Core Academic Competencies for Master of Public Health Students: One Health Department Practitioner's Perspective

The Association of Schools of Public Health (ASPH) has developed a comprehensive set of core academic competencies for master of public health (MPH) graduates. The ASPH core MPH competencies delineate fundamental knowledge, attitudes, and skills that every MPH student, regardless of their major field, should possess upon graduation.

From a public health agency perspective, this is a promising development. The ASPH MPH core competencies are complementary to the Core Competencies for Public Health Practice developed by the Council on Linkages Between Academia and Public Health Practice.

Although a useful development, the academic MPH core competencies should not be confused with a conclusive definition of what constitutes a public health professional. (*Am J Public Health.* 2008;98:1559–1561. doi:10.2105/AJPH.2007.117234)

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THE ASSOCIATION OF SCHOOLS of Public Health (ASPH) has recently developed a wide-ranging set of core competencies that all master of public health (MPH) students should achieve prior to graduation. In their most recent iteration (version 2.3), the ASPH core competencies are arrayed in 5 discipline-specific domains (biostatistics, environmental health, epidemiology, health policy and management, and social and behavioral sciences) and 7 crosscutting domains (communications and informatics, diversity and culture, leadership, professionalism, program planning, public health biology, and systems thinking). The ASPH has proposed that the 40 accredited schools of public health in the United States and the 6 ASPH associate member schools use the core competencies as a voluntary guideline. The MPH core competencies are also available for use by MPH programs that are not associated with ASPH.

The competency domains, the specific competencies aligned with each domain, and the process by which the competencies were identified have been discussed in detail elsewhere.[1] I participated in the competency development process as cochair of the epidemiology competencies workgroup and as a member of the communications and informatics competencies workgroup. I have now been asked to comment on these competencies from the perspective of a public health agency practitioner.

During more than 20 years of hiring and supervising MPH graduates, I have found virtually all of those graduates to be well educated in their major area (e.g., epidemiology, environmental health, health education, health administration, and so on). However, I have found considerable variation in the depth and quality of MPH graduates' skills and knowledge in competency areas relevant to public health practice that fall outside their major field. For me, a critical insight about the ASPH core competencies occurred when I realized that these competencies are primarily about knowledge and skill development in areas not directly related to the student's major field. For instance, the core epidemiology competencies are not knowledge and skills just for epidemiology majors; they are epidemiology competencies that MPH graduates in any field are expected to have. Likewise, the core competencies in health policy and management define core knowledge and skills that every epidemiology major, as well as every other MPH student, is expected to possess upon graduation. In aggregate, the MPH core competencies are intended to produce MPH graduates who can reliably be expected to possess a fundamental set of skills, regardless of the graduate's major field.

My experience and observation confirm that successful public health practice requires knowledge and skills outside any MPH graduate's major field. For instance, when I hire an MPH graduate with an epidemiology major for an epidemiologist position, this person must have solid epidemiology skills, but it is no less important for him or her to possess fundamental skills and knowledge related to communication, leadership, and management. Few jobs in public health practice are so narrowly focused that employee success is solely dependent on the employee's knowledge and skill in a single specialty area. An MPH epidemiologist in a public health agency needs to be able to work with community groups and nonepidemiologist colleagues, communicate effectively with diverse audiences, plan and execute a project, and be an effective leader and change agent. In an era when many of our hires are for grant-funded positions, it is especially important that new employees can hit the ground running and become rapidly productive so we can achieve the grant deliverables within the required timeline.

The ASPH core competencies outline many of the generic skills that I have found that my employees need to possess to be effective in public health practice. If future MPH graduates possess this broader skill set at graduation, they are more likely to be productive public health workers. To the extent that use of the new core competencies results in graduates acquiring the core skills needed for effective practice, I believe

that public health agencies will appreciate their implementation.

None of the new ASPH core competencies in any domain will come as a surprise to academic practitioners working in that domain. Few of them will be news to public health practitioners. However, the aggregate set, defining an array of competencies that every MPH graduate should possess, is a new and important development: the core competencies offer an expanded vision of what an MPH degree means. This expanded vision gives new prominence to the development of competencies outside a student's major field. A significant challenge associated with the ASPH MPH core competencies is how to ensure that students have mastered the full array of competencies prior to graduation. Version 2.3 is less of a roadmap than a topographic map; it provides landmarks and benchmarks, but not directions. Both academic and practitioner communities need to be involved in construction of the roads leading to the newly expanded version of the MPH.

This larger concept of what an MPH graduate should know and be able to do is a constructive response to the competencies for public health practice articulated by the Council on Linkages Between Academia and Public Health Practice (the council) in 2001. In the *Core Competencies for Public Health Professionals*,[2] the council presented a comprehensive set of competencies based on insights from the worlds of practice and academia about the skills needed for successful public health practice. Those insights have also been outlined in other important documents, such as the Institute of Medicine reports *The Future of Public Health*[3] and *The Future of the Public's Health in the 21st Century*.[4] The council competencies have provided an important resource for public health workforce development, and version 2.3 of the ASPH MPH core competencies complements and extends the council statement, with some important differences.

An important insight of the council competencies was that the academic route is not the only way to achieve competency for public health practice. My practice experience validates that insight; some of the most outstanding "masters" of public health with whom I have been privileged to work did not have an MPH. Moreover, there are limits to how much competency content can be fitted into a 42-credit-hour graduate program. The council competency statements are broader and, at least for me, less directly translatable to academic objectives, whereas the ASPH competencies are more detailed and academically oriented. I can read the ASPH core competencies and readily envision course work to develop many of those competencies, but that level of detail is not present in the council competencies. Both the council competencies and the ASPH competencies envision lifelong development of competency, but whereas this process is conceptualized within the council competency structure, it is operationally outside the ASPH competency structure.

None of these observations should be taken as criticism of either the ASPH or the council core competencies statements. They were developed for different purposes, and it is not surprising that the many goals they share are approached in different ways. Both sets of competencies are important contributions to a new understanding of what it takes to be a successful public health practitioner.

The competency approach to education has been rather late in coming to public health. Other major health fields, such as medicine and nursing, moved earlier to adopt the competency model in their core education programs. During my experience as an educator of undergraduate medical students and graduate medical trainees, I have seen improvements in student attainment associated with the move to a competency model. It seems reasonable that a curriculum that requires students to demonstrate their ability to perform practice-relevant tasks prior to graduation will produce graduates who are more likely to be effective practitioners. A competency model for MPH education is likely to produce similar benefits in terms of the attainment of skills and knowledge for effective practice.

A logical next step is the development of national educational competencies specific to the major fields of specialization for public health students. Well-formulated statements of the competencies needed for practice already exist in some public health specialty areas. For example, *A Competency-Based Framework for Health Educators* presents a hierarchical model for health education practice at the entry level and two advanced levels.[5] Recently, the Council of State and Territorial Epidemiologists (CSTE) and the Centers for Disease Control and Prevention (CDC) developed *Competencies for Applied Epidemiologists in Governmental Public Health Agencies*.[6] The Council of State and Territorial Epidemiologists and CDC applied epidemiology competencies were developed within the broader framework of the council Core Competencies for Public Health Professionals. Such statements of practice competencies provide important guidance to those developing major field academic competencies for students enrolled in public health degree programs.

In assessing the MPH core competencies, it is important that we recognize how broad the spectrum of potential work settings has become for MPH graduates. The competencies were developed by means of a process that was deliberately broad based, in an effort to ensure that the core competency array reflected the spectrum of public health work settings. Some of the core competencies that resulted may be more important in some settings than in others, but they are all part of the core to ensure that students are prepared for careers across the broad discipline of public health.

The ASPH core competencies are intended to be a work in progress. Version 2.3 should not be considered sacrosanct. The current version of the core competencies must be updated as the core competency model is implemented by schools of public health and as we learn more about what works and what does not. The content of the core competencies should be critically examined on an ongoing basis, and practitioners from across the spectrum of public health practice should insist that they be included in this process. There were 37 practitioners among the 332 participants in the core and resource groups assembled for development of the ASPH MPH core competencies; it is in the interest of both the academic community and the practice community that

practitioners be even more involved in future core competency development.

Human resources are a crucial component of any public health organization, and the core competencies are a way to improve on the human resources that come to public health organizations after graduating with an MPH. MPH programs are more likely to be successful in implementing competency-based education if they have strong collaborative links to the practice community. In addition, the practice community is a critical resource for evaluation of how well competency-based MPH education is working. The time spent revising, implementing, or evaluating core competencies can place significant demands on practitioners who are already wrestling with imbalances of resources and needs, but we should find the time for this responsibility. Academic institutions should also be innovative and flexible in finding ways for practitioners to participate.

The ASPH core competencies are a step forward for public health education and practice, but I do have some concerns associated with ASPH core competencies version 2.3. My number 1 concern is that the aggregate model may be too ambitious. I worry that the large number of competencies (119 in version 2.3) is an impediment to successful implementation. I fear that some faculties will feel overwhelmed by the prospect of incorporating all 119 competencies into their teaching plan and ensuring that all students have achieved all 119 competencies prior to graduation. Ideally, the core competencies will be developed and reinforced at multiple points in a student's MPH program, but doing this will require a degree of curriculum coordination and integration that currently does not exist in many MPH programs. Who will be responsible for this coordination?

Version 2.3, although not quite a house of cards, does involve a certain amount of interreliance that could prove problematic. In other words, if competency A is not achieved in domain X, the attainment of competency B in domain Y could be affected. If a school or program decides to require its students to attain certain competencies from the core competency array while ignoring others, there is a potential for secondary gaps in preparation.

Another concern is that some may take the ASPH core competencies to be a conclusive definition of what constitutes a public health professional. This issue is particularly relevant at a time when new credentialing organizations for public health professionals have appeared. The ASPH core competency model is sound, and it should contribute to producing MPH graduates better prepared for public health practice, but the ASPH core competencies are not sufficient to define a public health professional, nor do they constitute the only approach to such definition. The ASPH MPH core competencies were developed as a set of educational competencies, not as the criteria for a nonacademic credential—but there is a temptation to see them that way. Credentialing organizations should not adopt a purely academic model for determining who should receive certifications for practice or similar credentials. Such an approach would relegate many of our most capable practitioners to second-class professional status and reinforce geographic disparities in our public health workforce.

The ASPH core competencies are an important development in public health education that offers important potential benefits for public health practice. Practitioner participation in the further refinement of this model is vital both for its successful implementation and for its continuing improvement. ■

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