

College Within the College: Population Health

James Plumb MD, MPH

Rickie Brawer PhD, MPH, MCHES

Rob Simmons DrPH, MPH, MCHES, CPH

Abbie Santana MSPH

Nancy Chernett MA, MPH

Thomas Jefferson University

Rationale

- The current approach to educating health professionals has not kept pace with the needs of our growingly diverse population.
 - Health Professional Education for the 21st Century -The Lancet and Institute of Medicine
- AAMC – Population Health
- APTR/CDC/AAMC – *Patients and Populations. Public Health in Medical Education*
- JMC Leadership and Curriculum Committee – one year planning process – 2009-2010

Curriculum Task Force - Future

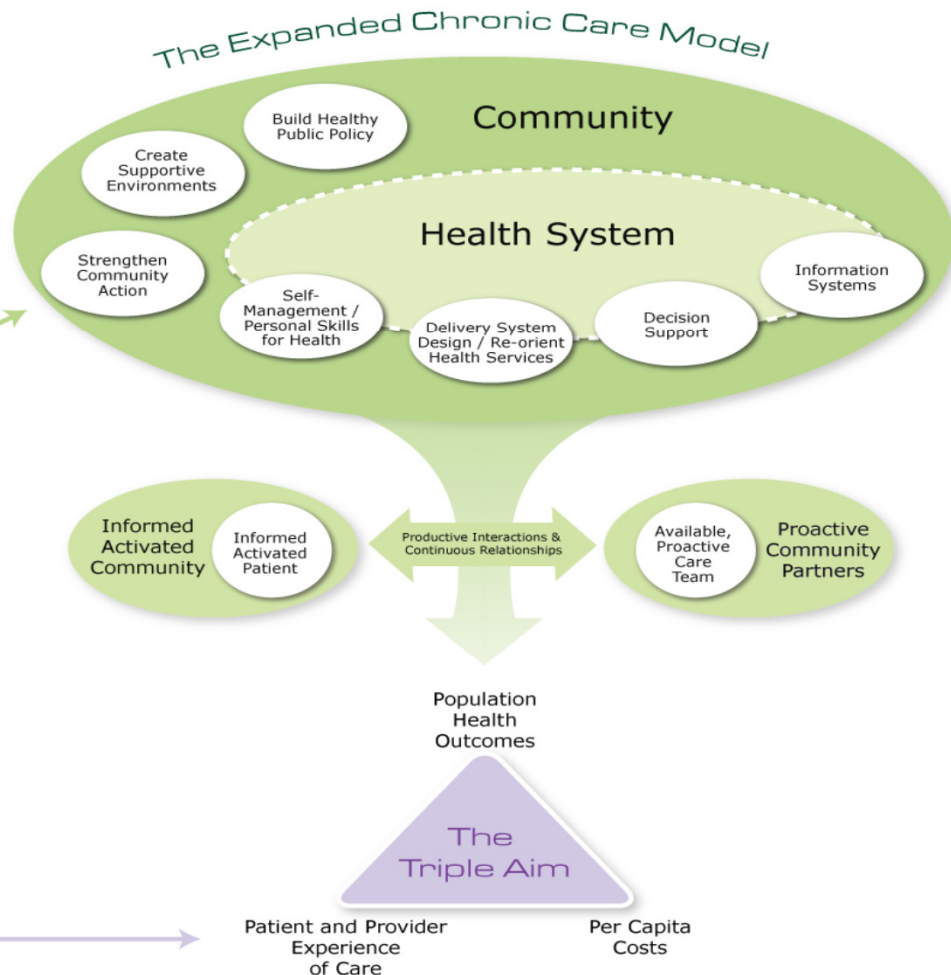
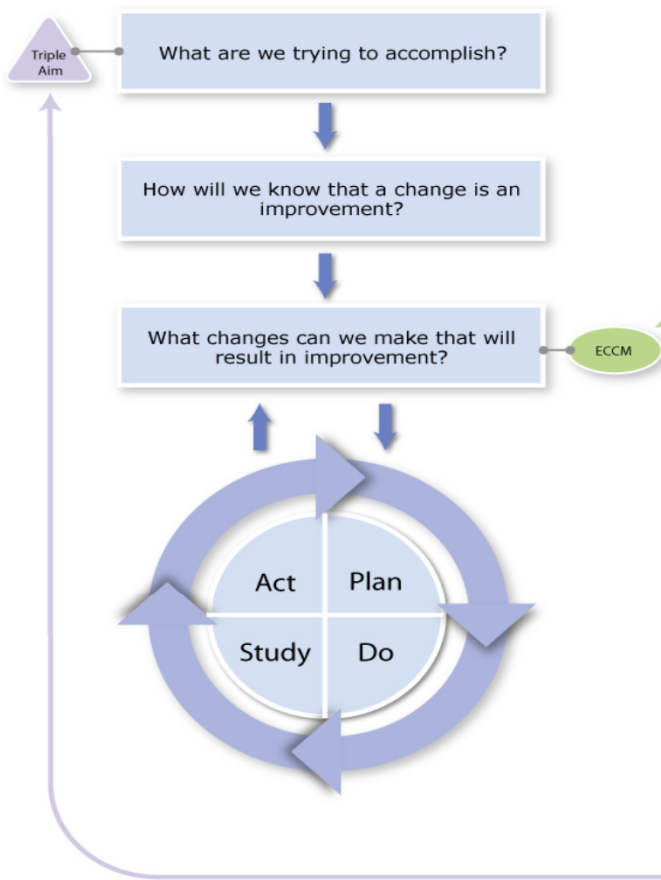
- Knowledge and skills for improving quality of care and safety for all
- Expanding use of evidence to guide medical decisions
- Managing Chronic Illness by coordination of care and utilization of multidisciplinary approaches
- Prevention and Health Promotion = everyday patient care
- Strategic focus on “non-biologic determinants of health”= poverty, education, housing
- Awareness by medical providers about community based resources that enhance care

Future

- Health implications of cultural diversity
- Global Health opportunities and challenges
- Healthcare Reform – leadership of physicians in efforts to reduce costs and improve quality
- Physician as Advocate
- Addressing the needs of an aging society- with dignity

Expanded Chronic Care Model

The Model for Improvement



The “ideal”

Agents of Change

- educational reform aimed at overcoming the deficiencies and disparities in our current health care system may produce health professionals that become “agents of change”, committed to designing a system of care that is equitable, cost-effective, prevention-oriented, universal, and thus moral”.
 - Federman DD, Healing and heeling, available at http://www.aamc.org/meetings/annual/2007/highlights/cohen_federman.pdf

College within the College (CwiC)

- The development of programmatic tracks providing students with academic opportunities outside of the traditional medical curriculum represents a national trend in medical education. (Brown, Duke, Stanford, Pittsburgh, Emory, Case-Western, New Mexico, others)
- Jefferson's College within the College Scholarly Concentrations (SC) Program began in the Fall of 2010 with two areas of concentration –
- **Population Health (emphasizing Public Health, Global Health and Community Medicine)**
- **Clinical-Translational Research (emphasizing rapid movement of discovery in the lab → → to care at the bedside-> community).**

College within the College

- This *parallel (and elective) curriculum* emphasizes:
 - Longitudinal mentored relationships, working closely with key faculty
 - Didactic sessions; group seminars; experiential opportunities; on-line programs
 - Participation across Years I-IV of medical school
 - Completion of a scholarly project and product
 - Can be completed within 4 years, no additional tuition
 - Opportunities to apply credits to other advanced degree programs (e.g 15 credits toward MPH)

College within the College

- Students must be in good academic standing
- Applications available in December and students selected in late January of Year I.
- Programs begin early February of Year I
- All curriculum *carefully* woven into medical school calendar
- Years I and II: didactic sessions, seminars, experiential programs, and assignment of mentors
- Years III and IV: complete clinical rotations and electives related to their concentration
- In the Summer between Year I and II, students work in areas related to their area of concentration.
- Each student must produce a “Scholarly Product” in Year IV.

College Within the College

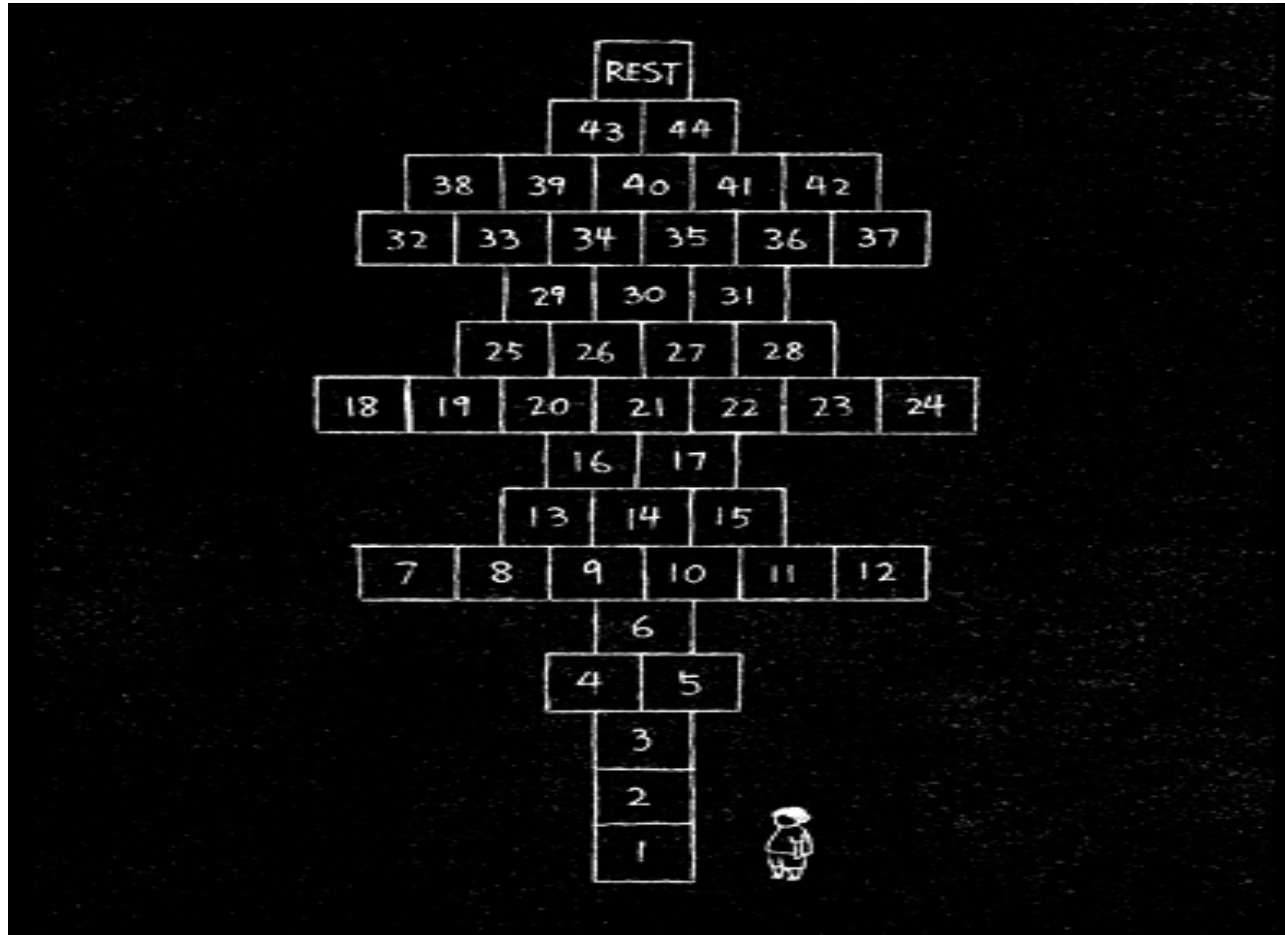
- Scholarly products may take the form of
 - research papers, conference presentations, curriculum modules, policy analysis, or other scholarly work.
- Students encouraged to publish their work and/or present at regional and/or national conferences.

College Within the College

Benefits to students:

- Unique experience and exposure, graduate-student forum within a medical school environment
- Opportunity to keep learning alive in areas given less time in traditional curriculum
- Recognition at graduation: Dean's Letters, certificate of completion
- Credits toward an additional degree (e.g. MPH, MS, PhD)

Graduation



JMC Student

Population Health

- An approach to [health](#) that aims to improve the health of an entire population. One major step in achieving this aim is to reduce health inequities among population groups. Population health seeks to step beyond the individual-level focus of mainstream [medicine](#) by addressing a broad range of factors that impact health on a population-level, such as environment, literacy, ethnicity, social structure, resource distribution, etc. An important theme in population health is importance of [social determinants of health](#).

CwiC- PH – bridge medical education and population health principles, practices, knowledge and skills

Professionalism in the New Millennium: A Physician Charter

- The preamble to this Charter is that *professionalism is the basis of medicine's contract with society*. Fundamental principles of professionalism are the primacy of patient welfare, patient autonomy, and social justice. “The medical profession must promote justice in the health care system, including the fair distribution of health care resources. Physicians should work actively to eliminate discrimination in healthcare, whether based on race, gender, socioeconomic status, ethnicity, religion, or any other social category.”

CwiC – Population Health

Ideal for those interested in:

- Career in academic medicine and population health
- Community based research in future practice
- Addressing health equity and social justice
- Improving quality and cost of care
- Engaging with communities – locally and globally
- Achievement beyond the curriculum

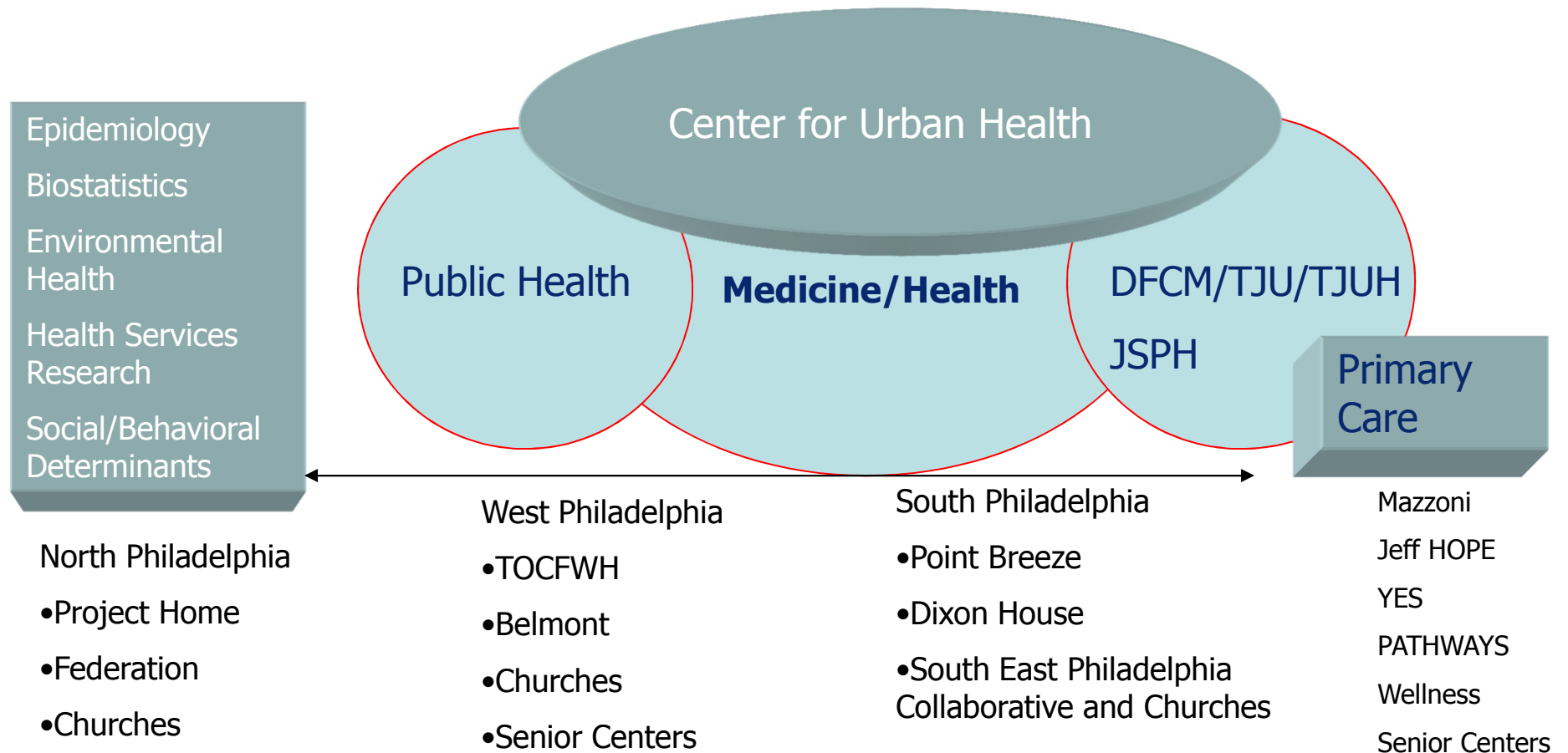
Evaluation

- Pre test – attitudes, beliefs
- Student and mentor satisfaction
- JMC Longitudinal study
- AAMC questionnaire
- Attrition rates
- Publications and presentations
- Comparison to non-participants - Specialty choice, Match results, Future academic career

COMMUNITY MEDICINE/HEALTH

1) Care to vulnerable populations

2) Health promotion through programs and community engagement and partnerships



Center for Urban Health

- Literacy
- Men's Health
- Breast health
- Chronic Disease Management
- BP+
- DSME
- Systems and policy change – obesity, workforce development

ARCHES Project



Focus Areas

- Access and Advocacy
- Research, Evaluation, and Outcomes Measurement
- Community Partnerships and Outreach
- Health Education, Screening and Prevention Programs
- Educating Health Professions Students and Providers
- Service Delivery Systems Innovation.

Jeff H.O.P.E. – 2002-present

- Health, Opportunities, Prevention, Education
- Jefferson students, residents, faculty
- Extensive organization - since 1992
- 2000 + visits per year at 5 sites
- 35,000 visits since inception
- Primary care – weekly!
- Social Advocacy,
- Screening and Health Education – Smoking Cessation, Diabetes
- Multiple Awards – AAMC, PPHA, GSK



Streetside Medicine



Immigrant and Refugee Health

- Center for Refugee Health
- Burma, Iraq, Eritrea, Nepal, Cuba, Haiti

Philadelphia High School = 67
languages spoken

Nationalities Service Center





PROJECTS

- Education
 - AIDS/HIV
 - Nutrition
 - Prenatal
 - Family Planning
- EWB - Sanitation
- Malnutrition
- Income Generation
- Chicken Rearing
- Elderly Visits
- Survey
- Continuity



Jefferson School of Population Health

Masters Public Health

Masters Health Policy


Masters Quality and Safety

**Masters in Applied Health Economics and Outcomes
Research**

Certificate in Chronic Disease Management

PhD – Population Health

CwiC - A Four Year Course

Year 1	Summer	Year 2	Year 3	Intersession	Year 4
<p>Aug - Orientation</p> <p>Sept-Dec – Monthly overview Discussions (Peers)</p> <p>Dec - Application</p> <p>Jan – Interviews and Selection</p> <p>Assign Advisor</p> <p>Assign Clinical Mentor (COPP)</p> <p>Participate -Jeff HOPE, Jeff YES</p> <p>Public Health Society, IMS, Other</p> <p>Late Jan - Syllabus, List serve, discussion board, Learning Contract</p> <p>Feb- June (2-5 PM – twice monthly) - lecture, discussion, PBL, community site visits (Project HOME, MCC, FNC, Mazzoni, YES) – Learning-Service activities</p> <p>Topics</p> <ul style="list-style-type: none"> - Introduction PH/HP2020 - Ecological Model - Health Data Systems - Health Literacy - Social determinants -PRECEDE-PROCEED - Individual health behavior - Culture, race and health - Environmental health - ICM I enhancement - Policy and advocacy - Global health – mini course (for International travel) 	<p>BTG</p> <p>Global Travel</p> <p>DFCM</p> <p>Assistantship</p> <p>Other – To be arranged with guidelines</p> <p>Service to other organizations at interface (clinical/public health):</p>	<p>ICM II – cases</p> <p>On-going Advising</p> <p>MD/MPH and MD/MS</p> <p>Syllabus, List serve, discussion board</p> <p>Peer mentoring</p> <p>Sept – May (2-5 PM twice monthly) – lecture, discussion, community site visit(s)</p> <p>Topics</p> <ul style="list-style-type: none"> - Health Promotion - Preventive Services - Community Preventive Services Task Force - Chronic Care Model - Social epidemiology - Individual Health Behavior - Interpersonal Health Behavior - Social Theories Behavior - Community Models/CBPR - Population Health approaches to <ul style="list-style-type: none"> •Diabetes •CV Disease – Hypertension/CAD/Stroke •Obesity/overweight/nutrition •Cancer •HIV, Hepatitis, HPV, Immunizations - Quality – Transitions of Care - Aging - Tobacco control - Maternal Child Health - Public Health Ethics - Selected PBH 501 Classes <p>LUNCH and LEARNS and Relevant campus and city programs</p>	<p>On-going Advising</p> <p>MD/MPH and MD/MS advising</p> <p>Peer mentoring Clerkship assignments -PH case-studies and reflections – one per clerkship - What would have prevented admission? What policy change would improve quality of care, prevent admission, improve outcome?</p> <p>In-Time Enhancements</p> <p>Selectives – block experience with community agency; self-guided assignments</p> <p>Scholarly Project planning</p>	<p>On-going Advising</p> <p>Special Topics</p> <p>Sessions – (inter-clerkship)</p> <p>JOINT DEGREE Transition</p>	<p>Electives – 2 required</p> <ul style="list-style-type: none"> •Community Medicine •Refugee Health •Medical Partnerships and Homelessness •International Health •Indian Health Service •Advocacy/Policy •Other TBD <p>.</p> <p>Peer mentoring Scholarly Project</p> <p>Graduation – “added qualifications - certificate”</p> <p>Dean’s letter</p> <p>Transcript</p>
	LONGITUDINAL	Mentoring and Advising quarterly	LONGITUDINAL	Mentoring and Advising quarterly	
	On-Going Evaluation				

Cohort I – February 2011

- 28 students – 12% of the class
- Application Essay – *Why are you interested in Population Health, and what do you hope to learn?*
- 30 Mentors – Family Medicine, Internal Medicine, Surgery, Pediatrics, Emergency Medicine, School of Population Health
 - provide career mentoring
 - provide experiential opportunities
 - assist in developing broad capstone goals
- Mentor's Manual
- Syllabus

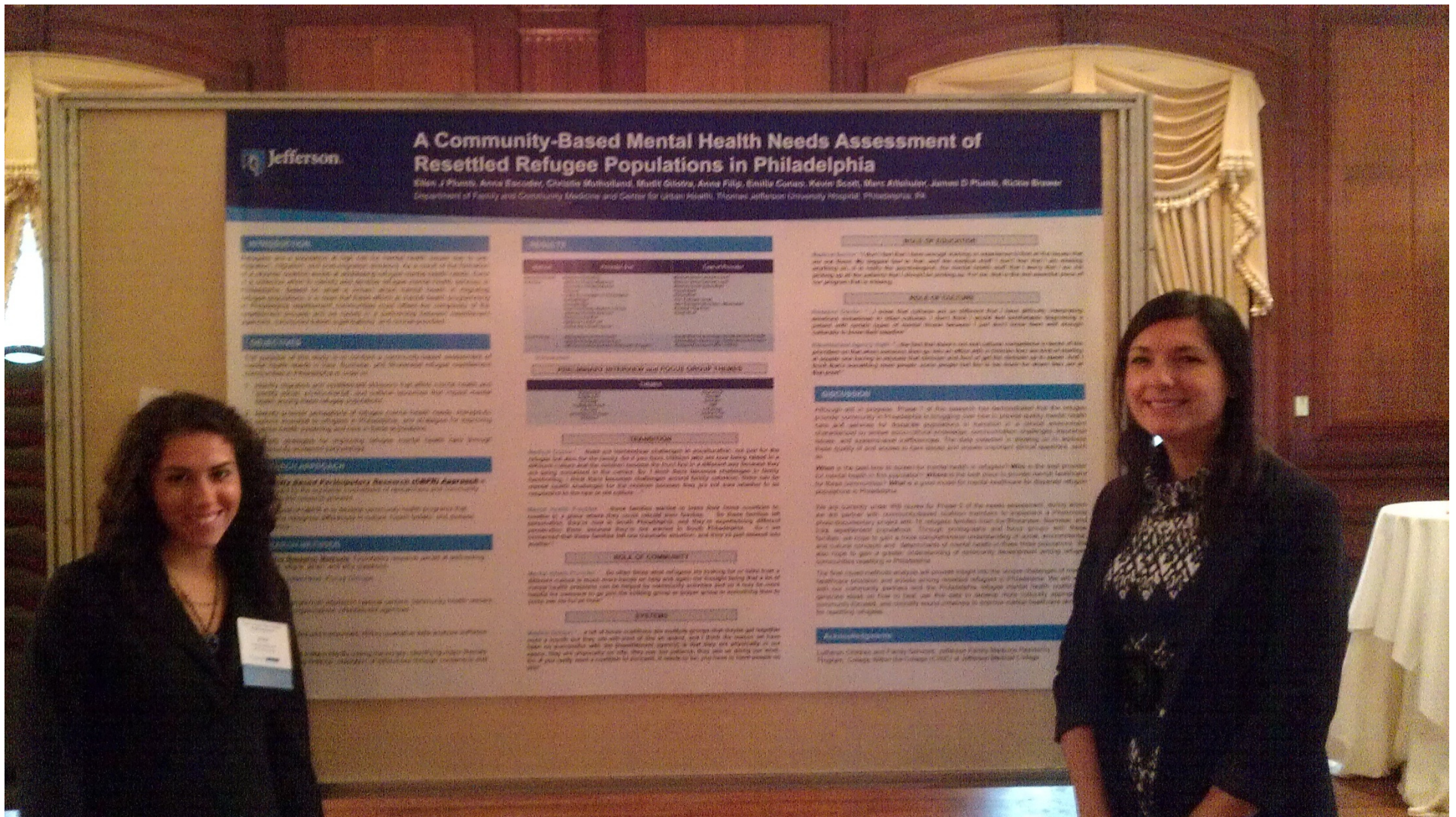
Cohort II – February 2012

- 40 students – 18% of class
- Additional Mentors

Cohort I – Summer 2011

- 11 – International Travel
- 6- Bridging the Gaps
- 1- DFCM Assistantship
- 4- Center for Urban Health
- 2 – Christiana/Dupont
- 2- Deans Summer Research – OB/GYN
- 1 – Department of Public Health – San Francisco
- 1- USAF

Summer Projects



A Community-Based Mental Health Needs Assessment of Resettled Refugee Populations in Philadelphia

Ellen F. Phelan, Anna Escobedo, Christiana Muthulohar, Matti Gilroy, Anna Filip, Emilio Corcos, Kevin Scott, Marc Altshuler, James D Phelan, Riccio Brewer
Department of Family and Community Medicine and Center for Urban Health, Thomas Jefferson University Hospital, Philadelphia, PA

INTRODUCTION
 Migration and a subsequent at-risk time for mental health issues due to war, violence, displacement, and persecution. As a result of the loss of a home, people are at risk of developing mental health issues. There is a need to better understand and address the mental health needs of resettled refugees in order to provide the best possible care. This study aims to assess the mental health needs of resettled refugees in Philadelphia and to identify the barriers to care.

Methods
 The purpose of this study was to conduct a community-based assessment of mental health needs in two Philadelphia and Delaware refugee resettlement communities. The study was conducted in two phases. Phase 1 was a needs assessment and Phase 2 was a focus group study. The study was conducted in two phases. Phase 1 was a needs assessment and Phase 2 was a focus group study. The study was conducted in two phases. Phase 1 was a needs assessment and Phase 2 was a focus group study.

RESULTS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

CONCLUSIONS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

RESULTS

Need	Prevalence	Barriers to Care
Depression	15%	Language barriers, cultural differences
Anxiety	12%	Lack of insurance, lack of transportation
PTSD	8%	Lack of insurance, lack of transportation

DISCUSSION
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

CONCLUSIONS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

CONCLUSIONS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

DISCUSSION
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

CONCLUSIONS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

CONCLUSIONS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

CONCLUSIONS
 The study identified several mental health needs among resettled refugees, including depression, anxiety, and post-traumatic stress disorder. The study also identified several barriers to care, including language barriers, cultural differences, and lack of insurance.

Final paper – Year 1

- The scientific basis for Public Health rests on the study of risks to the health of populations and on the systems designed to deliver required services. The *problem-solving paradigm* in Public Health practice is a model to apply this science. The key components of this model are:
 - Problem Definition
 - Problem Magnitude
 - A Conceptual Framework (e.g. – Ecological Framework) for Key Determinants
 - Intervention Strategy
 - Policy Development
 - Implementation and Evaluation

Final paper

- **Taking the Public Health issue/problem that you worked on during the summer, prepare a paper using the six components as a guide**

Year 1

Topics

- - Introduction PH/HP2020
- - Ecological Model
- - Health Data Systems
- - Health Literacy
- - Social determinants
- - Culture, race and health
- - Environmental health
- - ICM I enhancement
- - Policy and advocacy
- - Global health – mini course (for International travel)
- **Relevant campus and city programs**

9 - 2-3 hour sessions

Readings, on-line discussion,
question

Group Activities

Example – Year 1 – Session 2 – Race and Culture

- Lecture – Discussion
- **Diversity Shuffle – Reflection Paper** - In one page or less, please address the following questions:
 - What racial/ethnic group do you belong to? How did it feel to be in the group which had to walk across? What incorrect assumptions or stereotypes do people make about your group? What surprised you about the exercise?
- In the two chapters from *Culture, Health and Illness*, Helman reviews the Scope of Medical Anthropology and Cultural Definitions of Anatomy and Physiology. Since you began at Jefferson and completed HFD and are getting deeply into Systems, what are your cultural views of the “body”? Have they changed? Share your thoughts.
- https://pulse.jefferson.edu/webapps/portal/frameset.jsp?tab_id=11_1
- <http://www.equalitytrust.org.uk/resources/inequality-video>
- <http://www.nytimes.com/library/national/race/most-recent.html>

Example - Year I – Session 4 - Advocacy

Advocacy

- 510-515 – Introduction/Orientation – Break into 5 groups
 - think about an issue that you have "advocated" for, what did you do, was it effective, what would you do differently
- 515 – 600 – Group Work – ideas, themes
- 600-630 – Report Out/Summary
- 630-800 – Food Inc

Readings

- 1) Leadership for healthy communities - leadership for healthy communities action strategies toolkit. Available at:
http://www.leadershipforhealthycommunities.org/index.php?option=com_content&task=view&id=355
- 2) Trust for America's Health, <http://healthyamericans.org/policy/>
- 3) McCally M, Haines A, Fein O, Addington W, Lawrence RS, Cassel C, - Poverty and Ill Health: Physicians Can, and Should, Make a Difference. Ann Intern Med. 1998;129:726-733.
- 4) Gruen RI, Pearson SD, Brennan T – Physician-Citizens – Public Roles and Professional Obligations. JAMA; 291: 94-98

Example - Year I – Session 6 – Theme - Linking Social Determinants, Advocacy, Homeless Prevention, Integrated Care

- **Agenda**

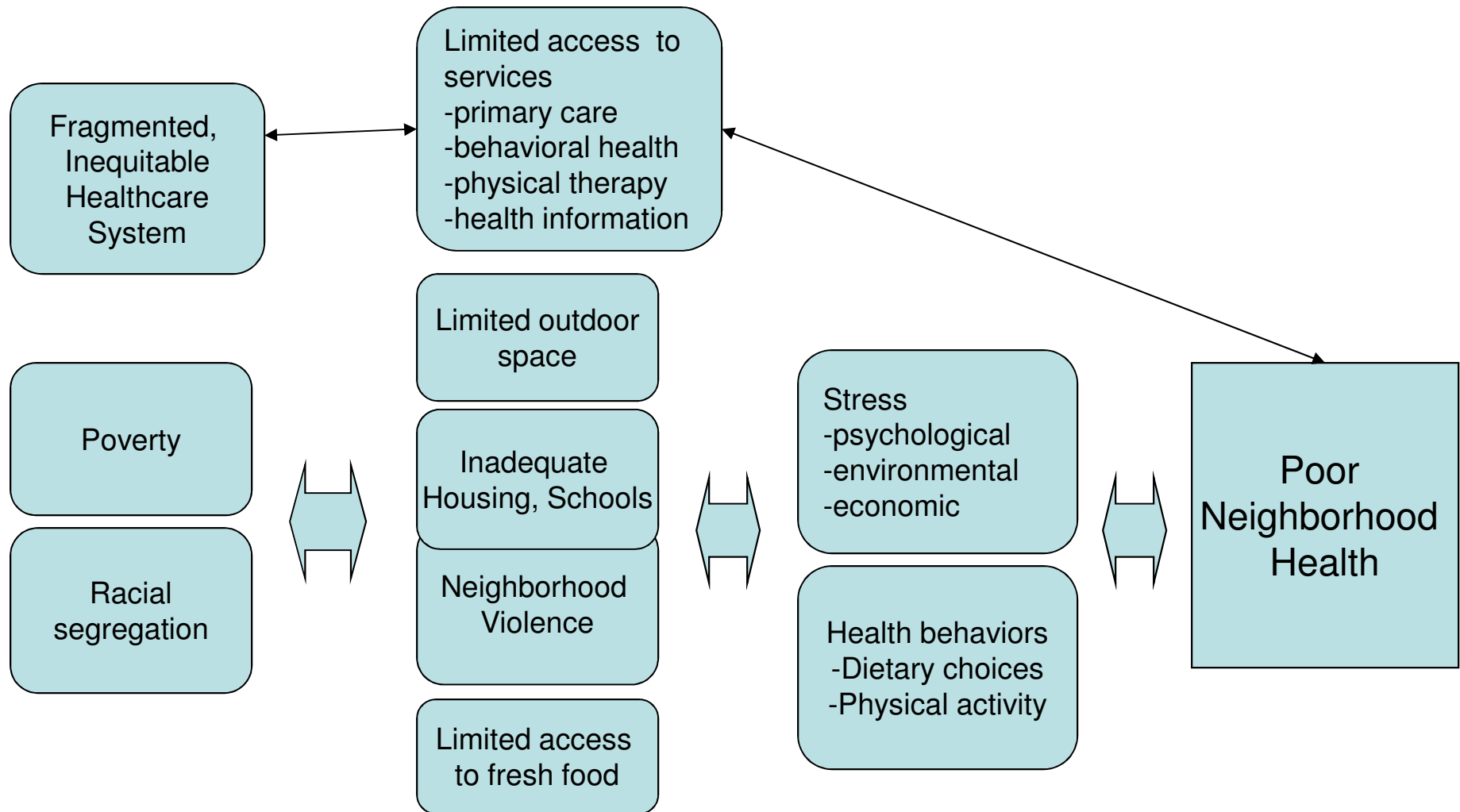
- Community Assessment (walking tour, windshield assessment; existing data)
- The Wellness Center
- Honickman Comcast Learning Center

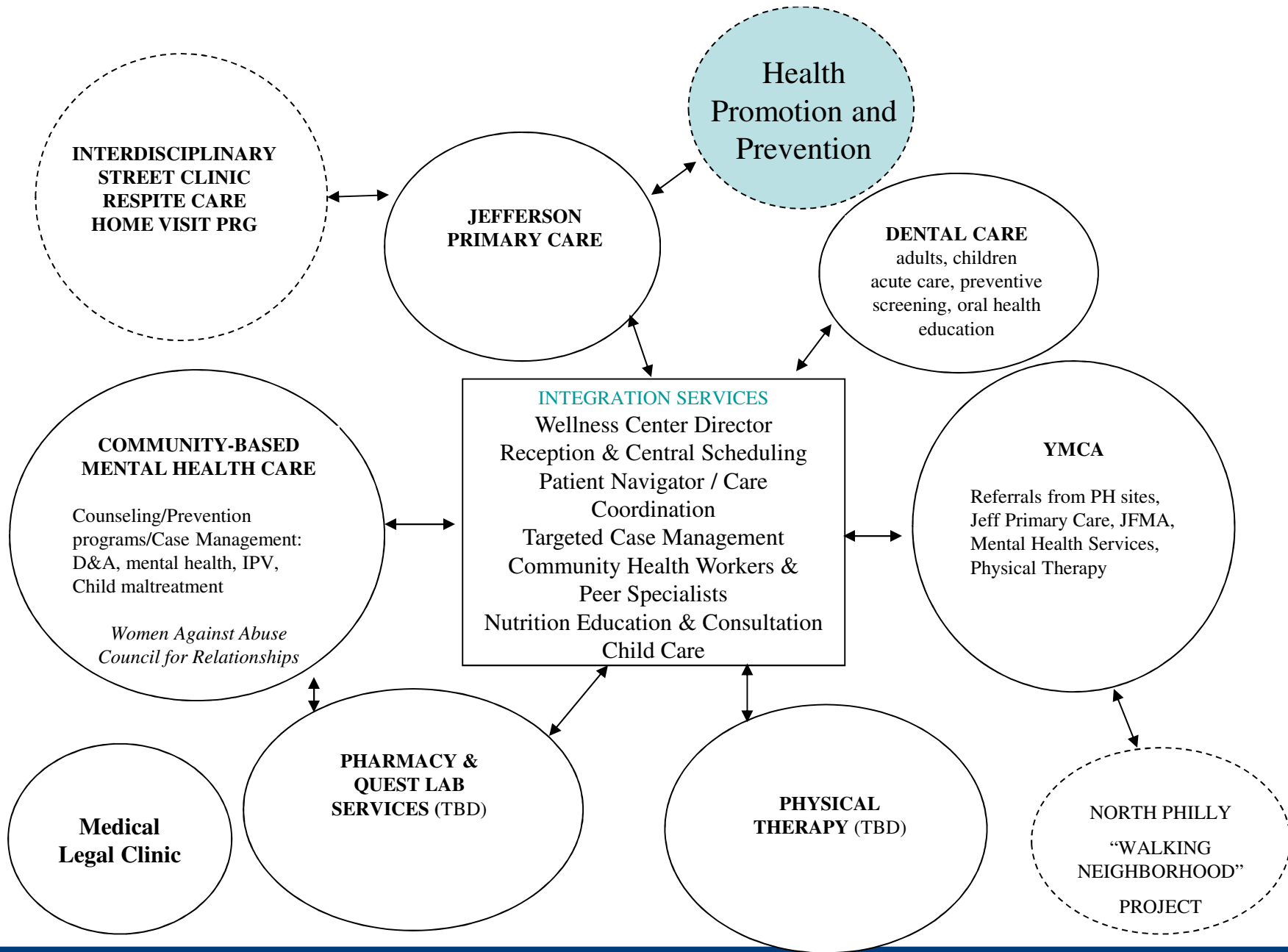
- **Readings/Websites**

- Brian Wallin's MSPH Thesis
- Weinstein LC, Plumb JD, Brawer R. Community engagement of men. Primary Care: Clinics in Office Practice. 2006; 33: 247-259.
- www.projecthome.org

Barriers to Health

(Schulz, Kannon 2005; Schulz, Zenk 2005)





Project Home Wellness Center

Example - Year I – Sessions 9 and 10

Global Health

Public Health Ethics

Human Rights

Country Health Profiles

Case Discussions

Readings

- Lawn JE, Rohde J, Rifkin S, Were M, Paul VK, Chopra M. Alma-Ata 30 years on: revolutionary, relevant, and time to revitalize *Lancet* 2008; 372: 917–27
- Principles of the Ethical Practice of Public Health - 2002 Public Health Leadership Society
- Kass NE. An Ethics Framework for Public Health - *Am J Public Health*. 2001;91:1776–1782
- Gruskin, S., Mills, E. J. & Tarantola, D. (2007). History, principles, and practice of health and human rights. *Lancet*, 370, 449-455.

In addition.....

- Announcements/recruitment to on-campus and local activities related to PH
 - Movies
 - Presentations
- Book club
- Provided textbook and additional books
 - Introduction to Public Health
 - Demand Better
 - Mountains Beyond Mountains

Summer

- Bridging the Gaps
- Global Travel
- DFCM Assistantship
- **Other – To be arranged with guidelines**
 - Service to other organizations at interface of clinical/public health):
- Schweitzer Fellowship

Year 2

- **Topics**
- - Health Promotion - Preventive Services
- - Community Preventive Services Task Force
- - Chronic Care Model
- - Social epidemiology
- - PRECEDE-PROCEED
- - Individual health behavior
- - Social Theories Behavior
- - Community Models/CBPR
- - Population Health approaches to
 - Diabetes
 - CV Disease – Hypertension/CAD/Stroke
 - Obesity/overweight/nutrition
 - Cancer
 - HIV, Hepatitis, HPV, Immunizations
- - Quality – **Transitions of Care**
- - Literacy
- - Public Health Ethics

18- 2-3 hour sessions

On-line discussion, questions

Group Work

Year 2 - Examples

- Health Literacy
- Presentations of Summer Work
- Link to Fundamentals of Clinical Medicine – Integration of Theory – PRECEDE, TTM, HBM, SLT
 - Preventive Cardiology – Million Hearts Campaign
 - Reproductive Health – Cervical Cancer/HPV
 - GI – Hepatitis C and Colon Cancer
 - Diabetes – DSME Group Visit
 - Cancer Prevention and Control
 - Asthma/COPD – Tobacco Control
 - Community Engagement - Immersion
 - Mental Health – ACES and Trauma Informed Care

Example - Year 2 – Session 2

- **Health Literacy**
 - **Scope of the problem**
 - **Recognizing literacy problems in individuals**
 - **Strategies for working with low literacy individuals and populations**

- **Teach back exercise**
- **Medication assessment**
- **Assignment – taking an informed consent and modify to 5-6th grade reading level**

- **Readings**
 - **Health Literacy for Clinicians – AMA Foundation**
 - *Martin, LT and Parker, RM, Insurance expansion and health literacy - JAMA, on-line August 9, 2011*
 - *Shipp A. A 76-Year-Old Man With Multiple Medical Problems and Limited Health Literacy - August 10, JAMA, 2011—Vol 306, No. 6*

Example - Year 2 – Session 2

- **Liver, GI Disease, Hepatitis, Alcoholic Liver Disease,**
 - **Preventive Services Task Force**
 - **Cancer Prevention and Control**
 - **“Put Prevention into Practice”**
 - **Hepatitis C – Screening**

Wong T, Lee S. Hepatitis C: a review for primary care physicians. *CMAJ* • February 28, 2006 • 174(5) | 649

Trooskin SB, Navarro VJ, Winn RJ, Axelrod DJ, McNeal AS, Velez M, Herrine SK, Rossi S Hepatitis C risk assessment, testing and referral for treatment in urban primary care: Role of race and ethnicity. *World J Gastroenterol* 2007 February 21; 13(7): 1074-1078

How to Increase Preventive Screening Rates in Practice: An Action Plan for Implementing a Primary Care Clinician's* Evidence-Based Toolbox and Guide

Sarfaty M, Wender R, Smith R. Promoting Cancer Screening Within the Patient Centered Medical Home. *CA CANCER J CLIN* 2011;61:397–408

Example - Year 2 – Session 11

- **Hematologic Malignancies**
 - **Palliative Care – a Public Health Issue**
 - **Health Beliefs and Culture**
 - **Readings**
- Improving End-of-Life Care: A Public Health Call to Action. Sally Gaintner Hess, RN MPH Candidate Capstone Project - Johns Hopkins Bloomberg School of Public Health
- Health promotion and palliative care - Allan Kellehear
- Stjernswärd J, Foley KM, Ferris FD The Public Health Strategy for Palliative Care. Journal of Pain and Symptom Management Vol. 33 No. 5 May 2007

Year 3

- **Clerkship assignments** -PH case-studies and reflections – one per clerkship – group discussions
 - What would have prevented admission?
 - What policy change would improve quality of care, prevent admission, improve outcome?
- **Scholarly Project** planning
- **Peer Mentoring**

Intersessions

- On-going Advising
- Special Topics Sessions – (inter-clerkship)
 - Public Health Research Methods
- **JOINT DEGREE - Transition**

Year 4

- Electives – 2 required
 - Community Medicine
 - Refugee Health
 - Medical Partnerships and Homelessness
 - International Health
 - Indian Health Service
 - Advocacy/Policy
 - Other TBD.
- **Peer mentoring**
- **Scholarly Project**
- Graduation – “added qualifications -certificate”

What have we learned so far

- Weave around the ebbs and flows of student examination schedule
- Discussions preferred – “no talking heads”
- Flexibility in assignment due dates – a 4 year course!
- Small group discussions

Evaluation

- Four students left program....”not what she expected”; “too much time”, “academic difficulty”, “involved in too many other activities”
- Overall Program rating – 3.4 (1 poor-5 excellent)
- Dimensions of global health series – strong rating
- More community immersions
- Better understanding of what MD’s are doing with a PH degree
- Networking important
- More group discussions

- Reworked curriculum for Cohort I and Cohort II

Challenges

- Ensuring PH related summer projects
- Maintaining mentoring relationship
- Competing with traditional curriculum
- Competing with extensive extracurricular opportunities
- Organizing meaningful discussions
- Articulating role of PH in clinical training and care
- Challenge of taking extra year for MPH – financial, personal, momentum

HRSA – Builds on CwiC - PH

- \$1.25 million over five years
- Create, implement, and evaluate a Jefferson Inter-professional Primary Care Dual Degree Program (IPCDDP).
- **The mission of the IPCDDP is to provide outstanding training in primary care and innovative education in chronic care management and population and public health in order to prepare primary care leaders to serve as future change agents working to improve the health of Americans, especially its most vulnerable and underserved populations.**
- **MD/MPH or MD/MS – Chronic Disease Management**

Thanks

Questions

Contact – James.Plumb@jefferson.edu

Rickie.Brawer@jeffersonhospital.org