Competency-Based Credentialing of Public Health Administrators in Illinois

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This article describes an initiative to develop and implement a competency-based credentialing program for public health managers and administrators that is linked with practice performance standards for local public health systems. The Illinois Public Health Administration Certification Board represents an innovative model for credentialing public health workers, placing equal value on competencies secured through education and training and those demonstrated in practice. Competency-based credentialing of public health administrators may have applicability for other segments of the public health workforce.

Key words: competency, credentialing, performance management, public health administration, public health infrastructure, public health workforce

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Introduction

“There has probably been no time in the history of this country when trained, competent, and efficient health officers were needed so much as they are now,” concluded an editorial in JAMA published more than a century ago. “It is unfortunate that in the absence of epidemics or pestilence, too little attention is paid to ... the selection of those whose duties require them to guard the public health.”

Although worker competency and its recognition by employers and the public have been long-standing concerns within the public health community, efforts during the past century to establish public health as a distinct profession have made little progress. Central to both successful and failed approaches of the past are issues related to credentialing, an activity involving the establishment of specific requirements and the evaluation of an individual’s qualifications for entry into a particular status.

Credentialing Public Health Workers

For the public health community, credentialing has long been a complex and controversial issue. In a 1993 study commissioned by the American Public Health Association (APHA), the majority of public health leaders opposed most forms of credentialing public health workers despite their belief that credentialing would benefit the public health community by clarifying the nature of public health practice, enhancing the status of practitioners, increasing the emphasis on public health in other health profes...
sions, and assisting employers in identifying qualified workers. Nearly half of these leaders believed that credentialing would serve to improve worker performance. Even though there was substantial consensus that credentialing was both desirable and feasible, there was little agreement as to what a national credentialing program should look like and how it should work. Notably, public health leaders did not believe that public health workers would support a national credentialing program. Beneath these somewhat contradictory perceptions were concerns that the diversity of professional backgrounds among public health workers, multiplicity of occupational settings and duties, and lack of consensus as to fundamental individual practice competencies were formidable obstacles to the establishment of a common credential for all public health professionals.

Although a single credential for all public health professionals remains an elusive goal, approaches that credential key occupational groups or public health disciplines have advanced, although somewhat unevenly. Examples are plentiful, with several different forms of credentialing evident including licensure, certification, registration, and education. For example, physicians (medical doctors [MDs] and doctors of osteopathy [DOs]) and nurses (registered nurses [RNs]) are licensed by states to practice within the scope of their various practice statutes. Physicians may seek additional certification voluntarily in a specialty or sub-specialty through a certification board, such as the American Board of Preventive Medicine and its sub-specialties for general preventive medicine/public health, occupational medicine, and aerospace medicine. Certification for nurses specializing in public health and community nursing is available through the American Nurses Credentialing Center’s Commission on Accreditation. For health educators, there is a Community Health Education Specialist (CHES) certificate. Credentials such as registered sanitarian or licensed environmental health professionals distinguish environmental health specialists. Among public health workers in these disciplines and many others, the master’s in public health (MPH) degree is the most common educational credential. These various forms of credentialing, however beneficial to individual workers, are used only infrequently by public health agencies as requirements for hiring and appointing new workers. Nonetheless, because nurses, environmental health professionals, and health educators are among the largest occupational categories within the public health workforce, credentialing of public health workers appears to already have established a beachhead in important segments of the public health workforce.

Public health managers and administrators are perhaps the largest occupational category within the public health workforce without a well-defined credential. This group represents an important target for reasons even beyond its large numbers. There is evidence that many individuals in these titles lack formal education in public health; data from the early 1990s demonstrated that approximately four of five chief administrators of local health departments lack graduate level training in public health. Arguably, this group of current and future leaders should be one of the best-trained and prepared occupational groups within the public health workforce. Competencies for public health administration have been advanced by several sources since 1990. Interestingly, public health administrators were one of the disciplines most supportive of credentialing in the 1993 study commissioned by APHA. It would be reasonable to expect that agencies filling positions such as public health agency heads and health officers would place a high value on the credentials of this particular occupational category. However, this may not be the case.

Requirements for local health officers vary greatly from state to state based in part on widely varying statutes, governmental structures, history, and tradition. In some states, a medical degree remains the primary qualification; in many others, non-physicians serve as health officers with medical backup provided through various means. Ensuring the quality of health officers, regardless of their education, training, and experience has been addressed largely through broad qualifying criteria that often appear intended to be more inclusive than exclusive in order to ensure there would be people to fill the jobs. One state, New Jersey, licenses local health officers based on a written test. Other states test their local health officers only by verifying whether they meet minimum qualifications for education, training, and experience.

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**Illinois Public Health Administrator Certification Board**

The genesis of this initiative dates back to recommendations included in the 1990 Illinois public health improvement plan.12 Paralleling recommendations that the state health department certify local health jurisdictions based on standards related to the performance of public health’s core functions were recommendations to develop competency standards for public health administrators. Several concerns prompted recommendations for competency standards, including:

- Public health administrators were concerned that their work was not appreciated and they were not receiving salaries commensurate with their duties and skills.
- Local boards of health were having difficulties in attracting qualified applicants to fill vacant positions for public health administrators.
- New performance standards for local health jurisdictions requiring expanded community assessment, advocacy, policy development, and program management skills within local public health agencies called for expanded competencies among agency leaders.

In 1992, a study group representing three statewide public health organizations—the Illinois Public Health Association (IPHA), the Illinois Association of Public Health Administrators (IAPHA), and the Illinois Association of Boards of Health (IABOH)—examined the feasibility of implementing these recommendations and endorsed the concept. The study group concluded that a credentialing initiative that recognizes individuals based on evidence of having demonstrated or acquired specific competencies would provide several benefits.13 This recognition or credential would support efforts to increase salary levels for competent administrators and assist local boards of health, especially those in rural parts of the state, in their search and recruitment efforts by providing a pool of pre-qualified individuals and competency-linked criteria. The study group envisioned a competency-based credentialing program that would lead to professional recognition, increased remuneration, greater visibility, and career mobility as achievable benefits for the discipline of public health administration. Enhanced organizational and public health system performance would be additional benefits for the entire population.

The study group initially suggested eight competency categories linked to organizational practice standards developed for Illinois local health jurisdictions. An independent accrediting body was proposed in order to establish competency standards and a process for certifying individuals demonstrating mastery of these competencies through education or practice. Importantly, this initiative was to target public health managers and administrators in all settings—public, private, and voluntary. It never was intended to apply only to administrators of local health departments, although this is the most visible and best-organized group of public health administrators in Illinois. In 1993, the Illinois Local Health Liaison Committee, the oversight body for the state’s public health improvement plan, endorsed the recommendations of the study group. The University of Illinois at Chicago (UIC) School of Public Health was encouraged to seek funding to support the development of this initiative. Several unsuccessful grant proposals were generated before funding was received from the Health Resources and Services Administration (HRSA) Bureau of Health Professions (BHP) in late 1997.

The project now functions under the auspices of the Illinois Public Health Administrator Certification Board (Certification Board), which initially was created by the appointment of six board members, two each from IPHA, IAPHA, and IABOH.14 The Illinois Department of Public Health (IDPH) has an official (although non-voting) liaison to the board and the UIC School of Public Health, through its Center for Public Health Practice, provides staff support for the project. After its initial appointment in 1998, the Certification Board established itself as an independent, nonprofit, tax-exempt entity and moved to identify appropriate competencies for the credentialing process and establish processes to solicit, evaluate, and approve applications. The Certification Board also identifies and approves courses and training programs that may be used to fulfill requirements for certification.

During the developmental stages of this initiative, the Certification Board faced several key questions and controversial issues. These included who could...
be certified, what criteria would be used, and how the process would operate. The Certification Board affirmed the view of the initial study group that certification should target broadly public health administrators working in all settings rather than only those working for local health agencies. A single level of credentialing was established rather than multiple levels targeting different levels of management and administration. In order to qualify to submit evidence of competency, an applicant must have completed a bachelor’s degree and 3 years each of administrative and supervisory experience in the public health field.

The Certification Board established five general competency areas: (1) public health practice, (2) health administration, (3) community assessment, (4) policy development, and (5) program management. General competency statements for each of these areas are provided in the box titled, “Public Health Administration Competencies.”

A unique feature of the application process is an experiential pathway that allows evidence of having demonstrated competencies in practice to be considered for certification. The Certification Board concluded that the demonstration of specific competencies in the real world should be given no less weight

### Public Health Administration Competencies

The competent public health administrator has an in-depth understanding of the knowledgebase for and/or extensive experience with the following:

#### Public Health Practice
- principles of public health practice, including communications and health education strategies and methods

#### Health Administration/Resource Management
- the acquisition, allocation, and control of human, physical, and fiscal resources
- the ability to maximize the operational functions of public health systems through the coordination of community agencies’ efforts and avoidance of duplication of services

#### Community Assessment
- population-based and community needs assessment methods and tools
- the ability to understand and collect appropriate information, to synthesize and analyze determinants of health and illness and contributing factors existing in the community, to initiate plans for health services based on this analysis, and to report professionally and effectively on factors influencing the use of health services. The public health administrator has an in-depth understanding of the knowledgebase of epidemiology and community health hazards including environmental risks within local communities. He or she is able to apply core biomedical and public health sciences to policy development and administration and conduct timely investigations that identify the magnitude of health problems, duration, trends, location and populations at risk.

#### Advocacy and Policy Development
- the processes of strategic planning and policy analysis. These processes focus on prioritizing among identified community health needs, examining existing systems and practices and their legal, political, strategic, cultural, and community status, identifying agency and program goals and objectives and developing policy options to achieve them, estimating and evaluating costs, efficacies and benefits associated with alternative options, and developing strategic plans to implement the policy options selected. The public health administrator is successful in advocating for public health, networking and resource analysis, and constituency building.

#### Program Management
- program planning and implementation that specifies department and program missions and objectives, translates legislative mandates into organizational plans and programs, identifies and evaluates resources, and designs, uses, and evaluates information systems. The public health administrator has an in-depth understanding of the knowledgebase and/or has extensive experience with evaluation and quality assurance in the areas of program monitoring and evaluation, methodology development, and implementation of the methods of continuous quality assessment, assurance and improvement, including market analysis, risk management, survey research, and utilization review.
in the credentialing process than the demonstration of competency through completing educational requirements. This approach was deemed preferable to granting certification to current administrators based on their “grandfather” status. The evidence necessary for demonstrating competency through this pathway is described in the box titled, “Pathway for Demonstration of Competency through Experience.” The Certification Board debated the nature of the academic and training pathway, determining that formal coursework roughly equivalent to five graduate, or advanced undergraduate, courses (public health practice, health administration, community assessment, policy development, and program management) should be the standard after considering an aggregation of less formal continuing education sessions. This determination was made by the Certification Board more on the basis of the evaluations of student competency that are regularly included in formal courses and often not present in continuing education offerings than on the actual content of this level of learning.

After more than 2 years of developmental work, the Certification Board formally solicited applications for certification in September 2000. As of January 2001, the Certification Board officially had certified five applicants. The Certification Board expects 50–100 applications by the end of 2001, although the actual size of the target audience is uncertain (as will be described below). The Certification Board makes final decisions on applications within 120 days of receipt. Recertification is required every 3 years based on documentation of 90 hours of approved continuing educational credits for the certified administrator. The Certification Board does not limit applications to individuals living and or working in Illinois, recognizing the need to act on applicants from other states who are applying for positions in Illinois. However, the Certification Board foresees the need for reciprocal arrangements to be made with other states that may adopt similar certification programs.

The Certification Board is proceeding cautiously on several fronts, including extension of certification to other occupational categories within the public health workforce and actually offering (for a fee) training programs leading to certification. The Certification Board was concerned that such activities could be viewed as competing with academic institutions and professional organizations already providing continuing education for the public health workforce. The need to establish a source of revenue beyond that derived from application and recertification fees, however, could move the Certification Board to formally sponsor training programs for certification and recertification purposes at some point in the future.

**Concerns and Controversy**

Acceptance and support for the concept and the proposed credentialing program were not universal, generating concerns and controversy especially among sitting administrators of local health departments in the state. Some feared that the state health department would move quickly to adopt the credential as a mandatory requirement for all local health department administrators or for new appointments into these positions after some point in time. Others feared that local boards of health would limit their searches for new administrators to only those who held this new credential. Such actions, it was feared, would transform public health administrator certification from a voluntary to a mandatory or at least quasi-mandatory credential. While there was general support for the administrator certification concept, some of the support was predicated on certification being purely voluntary. There was less support for the concept if it were to become a requirement. Another perceived result of a mandatory credentialing program was that it would reduce rather than expand the pool of qualified individuals available to fill vacant positions as these arise. In part, opposition to mandatory certification derived from the belief that existing state requirements for local health department administrators are appropriate. Those requirements call for a bachelor’s degree and 2 years of experience in public health prior to appointment as the administrator of a local health department.

Other concerns revolved around whether the proposed competencies had been validated scientifically and whether it was feasible and valid to obtain evidence for the experiential pathway from sources such as county commissioners, members of local boards of health, regional health officers, and other officials in the state health agency. Some feared that county commissioners and board of health members
Pathway for Demonstration of Competency through Experience

Credible individuals, familiar with the work of the applicant, are asked to confirm the high-level competency of the applicant in the public health administrative skills and/or activities listed below. The demonstration of competency must occur at a level broader than within a program or discipline-specific activity. For example, even if the applicant’s prior experience is largely clinical or field-based, the certification must still be based on the understanding of and experience with public health concepts and skills. Those providing evidence of competency are asked to specifically indicate whether they have specific experience with the applicant to verify their competency. If they answer “yes,” they are then asked to list specific examples in which the applicant exhibited each component of a competency.

Public Health Practice
1. demonstrates an understanding of the basic principles and concepts of public health practice
2. demonstrates the effective use of media and other forms of communication to inform the public about public health issues and programs
3. understands and effectively uses health education strategies and methods
4. is able to communicate effectively through writing, speaking, and electronic transmission to a wide variety of audiences

Health Administration
1. understands and has experience in the acquisition, allocation, and control of resources (human, physical, and fiscal)
2. is familiar with personnel issues in public health
3. demonstrates an understanding of financial reports and accounting methods
4. has played a significant role in coordinating community agencies and services

Community Health Assessment
1. has reported professionally and effectively on factors influencing the use of health services
2. has initiated plans for health services
3. is able to synthesize and analyze determinants of health and illness
4. is able to apply knowledge of epidemiology, environmental risks and community hazards in local communities
5. is able to conduct timely epidemiologic investigations in the community
6. is able to develop and implement policies based on an understanding of core biomedical and public health principles

Policy Development
1. demonstrates the ability to effectively develop and implement policies and procedures that enhance constituency building and advocate for public health issues
2. is able to work effectively with diverse staff and within diverse communities
3. understands the process of strategic planning and policy analysis
4. is able to prioritize identified community health needs
5. is able to examine existing systems and practices and their legal, practical, strategic, cultural and community status
6. identifies agency and program goals and objectives and develops policy options to achieve them
7. demonstrates the ability to estimate and evaluate costs, efficacies and benefits associated with alternative options
8. develops strategic plans to implement policy options

Program Management
1. has planned and implemented department and program missions and objectives
2. is effective in translating legislative mandates into organizational plans and programs
3. understands information system needs so as to be able to maximize and evaluate the efficient and accurate acquisition and transfer of information
4. understands different methodologies for program monitoring and evaluation and is able to implement those methodologies most effective for public health programs
5. has planned and implemented a program of quality assessment, assurance and improvement which has demonstrated the maintenance or improvement of quality standards
6. is able to design, collect and interpret market research using appropriate methods, such as survey research
7. is able to understand and implement risk management strategies and utilization review
may not really know what is happening in the health agency and therefore could not provide credible evidence of competency. Others feared that information would not be truthful because of personal relationships between applicants and those testifying to their competency. Some questioned whether certification of individuals is needed when the agencies in which they work already are subject to certification requirements while others suggested that certification should be limited to only those applicants who meet both the educational and experiential criteria. The Certification Board responded to these concerns by actively soliciting input from concerned individuals and organizations and by meeting on several occasions with the leadership of the association representing local public health administrators (IAPHA) and the ad hoc committee established to shape the association’s position on the program. The Certification Board also implemented pilot testing of the application process using a preliminary set of competencies. Both the competency standards and the application process were simplified and clarified following the pilot testing.

An ongoing concern for the Certification Board has been the uncertain size of the pool of potential possible applicants in the state. The 94 certified local health departments and their current administrators represent an important segment of the target audience. In addition to agency heads, there are another 300 or more individuals in titles such as directors of nursing, environmental health, administration, and program coordinators working in these agencies. Some of these workers likely aspire to higher duties in public health practice. Estimates of the number of managers and administrators working in state agencies include another approximate 350 professionals in agencies such as the state Department of Public Health, Department of Human Services, and Environmental Protection Agency. Outside of state and local government, it is even less clear how many potential applicants exist. The number of individuals obtaining graduate-level degrees in health administration is believed to be in the 100–150 range each year. UIC School of Public Health, for example, turns out 70–80 master’s level graduates annually from its programs in health policy and administration and community health sciences. These and graduates of other programs across the state are exposed to the educational content of the requirements for certified public health administrators in Illinois, and after they acquire the administrative and supervisory experience, may be eligible for certification. Overall, the pool of potential applicants for certification as public health administrators is probably somewhere in the 500–1,000 range with about a 10 percent turnover each year.

Even less is known about the demographics of this pool of potential applicants, although information is available on the current corps of local health department administrators. This group shows great diversity in terms of age, education, training, and experience. Only about one-fourth of the local health department agency heads have graduate-level training in public health and about one in five are licensed as nurses, environmental health professionals, or physicians. Most however, have 10 or more years of experience in public health.

Implications

It is not clear whether this competency-based credentialing program will be successful in Illinois and it is too early to determine whether this is a model that can be used nationally. These questions, however, have important implications; as a result, the progress and problems of this initiative merit careful and comprehensive examination across a variety of criteria. Livingood identified 10 important issues concerning credentialing that are relevant for its use with the public health workforce:3

1. who will credential (how will the organizational structure be constituted)
2. at what education level credentialing should occur
3. the nature of credentialing (government, private, mandatory, voluntary)
4. definition of the field of practice (role delineation)
5. determination of required competencies
6. methods of assessing competencies
7. years of experience
8. benefits to society
9. benefits to practitioners
10. grandfathering

The Certification Board faced each of these issues. The credentialing body is derived from the major statewide organizations representing both practitioners and employers; it operates as a private and inde-
pendent body. The credential itself is voluntary in nature. Certification is not based on any particular academic credential, but a bachelor’s degree is required of all applicants as well as 3 or more years of both administrative and supervisory experience in the field. The additional education and training requirements are not linked to any degree, although its content often is found in graduate degree programs related to public health. The certification process examines evidence that applicants have demonstrated mastery of specific competencies, either by passing courses that evaluated whether they acquired these competencies or by demonstrating these competencies in practice. The competencies were derived from the recommendations of professional organizations and adapted to link with standards for public health practice in Illinois. There is a strong consensus that this credentialing initiative will benefit both practitioners and the general public. Grandfathering has been addressed largely through the development of a pathway emphasizing experience.

Addressing these issues will not guarantee success and it is premature to judge the Illinois experience until it is better understood, not just in terms of whether it works but if it does work and why. Conversely, an unsuccessful effort in Illinois must be understood in terms of the factors responsible for its failure. It is these positive and negative influences that are most relevant in determinations of the applicability of this approach in another state or at the national level.

Several evaluation activities are necessary to provide these insights. Feedback from public health managers and administrators will be essential, both those choosing to seek certification and those who do not. Future studies of the performance of core functions and essential public health services in Illinois also can contribute information as to the relationship of public health administrator certification and agency/local public health system performance. Salary survey and job/career satisfaction information also may provide information as to the acceptance and results of this credential.

The identification of public health administrator competencies has implications for other key segments of the public health workforce. Administrators are one of several occupational groups within the public health workforce that rely on general public health skills and cross cutting competencies. Others include public health nursing, health education, community health planning, and environmental health. The identification of competencies—together with the organization of specific courses and course modules for public health administrators around these competencies—establishes a framework that can be adapted to establish other certificate programs for other public health disciplines. Further, specific modules that contribute to courses can be used as the basis for continuing education sessions, self-study, and short courses for public health professionals.

Through funding from IDPH, a curriculum consisting of five courses that then can be presented in a completely online (Internet-based) format was established to support the public health administrator credentialing initiative in Illinois. A newly established Illinois Public Health Preparedness Center will offer these courses and continuing education programs for recertification at no cost to public health managers and administrators through cooperative agreement funding from CDC and Association of Schools of Public Health (ASPH). This center also supports the operational costs of the Certification Board after the initial funding from HRSA terminated at the end of the year 2000. Public health administrator certification efforts also are linked with ongoing leadership development activities offered by the Mid America Public Health Leadership Institute (serving Illinois, Indiana, Wisconsin, and North Dakota), which is supported largely by the state health agencies in the participating states. This patchwork quilt of state and federal funding streams has been necessary to stimulate and focus public health workforce development activities. The instability of these various funding sources adds uncertainty to workforce development in Illinois and many other states.

The various state public health systems in the United States are unique in terms of history, structure, organization, needs, and public expectations. As a result, the Illinois experience cannot be generalized easily to other states or the national scene. For example, some states may have higher or lower levels of competency and training among public health administrators due to circumstances such as health officer qualifications or the availability of education and training within the state. The acceptance and emphasis on core functions and essential public health services also varies from state to state. The value of a credentialing initiative based on core func-
tions and essential public health services is greater where these principles are well established in public health practice, and less where they are not.

One of the unique features of the Illinois model is an experiential pathway for certification not relying solely on education and not using a written test to determine competency. This is most feasible within a state context where individuals, agencies, and statewide expectations are understood relatively well by a credentialing board familiar with that system. At the national level, the ability to judge evidence of competency through accomplishment could be problematic, leading to the development of a national credentialing program based solely on education, a standardized test, or a combination of education and a standardized test. Any of these options could raise questions and concerns that prevent the development of the consensus needed to launch a national credentialing program.

Conclusions

Credentialing public health professionals is fraught with pitfalls and controversy. The Illinois Public Health Administration Certification Board represents an innovative model that values competencies secured through education and training but also values competencies demonstrated in practice. The identification of public health administrator competencies led to the development of the framework for a training program in crosscutting competencies that may have applicability for other segments of the public health workforce. Ultimately, the success of a credentialing program for public health administrators will be determined by its value to those credentialed and the various agencies, organizations, and institutions within those public health systems that can use credentialing effectively to build capacity within the public health infrastructure and improve public health practice performance.

REFERENCES


