

Medical and Public Health Education

Public Health Practice and Academic Medicine: Promising Partnerships Regional Medicine Public Health Education Centers—Two Cycles

Rika Maeshiro

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The partnering of the academic medicine and public health communities to improve the health of populations seems natural; however, collaboration between the two groups has not been standard practice. This series of articles will highlight examples of what are hopefully a growing number of successful partnerships between academic medicine and public health practice that are intended to improve health status. Readers are encouraged to contribute their experiences in public health practice–academic medicine partnerships from the perspectives of public health practitioners and/or medical educators.

The Association of American Medical Colleges (AAMC) is a nonprofit association dedicated to improving the nation's health by enhancing the effectiveness of academic medicine. When the AAMC was founded in 1876 to help reform medical education, the association represented only medical schools. Currently, the AAMC represents the accredited allopathic medical schools in the United States (125) and Canada (17); nearly 400 major teaching hospitals, including 98 affiliated health systems and 68 Veterans Affairs medical centers; 94 academic and professional societies that represent 109,000 faculty members; and the nation's 67,000 medical students and 104,000 physicians in residency training programs. AAMC's three main mission areas mirror those of our constituents: Medical Education (educating the physician and medical scientist workforce); Medical Research (discovering new medical knowledge and developing innovative technologies for the prevention, diagnosis and treatment of disease); and Patient Care (providing healthcare

services in academic settings). Although not identical to the *Core Functions* or *Essential Services* of public health, "education, research, and service" to improve health appear to be shared objectives in the portfolios of public health practice and academic medicine. This month's column will review recent collaborations aimed at improving medical student education in population health, focusing particularly on the establishment of Regional Medicine–Public Health Education Centers (RMPHECs).

Incorporating prevention- and population-based health into the medical curriculum has been a challenge to US medical education for decades. Advocates for improving public health content in medical education believe that a better-informed physician workforce will respond more effectively to the needs of their patients, their communities, and their public health colleagues,

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Editors Note: I am very pleased to announce that starting with this July issue of the *Journal of Public Health Management and Practice*, we have a new column: *Medical and Public Health Education*. The column editor is Rika Maeshiro, MD, MPH, Assistant Vice President for Public Health and Prevention, Association of American Medical Colleges (AAMC). This column will focus on future physicians, a critical element for the public health workforce, and the interaction between medical practitioners and public health. AAMC is increasingly active in enhancing the population health and preventive curriculum for medical students. This has the dual potential of increasing the number of practicing physicians who are oriented to population-based prevention and also increasing the number of students who will consider preventive medicine as a career choice. We are particularly fortunate that Rika Maeshiro has agreed to edit the column. Contributions from our readers for this column are welcome and can be directed to novickl@ecu.edu

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translating into improved population health. Recent efforts at the AAMC to enhance population health content in medical school education began in 1998, when the second Medical School Objectives Project Report, *Contemporary Issues in Medicine: Medical Informatics and Population Health*,¹ recommended that all medical students receive training in epidemiology; biostatistics; disease prevention/health promotion; healthcare organization, management, and financing; and environmental and public health as part of their population health education. In 2000, the AAMC entered into a cooperative agreement with the Centers for Disease Control and Prevention (CDC), in which one explicit objective was to improve the teaching of prevention and public health at academic medical centers. The AAMC also contributed to the development of the *Clinical Prevention and Population Health Curriculum Framework*² released in 2004 through the multidisciplinary Healthy People Curriculum Task Force sponsored by the Association for Prevention Teaching and Research (formally the Association of Teachers of Preventive Medicine) and the Association of Academic Health Centers. This *Framework* identifies topics in four components (Evidence Base of Practice; Clinical Preventive Services—Health Promotion; Health Systems and Health Policy; and Community Aspects of Practice) that are considered “core” to the education of all health professions. Over the last two decades, the annual Graduation Questionnaire (GQ) has reflected improvement in medical school graduates’ perception of their instruction in the preventive care topics, but according to the GQ and the Liaison Committee on Medical Education’s (the accrediting body for allopathic medical schools) annual survey, educational progress has been slower on topics related to health systems/health policy, global health and environmental health.

To help accelerate the adoption of effective population health education in medical schools, in 2003, through the CDC cooperative agreement, the AAMC established seven pilot Regional Medicine–Public Health Education Centers (RMPHEC), which were described previously in this journal.³ Although the pilot program was originally envisioned as a multi-year project, funding beyond the first year was not available, and the pilot program ended after 1 year. Convinced that these Centers were a valuable and effective method of encouraging changes in medical education, the AAMC and the CDC embarked on a second phase of this project in early 2006, using funds that had been left over from prior years’ cooperative agreement activities. A Call for Proposals was developed that requested applications from schools to “fully integrate population health into the medical school curriculum.” All accredited US allopathic medical schools, including those that had participated in the pilot RMPHEC project, were eligible to compete for this op-

portunity. As in the pilot RMPHEC activity, a critical and required component of the current program is the partnering of medical schools with public health practitioners in local or state health departments. Collaborating with additional community or public health entities, such as area health education centers, centers for public health preparedness, community-based organizations, and schools of public health, was also encouraged. Despite a short 4-week deadline, 47 of 125 eligible schools (more than 33%) submitted applications, and several more had expressed interest but could not meet the timetable. The proposals came from a wide spectrum of medical schools: public and private, research-intensive and community-focused, large and small schools, and from across the country.

In their proposals, schools were required to describe their current educational activities in population health, public health, prevention, and preparedness and to identify preexisting collaborative efforts between the medical school and public health entities. Schools then identified gaps in their educational program. Selection criteria included evidence of active participation of a medical school and public health entity; senior administrative support from participating institutions; evidence that the proposal would provide educational experiences for all medical students (ie, not only those with preexisting interests in public health); and the feasibility of successful implementation. Staff from the AAMC and the CDC reviewed all applications. Unfortunately, the amount of funding was not sufficient to award all of the many qualified and innovative proposals. Eleven schools were funded by May 2006:

Case Western Reserve University School of Medicine
Harvard Medical School
Mercer University School of Medicine
Southern Illinois University School of Medicine
Stanford University School of Medicine
The Brody School of Medicine at East Carolina University
University of California, Davis School of Medicine
University of Colorado School of Medicine
University of New Mexico School of Medicine
University of Rochester School of Medicine and Dentistry
University of Vermont College of Medicine

The awarded schools represented well the pool of diverse institutions that had applied for this opportunity. The principal investigators included new grantees as well as veterans from the pilot RMPHEC program. They include faculty members, associate deans, as well as one dean. Two of the principal investigators are former state and/or local health officers. Altogether, at least 22 health jurisdictions are participating partners in the RMPHECs.

In general, the awarded proposals addressed curricular changes in both preclinical and clinical coursework. The clinical curriculum can be difficult to influence because students may be at a variety of sites and are under the supervision of relatively independent clinical departments. Ironically, medical students may best appreciate the importance of public health when they witness its relevance in a clinical setting. Successful proposals identified experiential learning opportunities that incorporate population health content in a diverse array of basic science and clinical disciplines and planned for the active participation of their public health agency colleagues in the development of their curricula.

Each of the awarded institutions described unique attributes of their schools and communities and/or proposed creative educational approaches. Case Western and Harvard are in the midst of a broad curricular revision process at their schools, and plan to leverage this opportunity to strengthen population health education at their institutions. The University of California at Davis, Stanford, and the University of Vermont addressed critical faculty-related issues—the need to acknowledge and compensate public health practitioners who serve as faculty to medical students and the need to educate medical school faculty about the clinical relevance of public health. To emphasize this particular point to both medical faculty and students, Southern Illinois University will offer a consulting service in which the public health/population health experts will “round” with existing ward teams to encourage the discussion of population health and prevention topics that are relevant to the patients on the ward team’s service. The University of New Mexico will be requiring that all of their medical school graduates complete the requirements for certificates in public health. Case-based curricula that integrate population health principles into clinical scenarios (such as infant mortality, suicide prevention, cancer screening, community health assessments, and bioterrorism) and use actual local public health data are implemented at Brody and the University of Rochester. Mercer and the University of Colorado are two of the schools that will integrate population health skills into their evaluation of students’ clinical skills.

The 11 grantees received \$50,000 each for a planning “year” in 2006. (The “year” is 5–7 months in length, because of the timing of the Call for Proposals and official award letters and the federal fiscal year.) The project was conceived to have four funding cycles—one planning year followed by three implementation years, in which the schools that complete their prior year’s work successfully will be awarded \$50,000 for the following implementation years (for a possible \$200,000 to each institution by the end of the project term). Currently,

the potential for continued funding for this activity through the cooperative agreement is uncertain. Alternate sources of funding are being explored. Meanwhile, interest appears to be growing in this activity. The committee for the Institute of Medicine’s “Training Physicians for Public Health Careers” project heard about the RMPHEC project during their first public hearing and were intrigued to learn that medical schools are in fact increasingly interested in these topics.

We hope that improving public health/population health education for future physicians will contribute to improved health outcomes in their patients and their communities, and will benefit public health agencies and academic medical centers. We would like to presume that any physician would be a better practitioner with an enhanced appreciation of the public health system and their roles and responsibilities within the systems, and we would like to think that communities would be healthier when their medical providers work in better coordination with their public health systems. Evaluating these educational initiatives to assess their impact is not an easy task and requires thoughtful consideration from the academic medicine and public health practice communities. For the RMPHEC project, we may wish to assess how the initiative affected the students at the 11 institutions, as well as potential influences on the grantee schools, the participating health departments, nongrantor schools, patients, and communities.

In spite of the challenges of evaluation, the contemporary health threats that confront both the public health and medical care systems seem to demand that we are better coordinated. On the basis of the robust response to the RMPHEC call for proposals, the academic medical community is embracing the importance of public health and the value of working with (and learning from) state and local public health colleagues. Philosophically, the missions of academic medicine and public health practice do not—and probably should not—differ substantially. The education of future physicians may be a timely opportunity to benefit from the possibilities of this partnership.

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