

College Within The College (CwiC) at Jefferson Medical College – Population Health

The development of programmatic tracks providing students with academic opportunities outside of the traditional medical curriculum represents a national trend in medical education.^{1,2} Education for clinicians traditionally focuses on the medical condition(s) acutely affecting individuals and fails to incorporate principles of population health and prevention that are necessary to achieve a greater impact on our nation's health. Similar to health care reform, medical education reform requires fundamental redesign. Education for medical students needs to expand beyond the traditional biomedical focus and integrate new skills and approaches that support the health of populations. In doing so, educational reform will play a key role in transforming the nation's health care delivery system and in improving the health of the nation. CwiC-PH at Jefferson is a major effort to fundamentally redesign the structure and content of medical education.

With support from the Senior leadership of Jefferson Medical College, the College Within the College (CwiC) Scholarly Concentrations Program began in the Fall of 2010 with two areas of concentration - *Clinical Translational Research* and *Population Health* (emphasizing Public Health, Global Health and Community Medicine). The *Population Health* area of concentration, with leadership from the Jefferson Medical College Department of Family and Community Medicine and the Jefferson School of Population Health, began in February 2011 with its first cohort of 28 first-year medical students. Thirty-five mentors from multiple University Departments and Schools were selected and assigned to CwiC-PH students.

A 2010 HRSA Interdisciplinary and Interprofessional Joint Graduate Degree (IPCDDP) five-year grant (\$1.25 million) to the Department of Family and Community Medicine supports the development of a dual degree program – either an MD/MPH or MD/Master of Science in Chronic Disease Management – and builds on the CwiC-PH program.

Over five years, CwiC and IPCDDP Leadership, Mentorship, Curriculum and Evaluation Teams will

work with at least 175 medical students and link a significant number of them to a dual degree program.

The CwiC-PH and IPCDDP address the critical need to redesign the nation's care system to meet the mandates of the Institute of Medicine to provide care that is safe, effective, efficient, and timely, and is delivered by patient-centered interprofessional teams of health professionals. An expanded and robust primary care system, which works actively and effectively with patients, communities, and populations to address existing and emerging health concerns, is vital to ensuring the health of the American public in the 21st century. Nonetheless, medicine continues to suffer from a lack of young leaders with the specific skills and perspective to drive needed change.

The mission of CwiC-PH and the IPCDDP is to provide outstanding training in clinical care and innovative education in population and public health in order to prepare leaders to serve as future change agents working to improve the health of Americans, especially its most vulnerable and underserved populations. To accomplish this mission, the longitudinal CwiC Population Health (PH) components that augment the traditional curriculum include:

Year 1 – enhanced population health components of Introduction to Clinical Medicine (ICM I), participation in community health initiatives, assignment of CwiC faculty mentors, and twice-monthly seminars emphasizing an Introduction to Public Health.

Summer – Bridging the Gaps, Family & Community Medicine Assistantship, Global initiatives, community service programs.

Year 2 – case studies in ICM II, ongoing advising for MD/MPH, and twice-monthly seminars emphasizing application of the Social and Behavioral Foundations of Public Health.

Year 3 – Ongoing advising, enhanced clerkship experiences, community electives, and Capstone planning.

Year 4 – Two electives such as Refugee Health, Medical Partnerships and Homelessness, Global Health, Health Advocacy, and completion of a Capstone Project, which may take the form of research papers, conference presentations, curriculum modules, policy analysis, or other scholarly work.

The CwiC-PH curriculum addresses the recommendations of an interdisciplinary panel of experts who developed objectives for a *Clinical Prevention and Population Health Curriculum Framework for Health Professions*.³ These objectives, not traditionally stressed in the current medical school curriculum, include:

1. Assessing the health status of populations using available data (e.g., public health surveillance data, vital statistics, registries, surveys, electronic health records and health plan claims data).
2. Discussing the role of socioeconomic, environmental, cultural, and other population-level determinants of health on the health status and health care of individuals and populations.
3. Integrating emerging information on individuals' biologic and genetic risk with population-level factors when deciding upon prevention and treatment options.
4. Appraising the quality of the evidence of peer-reviewed medical and public health literature and its implications at patient and population levels.
5. Applying primary and secondary prevention strategies that improve the health of individuals and populations.
6. Identifying community assets and resources to improve the health of individuals and populations.

In addition to longitudinal mentorship and enhanced curriculum, benefits to students enrolled in the CwiC-PH program include: discussion of

their concentration work in students' Dean's Letters; a certificate upon completion of the program; and 15 credits applied to the MPH program at Jefferson, thus saving additional tuition costs, and allowing students to obtain a joint degree in five years.

CwiC-PH is ideal for those students interested in: a career in academic medicine and population health; community-based research in future practice; health equity and social justice; improving quality and cost of care; engaging with communities – locally and globally; and achievement beyond the traditional curriculum.

A baseline assessment of student demographics and knowledge, attitudes and skills related to Population Health was conducted. Additional evaluation strategies have been developed to

track student changes over time and provide feedback for curriculum modification for subsequent cohorts. These measures include: student and mentor satisfaction; the JMC Longitudinal study; the AAMC graduate questionnaire; attrition rates; publications and presentations; and comparison to non-participants in CwiC - specialty choice, match results, and future academic career.

CwiC-PH will be organizing further learning opportunities, including an online discussion board, regular journal/book club discussions, and building on lessons learned from the first cohort. ■

James Plumb, MD, MPH

*Professor, Department of Family and Community Medicine
Director, Center for Urban Health*

Rickie Brawer, PhD, MPH

*Assistant Professor, Department of Family and Community Medicine
Associate Director, Center for Urban Health*

Abbie Santana, MSPH

*Clinical Research Specialist
College within the College (CWIC) Coordinator
Department of Family & Community Medicine*

Rob Simmons, DrPH, MPH, MCHES, CPH

*Associate Professor
Program Director, Public Health, JSPH*

Nancy Chernetz, MA, MPH

Director, Academic and Student Services, JSPH

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