The National Board of Public Health Examiners: Credentialing Public Health Graduates

Kristine Gebbie, DrPH, RN[a]
Bernard D. Goldstein, MD[b]
David I. Gregorio, PhD, MS[c]
Walter Tsou, MD, MPH[d]
Patricia Buffler, PhD[e]
Donna Petersen, MSc, DrPH[f]
Charles Mahan, MD[g]
Gillian B. Silver, MPH[g]

SYNOPSIS

The National Board of Public Health Examiners (NBPHE, the Board) is the result of many years of intense discussion about the importance of credentialing within the public health community. The Board is scheduled to begin credentialing graduates of programs and schools of public health accredited by the Council on Education for Public Health (CEPH) in 2008. Among the many activities currently underway to improve public health practice, the Board views credentialing as one pathway to heighten recognition of public health professionals and increase the overall effectiveness of public health practice. The process underway includes developing, preparing, administering, and evaluating a voluntary certification examination that tests whether graduates of CEPH-accredited schools and programs have mastered the core knowledge and skills relevant to contemporary public health practice. This credentialing initiative is occurring at a time of heightened interest in public health education, and an anticipated rapid turnover in the public health workforce. It is fully anticipated that active discussion about the credentialing process will continue as the Board considers the many aspects of this professional transition. The Board wishes to encourage these discussions and welcomes input on any aspects relating to implementation of the credentialing process.

[a]Columbia University, New York, NY

[b]Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA

[c]University of Connecticut Health Center, Graduate Program in Public Health, Farmington, CT

[d]Health-Care Consultant, Philadelphia, PA

[e]University of California at Berkeley, School of Public Health, Berkeley, CA

[f]College of Public Health, University of South Florida, Tampa, FL

[g]National Board of Public Health Examiners, Washington, DC

Address correspondence to: Bernard D. Goldstein, MD, Department of Environmental and Occupational Health, University of Pittsburgh Graduate School of Public Health, A710 Crabtree Hall, 130 DeSoto St., Pittsburgh, PA 15261; tel. 412-648-9994; fax 412-624-3040; e-mail <bdgold@pitt.edu>.

After years of debate, the leadership of the public health community has decided it is time to provide a general credential in the field of public health.[1,2] Discussions of credentialing in public health have been underway for at least two decades. Both the American Public Health Association (APHA) and the Association of Schools of Public Health (ASPH) established task forces on the credentialing of public health workers in the late 1980s, stimulated in part by the call from the U.S. Surgeon General for such an effort. Credentialing was identified as a major area of interest in strengthening the public health workforce in a series of discussions coordinated by the Centers for Disease Control and Prevention (CDC) as a part of strategic planning for workforce improvement.[3]

In 1999, APHA and ASPH formed a joint Task Force on Public Health Workforce Credentialing. Their discussions were instrumental in providing an understanding of the challenge of credentialing the public health workforce and the best pathway forward. A credential that focused solely on core competencies relevant to public health practice was recognized to be both within the purview of the ASPH and a suitable beginning for a field that had no general credential.

In January of 2002, the ASPH Executive Committee approved the development of an independent Board of Public Health to issue examinations and provide those that pass the exam with a public health credential. The ASPH initiative recognized the priorities of the field of public health, as recommended by the Institute of Medicine in its 2003 report, *Who Will Keep the Public Healthy?* The committee recommended the development of a voluntary certification of competence in the ecological approach to public health as a mechanism for encouraging recognition of new public health graduates prepared with this broad vision of public health,[4] and for encouraging the professional and personal development of the existing public health workforce. The initial bylaws of the National Board of Public Health Examiners (NBPHE, the Board) were developed through an iterative process that involved many public health organizations representing public health education and practice. In addition to APHA and ASPH, they included the Association of State and Territorial Health Officials (ASTHO), National Association of County and City Health Officials (NACCHO), and the Association of Prevention Teaching and Research (APTR, formerly the Association of Teachers of Preventive Medicine). The Board incorporated in September 2005 as the NBPHE and held the inaugural meeting in Philadelphia in December 2005.

NBPHE is a corporation structured to associate with, but be independent from, related organizations in the field of public health. NBPHE bylaws specify the nomination of board members by APHA (two), ASTHO (one), NACCHO (one), APTR (two), and ASPH (six, of whom two must represent private-sector employees). In addition, the bylaws allow for up to 12 at-large members selected by the Board itself. As one of its first tasks, the Board elected seven at-large board members, chosen to broaden the Board's perspectives on the complete range of public health practice. An additional member was elected when the Board recognized that it had insufficient expertise in global public health. The current Board membership is listed in the Figure. Dr. Bernard Goldstein was elected as the first Chair of the Board.

The Interim President (CEO) of NBPHE is Dr. Charles Mahan, whose experience includes serving as Director of the Florida Department of Public Health, President of ASTHO, and Dean of the University of South Florida College of Public Health. Dr. Mahan participated in many of the discussions leading to the formation of the NBPHE. ASPH supported the beginning operations of the Board, including provision of expert staff assistance. As quickly as feasible, the NBPHE will have its own full-time staff and administrative headquarters.

CREDENTIALING IN PUBLIC HEALTH

The development of a credentialing process is occurring during a surge in interest in public health practice and in public health education. Historically, most of the individuals entering public health were health practitioners licensed or credentialed in other professions (i.e., medicine, nursing, engineering, law, microbiology). Still, there was no specific credential for public health professionals, and, coupled with the recent expansion of public health degree programs for people coming from other backgrounds, the need for such a credential has only grown.

Defining the public health workforce to be included in a credentialing effort is challenging, in part because protecting and promoting the health of the public involves so many different health specialists and academic disciplines and is accomplished in so many different ways.[5,6] A common criticism is that public health is hampered in its mission by fragmentation among many different agencies and organizations. Credentialing of those with degrees from accredited schools and programs is a first step in that direction.

There is increasing recognition of the importance of public health professionals and public health concepts in preventing and responding to the many and diverse challenges to the health and well-being of individu-

Figure. Inaugural Board of Directors, National Board of Public Health Examiners

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Walter Tsou, MD, MPH
Past President, American Public Health Association; Public Health Consultant, Philadelphia, PA

als, populations, and human societies—globally and locally. This interest in public health is reflected in the substantial growth in the total number of public health students attending a rapidly increasing number of schools and programs accredited by the Council on Education for Public Health (CEPH, the national accrediting body for schools and programs of public health).[7] In 1995, there were 27 CEPH-accredited schools of public health; in 2005, there were 37. Even more rapid growth occurred in CEPH-accredited programs, from 21 in 1995 to 63 in 2005.[8] In 1995, there were 5,332 newly matriculated students enrolled in the schools of public health; in 2005, there were 7,206 newly enrolled—a 35% increase.[7]

The growth in applications and admissions to these accredited schools and programs in the past decade appears to be specific to public health. For example, during this period, there was a 20% decline in the number of medical school applicants, from 46,586 in 1995 to 37,364 in 2005.[9] This growth in interest in accredited graduate public health education is paralleled by the recent development of undergraduate public health programs.

The anticipated rapid turnover in the public health workforce due to the impending retirement of the relatively large number of professionals who entered the field three to four decades ago is also pertinent.[10,11] According to a 2004 survey of state health departments, an average of 24% of state public health employees are eligible for retirement, and as much as 40% to 45% of current federal employees are eligible for retirement.[12] The work of NACCHO and ASTHO, funded by the CDC and the Robert Wood Johnson Foundation through the Exploring Accreditation project, has related interests as well. This project has recommended that a voluntary national accreditation program for state and local health departments be established. While not the main focus, there is potential that at some point, accreditation measures could consider the number of credentialed individuals in the health department workforce as a positive measure, among other important metrics, as is done in some other accreditation processes. Several positions within the health department workforce already require a credential, and employment in the federal government takes various professionals' credentials into account.

The overall goals for credentialing are to establish standards based on the core competencies important to the scientific basis of public health practice, raise the overall visibility of the public health professions, and strengthen the public health workforce nationwide. The existing fragmentation is exacerbated by insufficient recognition of a common core of knowledge and

values upon which public health practice is founded. To provide society with the assurance needed that public health, while complex, is meeting its obligations, it is important to ensure that the public health workforce has the skills and knowledge necessary for this task.

The NBPHE has as its specific goal that of ensuring that graduates from schools and programs of public health accredited by CEPH have mastered the core knowledge and skills relevant to contemporary public health practice, measured and compared to high national standards. This purpose will be accomplished by developing, preparing, administering, and evaluating a certification exam. Although designed for those with a Master's of Public Health (MPH) or equivalent master's degree, the examination will be open to anyone who earns a graduate degree from a CEPH-accredited program or school. The interim decision of the Board is that the successful examinee will be identified as Certified in Public Health, or CPH. A final decision will be made prior to administration of the first examination.

Competency in public health is important to public health professionals, to employers, and perhaps most of all, to the public. Credentialing recognizes that the professional expertise required for public health decision making can only be verified through a process that is outside of the educational experience itself, although it may test for the learning that has occurred. Just as other health professions have various combinations of state-required licensure, national accreditation of core educational institutions, and discipline-managed certification to verify and recognize expertise, public health is now engaged in this process.

While the examination will focus on the foundations of public health practice, it will not be a test of specialized knowledge related to subdisciplines of public health. The NBPHE is not the sole credentialing body in public health, and the NBPHE does not intend to supplant existing, more specialized credentialing activities that are in place, such as the Certified Health Education Specialist (CHES), which is offered by the National Commission of Health Education Credentialing, Inc.,[13] the American College of Healthcare Executives' diplomat, specialty credentials in medicine and nursing, or credentials in environmental health such as Registered Sanitarians, Certified Industrial Hygienists, and Certified Food Safety Specialists.

One of the concerns raised during the many discussions with the public health community has been the possibility that the NBPHE will lead either to corporatization of public health or to a "closed union shop." We recognize this concern, but believe the question should be posed differently: has it been advantageous to the health of the public for the field of public health to be by far the least corporatized of all major health fields? We believe that there is ample room for improvement in the health of the public, in the status of public health, and in the stature of public health practitioners—and we believe that credentialing will contribute to that improvement.

One of the advantages of a credential for those working in the field is that it encourages professional continuing education. A valid credentialing process in any field requires periodic re-credentialing, usually associated with some evidence of continued professional updating. This process is particularly important for a field as dynamic as public health, in which new threats to the health of the public, and new public health practice and management tools to meet these threats, are continually emerging.[14] Additionally, support for continuing professional education may be more forthcoming from employers and other groups if such education is aimed at meeting or renewing a specific credential. The Board is optimistic that there will be a substantial increase in continuing education activities for those eligible for the examination offered by schools and other organizations.

DEVELOPMENT OF THE EXAMINATION

The first NBPHE examination is scheduled for the summer of 2008. The examination is anticipated to last approximately four hours and will be given at least once a year at multiple convenient sites across the country. NBPHE is contracting with the National Board of Medical Examiners (NBME) to develop the examination, capitalizing on their expertise in test development and test administration. Twenty-eight item writers were selected by the Board to represent the range of public health expertise in core content areas. To assure a valid examination, these individuals were trained in test question construction by the NBME. The test will be thoroughly reviewed by the NBPHE for validity, balance, and fairness.

The item writers will develop 600 test questions, of which approximately 200 will be used for any one examination. The Board is committed to building the credentialing process on the core values of public health: equity, diversity, empowerment, integrity, dignity, and knowledge for individuals and communities throughout the world. These core values will be incorporated within the context of the examination, particularly through the use of cross-cutting questions. This examination of basic public health competencies is intended to be relevant to the practice of public health, not simply to the academic study of public health and

its core disciplines. Representatives from public health practice have been included on the Board to facilitate and ensure this focus. Half of the test writers (14 of 28) have public health practice experience (defined as having worked for a local, state, or federal public health agency), reflecting the importance to the Board of testing for knowledge of core and cross-cutting competencies that are relevant to public health practice.

Test writers will draw upon, but not be limited to, core discipline-specific and interdisciplinary/cross-cutting public health competency activities, such as those recently completed by the ASPH (http://www.asph.org/userfiles/Version2.3.pdf) and the Council of Linkages (http://www.phf.org/competencies.htm).[15,16] The five core areas of knowledge are those specified by CEPH: biostatistics, environmental health science, epidemiology, health policy and management, and social and behavioral sciences. The centrality of cross-cutting interactions to public health was recently emphasized by the Institute of Medicine (IOM) Committee on Educating Public Health Professionals for the 21st Century (informatics, genomics, communication, cultural competence, community-based participatory research, policy and law, global health, and ethics).[4] The recent ASPH competencies process modified the IOM list around seven categories (communication and informatics, diversity and culture, leadership, professionalism, program planning, public health biology, and systems thinking).

OTHER PROFESSIONAL BOARD EXAMINATIONS

The Board has reviewed other professional credentialing approaches with two questions in mind: (*1*) have other credentialing efforts made a difference for individual practitioners or for the field? and (*2*) how have analogous professions worked to most effectively prepare an examination and a process to accomplish their goals?

An answer to the first question comes from the National Board for Professional Teaching Standards (NBPTS), which was launched in 1986. This board was developed subsequent to the release of the report, *A Nation at Risk*, and the Carnegie report, *A Nation Prepared: Teachers for the 21st Century*.[17] These reports in part called for the certification of teachers to establish and maintain high standards. NBPTS awarded its credential to more than 40,000 teachers in its first decade. In addition to assuring high-quality teachers, the certification has led to salary increases or annual bonuses for the teachers in many states and increased job flexibility for teachers, enabling them to move from state to state without losing their accrued status. The demographics of current graduates in public health mirror those in teaching, as the majority of graduates are women, and many will end up in work positions in state and local government.

An answer to the second question comes from the health arena. The proposed NBPHE examination is somewhat similar to the Step 1 examination of the United States Medical Licensing Examination (USMLE), usually taken after the first two years of medical school. The Step 1 USMLE was originally conceived as a test for knowledge of the basic sciences of medicine. It has gone through an interesting evolution pertinent to the current NBPHE discussions of the relative role of core and cross-cutting examination questions. Originally, the USMLE Part 1 consisted of six separate sections: one for each of the core basic science subjects of anatomy, physiology, biochemistry, pathology, pharmacology, and microbiology. To facilitate cross-cutting questions and the testing of additional subjects, such as ethics, the USMLE merged its six tests into a single test, now known as Step 1. The general principles guiding test development include gender, ethnic, and behavioral considerations affecting disease treatment and prevention, including psychosocial, cultural, occupational, and environmental. The examination now includes questions related to psychosocial, cultural, and environmental considerations, as well as to interdisciplinary areas such as genetics, aging, immunology, nutrition, and molecular and cell biology.

The USMLE examination committee members "... are selected to provide broad representation from the academic, practice, and licensing communities. ..."[18] The NBPHE Board infers that this criteria reflects a view similar to that developed independently by the NBPHE; namely that to ensure that the public health credentialing examination tests basic public health knowledge pertinent to the practice of public health, it is crucial that the involvement of practitioners be an important part of the test development process.

As in any area of public health, the outcome and impact of the credential must be evaluated. The Board has created a committee on Research and Evaluation, and will be establishing a formal agenda to assess the quality and effectiveness of the credentialing process.

Among the many questions that will arise from the creation of this examination are:

- Are the exam questions, which are based on core competencies, an accurate reflection of what is taught in public health schools and programs?

- Is the test relevant to current public health practice? If it is not relevant, is the problem with the exam or what is being taught?
- How do recent graduates and established public health practitioners evaluate the exam?
- Do public health practitioners use the exam as a tool for continuing education?
- Do employers of public health graduates value the credential?
- Are the standards for public health practice being raised, and the professional development of public health practitioners being improved?

These and other questions will require several years of continual evaluation, and may also stimulate additional research on the relationship of the professional workforce to other components of the public health infrastructure, and to health outcomes.

SUMMARY

After more than two decades of discussion, the NBPHE has been established by leaders in public health to credential public health graduates. By establishing this new credential, we hope to reaffirm and strengthen the scientific basis of public health practice. The voluntary exam available to all graduates of CEPH-accredited programs and schools will be administered for the first time in the summer of 2008. Established public health professionals are encouraged to join recent graduates in taking the examination. The Board recognizes that what is established in the first round may need improvement; therefore, feedback in this regard is essential. The Board invites the partnership of all public health professionals, and the organizations that employ and represent them, to engage in ongoing dialogue as the process moves forward.

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