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Patterns and predictors of local health department accreditation in Missouri

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Abstract

Context—Accreditation of local health departments has been identified as a crucial strategy for strengthening the public health infrastructure. Rural local health departments face many challenges including lower levels of staffing and funding than LHDs serving metropolitan or urban areas; simultaneously their populations experience health disparities related to risky health behaviors, health outcomes, and access to medical care. Through accreditation, rural local health departments can become better equipped to meet the needs of their communities.

Objective—To better understand the needs of communities by assessing barriers and incentives to state-level accreditation in Missouri from the rural local health department (RHLD) perspective.

Design—Qualitative analysis of semi-structured key informant interviews with Missouri LHDs serving rural communities.

Participants—Eleven administrators of RLHDs, seven from accredited and four from unaccredited departments were interviewed. Population size served ranged from 6,400 to 52,000 for accredited RLHDs and 7,200 to 73,000 for unaccredited RLHDs.

Results—Unaccredited RLHDs identified more barriers to accreditation than accredited RLHDs. Time was a major barrier to seeking accreditation. Unaccredited RLHDs overall did not see accreditation as a priority for their agency and failed to the see value of accreditation. Accredited RLHDs listed significantly more incentives then their unaccredited counterparts.

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Unaccredited RLHDs identified accountability, becoming more effective and efficient, staff development, and eventual funding as incentives to accreditation.

Conclusions—There is a need for better documentation of measurable benefits in order for a RLHD to pursue voluntary accreditation. Those who pursue are likely to see benefits after the fact, but those who do not, do not see the immediate and direct benefits of voluntary accreditation. The findings from this study of state-level accreditation in Missouri provides insight that can be translated to national accreditation.

Through its *Futures Initiative,* a 2004 report by the Centers for Disease Control and Prevention (CDC), the CDC identified accreditation as a crucial strategy for strengthening the public health infrastructure.[1] Accreditation efforts have been occurring at both the national and local level. The Multistate Learning Collaborative of Performance and Capacity Assessment for Accreditation of Public Health Departments (MLC) began in 2005.[2] The five MLC states (Illinois, Michigan, Missouri, North Carolina, and Washington) demonstrated strong partnerships and collaborations across agencies, were often motivated to move towards accreditation because of the need for uniform, quality public health services across the state, and saw the importance of accountability and quality improvement.[2] The national Steering Committee and the Exploring Accreditation Project (EAP), which convened during 2005 and 2006, concluded that a national voluntary accreditation program for state and local public health departments was both desirable and feasible.[3–5] In 2007, the Public Health Accreditation Board (PHAB) was established.[4,6]

The Missouri Institute for Community Health (MICH) is the non-profit agency in Missouri that administers the Missouri Voluntary Accreditation Program (MOVAP) for LHDs.[7] MICH began exploring accreditation of LHDs in the 1990s and accredited the first LHD in 2003.

The MOVAP is based on the 10 Essential Public Health Services and agencies can apply for primary, advanced, or comprehensive accreditation which is based on population served. MOVAP differs from PHAB accreditation in two ways. MOVAP has required workforce standards but does not require LHDs to have a performance management system, which is part of the PHAB standards. All levels of MOVAP require a base level of workforce standards which include core staff of qualified administrator, public health nurse, environmental public health specialist and support staff. Additionally, agencies must also have full or part-time staff, or otherwise have access to a medical consultant and individuals with expertise in health education, nutrition, computer technology and epidemiology. With each level of accreditation above primary there are additional workforce requirements as well as a higher score for each standard and corresponding substandards. Similar to PHAB, before a LHD can begin the process of accreditation through MOVAP they must complete three prerequisites within three years: a community health assessment (CHA), a community health improvement plan (CHIP), and an agency-wide strategic plan. Once a LHD receives accreditation through the MOVAP, their accreditation lasts three years.[8] In the past ten years, twenty-four LHDs, or 21% of Missouri's LHDs, have begun or successfully competed accreditation activities.

LHDs in rural jurisdictions (RLHDs) typically serve fewer people, and have correspondingly lower levels of staffing and funding than LHDs serving metropolitan or urban areas.[9]

Although populations in RLHD jurisdictions may be generally smaller in size, these populations experience numerous health disparities related to risky health behaviors,[10,11,12] health outcomes,[13,12,14] and access to medical care[12,15]. The benefits of accreditation may be greater in rural areas. LHD accreditation in rural areas is a critical tool for improvement and change. Through accreditation, RLHDs can become better equipped to meet the needs of their communities. Over 60% of American LHDs provide services in jurisdictions with less than 50,000 people and comprise 10% of the US population.[16] Of Missouri's 115 LHDs, 102 or 89% serve jurisdictions with less than 50,000 people.

Previous studies have looked at the incentives and barriers to accreditation.[17–19] In an effort to explore the incentives that would encourage voluntary participation in the national accreditation program Davis and colleagues conducted a systematic investigation.[17] The top incentives were financial incentives for agencies preparing for accreditation, financial incentives for accredited agencies, infrastructure and quality improvement (QI), and technical assistance.[18] A survey of North Carolina LHDs was conducted to assess barriers to accreditation through the North Carolina Local Health Department Accreditation program. Barriers identified included limited resources, time and schedule limitations, lack of county support, lack of staff support, lack of perceived value, and accreditation being not seen as a priority.[18] A recent study identifying organizational, structural, and workforce factors related to accreditation status of LHDs in Missouri found barriers such as cost and time play an important role likelihood of being accredited.[20] Only one study has looked at accreditation from the prospective of rural health departments, which occurred before the PHAB began accrediting health departments. The NORC Walsh Center for Rural Health Analysis conducted a study of opportunities and barriers to accreditation among LHDs serving rural jurisdictions in 2008.[19] From the RLHDs perspective, limited human and fiscal resources, staff lacking of formal public health education and knowledge about accreditation, and structural barriers were all identified as obstacles to accreditation.[19]

Purpose

To date there have been no studies that have looked at barriers and incentives to accreditation from the RLHD perspective since either the inception of PHAB or from RLHDs that have been accredited through a state program. To better understand the needs of communities in the hopes of assisting unaccredited RLHDs move towards accreditation, this study compared organizational and community influences and barriers to RLHD accreditation in the state of Missouri through key informant interviews.

Methods

Selection of LHDs

For this study, qualitative data were collected, through semi-structured interviews with Missouri RLHDs serving rural communities, serving less than 75,000 people. We defined "rural" based on the based on Rural/Urban Commuting Area (RUCA) codes for the zip code of the city the LHD was located. "Large rural" includes census tracts with towns of between 10,000 and 49,999 population and census tracts tied to these towns through commuting. "Small rural" includes census tracts with small towns of fewer than 10,000 population, tracts

tied to small towns, and isolated census tracts. Both categories are considered rural by the Federal Office of Rural Health Policy.[21] All LHDs were either coded as small or large rural. The interviews included open ended questions with probes and were conducted with the administrators of eleven (11) RLHDs. Seven RLHDs were accredited through the MOVAP and four were unaccredited. One of the MOVAP accredited RLHD was seeking PHAB accreditation at the time of their interview. The RLHDs were selected with the assistance of MICH and the Missouri Practice Based Research Network (MPBRN). There are 21 (18%) MOVAP accredited LHDs, and not all serve rural communities.

Interview Questions

Interview questions were created based on previous research and with the input of MICH, the MPBRN, and the research team. The questions where submitted to the Saint Louis University IRB, approved, and piloted at two accredited RLHDs. Based on feedback from the pilot, the questions were revised. Most revisions were related to the order of questions and the addition of probes.

Interview Process

The interviews ranged between 45 and 110 minutes in duration. Interviews were mostly conducted in person (n=8) but if it was not possible due to distance, time, or RLHD preference, the interviews were conducted over the phone (n=3). All interviews were recorded for transcription purposes and transcribed generating 336 pages of text. The interviews were broken into sections with a focus on accreditation efforts as well as questions about the RLHD and the community they serve, organizational processes and any barriers to accreditation.

Qualitative Analysis

Once all eleven interviews were completed and transcribed, a content analysis of the data was performed. This paper specifically addresses the domains of accreditation prerequisites, and accreditation barriers and incentives. Results were aggregated and reported by accreditation status. During the coding process, strategies to overcome accreditation barriers emerged as an additional domain and were coded. This emerging category was not compared and contrasted between the two groups because it was not part of the original interview guide and therefore was not discussed consistently across interviews. Instead, all strategies discussed were compiled together. After the initial coding was completed by the lead author, a codebook of domains and subdomains was created. To assess inter-coder reliability, a second coder using the codebook independently coded one accredited and one unaccredited interview (18% of interviews). Percent agreement was calculated at 94%. Coding was conducted using ATLAS.ti 6.2.[22]

RESULTS

Study Population

The RLHDs selected were similar in population size served, staff size, and mill tax from across the state. Population size served ranged from 6,400 to 52,000 for accredited RLHDs and 7,200 to 73,000 for unaccredited RLHDs. Approximately 43% of accredited RLHDs

and 75% of unaccredited RLHDs were coded as "small rural". Per capita revenue ranged from $20.01 to $111.74 for accredited RLHDs and $28.60 to $91.96 for unaccredited RLHDs. The mill tax rates provided here is the portion of property tax collected that is set aside to fund the LHD, and range from $0.72 to $0.206 for accredited RLHDs in the study, and from $0.095 to $0.150 for unaccredited RHLDs. In all cases the mill tax only funds a small portion of the LHD"s total budget. Staff size ranged from nine to 46 for accredited RLHDs and eight to 42 for unaccredited RLHDs. See Table 1.

Accreditation Prerequisites

All seven of the accredited RLHDs currently have a community health assessment (CHA) and half of the unaccredited RLHDs (n=2) have one. Of the RLHDs that currently have a CHA, six or 85.7% of the accredited RLHDs recently updated it and only one of the two unaccredited RLHDs had recently updated theirs. Only four RLHDs currently had a community health improvement plan (CHIP), all of which were accredited RLHDs. All seven accredited RLHDs and three (75%) of the unaccredited RLHDs stated they had an agency-wide strategic plan. Six or 87.5% of the accredited RLHDs had recently updated their strategic plan as had 50% of the unaccredited RLHDs. See Table 1.

In the past the CHA and CHIP were required by the Missouri Department of Health and Senior Services (MDHSS) as part of the core public health contract. As funding for the core contract has decreased and they were no longer required. Unaccredited RLHDs were more likely to report they have not updated their CHA and CHIP, therefore there were no longer current and would necessitate an update before applying or re-applying for MOVAP. Of the three prerequisites, the CHIP was the least likely to be updated. More than the two other prerequisites, the CHIP can be time-consuming to update and require significant input from partners. However, accredited RLHDs called it the "nuts and bolts" of the strategic plan.

RLHDs in both groups saw benefits in inclusion of their community partners in the process of identifying priorities. Specifically, accredited RLHDs felt they helped them engage with their community, review their mission and vision with the community; both accredited and unaccredited worked together on priorities with their communities. Identifying priorities and strategically creating a plan has helped accredited RLHDs become focused and keeps them on target, thus, improving their planning. Both accredited and unaccredited RLHDs mentioned an interest in working with their local hospital(s) on a CHA in the future, highlighting an area for partnerships with their local hospital that has not been explored yet. [Add sentence about community benefit here]

Barriers to Accreditation

All RLHDs were able to name at least one barrier to accreditation or to their continued accreditation. Unaccredited RLHDs identified more barriers to accreditation than accredited RLHDs. Eleven different barriers were identified, three of the barriers were broken down further into sub-domains: time, workforce/staff, and lack of training and knowledge, based on the themes that emerged from the interviews. Table 3 provides a list of all barriers identified. Barriers listed with an "X" where identified by at least two RLHDs within a group. Unaccredited RLHDs identified all eleven barriers while accredited RLHDs only

identified times and schedule limitations, workforce credentials, adequate staff size, lack of quality improvement training, funding shortages, and community and local board of health by-in. Time was a major barrier to seeking accreditation, mentioned by all RLHDs, often multiple times during the interviews. Time was subcategorized into time and schedule limitations and poor time management. Both accredited and unaccredited RLHDs cited time and schedule limitations while poor time management was only found in interviews with unaccredited RLHDs.

As part of the MOVAP, agencies must meet specific workforce characteristics including a qualified administrator, public health nurse, environmental public health specialist and support staff. These workforce standards require certain levels of education and/or credentials. RLHDs expressed issues with finding and compensating staff that met the standards in their communities; this was the second most often identified barrier for accredited RLHDs. In addition, having enough staff to support accreditation efforts was a barrier. Getting buy-in from three important groups was an issue for unaccredited and accredited RLHDs. Community and local board of health buy-in was identified by both groups. Accredited RLHDs did not think their communities understood accreditation or valued it. Unaccredited RLHDs felt their staff would not support accreditation efforts, specifically they may see accreditation tasks as additional work, which was also found in the identified barrier of the burden of documentation required for accreditation. See Table 3.

Unaccredited RLHDs, in general, overall did not see accreditation as a priority for their agency and failed to see value or benefit in the outcome. They also identified a lack of knowledge and training around accreditation. In addition, there was a lack of organizational and leadership capacity in the unaccredited RLHDs. These issues seem to be compounded by this barrier of funding shortages. Table 4 provides illustrative text experts related to barriers to accreditation.

Benefits and Incentives for Accreditation

A reverse pattern is seen when reviewing the identified incentives to accreditation; accredited RLHDs listed more incentives then their unaccredited counterparts. A total of nine incentives were identified with three sub-domains listed for the incentive "staff" (see Table 3). Unaccredited RLHDs only identified accountability, becoming more effective and efficient, staff development and eventual funding as incentives to accreditation. Many of the incentives listed by accredited RLHDs are not realized until the RLHD is in the process of seeking accreditation or afterwards. Unanticipated benefits, those not realized until a RLHD seeks accreditation, include the themes of sense of accomplishment, clearer goals, prestige, and community recognition. For example, by going through the process of accreditation, RLHDs fulfill the prerequisites and collect evidence of their work around the 10 Essential Public Health Services. In addition, a site visit by MICH provides the opportunity to review their strengths and areas for improvement. It is not until they receive a passing score that they would really feel a sense of accomplishment or receive recognition by the local board of health and community. Therefore, throughout the process and after achieving accreditation, accredited RLHDs were able to see the fruits of their labor.

There were three incentives directly related to the RLHD staff. Both accredited and unaccredited RLHDs reported that the process of seeking accreditation would develop their staff, help them see areas for improvement as well as areas where they had strengths. Accredited RLHDs saw their staff become a more cohesive team, united around their mission. Finally, staff gains confidence in their abilities to perform their job tasks as well as confidence in their achievements around accreditation, see Table 3.

The incentive of eventual funding streams or access to grants was not very compelling for either accredited or unaccredited RLHDs. The RLHDs discussed that they were not sure if this would lead to state level or national funding opportunities. For example, some mentioned that when they first heard about accreditation, they were told that the MDHSS and state-level funders would provide opportunities for funding that were only available to accredited LHDs. This was echoed by others related to CDC funding. They all "heard" funding would be linked to accreditation but thus far this has not happened. Additionally, most of the unaccredited RLHDs have been very successful at applying for and receiving funding outside of the MDHSS contract. They also partner with organizations in their communities around programs and grants, therefore their communities already recognize their commitment. Table 4 summarizes themes related to incentives for accreditation, and provides illustrative text excerpts.

Strategies to Overcome Barriers

Strategies to overcome barriers to accreditation were an emergent theme. Many RLHDs identified the barrier of meeting workforce standards including meeting the staffing credentials. RLHDs were able to provide some funds to staff to assist with tuition for coursework or certificate programs. Other RLHDs incorporated the standards in their hiring processes and tried to find qualified, credentialed staff that could "wear multiple hats." One interesting suggestion was for MICH to revisit and update their workforce standard requirements. MICH is currently revising the workforce standards, moving away from specific credentials to standards that align with the Council on Linkages Core Competencies for Public Health Professionals.[23]

Unaccredited RLHDs commonly found the whole accreditation process to be overwhelming. When discussing the barriers around time limitations and the burden of documentation, unaccredited RLHD administrators often spoke in the first person, "I can't do it all by myself." Accredited RLHDs realized that for accreditation to be successful they had to take a team approach. They created teams around the accreditation standards and specific tasks. They involved the whole staff, their local board of health, and sometimes their community. Everyone supported each other, helping cover "regular" job tasks or assisting with accreditation tasks if they had time. They also located accreditation champions from within their organization. Though unaccredited RLHDs suggested that having a dedicated accreditation staff member as a strategy for success, this was not a technique used by the accredited RLHDs. Accredited RLHDs set aside time, a few hours a week or one day a month, that was dedicated to working on accreditation.

Another strategy that helped RLHDs with the document flow and organization was to create and maintain accreditation infrastructure. More technologically savvy RLHDs created

electronic filing systems to file accreditation related documentation throughout the year. Other RLHDs used low-tech filing systems with the same effect. All RLHDs would like more templates and examples of accreditation materials. The idea of "not reinventing the wheel" was stated by multiple RLHDs. This was achieved for some through their partnership with other RLHDs. Accredited RLHDs were very willing to share their documentation and strategies. Many of the accredited RLHDs had made themselves available to their neighboring LHDs by sharing knowledge and resources. One approach for meeting the workforce standards was RLHDs sharing an environmental health specialist, for example, across multiple counties. RLHDs were interested in this as a strategy.

RLHDs could benefit from utilizing partnerships beyond those with other RLHDs. The RLHDs interviewed have worked with universities to provide practice experiences for masters of public health students. In their experiences, students were a valuable resource and can assist with accreditation efforts.

With the passage of The Patient Protection and Affordable Care Act, tax exempt hospitals must also perform a community health needs assessment (CHNA) every three years. This CHNA is very similar to the CHA required for the LHDs. Additionally, hospitals are required to collaborate or include in the process, for both the CHNA and Community Benefit Plan, public health expertise and the identification of other resources in the community available to citizens to meet the identified health needs.[24] For LHDs with hospitals in their communities this provides an opportunity to pull financial and human resources to meet the accreditation prerequisites. Current levels of collaboration on assessments between LHDs and hospitals in Missouri is low, with LHDs waiting from the hospitals to engage them in the process.[25] Additionally, the RLHDs interviewed have worked with universities to provide practice experiences for masters of public health students. In their experiences, students were a valuable resource and can assist with accreditation efforts.

Finally, RLHDs wanted more training opportunities. Both accredited and unaccredited RLHDs wanted access to QI trainings for the leadership and staff. Unaccredited RLHDs would benefit from trainings related to the accreditation prerequisites and the accreditation process. Previously, the MDHSS provided a limited number of licenses for strategic planning software to LHDs; those that received the software were able to create more meaningful strategic plans without the need for outside assistance. Making this and other tools available to all LHDs can increase the number of LHDs that meet the prerequisites.

Discussion

LHD accreditation is seen as an important step to improve the quality and effectiveness of health services, but a shortage of funds, lack of staff, and insufficient staff knowledge are major barriers for LHDs to achieve accreditation, especially in rural and remote areas. Accredited RLHDs more often had continued to update the prerequisites for accreditation, even after the state no longer considered them part of the core contract. Accredited RLHDs found them to be important tools to engage their communities and stay on target. As was expected, unaccredited RLHDs identified more barriers to accreditation, but all RLHDs were able to identify at least one barrier, with time being the most often mentioned. A study of

predictors of LHD accreditation in Missouri also found that time was a major barrier to MOVAP.[20] Also expected, accredited RLHDs identified more benefits and incentives to MOVAP, many of which are not realized or anticipated until the LHD is in the process of seeking accreditation.

Only accredited RLHDs were specifically asked "how was your agency able to overcome these barriers" but throughout all eleven interviews, RLHDs discussed ways they saw to address barriers to accreditation. This highlighted an overall desire in the leadership to problem solve and find solutions to the struggles they faced as RLHDs in a time of declining resources.

Though the focus was on MOVAP, the topic of PHAB accreditation came up in every interview. As mentioned, MOVAP and PHAB both require prerequisites and are based on the 10 Essential Public Health Services. They differ in the requirement of workforce standards (MOVAP) and performance management and quality improvement standards (PHAB). One other difference is the fees for accreditation. PHAB accreditation is more expensive than MOVAP. Overall, only one RLHD was actively seeking PHAB accreditation. The literature listed national recognition as a possible incentive for PHAB accreditation.[26] In this sample of RLHDs, only one LHD mentioned that "…if you get to the national level and you're accredited by a national body, that says that you have the same or same level of expertise and ability as another agency in California, for instance." Overall, national recognition was not an incentive for PHAB accreditation in these RLHDs.

Limitations

With every study, there are limitations. Only eleven RLHDs were interviewed. There were difficulties finding unaccredited RLHDs that were interested in discussing accreditation. Additionally, only one interview was performed at each RLHD. These interviews were performed with the administrators of the RLHDs. Administrators were provided the interview guide at least one week before their interview and were encouraged to share the guide with key staff. Having the ability to interview other key staff may have shown areas of agreement and disagreement within the RLHD. Finally, Missouri level findings can only be generalized to similar rural communities. This study focused on MOVAP accreditation, though the standards and prerequisites are similar to those of PHAB, future studies should explore RLHD perceptions about PHAB accreditation, including states that have different legal requirements for LHDs and governance structures.

Implications for Practice

The findings from this study have practical implications that go beyond MOVAP and can inform the accreditation process nationally. The IOM's 2012 report *For the Public's Health: Investing in a Healthier Future*, discussed the concept of a minimum package of public health services along with foundational capabilities which include surveillance and epidemiology, health planning, and research.[27] Accreditation can provide a pathway to achieving these capacities through standards related to the 10 Essential Services and the three accreditation prerequisites.

Allocation of adequate funding for the accreditation process is crucial to increase the likelihood of LHDs seeking accreditation, especially in rural and remote areas. Current funding has not kept up with increasing needs.[28] Funds need to be secured and budgeted at the federal or state levels; specifically for accreditation related activities that would increase RLHD eagerness and desire to achieve accreditation. Two sources of support that have been successful in improving LHD PHAB accreditation readiness are the CDC/NACCHO Accreditation Support Initiative and CDC's National Public Health Improvement Initiative (NPHII).[29–31] The provision of technical support to RLHDs is another area needed to support successful for both MOVAP and PHAB accreditation. Using a train the trainer model (shown successful for LHDs in related content areas)[32], staff from accredited LHDs could be used as change agents to move the accreditation process forward by providing technical expertise to those rural health departments where accreditation is not seen as a priority. In Missouri, LHDs located in regions with a high proportion of MICH accredited LHDs were more likely to be MICH accredited.[20] This may reflect collaborations; possibly in informal ways, between LHDs. Accredited LHDs can share documentation, strategies, and be available to their neighbors with regards to knowledge and resources around accreditation. PHAB has acknowledged the importance of cross-jurisdictional sharing in seeking accreditation and created provisions to allow for multiple jurisdictions to apply together as well as the provision that individual LHDs can meet certain requirements through shared capacity.[33] For MOVAP, LHDs can seek multi-jurisdiction accreditation, so far three countries have successfully sought MOVAP accreditation as a multi-jurisdictions. Additionally, RLHDs would benefit from the development of standardized packages for accreditation, reducing the documentation burden and lowing barriers related to the process with concrete guidance and documentation.

Finally, having a diverse and competent workforce can make a difference in the ability of LHDs to seek and achieve accreditation.[34–36] Specifically, having an epidemiologist to assist with the prerequisites and pulling the documentation related to the standards is important. Assisting RLHDs to find ways to increase staff capabilities is important. Through collaborations with other LHDs, regional or multicounty positions can be created.[37,38] Also, collaborations with universities, specifically colleges or schools of public health, and local hospitals can provide important assistance with accreditation activities.[39]

Conclusion

Accreditation in rural areas may be critical tool for improvement and change. Through accreditation, RLHDs can become better equipped to meet the needs of their communities. This study provides insight into the barriers and incentives to accreditation from the rural prospective. These findings add to the evidence base provided by previous studies concerning the importance of incentives and barriers in accreditation decision making.[19,26,40] These barriers are consistent with the barriers identified by public health practitioners related to evidence-based public health; accreditation like other evidence-based practices can be seen as time consuming and may require additional resources.[41–44] Time will tell how viable state-level accreditation programs as more state and local health department seek and achieve national accreditation through PHAB. In Missouri, MOVAP

has accreded over 20 LHDs over the last decade. MICH and MOVAP continue to be an option that is achievable for RLHDs.

To speed up the process of RLHD accreditation, the incentives need to outweigh the barriers.

There is a need for better documentation of measurable benefits in order for a RLHD to pursue voluntary accreditation. Strategies identified by RLHDs provide important next steps that can tip the scale towards accreditation.

Acknowledgments

References

1. Centers for Disease Control. [June 15, 2012] Futures initiative. 2005. www.cdc.gov/futures/

2. Beitsch LM, Thielen L, Mays G, et al. The Multistate Learning Collaborative, states as laboratories: Informing the National Public Health Accreditation dialogue. J Public Heal Manag Pract. 2006; 12(3):217–231. <Go to ISI>://000237100500002.

3. Beitsch LM, Thielen L, Mays G, et al. The Multistate Learning Collaborative, States as Laboratories: Informing the National Public Health Accreditation Dialogue. 2006; 12(3):217–231.

4. Bender K, Benjamin G, Carden J, et al. Final Recommendations for a Voluntary National Accreditation Program for State and Local Health Departments: Steering Committee Report. 2007; 13(4):342–348.

5. Mays GP. Can accreditation work in public health? Lessons from other service industries. Univ Arkansas Med Sci. 2004

6. Riley WJ, Lownik EM, Scutchfield FD, Mays GP, Corso LC, Beitsch LM. Public Health Department Accreditation: Setting the Research Agenda. Am J Prev Med. 2012; 42(3):263–271. http://linkinghub.elsevier.com/retrieve/pii/S0749379711009111?showall=true. [PubMed: 22341163]

7. Missouri Institute for Community Health. Missouri Voluntary Local Public Health Agency Accreditation Program. http://www.michweb.org/accred.htm.

8. Missouri Institute for Community Health. Voluntary Accreditation Program for Local Public Health Agencies: Accreditation Manual. 2011:1470.

9. Leep C. Activities and workforce of small town rural local health departments: findings from the 2005 National Profile of Local Health Departments Study. Washington, DC NACCHO. 2007:18. [Accessed October 20, 2014] http://www.naccho.org/topics/infrastructure/profile/upload/LHD_Rural_final.pdf.

10. Doescher M, Jackson J, Jerant A, Hart G. Prevalence and trends in smoking: a national rural study. J Rural Heal. 2006; 22(2):112–118. [Accessed October 20, 2014] http://onlinelibrary.wiley.com/doi/10.1111/j.1748-0361.2006.00018.x/full.

11. Cronk CE, Sarvela PD. Alcohol, tobacco, and other drug use among rural/small town and urban youth: a secondary analysis of the monitoring the future data set. Am J Public Health. 1997; 87(5):760–764. [PubMed: 9184502]

12. Meit M, Knudson A, Gilbert T, et al. The 2014 Update of the Rural-Urban Chartbook. 2014 Oct. [Accessed November 13, 2014] http://ruralhealth.und.edu/projects/health-reform-policy-research-center/pdf/2014-rural-urban-chartbook-update.pdf.

13. Merchant JA, Stromquist AM, Kelly KM, Zwerling C, Reynolds SJ, Burmeister LE. Chronic Disease and Injury in an Agricultural County: The Keokuk County Rural Health Cohort Study. J Rural Heal. 2002; 18(4):521–535.

14. O'Campo P, Burke JG, Culhane J, et al. Neighborhood Deprivation and Preterm Birth among Non-Hispanic Black and White Women in Eight Geographic Areas in the United States. Am J Epidemiol. 2008; 167(2):155–163. [PubMed: 17989062]

15. Rural Health Research and Policy Centers. Challenges for Improving Health Care Access in Rural America. 2010 http://www.raconline.org/pdf/research_compendium.pdf.

16. National Association of County & City Health Officials. 2013 National Profile of Local Health Departments. Washington, DC: 2013. http://www.naccho.org/topics/infrastructure/profile/upload/2013-National-Profile-of-Local-Health-Departments-report.pdf

17. Reed J, Pavletic D, Devlin L, Davis MV, Beitsch LM, Baker EL. Piloting a state health department accreditation model: the North Carolina experience. J Public Heal Manag Pr. 2009; 15(2):85–95. [doi] 00124784-200903000-00002 [pii].

18. Davis M V, Cannon MM, Stone DO, Wood BW, Reed J, Baker EL. Informing the national public health accreditation movement: Lessons from North Carolina's accredited local health departments. Am J Public Health. 2011; 101(9):1543–1548. [PubMed: 21778472]

19. Meit M, Harris K, Bushar J, Piya B, Molfino M. Rural Public Health Agency Accreditation: Final Report. 2008; 20814(6511) [Accessed October 21, 2014] http://www.norc.org/PDFs/WalshCenter/LinksOut/NNPHI_Accreditation_FinalReport_528.pdf.

20. Beatty KE, Mayer J, Elliott M, Brownson RC, Wojciehowski K. Patterns and Predictors of Local Health Department Accreditation in Missouri. J Public Heal Manag Pract. 2014 Publish Ah: 10.1097/PHH.0000000000000089. http://journals.lww.com/jphmp/Fulltext/publishahead/Patterns_and_Predictors_of_Local_Health_Department.99838.aspx.

21. Ingram DD, Franco SJ. 2013 NCHS Urban-Rural Classification Scheme for Counties. Vital Heal Stat 2. 2014; (166):1–81.

22. ATLAS.ti Scientific Software Deveopment GmbH. ATLAS.ti.; 2010.

23. Council on Linkages Between Academia and Public Health Practice. Core Competencies for Public Health Professionals. 2014 Jun. http://www.phf.org/resourcestools/pages/core_public_health_competencies.aspx.

24. Patient Protection and Affordable Care Act. United States of America: 2010.

25. Wilson KD, Mohr LB, Beatty KE, Ciecior A. Describing the Continuum of Collaboration Among Local Health Departments With Hospitals Around the Community Health Assessments. J Public Heal Manag Pract. 9000;Publish Ah: 10.1097/PHH.0000000000000030. http://journals.lww.com/jphmp/Fulltext/publishahead/Describing_the_Continuum_of_Collaboration_Among.99859.aspx.

26. Davis MV, Cannon MM, Corso L, Lenaway D, Baker EL. Incentives to encourage participation in the national public health accreditation model: a systematic investigation. Am J Public Heal. 2009; 99(9):1705–1711. doi:AJPH.2008.151118 [pii].

27. IOM (Institute of Medicine). For the Public's Health: Investing in a Healthier Future. Washington, DC: 2012.

28. Levi J, Juliano C, Richardson M. Financing public health: diminished funding for core needs and state-by-state variation in support. J Public Heal Manag Pract. 2007; 13(2):97–102.

29. McLees AW, Thomas CW, Nawaz S, Young AC, Rider N, Davis M. Advances in Public Health Accreditation Readiness and Quality Improvement: Evaluation Findings From the National Public Health Improvement Initiative. J Public Heal Manag Pract. 2014; 20(1):29–35. 10.1097/PHH.0b013e31829ff726. http://journals.lww.com/jphmp/Fulltext/2014/01000/Advances_in_Public_Health_Accreditation_Readiness.9.aspx.

30. Thomas CW, Pietz H, Corso L, Erlwein B, Monroe J. Advancing Accreditation Through the National Public Health Improvement Initiative. J Public Heal Manag Pract. 2014; 20(1):36–38. 10.1097/PHH.0b013e3182a8a5cb. http://journals.lww.com/jphmp/Fulltext/2014/01000/Advancing_Accreditation_Through_the_National.10.aspx.

31. Monteiro E, Fisher JS, Daub T, Zamperetti MC. CDC/NACCHO Accreditation Support Initiative: Advancing Readiness for Local and Tribal Health Department Accreditation. J Public Heal Manag Pract. 2014; 20(1):14–19. 10.1097/PHH.0b013e3182a336f3. http://journals.lww.com/jphmp/Fulltext/2014/01000/CDC_NACCHO_Accreditation_Support_Initiative__.6.aspx.

32. Jacobs, Ja; Duggan, K.; Erwin, P., et al. Capacity building for evidence-based decision making in local health departments: scaling up an effective training approach. Implement Sci. 2014; 9(1):124. [PubMed: 25253081]

33. Pezzino G, Libbey P, Nicola B. Cross-Jurisdictional Approaches to Meeting PHAB Standards and Achieving Accreditation. J Public Heal Manag Pract. 2014; 20(1) http://journals.lww.com/jphmp/Fulltext/2014/01000/Cross_Jurisdictional_Approaches_to_Meeting_PHAB.36.aspx.

34. Hyde JK, Shortell SM. The structure and organization of local and state public health agencies in the US: a systematic review. Am J Prev Med. 2012; 42(5):S29–S41. [PubMed: 22502924]

35. Bekemeier Jones MB. Relationships between local public health agency functions and agency leadership and staffing: a look at nurses. J Public Heal Manag Pract. 2010; 16(2):E8–E16.

36. Baker EL Jr, Stevens RH. Linking agency accreditation to workforce credentialing: a few steps along a difficult path. J Public Heal Manag Pr. 2007; 13(4):430–431. [doi] 00124784-200707000-00019 [pii].

37. Livingood WC, Marshall N, Peden A, et al. Building Capacity to Support and Study QI in Local Georgia Public Health Systems. Front Public Heal Serv Syst Res. 2012; 1(3):6.

38. Livingood W, Marshall N, Peden A, et al. Health districts as quality improvement collaboratives and multijurisdictional entities. J public Heal Manag Pract JPHMP. 2012; 18(6):561.

39. Beatty K, Harris JK, Barnes PA. The Role of Interorganizational Partnerships in Health Services Provision Among Rural, Suburban, and Urban Local Health Departments. J Rural Heal. 2010; 26(3):248–258.

40. Beatty KE, Mayer J. Organizational and Structural Factors Related to Accreditation in Local Health Departments. Coll Public Heal Soc Justice. 2013 PhD.

41. Baker EA, Brownson RC, Dreisinger M, McIntosh LD, Karamehic-Muratovic A. Examining the Role of Training in Evidence-Based Public Health: A Qualitative Study. Health Promot Pract. 2009; 10(3):342–348. [PubMed: 19574586]

42. Jacobs JA, Dodson EA, Baker EA, Deshpande AD, Brownson RC. Barriers to evidence-based decision making in public health: a national survey of chronic disease practitioners. Public Health Rep. 2010; 125(5):736. [PubMed: 20873290]

43. Dobbins M, Cockerill R, Barnsley J, Ciliska D. Factors of the innovation, organization, environment, and individual that predict the influence five systematic reviews had on public health decisions. Int J Technol Assess Health Care. 2001; 17(04):467–478. doi:doi:null. [PubMed: 11758291]

44. Maylahn C, Bohn C, Hammer M, Waltz EC. Strengthening epidemiologic competencies among local health professionals in New York: teaching evidence-based public health. Public Health Rep. 2008; 123(Suppl 1):35. [PubMed: 18497017]

Table 1

Characteristics of selected LHDs for Key Informant Interview (N=11).

Characteristic	Accredited n (%)	Unaccredited n (%)
Population served (range)	6,400 – 52,000	7,200 – 73,000
RUCA code "small rural"	3 (42.9)	3 (75.0)
Per capita revenue (range)	$20.01 – $111.74	$28.60 –$91.96
Staff size (range)	9 – 46	8 – 42
CHA	7 (100.0)	2 (50.0)
CHA Recently updated	6 (85.7)	1 (25.5)
CHIP	4 (57.1)	0 (0.0)
Strategic plan	7 (100.0)	3 (75.0)
Strategic plan Recently updated	6 (85.7)	2 (50.0)
Quality Improvement	7 (100.0)	2 (50.0)
Informal QI	3 (42.9)	2 (50.0)
Formal QI	4 (57.1)	0 (0.0)

Table 2

Accreditation Prerequisites Themes and Supporting Excerpts by Accreditation Status.

	Accredited Supporting Excerpts	**Unaccredited Supporting Excerpts**
Community benefits	"It helps us to be more engaged with the community." "Now that we've identified some things, I will take it out the stakeholder… to get their input on what they see to be problems in our area. And from all of that, we try to have a consensus idea of what we're going to be prioritizing for the future." "Well, first of all, to look at the community assessment information and then to help us kind of sort out our strategic plan, and decide if what our mission is is correct. Our vision of what the community should be, if that's correct. Look at some of the things we value in the community and then to, to see if we're on target, if these are the areas that they wanted to work on."	"We recently completed a community health assessment in May of 2012 and through the community partners and with our board identified three priority areas that we wanted to address that we saw were issues"
No longer required by MDHSS	[E]ven though it's no longer required by Core Public Health … I have gone in and reevaluated several parts of our community health assessment…"	"We haven't done one again for a while because it used to be required and when they started chopping our money away, which has been drastically cut in the last six years."
Connections between perquisites	"Well the health improvement plan, in my opinion, is kind of the nuts and bolts of the strategic plan."	
Improved planning	"[I]n years before we did accreditation and strategic planning, looking at community assessments, if somebody said "We've got $5,000 or we'll give you a contract for $20,000 if you do this service," that's what we did. That was our planning. It's just wherever the money is, that's where we're going."	
Partnering with hospitals	"…now that the hospital is in the assessment business, I'm going to see if we can co-collaborate on a new assessment."	"We are working on - going to be working with the local hospital here on a community assessment."

Table 3

List of Barriers and Incentives to MOVAP Accreditation by Accreditation Status.

	Accredited	Unaccredited
Barrier/obstacle [a, b]		
Any barriers	X	X
Time	X	X
Time/schedule limitations	X	X
Poor time management		**X**
Workforce/staff	X	X
Credentials/job category	X	X
Buy-in/Value		**X**
Adequate staff size	X	X
Lack of training/knowledge	X	X
Prerequisites		**X**
Accreditation		**X**
QI	X	X
Fees		**X**
Lack of perceived value/benefit		**X**
Documentation burden		**X**
Community buy-in/value	X	X
Local board of health buy-in/value	X	X
Organizational/leadership capacity		**X**
Not seen as a priority		**X**
Funding shortages	X	X
Incentive		
Credibility	**X**	
Accountability	X	X
More effective/efficient	X	X
Sense of accomplishment	**X**	
Clear goals	**X**	
Prestige	**X**	
Staff	X	X
Development	X	X
Cohesion	**X**	
Confident	**X**	
Community recognition	**X**	
Funding (eventual)	X	X

[a]Themes received an "X" if at least two RLHDs within the group (accredited or unaccredited) identified the barrier or incentive.

[b]Xs that are bolded are themes identified by one group, either accredited or unaccredited RLHDs, but not the other.

Table 4

Barriers and Incentives to Accreditation Themes and Supporting Excerpts by Accreditation Status.

	Accredited Supporting Excerpts	Unaccredited Supporting Excerpts
Barrier		
Time/schedule limitations	"…everyone wears multiple hats in the health department, they're doing multiple programs. So you know, you do feel stretched thin a lot of the time."	"However, when we're a rural health department it's very time consuming."
Poor time management		"…I need to have the plan in place of okay, after today, here's what we're going to do." "And we did for a while and then somebody couldn't make one of the designated times that we were going to meet. They couldn't get together. And then the next one couldn't get together. So it just kind of fell apart."
Credentials/job category	"It will be tough for us to do advanced again because of not replacing that environmental public health coordinator." "Well at this point, it mainly becomes the financial or if we lose people and we have to replace them, can we find the people that meet the workforce standards?"	"We have a nurse. She is an excellent health educator. She does daycare programs. She does health fairs. She doesn't have a degree."
Staff Buy-in/Value		"I've talked to a couple of staff, but it's just not an interest in it right now." "I'm going to have to have the dedication of other staff members. Of course, if I tell them that's what they're going to do but I would like for them to have a real interest in it, too."
Not seen as a priority		"It's just not been on the top of the priority list."
Community buy-in/value	"Honestly, I believe the community could care less."	"I don't think there's an incentive to do it at this point. I don't think our community would recognize it." "So in our community I don't think it's that important."
Local board of health buy-in/value	"And he [LBOH member] just thinks that's this extra work that you're paying people to do. Or is it taking time away from your other job?"	"So accreditation, I don't know how high priority that would be in their eyes."
Lack of perceived value/benefit		"I think we're all at the point because [MDHSS] keep cutting and cutting and. I think we're all at the point to where, we do what we have to do to survive if we take on something extra with no compensation or no real benefit to it that we can see." "And there just hasn't ever been an - an incentive for us to do it really."
Funding shortages	"If we can maintain enough funding to keep our staff –" "Well, as funding gets tighter, the difficult thing is if you have someone who, for instance, creates a master's in nursing, we need to compensate them –"	"Even though we've had all these cuts they still want us to do the inspections, to do this because we're getting money from the taxpayers, and they want these services done."
Incentive		
Credibility	"I think gives us credibility."	