

Regional Medicine Public Health Educational Centers-GME

Institution: Beth Israel Deaconess Medical Center/Harvard Affiliated Emergency Medicine Residency

Principal Investigator: Jonathan Fisher, MD, MPH

Specialties: Emergency Medicine

Collaborating organizations:

Healthy Again Health and Disability Unit, Massachusetts Department of Public Health
Undersecretary for Elder Affairs, Commonwealth of Massachusetts
Community Care Alliance Network of Community Health Centers
Community Initiatives Bureau, Boston Public Health Commission
Harvard School of Public Health
Harvard Medical School

Project Description:

Background

Although medicine and public health arise from similar foundations, there remains a critical need for improved collaboration between the fields. The Emergency Department (ED) represents a source of help open to the public and dedicated to the public's health. Its unique position in medicine makes the ED an ideal place to begin to integrate public health considerations into the standard of medical care. As part of the CDC and AAMC's national initiative for "Regional Public Health-Medicine Education Centers-GME", we designed and implemented a new public health curriculum for emergency medicine (EM) residents. Prior to this initiative, the public health education of EM residents was piecemeal and poorly integrated into the curriculum.

Needs Assessment

As part of the implementation of the project, we conducted a focus group with 20 residents in February, 2008. The group discussed current attitudes among the residents with regard to public health practices in the emergency department (ED), including what they felt was useful and what was lacking. Residents expressed concern about additional work that public health initiatives may entail, potentially disrupting the flow in the ED and ultimately lessening the quality of care. In addition, there was almost unanimous consensus that practical, real life examples of ways to integrate public health effectively into the ED were needed. We also conducted a web-based self-assessment of public health knowledge and application in the ED to the residents to determine their comfort level with public health practices and what skills they thought would be useful. The purpose of the self-assessment was to identify specific topics that would be relevant to the residents and to tailor lectures so that they addressed these topics of interest. Twenty-four of thirty-two residents completed the assessment.

Implementation

Based on the knowledge gathered in the needs assessment, we developed four didactic sessions and one journal club for the 35 residents in the Harvard-Affiliated Emergency Medicine Residency (HAEMR) at Beth Israel Deaconess Medical Center (BIDMC) to integrate into the curriculum. Each session was held during the regular weekly didactic conference and used a modular approach to link a basic public health principle to a relevant clinical topic in EM. The four sessions were based on the traditional core disciplines in public health: 1) Epidemiology and Biostatistics, 2) Environmental Health Sciences, 3) Health Policy and Management, 4) Social and Behavioral Sciences.

Public Health Session 1:

Introduction to the public health curriculum and Health Policy and Management

This session was an introduction to the connection between public health combined with a lecture on health policy and health care reform in Massachusetts. The information gathered from the focus group helped guide the lecture by focusing on the effects of the health care reform in Massachusetts and the role of the ED in providing care. After the lecture residents were divided into small groups and given a case study that focused on allocation of limited resources for public health prevention activities in the ED. Resident groups were given a set of questions to discuss before presenting their recommendations to the whole group.

Public Health Session 2:

Principles of epidemiology and Biostatistics

The lecture presented clinical examples of falls in the elderly and the risks and benefits of anticoagulation for stroke prevention. There was discussion about steps to prevent falls in the elderly and their effectiveness followed by a risk-benefit analysis of stroke prevention with anticoagulation weighed against the probability of developing a life threatening bleed.

Public Health Session 3:

Principles of environmental health sciences

The lecture used the ED work environment, including the clinical management of violent patients, to discuss issues in occupational health. Topics included a discussion of workplace risks such as bloodborne pathogens and post exposure prophylaxis, workplace violence, and other infectious exposures.

Public Health Session 4:

Social and Behavioral Sciences.

This session focused on Screening, Brief Intervention, and Referral to Treatment (SBIRT). The interactive lecture, which included a video and resident role-playing, focused on the background and use of SBIRT for alcohol problems in the ED.

Journal Club:

Residents were given three articles related to the integration of public health practice in the ED to read and to discuss at journal club (held monthly as an integral part of the current curriculum). The resident-led discussion with faculty paid particular attention to (1) how to decide what components of public health are realistic in an emergency setting, and (2) what would be most effective from a clinical standpoint. The informal feedback from the residents was very positive: they indicated that they enjoyed learning about article critiques but also liked applying their knowledge to the larger context of the medical field.

Evaluation

Before the first session and after the last session, residents completed an anonymous evaluation with questions about their comfort level and interest in public health. All evaluations and tests were completed using an online survey tool that included an opt-out function and free-text comment boxes. Overall, 76.6% of responders felt it was important for physicians to receive training in public health. When residents were asked if the residency program had taught them the skills necessary to implement public health principles in clinical practice, responses increased from 62% before implementation to 95% after ($p < 0.05$). Before the public health sessions, 53.8% of responding residents felt the curriculum did not emphasize public health enough, a proportion which decreased to 28.6% after program implementation ($p = 0.09$). At the end of the program, 52.4% of responders felt that EM as a field had too little involvement in public health issues. After program implementation there appeared to be a trend of increased comfort with particular topics in public health, although the results were not statistically significant. In addition, we have had several residency graduates go on to pursue an MPH degree.

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Publications (if available):

Manuscript submitted
Abstract

Effect of an Integrated Public Health Curriculum in an Emergency Medicine Residency,
Betz M, Tibbles C, Joyce N, Fisher J. Acad. Emerg. Med. 2009 16(.4), Suppl.1 S47.

Website(s) (if available):

Being transitioned to permanent server.

Regional Medicine Public Health Educational Centers-GME

Institution: The Cambridge Health Alliance

Principal Investigator: Richard Pels, M.D.

Specialties: Internal Medicine

Collaborating organizations: Cambridge Public Health Department

Project Description:

The Institute of Medicine report states a need for further integration of public health and clinical medicine at all levels, including medical education. We want to prepare our medical residents to “practice” public health as well as clinical medicine. Our goal is to introduce medical residents to a public health resource in the community, the Cambridge Public Health Department. This collaboration seeks to increase the residents’ awareness of the basic functions of the public health department, and its role in promoting health, and preventing illness in relation to Hepatitis B and Tuberculosis in the community.

Prior to the RMPHEC-GME grant, the CHA residency program stressed the importance of a community health curriculum. Residents were taught to give “health talks” to the community. Residents still take part in biannual health education sessions to community members. Furthermore, residents undertake scholarly work on their own with an associated mentor. Residents can also take part in an elective, Health Advocacy, which introduces residents to different aspects of community and health advocacy. Finally, residents participate in a monthly journal club where they learn to evaluate the literature.

After the RMPHEC-GME grant, the CHA put in place an official public health curriculum for interns. The goal of this curriculum is to introduce interns (first year medical residents) to the role of the public health department in a community, and discuss the areas of collaboration between clinicians and a public health department.

From August 2008 – February 2010, residents at the CHA rotated through this course during one of their ambulatory months. Interns spend a total of 6.5 hours a week on the population health practicum. The practicum is divided into two components: didactics, and the practicum. Didactics focus on the functions of the Public Health Department and discuss areas of interplay between clinical and public health practice. Part of this includes a tabletop exercise where residents simulate the clinical and public health management of a flu pandemic through case studies. Other topics include a discussion on the difference between the public health research model and the community oriented public health model. Didactics are given by a public health nurse and a clinician. The practicum expects residents to work with public health departments to understand a public health problem, evaluate it, and present possible interventions. From 2008 – 2010, the practicum focused on the management of chronic hepatitis B in the community, and at our own medical center. Interns evaluated how primary care

physicians managed patients with chronic Hepatitis B in the community, and at CHA. Residents summarized that both in the community and at our practice site, patients with chronic Hepatitis B did not get proper counseling in terms of notifying partners/household contacts; using protection; getting tested for other STDs; and finally getting immunized to Hepatitis A. Therefore, as a result of this project, the CPHD decided to implement a referral process. Physicians at the CHA can refer Cambridge residents with Hepatitis B to a public health nurse. This nurse will contact the patient, provide more education, and if needed make a home visit to immunize sexual partners/household contacts who might not have access to healthcare.

From March 2010 to June 2010, residents will work on a similar project with the public health department this time focusing on the management of patients with latent Tuberculosis infection (LTBI). In current practice, patients with positive PPDs are immediately referred to the TB clinic with no education on the meaning or workup of a positive PPD. The TB clinic is a weekly clinic run out of the hospital by public health nurses and CHA clinicians. The project aims to understand: (1) outcome of these referrals – understanding how many of these patients with LTBI accept treatment (2) adherence to LTBI therapy – how many patients who start treatment comply with the 9 month regimen. The aim of this project is for residents to work with public health nurses at the TB clinic to understand their allocation of resources, and evaluate how best to utilize/distribute these resources of time, person, and cost.

The program has yet to fully implement an objective evaluation of the Population Health practicum. Interns do evaluate the quality of didactics and practicum. Based on these evaluations, we understand that interns appreciate the exposure to public health during their rigorous clinical training.

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Publications (if available):

Public Health Education in an Internal Medicine Training Program: an experiential report. (2009). Saravanan, Yamini & Pels, Richard. Poster presented at CHA Research Day, and the Harvard Macy Program, Harvard Medical School.

Referral of PPD Positive Patients to the TB clinic: A Closer Look. (2010). Saravanan, Yamini, Rice, Louise, & Pels, Richard. Poster presented at the CHA Research Day.

Regional Medicine Public Health Educational Centers-GME

Institution: Columbia University Medical Center

Principal Investigator: Nicholas Fiebach, MD

Specialties: Internal Medicine

Collaborating organizations: Mailman School of Public Health of Columbia University; NYC Department of Health and Mental Hygiene

Project Description:

The Medical House Staff Training Program in internal medicine at the Columbia University Medical Center is a 3-year categorical program that features options for a Generalist/Primary Care Pathway as well as a Research Pathway. Although residents who have chosen the Generalist/Primary Care Pathway may have more pre-existing interest in public health, this RMPHEC-GME project applies to all of the approximately 135 house staff in the program.

Prior to initiation of the RMPHEC-GME, senior (PGY3) residents in internal medicine at Columbia rotated through a week-long curriculum on Health Systems with 10 seminars taught by faculty from the Mailman School of Public Health. Topics included health policy, health insurance, health care delivery systems, health care reform, comparative health systems, and the roles of technology and cost/benefit analyses in health care. In addition, a small number of residents arranged elective rotations at the New York City Department of Health and Mental Hygiene (NYC DOHMH).

The RMPHEC supported expansion and enhancement of the curriculum to include 2 new modules presented by DOHMH physician staff, addressing population approaches to prevention of cardiovascular disease and cancer and control of communicable diseases. These modules are delivered on site at the DOHMH central office as part of an introduction to the local health department. One additional new module was added, in which residents are guided in performing population-based assessments of the health needs of their own panel of continuity clinic patients. This session uses a community-oriented primary care (COPC) framework.

The RMPHEC also supported development and implementation of a ½-day conference on “Population and Public Health in Graduate Medical Education” for residents and faculty throughout New York City, and facilitation of more opportunities for residents to participate in population

and public health experiential learning through electives and projects at the NYC DOHMH.

Process monitoring and evaluation assesses specific objectives, including implementation of activities and participation as intended as well as the quality of the delivered program. Learning objectives-based post-seminar evaluations are completed by house staff, and faculty from the MSPH and NYC DOHMH are interviewed for their perspectives on teaching medical residents.

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Publications (if available):

Website(s) (if available):

Regional Medicine Public Health Educational Centers-GME

Institution: Mayo Clinic

Principal Investigator: Prathibha Varkey, MBBS, MPH, MHPE

Specialties: Preventive Medicine, Pediatrics

Collaborating organizations: Mayo Clinic Preventive Medicine, Mayo Clinic Pediatrics, Olmsted County Public Health Services, Olmsted Child Protection/Foster Care Services; Rochester Public Schools; Rochester Area Head Start; Minnesota Medical Association

Project Description: The Mayo School of Graduate Medical Education offers a 3-year pediatric and adolescent medicine residency program and a 2-year Preventive Medicine fellowship. This project utilizes the expertise and the resources of the Preventive Medicine fellowship to enhance the public health content in the pediatric residency curriculum. Prior to the RMPHEC-GME grant, the pediatric residency curriculum included four half days of community based training in the first year of residency. These experiences include site visits to the local refugee clinic, Children's Protective Services, the Salvation Army Free Clinic, Head Start and to area public schools. These experiences typically consist of touring the facilities and speaking with the directors of the program to learn about issues such as the intake process, the eligibility criteria and anticipated outcomes. Visits also include interactions with child, and parent, clients. Although, these experiences provide an introduction to community-based pediatric needs and local public health services relevant to children, they have traditionally not been roundly structured and were limited to the first year of training.

This project was designed to equip pediatric residents with the tools and knowledge necessary to become future professionals committed to, and capable of, improving the health of children in their communities through an innovative and unique collaboration between preventive medicine, public health and pediatrics.

The faculty from the Division of Preventive, Occupational and Aerospace Medicine collaborated with the Department of Pediatric and Adolescent Medicine to implement a longitudinal public health curriculum for the 30 residents of the pediatrics residency program. Interventions included:

1. A structured longitudinal public health educational experience, combining integrated didactic and experiential opportunities
2. Education on child advocacy, including the legislative role of the pediatrician in disease
3. Education on culturally sensitive care of the underserved and the disadvantaged
4. Knowledge of the effects on child health of common environmental toxins, including that of potential agents used in bioterrorism

5. Experiential education on the basics of healthcare systems and Quality Improvement

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Regional Medicine Public Health Educational Centers-GME

Institution: Northwestern University Feinberg School of Medicine

Principal Investigator: Marie Crandall, MD, MPH, FACS

Specialties: Surgery

Collaborating organizations: Chicago Department of Public Health, Heartland Alliance

Project Description: As a result of Resident and Faculty focus groups, we have begun to integrate Population Health content into our residency curriculum in four broad categories:

Guest Lecturers:

Surgical Grand Rounds are a bimonthly event, well-attended by faculty and residents, and cover a wide range of topics, but typically involve recent advances in surgical care, controversies in surgery, or faculty research. Nationally prominent speakers are featured 6-10 times per year. Residents stated that they would like to have Grand Rounds lectures from surgeons who are active in both clinical and public health arenas.

Dr. Mary Ann Hopkins gave Northwestern University Surgical Grand on 12/9/08. Dr. Hopkins is a specialist in Minimally Invasive Surgery, is interested in surgical education, and is on the Board of Directors of Doctors without Borders (Medicins sans Frontiers, MSF). Her visit included meetings and discussions with our Surgical Education PhD, a lunch roundtable with medical students and residents regarding global health opportunities for trainees, and a meeting with the Global Health Coordinator for Northwestern. Her Grand Rounds was a gripping photographic journey of her MSF experiences in a war-torn area of the Congo. Monies from the AAMC/CDC grant were used to support her travel and speakers' fees.

Dr. Edward Cornwall, an expert in Urologic health disparities, has been contacted to be a guest lecturer for the 2009 academic year.

Didactic Education:

Core Curriculum for the surgical residents is a mandatory conference of a series of lectures which covers a comprehensive set of topics in the basic and clinical sciences. It is updated and cycled every two years and is the primary source of didactic and interactive instruction for the residents in the basic and clinical sciences. The residents expressed interest in a variety of clinically and biologically relevant topics for our Core Curriculum lectures.

Per resident recommendations we have included lectures in pain management, post-traumatic rehabilitation issues, injury prevention and outcomes, surgical nutrition, obesity, "Drugs and Bugs: Antimicrobials and Resistance", cancer screening and

prevention (multidisciplinary conference planned), and transplantation ethics. Residents noted that they would also like to help give lectures and make them more interactive (they have traditionally been didactic, despite educational efforts), so the Chief Residents are co-presenting several topics with faculty mentors.

In addition, we have added several topics to our monthly Resident Seminar Series, which is a conference that covers practical, topical issues in surgery. We have added lectures on health care financing and VA structure and health care.

Finally, residents are currently receiving forwarded emails from the Illinois Department of Public Health and the Northwestern University Program in Public Health with respect to classes, lectures, and conferences of interest. Monies from the AAMC/CDC grant will be used to offset any attendance fees.

Global Health Electives:

Residents are very interested in global health electives. To date, we have had the following discussions:

Evolution: By working with faculty who have helped facilitate resident global health electives, we have identified at least three institutions that are appropriate for surgical resident electives.

Residents may choose to go abroad to program-approved locations:

Guatemala has a retired surgeon from the University of Iowa (Dr. Recinos) who works out of a small hospital outside of Guatemala City. Dr. Recinos would be very interested in partnering with Northwestern.

Stellenbosch University, South Africa. Professor Warren of the Surgical Sciences Department will be a host for surgical residents on trauma and emergency surgery rotations. This site has been vetted by medical students and Public Health practitioners from Northwestern.

Srinagarind Hospital, Thailand. Professor Uttarivichien will be a host for surgical residents on general surgery and surgical oncology rotations. This site has been vetted by Dr. David Mahvi (formerly at University of Wisconsin, now at Northwestern).

Additional sites are being considered in Uganda and Mexico City. These will evolve over the next 1-2 years.

Local and Community Health:

Partners: Chicago Department of Public Health and the Heartland Alliance

Northwestern Family Medicine residents work with Heartland Alliance initiatives in Chicago. It is community-based, not university-based. Our residents could potentially participate in Chicago refugee clinics, refugee health series, lectures, & journal clubs. In addition, the CDPH Chicago clinics see surgical patients, but there is a 2yr waiting list

at Cook County Hospital. Northwestern will have to discuss possible charity care if our residents diagnose surgical problems.

Other Opportunities:

Ambulance ride-alongs: Our residents now have the opportunity to go on EMS runs and will be encouraged to do so on their Trauma/Emergency Surgery rotation

Residents have been made aware of public health conferences, electives from the Program in Public Health, Illinois Department of Public Health lectures, and research opportunities with a population health focus via email

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Regional Medicine Public Health Educational Centers-GME

Institution: Rhode Island Hospital/The Warren Alpert Medical School at Brown University

Principal Investigator: Lisa M. Schweigler, MD, MPH, MS

Specialties: Emergency Medicine

Collaborating organizations: Rhode Island Free Clinic, University Emergency Medicine Foundation, Rhode Island Department of Public Health

Project Description:

Prior to being awarded the RMPHEC-GME grant, public health/population health/preventive medicine education in the Brown Emergency Medicine Residency was not formally recognized as a key component of the education of emergency medicine (EM) residents. However, residents would gain some exposure to public/population health principles and problems as part of the core curriculum in EM and through their clinical work. In addition, the Department of Emergency Medicine (DEM) at Brown does have a traditionally strong focus on public health education and research, including through the Injury Prevention Center housed within the DEM, fellowships in Injury Prevention and International Emergency Medicine (among others) awarding Master's Degrees of Public Health, and faculty research and expertise in injury prevention, disaster medicine, sexually transmitted diseases, and substance abuse, to name a few. Faculty of the DEM also run the Medical Simulation Center at Rhode Island Hospital, the largest and most advanced medical simulation center in southern New England. The Simulation Center has also traditionally been a key learning tool for Brown EM residents.

Funding through the RMPHEC-GME has allowed us to develop and support several public health/population health focused activities that will be integrated into the existing emergency medicine residency curriculum:

- We have invited several Grand Rounds speakers both from within and outside of Emergency Medicine to speak on numerous public/population health topics, including research on and strategies of smoking cessation interventions in the ED, to the role of the Rhode Island Department of Public Health, to advances in motor vehicle injury prevention, to the role of Emergency Medicine in public and population health and the development of an Emergency Medicine public health training and research agenda. Evaluation forms are distributed after each lecture and are used to guide future Grand Rounds invitations and topics.

- Taking advantage of the existing expertise in medical simulation new simulation cases focusing on public/population health issues are being developed and implemented by several DEM faculty members, including topics of international medicine and infectious disease, pediatric injury prevention, and substance abuse and behavior modification. Both mannequins and live actors are being

employed in these scenarios. These cases will become part of the rotation of cases presented to Brown EM residents throughout their training, and will be modified and refined as appropriate based on formalized feedback provided by the simulation participants.

-Drs. Esther Choo and Megan Ranney are developing, implementing, and assessing a video-based educational module for EM residents to increase their understanding of youth violence and ability to recognize and address it during the ED visit. Drs. Choo and Ranney will evaluate the effectiveness of this intervention using pre- and post-testing of resident knowledge about youth violence, satisfaction with skill in handling youth violence cases, and actual use of an evidence-based youth violence discharge instruction sheet.

-We have developed a partnership with the Rhode Island Free Clinic (RIFC), a not-for-profit organization dedicated to providing free primary and specialty care to uninsured Rhode Island residents. The goal of the partnership is for Brown EM residents to develop, implement, and assess public/population health interventions for the benefit of the RIFC clientele in an environment that has a clear need for their engagement and encourages innovation and flexibility. Currently several Brown EM residents are working with the RIFC staff on a project to promote and track smoking cessation interventions for RIFC patients, using the "Plan-Do-Act-Check" model of continuous quality improvement. The residents will be able to meet some of their residency requirements (scholarly activity and/or quality improvement) with this project. It is anticipated that this partnership will continue in the future with new residents, and expand to other prevention areas such as injury prevention or diet modification.

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School: University of Florida, College of Medicine – Jacksonville

Principal Investigator: David Wood, MD, MPH

Specialties: Emergency Medicine, Internal Medicine

Collaborating Organizations: Duval County Health Department

Project Description: The University of Florida, College of Medicine – Jacksonville (UFCOM-J) Regional Medicine Public Health Education Center (RMPHEC) builds on existing resources, experience and collaborations between the UFCOM-J and the Duval County Health Department (DCHD). The main focus of UFCOM-J's RMPHEC is to increase population and public health training of all Internal Medicine and Emergency Medicine resident physicians. The current IM and EM curriculum has relatively limited content related to the public health or exposure to services provided by the local health department. The main objectives are to:

Objective 1. Create an administrative structure to oversee the program that is interdisciplinary and has representation from the leadership of DCHD, the UFCOM-J Dean's Office, Internal Medicine and Emergency Medicine Residency Training programs, and residents and faculty with either training or interest in population and public health (PPH).

Objective 2. Provide all residents in Internal Medicine and Emergency Medicine with both short and long-term experiential learning in a wide array of population and public health content.

Objective 3. Integrate population/public health and preventive health content into core didactic conferences in Internal Medicine and Emergency Medicine, including grand rounds, noon conferences, ward rounds, morning report and other didactic educational opportunities.

Activities. During the past several years, the UFCOM-J RMPHEC has been involved in a variety of activities to promote public health education at the GME level in collaboration with the DCHD Institute for Health Evaluation and Policy Research, Epidemiology and Disease Surveillance Group, Emergency Preparedness Department, and Environmental Health Division. This partnership has helped with the development of training materials, hands-on training opportunities for residents and lectures.

Environmental Health Curriculum. The UFCOM-J RMPHEC and DCHD are working together to tailor an environmental health curriculum for Emergency Medicine and Internal Medicine resident physicians. The curriculum includes an interactive self-learning module that includes several toxic exposure case studies, introduction to the concepts and principles of environmental justice. As part of the module they explore, through the EPA website, specific examples of environmental racism perpetrated in the

Jacksonville community in the form of toxic waste sites. The residents will have an opportunity to work directly with the Emergency Operations Center to gain hands-on experience in disaster management and do site visits at toxic waste superfund cleanup sites with the Environmental Health Department staff. Residents will also gain exposure to the DCHD's activities in infectious disease epidemiology and syndromic surveillance. Currently, Emergency Medicine and Internal Medicine residents receive half a day of training in environmental health, but with the implementation of this module this will increase to 2 days.

Obesity Case Study. The UFCOM-J RMPHEC has developed and is now fielding with the residents a self-directed learning module on obesity and its co-morbidities. The obesity case study is for internal medicine and emergency room residents. It is 8 hours in length. It emphasizes the public health aspects of obesity, including the national and international epidemiology of obesity, health literacy and behavior change models and primary prevention strategies. We also explore the contribution by obesity to health disparities at the national, state and local level. The residents are introduced to the public health Ecologic Model to introduce and explain the social determinants of obesity in poor and minority populations. Lastly, the residents make a site visit to an inner-city practice that is using a patient-centered medical home and community engagement strategies to address obesity and its associated co-morbidities.

Other Activities. The UFCOM-J RMPHEC has been working with AHEC Program office on the development of a curriculum to be used for the Student/Resident Experiences & Rotations in Community Health (SEARCH) program. Faculty within our group have been working closely to develop a training manual for health professions students on the leading health disparities related to underserved rural and urban populations. The project will focus on curriculum development and evaluation of a six week clinical and public health rotation for students. RMPHEC supporting faculty will oversee the community health components for the AHEC's SEARCH program.

The UFCOM-J RMPHEC is also working with Internal Medicine and Emergency Medicine to develop several lectures on public health. These lectures will focus on health literacy, cultural competency, financing health care and global health. They are geared toward the resident physicians to help them increase their understanding and knowledge on a variety of public health issues that may impact patient care.

Publications:

Livingood WC, Razaila L, Reuter E, Filipowicz, Butterfield, Lukens-Bull K, Edwards L, Palacio C, **Wood DL.** Using Multiple Sources of Data to Assess the Prevalence of Diabetes at the Sub-County Level in Jacksonville, Florida, 2007. *Preventing Chronic Disease.* 2010; www.cdc.gov/pcd/issues/2010/sep/09_0197.htm

Presentations:

Wood DL. Innovations in Medical Education at the GME Level. Prevention and Health, Annual meeting of the Association for Prevention Teaching and Research. Washington, DC. March 25, 2010.

Accepted Abstracts:

Alexandraki, I, Balls, JE, Kumar, V, Lukens-Bull, K, Zenni, E, Wood, D. Introducing public health to internal medicine residents through the design and implementation of an obesity case module. University of Florida College of Medicine – Jacksonville Medical Education Week 2010. (Poster Presentation April 2010)

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Regional Medicine Public Health Educational Centers-GME

Institution: University of Massachusetts Medical School

Principal Investigator: Warren J. Ferguson, MD

Specialties: Family Medicine

Collaborating organizations: UMass Worcester Family Medicine Residency; UMass Preventive Medicine Residency; MassAHEC Network; MA Department of Public Health; Worcester Division of Public Health; Central MA AHEC

Project Description:

The University of Massachusetts Medical School was founded in 1962 with a mission to develop a health care workforce to meet the needs of the people of the Commonwealth. One of the first residencies to be developed was Family Medicine, with its first class of residents finishing in 1976. From its inception, the residency was structured to combine learning opportunities in an academic health center with patient care training in community-based practices, within the context of the community. The community-based practice experience continues to be central to residency education, and comprises about one-third of each resident's educational experience. In 1998, the Department of Family Medicine and Community Health adopted a new mission statement: "Our department provides leadership to achieve the highest standards of patient care, education, and research in Family Medicine and Community Health, and is committed to improving the impact of this work on the health of populations, with special emphasis on those most vulnerable." The integration of family medical care training with population health continues to be the Department's vision for residency training.

The Family Medicine residency trains 36 residents who are based at one of three different outpatient practice sites (rural, federally-funded community health center, hospital-owned health center) during their 3 years of residency training. Prior to RMPHEC-GME, the residency's population and community health curriculum was fairly unstructured. Since the residency's inception, a Family Medicine/Community Health rotation has existed in the first year of residency; while well received, it--along with several workshops and projects in population and community health--has lacked coordination and opportunities for building on and enriching learning.

The RMPHEC-GME funding has helped us develop a structured, coordinated population and community health curriculum across the three years of residency training. Innovations include:

- Developing a format for chart rounds case presentations that integrates community and population health information and the use of the mnemonic, COMPLETE as a guide; the Director of Public Health for the city of Worcester

has made himself available to contribute information and data for these presentations.

- Redesigning a home visiting guide to include facilitated observation and reflection about the community of context within which a patient lives.
- Redesigning the Family Medicine/Community Medicine block inclusive of community agency visits, a group project for each residency teaching practice, a community scavenger hunt, introduction to community-oriented primary care as an approach to caring for a community, and utilization of a modified questionnaire for describing the population and a population health issues
- Coordinating workshops between family medicine and preventive medicine residencies to identify opportunities for joint teaching and learning
- Third year residents now utilize the population health tool* to provide a broad, community context for their third year practice improvement projects
- Faculty development activities have focused on expanding chart rounds (using the COMPLETE mnemonic) and learning skills in mapping and geocoding
- Resident instruction in the use of a wide range of secondary databases appropriate for defining and characterizing a community, including the state's Community Health Information Profile (MassCHIP) database.

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* The Population Health Tool is adapted from Trevena, et al. Population Health Integration with in a Medical Curriculum. AJPM 2005; 29(3):234-239.

School: University of Rochester School of Medicine and Dentistry

Principal Investigator: Thomas A. Pearson, MD, MPH, PhD

Collaborating organizations: Monroe County Dept. of Public Health
Wyoming County Dept. of Public Health

Project Description:

The Rochester Regional Public Health-Medicine Education Center

The overall goal of the Center is to create a model program which not only teaches medical students the principles of population health and preventive medicine, but also provides opportunities for experiential learning of the practice of public health in the setting of public health agencies. In order to create this model program, the Center has the following specific aims:

1. To expand the Prevention Theme to a Prevention/Public Health Theme as curricular content area which appears in all four years of the MD curriculum.
2. To expand involvement of public health officials in didactic courses in Mastering Medical Information, Ambulatory Care, and Community Health Improvement which are required of all students.
3. To develop clinical practice rotations in public health agencies under the supervision of public health practitioners, for students contemplating public health careers.
4. To create opportunities for students to perform population health research in public health agencies in preparation for leadership roles in public health careers.
5. To evaluate the Center's attainment of learning objectives and process goals.

The Center builds on two strengths at the University of Rochester School of Medicine and Dentistry. The first is an already strong curriculum in terms of instruction in the public health sciences. The "Double Helix Curriculum" begins with Mastering Medical Information, a four-week course on epidemiology, biostatistics, and related subjects. Later in Year I, a course on ambulatory medicine, Ambulatory Care Experience, emphasizes the U.S. Preventive Services Task Force recommendations on prevention. Finally, Year IV medical students complete their Medical School with a four week required clerkship, Community Health Improvement, which emphasizes the role of the MD in community health. A second strength is a long history of successful collaboration between the University of Rochester Medical Center and public health agencies, including the Monroe County Department of Health, the New York State Department of Health, and the Centers for Disease Control and Prevention. Current active

collaborations include a Center for Community Health (with the Monroe County Department of Health), a Prevention Research Center (with the CDC), a Preventive Medicine Residency Program (with Monroe County and New York State Health Departments) and a Community Engagement Program for Clinical and Translational Research (with the NIH). Involvement of public health agency personnel in the MD curriculum and medical students' participation in clinical and research programs in public health agencies are therefore feasible.

The Rochester Regional Public Health-Medicine Educational Center is designed as a collaboration between the Department of Community and Preventive Medicine (responsible for instruction of medical students in public health sciences) and the new Center for Community Health, formed to carry out the fourth mission of the URMC, namely community health. The Education Center's administration and structure actively involves faculty and staff from the URMC and the Monroe County Department of Health, including Center leadership shared by the Chair of Community and Preventive Medicine and the Director of the Center for Community Health (and Deputy Director of the Monroe County Department of Health). The proposed Center has full support by leaderships of the School of Medicine, the Medical Center, and the Monroe County Department of Health.

The work of the Center will be carried out by four task forces: Curriculum, Clinical/Experiential Programs, Research, and Evaluation. Tasks include curricular needs assessment, involvement of public health agency personnel in didactic courses, development of research rotations in public health agencies including those fulfilling requirements for the MPH degree, and an evaluation plan. The Center and its students have multiple opportunities for involvement with the CDC and AAMC, and the products of the Center should be exportable to other medical schools. A revised Prevention/Public Health theme should be ready for implementation by the end of several years of support. The Center should be implemented, evaluated, modified, and self-sustaining as a model program integrating the theory and practice of public health into the training of the next generation of physicians.

Publications: None

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