC of Small Accredited Health Department:

My name is Chelsey Saari. As an employee of a PHAB-accredited health department, you may recognize me as one of PHAB's Accreditation Specialists. Today, however, I am contacting you as a doctoral student in the University of Illinois at Chicago's Doctor of Public Health Leadership (DrPH) program. I am currently in the process of identifying and recruiting small PHAB-accredited local health departments to participate as cases in my dissertation research. The purpose of the study is to gain a better understanding of the small health department experience as it relates to pursuing, achieving, and maintaining national accreditation by interviewing the Directors and Accreditation Coordinators of small PHAB-accredited health departments.

Your health department has been identified as a candidate for participation in the study I am conducting for my dissertation research. As such, I am hopeful that you and your colleagues will be interested and willing to participate in an interview via phone conference to discuss your department's experience with initial accreditation.

- The interview will take between 90 and 120 minutes (2 hours).

- The interview will be hosted using Open Voice, a web-based conference/meeting service, and will be audio recorded (with permission) to assist with data collection and transcription.

- Health Department Directors, members of the health department's leadership team, Accreditation Coordinators, and staff who served as members of the department's Accreditation Team will be invited to participate in small group interviews for this study.
    - Two separate interviews will be held with each health department that agrees to participate in this study.
        - Health Department Directors and up to three additional members of the leadership team will comprise one small group interview.
        - Accreditation Coordinators and up to three additional members of the Accreditation Team will comprise another small group interview.

Highlighting the voice and special circumstances, challenges and opportunities often encountered by small health departments has been at the forefront of national discussions relating to public health accreditation and associated performance improvement efforts for years and remains an important and timely topic today. Your input as a small PHAB-accredited health department in this study will help the field and decision-makers better define the 'small' experience by providing in-depth accounts of what most influenced your health department's accreditation process, what contributed to your health

department's success in achieving accreditation and how other small health departments can be encouraged and supported in their pursuit of PHAB accreditation.

If your health department chooses to participate as a case in this research study, each interviewee will be provided with a summary report and preliminary analysis of their respective interview with an opportunity to provide clarification to assure accuracy. All analyses, reports, and data included in my dissertation and any subsequent publications will be anonymized. This means all findings will be reported in aggregate while personal and institutional information of interviewees, such as names of health departments and individuals interviewed will be confidential from both PHAB and those outside of PHAB.

A detailed summary of this study, risks and benefits, and how your privacy and confidentiality will be protected is available for review HERE, or in the attached PDF document.

I plan to schedule interviews between now and DEADLINE. It is my hope that your department will see the value in participating in this study, and that the requisite interviewees (minimally the Health Department Director and Accreditation Coordinator) will be willing and available to participate. Please let me know by DEADLINE whether you are willing and able to participate, and I will follow-up with you to schedule a day and time conducive to your schedule for a telephone interview.

Thank you in advance for your response and participation.

Sincerely,

Chelsey K. Saari, DrPH(c), MPH
DrPH Candidate, University of Illinois at Chicago (cchmel3@uic.edu)
Accreditation Specialist, Public Health Accreditation Board (csaari@phaboard.org)

APPENDIX 6 - STUDY OVERVIEW AND CONSENT

You are invited to participate in a DrPH dissertation research study.

The Experience of PHAB Accreditation Among 'Small' Accredited Local Health Departments: An Exploration of Decision-Making Factors, Processes, and Perceived Benefits and Outcomes

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About this Document

You are invited to participate in a research study titled "*The Experience of PHAB Accreditation Among 'Small' Accredited Local Health Departments: An Exploration of Decision-Making Factors, Processes, and Perceived Benefits and Outcomes"*. This document describes the study, potential risks and benefits of your participation, how your personal and institutional privacy and confidentiality will be protected, and who to contact with any questions or concerns.

About the Researcher

Chelsey Saari, MPH is the primary researcher leading this study. Chelsey is a DrPH candidate in the University of Illinois at Chicago's School of Public Health and an Accreditation Specialist with the Public Health Accreditation Board. This study serves as Chelsey's DrPH dissertation and will help fulfill her DrPH program requirements.

A Brief Overview of this Study

The purpose of this study is to gain a better understanding of the small health department experience of pursuing, achieving, and maintaining national accreditation through the Public Health Accreditation Board. The three overarching research goals of this study are to: (1) Explore why small accredited health departments chose to pursue PHAB accreditation; (2) Document and describe approaches, processes, strategies, supports and resources used by small accredited health departments to achieve PHAB accreditation, and; (3) Understand perceived purpose, benefits, and outcomes of PHAB accreditation among small accredited health departments and explore the challenges they are experiencing as they work to maintain their accreditation.

Your Involvement

Participants in this study will be asked to participate in a small group (Accreditation Coordinators with up to three peers from their health department Accreditation Team; Health Department Directors with up to three additional leadership team members) interview via phone conference to discuss their respective health department's experience in becoming accredited, as well as respondent perceptions related to the benefits and outcomes of being accredited. With participant consent, interviews will be recorded using a web-based conference service, Open Voice, to allow for data transcription and more accurate analysis.

Participant health departments will also be asked for permission for the researcher to access and use data hosted in PHAB's information system, e-PHAB, to further describe how the department achieved accreditation (documents submitted for initial accreditation); the health department's performance in achieving initial accreditation (site visit reports and any action plan or Accreditation

Committee Action Required (ACAR) documentation); and the progress and continued work they have reported to PHAB since becoming accredited (annual reports).

Any identifying information collected through the recording will be redacted from the transcription file, which will ensure this information is not included in the data being analyzed or reported through this study. You will be asked for verbal permission to record the interview before it begins. You may still participate in the study if you are not willing to have the interview recorded.

Further, any identifying information collected through data extraction from documents and reports in e-PHAB will be redacted from any summary memos produced by the primary researcher. These memos will be used to support and supplement qualitative analysis of interviews. You may still participate in the study if you are not willing to grant permission for the use of e-PHAB data associated with your health department.

Following initial analysis of the interview, the researcher will share summaries with interviewees to provide any input or feedback on findings and initial interpretations of the data for their respective interview to increase accuracy, completeness, fairness and perceived validity of data among participants. While response to this request is not required for participation as an interviewee in this study, participants will be given one week to provide requested feedback to the primary researcher for consideration in final data analysis for this study.

Privacy and Confidentiality

Data collected through this study should not place you at risk of criminal or civil liability, nor should it be damaging to your financial standing, employability, educational advancement, or reputation. Regardless, your personal and institutional privacy and the confidentiality of your input are important and a priority. To ensure privacy and confidentiality, the researcher will collect only limited identifying information (name, institution, city/state) and these pieces of information will be kept separate from interview data as it is analyzed.

Only the lead researcher (Chelsey Saari) will have access to the identifiable information, which will be stored in a private password protected file. Audio recordings of each interview will be retained in Open Voice's password-protected storage and destroyed post-dissertation defense; the interview transcripts will not contain identifying information; analysis will occur on de-identified data; and no identifying information (respondents or institutions) will be shared in any project report, presentation, or publication.

Possible Risks or Discomforts

The risks associated with participation in this study are minimal. As a representative of a PHAB-accredited health department, it is imperative that you know and understand that your participation in this research will **not** affect your relationship with PHAB or your accreditation status.

During the interview, you may feel uncomfortable answering one or more of the questions. You may skip any questions you do not wish to answer. Although your institution and/or personal contact information will be used to conduct the interviews for this study, your name and institutional affiliation will not be used during data analysis, reporting, and/or presentations of data.

Anticipated Benefits

There are no anticipated direct benefits to you or your institution for participating in this study. However, the questions and conversation may be of interest to you and your colleagues. Further, information collected, summarized, and shared through this research may benefit the field of public health, specifically as it relates to performance improvement and accreditation among small health departments by: identifying challenges, barriers, motivators, and facilitators for accreditation among small health departments; identifying existing resources and tools and/or gaps in these resources and tools that best support small health departments in their accreditation efforts; and by documenting and sharing best practices – what worked – and lessons-learned for small health departments that have achieved and maintained PHAB accreditation.

Compensation for Participation

There is no payment or other form of compensation offered to participants of this study.

Participation is Voluntary

Participation in this study is voluntary. You may choose to end your participation before, during, or after the interview. You may skip any questions that you do not wish to answer with no consequence Deciding to participate or to not participate will have no impact on your current or future relationship with me or with PHAB, or your health department's accreditation status.

For Questions or More Information

If you have questions or concerns associated with you or your institution's participation in this study, please contact the lead researcher:

- **Chelsey Saari, DrPH(c), MPH** cchmel3@uic.edu **(810) 569-2395**

If you have questions or concerns regarding your rights as a subject in this study, you may contact the UIC Institutional Review Board (IRB) for Human Participants. All concerns will be addressed in a manner that maintains anonymity.

- **Associate Director for Research Compliance** **(312) 413-7323**
- **University Ethics Officer** **(866) 758-2146**
- **Online Form: https://research.uic.edu/human-subjects-irbs/reporting-human-subject-concerns/**

APPENDIX 7 - CODEBOOK

https://drive.google.com/file/d/1NQNZH25Szqjix-O7CQ8juwu9yBvaTLIW/view?usp=sharing

VITA

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Chelsey K. Saari, DrPH(c), MPH

9334 Cedar Pines Lane, Sparta, MI 49345 • ckssaari@gmail.com • (810) 569-2395

PROFESSIONAL PROFILE

- I am skilled in community assessment and program planning, implementation, and evaluation.
- I have significant interest in and knowledge of public health accreditation and public health quality improvement initiatives.
- I am experienced in conducting literature reviews, developing research proposals, and submitting proposals to Institutional Review Boards (IRBs). I have excellent written and oral communication skills, including grant writing experience.
- I am adept at providing written and oral presentations to a variety of audiences.
- I am practiced in coalition building and community engagement.
- I have strong interpersonal, problem-solving, and critical thinking skills.
- I am recognized as a highly effective and self-motivated team player.

WORK EXPERIENCE

Public Health Accreditation Board (PHAB), Remote **(June 2018 – Present)**

Senior Accreditation Specialist (February 2021 - present)

- Continued responsibility for roles of Accreditation Specialist. (see entry below)
- Provides leadership for new accreditation product development, such as Pathways Recognition, Vital Records and Health Statistics Accreditation, and exploration of recognition options for areas of excellence.

Accreditation Specialist (June 2018 – February 2021)

- Provide technical assistance to site visit teams and health departments engaged and/or interested in pursuing national public health department accreditation.
- Co-develop and deliver technical assistance and informational content on numerous accreditation-related topics to a variety of audiences.
- Engage in collaborative development, implementation and revision related to accreditation program processes and procedures.

Kent County Health Department, Grand Rapids, MI **(May 2012 – June 2018)**

Public Health Program Supervisor, Accreditation Coordinator

- Developed the concept and governing structure for a health-focused collective impact effort in Kent County, known locally as the Kent County Population Health Consortium.
- Provided technical assistance and subject matter expertise to numerous local and state health departments on topics of national accreditation, performance management, quality improvement, strategic planning, community health assessment and improvement planning, and development of a public health internship program.
- Conceptualized and implemented a comprehensive internship program for college and university students while creating and delivering a learning curriculum to help bridge the gaps between academia and practice and enhancing partnerships with local colleges and universities.
- Coordinated department efforts to become nationally accredited through the Public Health Accreditation Board (conferred in September 2014), and led reaccreditation efforts for the department.
- Supervise county-wide community health needs assessment and community health improvement planning processes on a three-year cycle.
- Planned and managed department strategic planning efforts to comply with Public Health Accreditation Board standards and measures.

- Developed an organizational performance management plan and system of tracking organizational performance based on principles outlined by the Turning Point Framework; developed performance measures and established standards for all health department programs and services.
- Completed a workforce training needs assessment based on the Core Competencies for Public Health Professionals and managed efforts to address identified training needs by crafting a workforce development plan for all Health Department staff.
- Created and implemented a department quality improvement plan, including program infrastructure, training on widely used quality improvement tools, and a strategy for providing technical assistance for staff using the Plan-Do-Study-Act process.

James Butler and Associates **(April 2014 – June 2018)**
Grand Rapids, MI
Consulting Associate
- Provided peer-to-peer consultation and training to public health departments in quality improvement, performance management, and state/national accreditation.

Grand Valley State University **(Aug 2014 – May 2015)**
Grand Rapids, MI
Adjunct Instructor
- Developed course content, assignments, and methods of assessment for a graduate level public health courses.
- Taught health literacy and patient advocacy course and assessed student learning.
- Taught health and disease disparities course and assessed student learning.

Centers for Disease Control & Prevention **(July 2010 – May 2012)**
Cuyahoga County Board of Health, Ohio
Public Health Associate, Program Planning, Health Promotion, and Health Education
- Developed a community survey to gauge parent attitudes, knowledge, and perceptions related vaccinating adolescent males against human papillomavirus (HPV).
- Successfully engaged school districts as partners in parent HPV assessment process.
- Conducted literature reviews, developed research proposal, and submitted HPV project for approval by an Institutional Review Board.
- Researched, adapted, and implemented best practices in developing a health education campaign aimed to increase adolescent male uptake of HPV vaccine within the county.
- Edited and provided formatting recommendations for several chapters of the 2011 Cuyahoga County Comprehensive Cancer Report.

Public Health Associate, Community Health Assessment, Strategic Planning
- Served as lead staff person and community partner liaison for countywide community health assessment and community health improvement planning process that utilized the Mobilizing for Action through Planning and Partnership (MAPP) framework.
- Developed written materials to guide and document the MAPP process, including an organizational chart, committee member orientation manual, GAANT charts/timelines, educational materials, website content, two grant applications, and quality of life survey questions and format.
- Assisted with public health accreditation preparation by locating and organizing evidence to demonstrate compliance with Public Health Accreditation Board (PHAB) standards and measures, while also identifying gaps in said evidence.
- Provided presentations to various community groups and educational institutions to educate them about and engage them in the MAPP process.
- Conducted a process evaluation of phases one and two of the MAPP framework.
- Participated in a tobacco use reduction taskforce within a suburban community located outside of Cleveland.

- Explored and analyzed information from several public and private organizational communication plans to develop a new agency-wide media and internal communications protocol (including forms and templates) for the local health department.
- Created a health department policy and standardized protocol for coordinating internships, capstone projects, and other public health experiences for students and community residents.

Mid-South Substance Abuse Commission **(Sept 2009 – July 2010)**
Lansing, MI
Prevention Assistant

EDUCATION

University of Illinois at Chicago **(August 2016-present)**
Doctor of Public Health in Leadership (DrPH) - ABD
GPA: 3.90
Dissertation: (January 2020 – present): *The Experience of PHAB Accreditation Among 'Small' Accredited Local Health Departments: An Exploration of Decision-Making Factors, Processes, and Perceived Benefits and Outcomes*

Des Moines University **(May 2010 – May 2013)**
Masters of Public Health (MPH); Major: Public Health, General
GPA: 3.95
Capstone Final Project: (February 2012 – November 2012): *The effect of parental knowledge, perceptions, and attitudes on adolescent male human papillomavirus vaccination rates in Cuyahoga County, Ohio*

Saginaw Valley State University **(Aug. 2005 – May 2009)**
Bachelor of the Arts (BA); Major: Psychology, Health Sciences
GPA: 3.944

PRESENTATIONS AND PUBLICATIONS

Publications

- Yeager, VA, Leider, JP, **Saari, CK**, & Kronstadt, J. (2020). Supporting increased local health department accreditation: Qualitative insights from accredited small local health departments. *Journal of Public Health Management and Practice, ahead of print*. https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1097%2FPHH.0000000000001251
- Leider, JP, Kronstadt, J, Yeager, VA, Hall, K, **Saari, CK**, Alford, A, Freeman, LT, & Kuehnert, P. (2020). Application for public health accreditation among US local health departments in 2013 to 2019: Impact of service and activity mix. *American Journal of Public Health, 111*(2), 301-308. Doi: https://doi.org/10.2105/ajph.2020.306007
- Healthy Kent. (2018). *2017 Kent County Community Health Needs Assessment*. Available at https://accesskent.com/Health/pdf/2017KC_CHNA.pdf
- Saari, C. (2018). *Kent County Health Department: Using an agency strategic plan to drive improvement*. Journal of Public Health Management and Practice, 24, S95-S97. Doi: 10.1097/PHH.0000000000000698. https://journals.lww.com/jphmp/Fulltext/2018/05001/Kent_County_Health_Department___Using_an_Agency.22.aspx
- NACCHO Exchange. (2016, Fall). *Two Accreditations, One Workforce Development Plan: How PHAB and PPHR Can Drive an Agency's Workforce Development*.
- Healthy Kent. (2016). *2015 Kent County Community Health Improvement Plan*. Available at https://accesskent.com/Health/CHNA/pdf/2015CHIP.pdf
- Healthy Kent. (2015). *2014 Kent County Community Health Needs Assessment*. Available at http://www.kentcountychna.org/pdfs/CHNA2014.pdf
- Cuyahoga County Board of Health. (2011). *Cuyahoga County Comprehensive Cancer Report*. Available at http://www.ccbh.net/storage/cancer/2011-cancer-report/Report%20Cover%202.14.12.pdf

Invited Presentations

- *Small but Mighty.* Open Forum for Quality Improvement in Public Health, Virtual Conference, December 3, 2021
- *PHAB Accreditation Requirements for Evidence-Based and Promising Practices*. Seven Directions Fall Forum, St. Paul, MN, August 2018.
- *Preparing the Future's Workforce – An Internship Program with Purpose*. NACCHO Annual, Pittsburgh, PA, July 11, 2017.
- *Curbing the Epidemic: Addressing Opioid Overdose Deaths in Kent County, MI*. Open Forum for Quality Improvement in Public Health, New Orleans, LA, April 21, 2017.
- *KCHD's Performance Management Experience.* Michigan Premier Public Health Conference, Kalamazoo, MI, October 10, 2016.
- *Putting together the Pieces of the PI Puzzle*. Open Forum for Quality Improvement in Public Health, Salt Lake City, UT, October 7, 2016.
- *Performance Management in Public Health*. Governmental Administration and Finance Seminar, Mt. Pleasant, MI, September 15, 2016.
- *Putting together the Pieces*: Performance Management as a Framework for Aligning the Plans. Public Health Improvement Training, Baltimore, MD, June 15, 2016.
- *An Action-Oriented Introduction to Performance Management*. Public Health Improvement Training, Baltimore, MD, June 15, 2016.
- *Establishing an Academic Health Department to Support Local Communicable Disease Activities*. Michigan Communicable Disease Conference, Lansing, MI, May 18, 2016.
- *Public Health Workforce Development: From Planning to Evaluation*. Open Forum for Quality Improvement in Public Health, Indianapolis, IN, April 7, 2016
- *Academic Health Department: Everybody Wins*. Michigan Premier Public Health Conference, Thompsonville, MI, October 7, 2015.
- *Embracing Quality in Public Health: Performance Management and Quality Improvement Training for Public Health Practitioners*. Michigan Premier Public Health Conference, Thompsonville, MI, October 6, 2015.
- *Using Data in Public Health Practice: Strategic Planning, Performance Management, and Quality Improvement*. Michigan Public Health Training Center, Ann Arbor, MI, July 23, 2015.
- *Two Accreditations, One Workforce Development Plan: How PHAB and PPHR Can Drive an Agency's Workforce Development*. NACCHO Annual, Kansas City, MO, July 9, 2015.
- *We're accredited! Kent County Health Department's Tips for PHAB Success*. Open Forum for Quality Improvement in Public Health, San Antonio, TX, March 19, 2015.
- *Journey to National Accreditation: The Kent County, MI Story*. Michigan Premier Public Health Conference, Bellaire, MI, October 22, 2014.
- *Engaging Staff in the Creation of a Public Health Workforce Development Plan*. Open Forum for Quality Improvement in Public Health, Kansas City, MO, June 12, 2014.
- *Michigan Public Health Association Accreditation Readiness Webinar Series: Workforce Development*. Webinar presentation, Grand Rapids, MI, June 3, 2014.
- *Kent County's Road to Accreditation*. MALPH Public Health Administrator's Forum, Midland, MI, September 12, 2013.

ADDITIONAL EXPERIENCE, AFFILIATION, & RECOGNITION

Volunteer Experiences

Site Visitor, Public Health Accreditation Board (PHAB) **(January 2014 – June 2018)**

- Review accreditation application materials submitted by local, state, or tribal health departments in preparation for site visit.
- Conduct at least one site visit at a local, state, or tribal health department per year.
- Participate in panels and think-tanks to continuously improve the PHAB process and procedures.

Awards and Recognition

- 2017 Excellence in Innovation Award, Academic Health Internship Program

- 2017 NACCHO Model Practices Award, Academic Health Internship Program
- 2016 NACCHO Model Practices Award, Public Health Workforce Development Plan

State and National Workgroups and Committees

- Public Health Accreditation Board Evaluation and Quality Improvement Committee, 2018
- Public Health Accreditation Board Metrics Experts Panel, 2015
- NACCHO Accreditation Coordinator Learning Community, 2013-2018
- NACCHO Model Practices Reviewer, 2014-2018
- NACCHO Performance Improvement Workgroup, 2013-2018
- Michigan Accreditation Efficiencies Committee, 2013-2014

Certifications and Trainings

- 2017 – *ICS-100, Introduction to the Incident Command System,* Federal Emergency Management Agency (FEMA)
- 2017 – *ICS-200, ICS for Single Resources and Initial Action Incident,* FEMA
- 2012 – *Health Equity and Social Justice Workshop,* Kent County Health Department
- 2012 – *ICS-300, Intermediate ICS for Expanding Incidents,* Michigan State Police
- 2012 – *ICS-400, Advanced ICS for Command and General Staff,* Michigan State Police
- 2010 – *ICS-700, National Incident Management System (NIMS), an Introduction,* FEMA
- 2010 – *ICS-800, National Response Framework, an Introduction,* FEMA
- 2010 - Grant Writing Certification, Fort Hays State University