



EDUCATION FOR HEALTH

BRIEF COMMUNICATION

Community-Academic Partnerships: A "Community-First" Model to Teach Public Health

JK Carney¹, R Hackett²

¹*University of Vermont College of Medicine, Burlington, Vermont, USA*

²*United Way of Chittenden County Volunteer Center, South Burlington, Vermont, USA*

Published: 21 April 2008

Carney JK, Hackett R

**Community-Academic Partnerships: A "Community-First" Model to Teach Public Health
Education for Health, Volume 21, Issue 1, 2008**

Available from: <http://www.educationforhealth.net/>

A B S T R A C T

Context: Physicians face complex public health issues in clinical practice today. We describe an innovative "community-first" model that teaches public health to medical students.

Methods: The United Way of Chittenden County Volunteer Center (UWCCVC) in the State of Vermont, U.S.A., was chosen as the focal point for projects because of its documented history, success, and credibility.

A simple form, sent to local community agencies, facilitated participation and identified Healthy People 2010 focus areas as the public health framework. Community agencies identified the health needs of populations that were served through this process. Projects were subsequently jointly developed and following student completion, assessed jointly by university faculty and community agency mentors.

Results: A total of 41 projects have been completed, spanning 11 different areas of Healthy People 2010. Many different local community agencies have participated. An annual poster session is held at project completion. Assessment includes both faculty mentor and community agency assessment of student groups' progress and project quality. Community agencies are surveyed following project completion. Nearly all community agencies agreed that projects benefited the populations served and anticipated continuing the partnership.



Conclusions: Putting community public health needs first, in developing projects, was critical to success. This “community-first” model provides opportunities to teach public health and benefit health in local communities.

Keywords: Public health, partnerships, community, academic, medical education, collaboration

Context

Physicians in the United States and throughout the world currently face complex public health challenges in clinical practice that include: emerging infections, obesity, and chronic disease conditions in an aging population. A better understanding of risk factors and their modifications will help physicians to prevent chronic conditions and lessen their impact on the health of individuals and populations. For example, tobacco use, poor diet, lack of physical activity, and alcohol abuse are major contributors to deaths that could be prevented in the U.S. (McGinness, J.M. and Foege, W.H., 1993; Mokdad, A.H. et al., 2004) and worldwide. If the recommendations for “basic public health training in the population-based prevention approach” for medical students (Institute of Medicine, 2003) and academic health centers’ leadership in curricular changes (Institute of Medicine, 2004), are followed, then physicians will potentially be prepared to address current and emerging health challenges. Furthermore, although public health is not specifically cited, the U.S. Liaison Committee on Medical Education (LCME), the authority that accredits medical schools, requires medical education content to include preventive medicine and the understanding of cultural diversity and its impact on health and illness. A new standard to make opportunities available and encourage participation in service-learning activities will become effective in July 2008 (LCME, 2007).

Although examples of population health teaching models in medical curricula have been described (Novick, L.F., 2003), a need persists for additional new approaches. Previous authors have described models to integrate public health and primary care (Bradley, S. and McKelvey, S.D., 2005) and highlighted the importance of Continuous Quality Improvement (CQI) and Community-Oriented Primary Care (COPC) methods in the development of university-community partnerships (Working with the Community, 2007). In this paper, we describe an innovative “community-first” model to teach public health to medical students.

Methods

The Vermont Integrated Curriculum (VIC) at the University of Vermont College of Medicine began in the fall of 2003. It integrates sciences with clinical medicine, and develops skills for life-long education (Vermont Integrated Curriculum, 2006). Prior to 2003, medical students at the College of Medicine had asked for better ways to “make a difference” in the community. In developing the teaching model for this course, previous project designs were reversed. Instead of projects being driven by student interest, they were developed by community public health needs that were identified by the United Way of Chittenden County Volunteer Center and local health agencies. The rationale behind our community-first approach as a foundation was our belief that it was necessary to initially understand and address community public health needs in order to facilitate community engagement and sustain true partnerships.

Beginning in 2004, public health projects have been added as a requirement for all students. These are conducted in a second-year course entitled Public Health Projects which builds upon the group skills learned in a first year course that emphasizes collaborative small group learning to address topics in medical leadership, professionalism, and cultural awareness. There are 13 or



14 projects per year, in local Vermont communities, developed in partnership with the United Way of Chittenden County Volunteer Center, in Burlington, Vermont. The educational goals are as follows:

1. Learn public health through action in the community to improve health,
2. Understand and apply basic public health research methods, and
3. Understand and address public health issues facing our community.

The United Way of Chittenden County (UWCC) is a private, non-profit organization dedicated to engaging the entire community in solving the pressing human services needs in Vermont's largest county. The United Way of Chittenden County Volunteer Center, a key component of UWCC, began in 1991 to address the volunteer needs of the community (United Way of Chittenden County Volunteer Center, 2006).

By recruiting and referring individuals to volunteer their time, the volunteer center matches the needs of a non-profit organization with a volunteer workforce, either in groups or individually. The UWCCVC was chosen as the focal point of our new curricular efforts because of its documented history, success, and credibility in working to improve the lives of local community residents. It was the logical first contact to assist with locating health issues within the agencies they serve.

A joint letter from the College of Medicine and the UWCCVC was sent to over 50 community agencies inviting their participation. A simple form was developed to facilitate agency participation, identify Healthy People 2010 focus areas of the proposed project, and identify the health needs of populations served. Follow-up contact was established through telephone calls, subsequent to which projects were jointly designed. Healthy People 2010 areas were chosen as a framework, as they were easily understandable from both a community and a clinical perspective (U.S. Department of Health and Human Services, 2006). Ways to identify potential solutions to community health needs were also framed as a research question. This step was designed to encourage potential development of collaborative research if initial projects were successful, but more immediately, to encourage students to develop practical solutions within an academic mindset. All projects were reviewed and approved by the Institutional Review Board. Individual project oversight was done jointly by a university faculty mentor and by a representative of the community agency, called the "Community Agency Mentor".

Results

The first public health projects at the University of Vermont College of Medicine began in September 2004 and a total of 41 have been completed to date, spanning 11 different content areas of Healthy People 2010, and a variety of community agencies (Table 1). One project example was the development of a strategy to increase the volume and improve nutritional value of food donations from the general public to the local emergency food shelf, an organization that provides food to individuals with limited income. Another project determined that capacity existed to screen all individuals in Vermont for colorectal cancer, beginning at age 50. Projects spanned the age and population spectrum, covering many different areas of public health.

At the completion of the projects, an annual poster session is held at the College of Medicine for students, faculty, and community agencies. Student posters summarize their projects in a format similar to journal articles. A section called "Lessons Learned" is also required that includes: lessons learned about working with community agencies, specific populations, barriers to health, or unanticipated skills needed to address community needs.



Table 1: Public Health Project Examples. Titles, Community Agencies, Health People 2010 Focus Areas

- Removing Barriers to Health: Prioritizing Health Needs of Vermont Refugees
Agency: Vermont Refugee Resettlement Program
Healthy People 2010 Focus Area: Access to Quality Health Services
- Nutrition and Poverty: Improving Access to Healthier Foods for Vermonters
Agency: Chittenden Emergency Food Shelf
Healthy People 2010 Focus Area: Nutrition and Overweight
- Access to Colorectal Cancer Screening: Can Vermont Screen All Those Who Need it?
Agency: American Cancer Society
Healthy People 2010 Focus Area: Cancer
- From Local Libraries to Health Literacy: Teaching Vermonters to be Better Informed About Health
Agency: Fletcher Free Library
Healthy People 2010 Focus Area: Health Communication
- Improving Health Care Quality: Practical Ways to Reduce Medication Errors
Agency: Visiting Nurse Association of Chittenden and Grand Isle Counties
Healthy People 2010 Focus Area: Access to Quality Health Services
- Malnutrition in Vermont Children: Meeting Community Needs through Professional Education and Collaboration
Agency: Vermont Campaign to End Childhood Hunger
Healthy People 2010 Focus Area: Nutrition and Overweight
- Communicating Environmental Health Risks: How Much Does the Public Know about Health Risks Related to Mercury in Fish?
Agency: Vermont Department of Health
Healthy People 2010 Focus Area: Environmental Health
- Developing Successful Alternative Physical Education Programs in Middle School Children
Agency: Sara Holbrook Community Center
Healthy People 2010 Focus Area: Physical Activity
- Are We Missing Anyone? Preventing Suicide in Vermont Teens
Agency: The Baird Center for Children and Families
Healthy People 2010 Focus Area: Mental Health

The course requires student self-assessment of their contribution to the project, and both a faculty mentor and community agency mentor assessment of the student group's progress and project quality. Assessment questions include competencies in areas of: professional development, learning, leadership and collaboration, culture and diversity, and research and discovery in public health. In addition, community agencies are surveyed following project completion about reasons for participation and value of projects to populations served.

Nearly all community agencies agreed or strongly agreed that the projects benefited the populations served and anticipated continuing the partnership, as determined by an electronic survey distributed to participating agencies (Table 2). As reasons for



participating, agencies most commonly cited factors such as interest in influencing training of future health professionals, making a connection with the University, their prior positive experience with students, and the need for additional help.

Table 2: Community Agency Surveys: Results from 2005 and 2006

<p>Scale (1-5): 1= Strongly Agree 3= Neutral 5= Strongly Disagree</p> <ul style="list-style-type: none">▪ The community served by our agency benefited: 2005 Mean = 1.5 (N=8) 2006 Mean = 1.7 (N=10)▪ We anticipate the relationships we have developed with UVM will continue: 2005 Mean = 1.5 (N=8) 2006 Mean = 1.5 (N=10) <p>Commonly cited reasons for participating in projects:</p> <ul style="list-style-type: none">▪ Wanted to influence the training of future health professionals▪ Wanted to make a connection with the University▪ Positive prior experience with students▪ Needed additional help▪ Wanted to try something new

Conclusions

We describe a successful “community-first” model to develop and sustain community partnerships, teach medical students public health and address health issues in local communities. The most important components of the model include putting community health needs first, when developing projects, and working in partnership with involved agencies to jointly develop, implement, and assess the quality of projects. The emergence of sustained efforts, with some multi-year projects, new participating agencies, supported by survey data, reflect the creation of “true partnerships”. Although students are not assessed on content learning, current developmental work focuses on longitudinal assessment of student public health knowledge throughout the entire medical school curriculum. Teaching public health and improving community health are primary goals, but students also learn introductory public health research methods. Applications of such community-based research, emphasizing practical community solutions to health issues, will represent an area of future development. Community-academic partnerships emphasizing a “community-first” approach provide opportunities to teach public health, benefit health in local communities, and prepare medical students for clinical practice in the 21st century.

References

BRADLEY, S. & McKELVEY, S.D. (2005). General practitioners with a special interest in public health; at last a way to deliver public health in primary care. *Journal of Epidemiology and Community Health*, 59:920-923.

INSTITUTE OF MEDICINE (2003). *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*. Washington, DC: National Academy Press; pp. 1-26.



INSTITUTE OF MEDICINE (2004). Academic Health Centers: Leading Change in the 21st Century. Washington DC: National Academy Press; pp. 5- 6.

LIAISON COMMITTEE ON MEDICAL EDUCATION (LCME). Available at <http://www.lcme.org/>. Accessed March 21, 2007.

MCGINNIS, J.M. & FOEGE, W.H. (1993). Actual causes of death in the United States. JAMA, 270(18): 2207-12.

MOKDAD, A.H., MARKS, J.S., STROUP, D.F. & GERBERDING, J.L. (2004). Actual Causes of Death in the United States. JAMA March 10; 291(10): 1238-1245.

NOVICK, L.F. (2003). Introducing a case-based teaching intervention in preventive medicine education. American Journal of Preventive Medicine, 24(4S): 83-4.

UNITED WAY OF CHITTENDEN COUNTY VOLUNTEER CENTER (UWCCVC). Information available at <http://www.unitedwaycc.org/>. Accessed September 8, 2006.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. Healthy People 2010. Information available at <http://www.healthypeople.gov>. Accessed September 8, 2006.

VERMONT INTEGRATED CURRICULUM (VIC) at the University of Vermont College of Medicine. Information available at <http://www.med.uvm.edu>. Accessed September 1, 2006.

WORKING WITH THE COMMUNITY – INTRODUCTION: UNIVERSITY-COMMUNITY PARTNERSHIPS. Available at: http://www.gwu.edu/~iscopes/LearningMods_COPE.htm Accessed March 21, 2007.
