

School: Harvard Medical School

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Project Description:

We have established the Harvard Medical School (HMS) Regional Medicine Public Health Education Center (RMPHEC) as vehicle to take advantage of the diverse individuals and programs associated with HMS that are engaged in population health and to develop and implement and enhance new learning opportunities for all our students. Our major activities to date have been: 1) to convene a core faculty from across HMS in addition to collaborators from the Massachusetts Department of Public Health (MDPH) and the Harvard School of Public Health's Center for Public Health Preparedness; 2) to design and implement a novel, required course, Clinical Epidemiology and Population Health for all first year medical and dental students. In the upcoming year we will focus on integrating population health themes in the clinical curriculum.

Harvard Medical School's program emphasizes a problem-based learning approach for all preclinical courses. Prior to the HMS RMPHEC, population health and prevention were addressed in two courses within the pre-clinical curriculum: a required clinical epidemiology course in the first semester of year one and a preventive medicine and nutrition (PMN) course in the second semester of year two. Students also chose from one 'selective' course in health policy or social medicine. Although these exposures worked reasonably well, they suffered from disconnection from each other and from other aspects of the curriculum. And, as once weekly courses, they often unsuccessfully competed for students' attention with biomedical sciences.

Our RMPHEC was able to take advantage of a recent effort to reform medical education at HMS. A new series of non-biomedical courses in the first curricular block (approximately 18 months) was implemented called the Fundamentals of Medicine. In addition to basic biomedical sciences, these include required courses in Ethics, Social Medicine, Health Policy, and our course in Clinical Epidemiology and Population Health (CEPH). CEPH was re-designed with the overarching goal to link teaching of the core skills of clinical epidemiology to the care of both individuals and populations. The course was taught during an intensive 1-month period (the January block) during which it was the students' major focus. Each methodological skill was paired with a major public health topic (such as avian influenza, immunization, smoking, and obesity), and several complimentary pedagogical settings and techniques were used: lectures to energize students and provide context, conferences (of 24 students) to teach epidemiological methods, and small tutorials to review papers and problem sets. In collaboration with the Harvard School of Public Health's Center for Public Health Preparedness, we conducted a pandemic influenza "exercise" during which students took on roles of first responders, office and

hospital-based physicians, public health officials, and others. Individuals who have these roles in the community participated as “coaches.” This role-play exercise was particularly well received by our students.

Our RMPHEC also seeks to have significant impact on the education of our students in the clinical years. There is substantial opportunity for integrating population health themes into a new longitudinal framework for clinical rotations at HMS, and we are in discussions with the leadership of this emerging program to accomplish this aim. One of the clinical sites, Cambridge Health Alliance, has been piloting a longitudinal curriculum for several years that we will use as one of our models in our development process.

Having successfully implemented CEPH, we are now focused on continued integration of the population health theme in other preclinical courses, and establishing applied population health summer experiences and other elective opportunities. With the help of our partners at DPH, we have already developed a number of summer opportunities for students to work with local health departments or to do research that addresses surveillance at the State level. We will continue to work to develop new strategies to integrate population health themes into the clinical years of our curriculum.

Publications and presentations:

Shui E, Simon S, Peters A, Huskamp H, Finkelstein J. Center for Population Health Medical Education: Teaching the continuum of medicine and population health. Harvard Medical School Medical Education Day Conference. November 7, 2006; Poster presentation.

“Teaching population health as a basic science” presented at the American Public Health Association Learning Institute Workshop “New Public Health: Innovative Approaches to Teaching Public Health and Population Medicine to Medical Students” November 3, 2007, Washington, D.C.

Panel presentation “Regional Medicine-Public Health Education Centers: Educating for the Public's Health,” Annual Meeting of the Association of American Medical Colleges, November 5, 2007, Washington, D.C.

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