Integrated Training for Population Health and Prevention in Medical Education

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GEORGETOWN UNIVERSITY
Disclosure Statement

• I have no relevant financial relationships with any commercial interests to disclose.
Learning Objectives

• Integrate longitudinal population health training into all years of the medical curriculum at your home institutions

• Create more intensive educational experiences for students with special interests in prevention and public health
  – Population Health Track or Certificate
  – MD/MPH Joint or Dual Degree program
Are we doing well enough in teaching population health in medical school?

• 2012 AAMC graduation questionnaire, % reporting “inadequate instruction”
  – Health policy (40%)
  – Occupational medicine (37%)
  – Health care systems (35%)
  – Environmental health (34%)
  – Community health & social service agencies (24%)
Healthy People Curriculum Task Force “Clinical Prevention and Population Health Framework”
GUSOM prevention and population health coursework

• Service Learning (M1)
• Patients, Populations and Policy (M1)
• Evidence-based Medicine (M1-M2)
• Family Medicine, Internal Medicine, Pediatrics clerkships (M3)
  – New optional longitudinal experience
• Health Policy & Public Health (M4, elective)
2013 GUSOM curriculum review

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<tr>
<th>Required Courses</th>
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* New course title: Evidence-Based Practice (now Clinical Practice & Population Health)
Findings from curriculum review

• Evidence-based practice
  – Good continuity from EBM course in MS1 and 2 to MS3 clerkships, where students use point-of-care EBM resources for answering clinical questions and formal presentations

• Clinical preventive services & health promotion
  – Missed integration opportunities in M2 year
  – Gaps in prevention teaching in M3 clerkships
Findings from curriculum review

• Health systems and health policy
  – Covered extensively in M1 year, then no formal instruction until M4 elective

• Population health / community aspects
  – Covered extensively in M1 year, then little reinforcement after
  – Missing topics: public health preparedness, sharing health information w/public, environmental & occupational health
Three Distinct and Integrated Levels

- MD/MPH Degree
- Population Health Scholar Track
- Longitudinal Integrated Population Health & Prevention Curriculum for all students
**Population Health Curriculum**

**Georgetown University School of Medicine**

**2015-2016**

**SL:** Health education outreach in underserved DC area communities

**P3:**
- Health Systems Overview, Health Insurance & Payment, Quality in Health Care, Healthcare Disparities, Global Health, Social Determinants of Health, LGBTQ, Homelessness, Medical Home & Patient Centered Care, COPC, Population Health Framework, Public Health & Clinical Medicine, Role of State Departments, Advocacy, Preventive Services

**EBM I:**
- Population Health project using PH data with a defined population

**Selectives:**
- e.g. Health IT & Health Policy, Health & Human Rights, Health Care Management, Quality & Safety Improvement

**M2**

**EBM II:**

**Hematology, Renal & Genitourinary Science Modules:**
- Cervical Cancer Prevention Disparities in Hypertension & Renal Disease
- Emergency Preparedness

**M3**

**Family Medicine, Medicine & Pediatrics Clerkships:**
- Primary, secondary, tertiary prevention strategies, Counseling for behavior change, Chronic disease management, Patient Centered Medical Home

**USPSTF Guidelines, ACIP Immunization Recommendations, Shared Decision Making

**M4**

**HPP:**
- History of US Health Delivery Systems, Insurance Systems, National Health Expenditures
- HC Economics, Payment & Reimbursement Methods, Comparisons of International Systems, Medicare & Medicaid Services, Social Determinants of Health
- Legal Medicine, Uninsured & Access to Care; Charitable Organizations, Free clinics, Foundations & Lobbying, Health Policy and media, HC Reform & Politics, Cost Containment Strategies: ACOs, PCMH

**Mock Congressional Testimony**

**Site visits:**
- AMA, AAMC, AHRQ, ASTHO, RGC, Urban Institute, FDA, HHS, DC Dept. of Health, US Senate

**Summer Internship & Summer Seminars**

**Grand Rounds, Journal Club, Population Health Student Interest Group**

**Population Health Scholar Track**

**Research Project/Independent Scholarly Project**

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**SL:** Service Learning  
**EBM:** Evidence-Based Medicine  
**P3:** Patients, Populations & Policy  
**HPP:** Health Systems, Policy & Public Health for Clinicians Elective

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**Georgetown University**
Longitudinal integrated population health and prevention curriculum

- M1 – Link public health frameworks in P3 to EBM data analysis of populations
- M2 – Add emergency preparedness exercise, integrate prevention/epi with basic science
  - Cervical cancer screening (Heme/Onc module)
  - Racial disparities in hypertension (Renal module)
- M3 – Reinforce competencies in preventive services, value-based health care, social determinants of health during IM, FM, and Pediatrics clerkships
Population Health Scholar Track
(https://som.georgetown.edu/academics/phst)

- Goal: “To give students the knowledge and skills to apply population health principles to clinical practice and contribute to the improvement of the health of individuals, communities, and populations.”
- Specific learning objectives in health systems, public health, analytic and critical thinking, leadership and interprofessional skills
- Competitive application process
- Launched in June 2015 with 8 students from Class of 2018
  - 3 with undergrad PH coursework, 2 with Master’s degrees
Population Health Scholar Track

- Summer Seminar Series
- Population Health Summer Practicum (8 weeks)
- Longitudinal Population Health Scholarly Project
- Journal Club/Interest Group (quarterly)
- Population Health Grand Rounds (quarterly)
- Health Systems, Policy and Public Health M4 elective (didactics, site visits, policy project)
Population Health Scholar Track: Summer Seminar Activities

• Step back on practicum projects
• TED talk by “upstreamist” Dr. Rishi Manchanda
• Prompts for reflective writing
  – If you had opportunity, time, and unlimited resources, how might you add an “upstreamist” component to your summer project?
  – What are your core values that will drive your development as a physician?
  – Envision what you think you will be doing upon graduation from residency. What will you do between now and then to achieve your vision?
# Summer Practicum Sites and Projects

<table>
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<tr>
<th>Scholar</th>
<th>Research Mentor</th>
<th>Practicum Site</th>
<th>Capstone Projects</th>
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<tbody>
<tr>
<td>Meghan Davis</td>
<td>Rachel Scott, MD, MPH</td>
<td>MedStar Washington Hospital Center</td>
<td>Pregnancy outcomes of women living with HIV: a retrospective cohort study at MedStar Washington Hospital Center from 2004 to 2015</td>
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<td>Margaret McCarthy</td>
<td>Steven Schwartz, MD</td>
<td>Potomac Physician Associates (PPA)</td>
<td>Strategies for Improving the CMS Quality Measure PREV-1</td>
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<td>Katherine Mullins</td>
<td>Lacy Fehrenbach, MPH Andria Cornell, MSPH</td>
<td>Association of Maternal and Child Health Programs (AMCHP)</td>
<td>Maternal Levels of Care: Highlights from a Systematic Analysis of State Activities</td>
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<td>Jack Penner</td>
<td>Jeff Weinfeld, MD, MBI</td>
<td>MedStar Spring Valley Family Medicine</td>
<td>Improving PCV13 vaccination rates in the Medicare population at MedStar Family Medicine Spring Valley</td>
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<td>Brandon Quinn</td>
<td>Larry Wolk, MD, MSPH</td>
<td>Colorado Department of Public Health &amp; Environment</td>
<td>Population Health Tiers: Opportunities for Reimbursement of Colorado's Local Public Health Agencies</td>
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<td>Zachary Smith</td>
<td>Katie Sellers, DrPH Lisa Waddell, MD, MPH</td>
<td>Association of States and Territorial Health Officials (ASTHO)</td>
<td>Medication Adherence Interventions in Hypertensive Minority Populations: A Review</td>
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<tr>
<td>Christopher Wynkoop</td>
<td>Christine Goeschel, ScD, MPA, MPS, RN</td>
<td>MedStar Pellegrini Quality Improvement</td>
<td>Improving HCV Recognition and Linkage to Care Among the Baby Boomer Generation</td>
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Population Health Scholar Track
Summer Practicum: Lessons Learned

• Plan mutually beneficial projects that can be disseminated and published
• Participate in projects already off the ground in which the student can “own” a specific part
• Decide on a clear deliverable to be completed by the end of the practicum
• Choose a mentor who is at a mid-level in the organization who has the time and passion to guide the student experience
Population Health Scholar Track: Summer Seminar Pre- and Post-tests

- What is population health?
- List the 3 goals of the Triple Aim.
- How does the Affordable Care Act aim to improve population health?
- What is patient-centered care?
- How do social determinants of health explain life expectancy differences?
- What steps must one follow to complete a quality improvement project?
Summer Seminar Pre- and Post-tests (knowledge)

- Give one or more examples of how the integration of clinical medicine and public health can improve health.

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<th>Highest Level of Integration</th>
<th>Some Integration</th>
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Summer Seminar Pre- and Post-tests (skills, satisfaction)

- Trending towards becoming more comfortable with
  - Literature searching
  - Institutional review board process
- 8/8 felt the summer seminar series was good or excellent
- 7/8 felt that the practicum was a valuable experience
Summer Seminar and Practicum feedback

• “Most valuable part for me has been working with the faculty who attend our meetings and provide feedback on our projects. It is helpful to hear how these experts discuss issues in population health, and to hear about the work that they have conducted in the field.”

• “I gained very practical experience in the public health field and navigating the complexities of the health department, qualitative interviewing, and an opportunity to present to a diverse group of stakeholders.”
MD/MPH Joint Degree program
MD/MPH Joint Degree program

• 2012 MOU between GUSOM and Johns Hopkins Bloomberg School of Public Health

• 5 year program – 4 years MD, 1 year MPH
  – Students complete MPH coursework between 3rd and 4th years of MD program

• Recent graduate capstone topics
  – Smoking prevention among youths in Egypt
  – Geographic & season tracking of malaria incidence
MD/MPH Joint Degree program

• Averaging one student per year
• One current 3rd year student will complete MPH coursework in 2016-17
• Activities to increase student interest in Population Health Track and MD/MPH
  – 2 current PH Scholars gave presentations to entire 1st year class following P3 workshop
  – Information session led by MPH Program Chair
Summary

• GUSOM’s efforts to align with CPPH Framework prompted re-organization of curriculum along 3 distinct and integrated levels
  – Enhance basic population health training for all medical students
  – Competitive Population Health Scholar Track for 8-12 students per class
  – MD/MPH degree in collaboration with JHBSPH for 1 or more students per class
Acknowledgements

• Andrea Cammack
• Peggy Weissinger, EdD, MBA
• Richard Waldhorn, MD
• Marie Diener-West, PhD
Thank you!