Enhancing a Rural Medicine Curriculum with Public Health Content

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Disclosure Statement

• All individuals have disclosed no relevant financial relationships with any “commercial interests.”
Purpose of Program

• HRSA Interdisciplinary and Interprofessional Graduate Joint Degree
• Improve and expand the content and practice of public health in the Rural Scholars program.
• 3 program components
  • Implementation of public health modules in ROME curriculum
  • Implementation of dual degree fellowship (DO/MPH)
  • Implementation of interprofessional collaboration through the Community Health Research Project
Rural Scholars Curriculum Map

- Pre-matriculation
- Rural Medicine Courses – Year 1 and Year 2
- Family Medicine Continuity Experience
- Community Health Research Project
- Core Clinical Clerkships – Year 3
- Clinical Rotations – Year 4
ROME Rural Scholars Program
Curriculum Overview

Year 1

Semester 1
MEDE 7411
Rural Medicine 1

15-Hour Rural ER Observation

Semester 2
MEDE 7416
Rural Medicine 2

15-Hour Rural ER Observation

Summer

4-Day Rural Practice and Lifestyle Practicum

Year 2

Semester 3
MEDE 7024
Rural Medicine 3

Semester 4
MEDE 7220
Rural Medicine 4

4-Day Pre-Clinical Preceptorship
ROME Rural Scholars Program
Curriculum Overview
Year 3 and 4

Year 3

- MEDE 8834 Core Rural Clerkship - Family Medicine (8 weeks)
- MEDE 8441 Core Rural Clerkship - OMM (4 weeks)
- MEDE 8633 Core Rural Clerkship - OB/GYN (6 weeks)
- MEDE 8631 Core Rural Clerkship - Pediatrics (6 weeks)
- MEDE 8838 Core Rural Clerkship - Surgery (8 weeks)
- MEDE 8836 Core Rural Clerkship - Internal Medicine (8 weeks)
- MEDE 8441 Core Rural Clerkship - Psychiatry (4 weeks)
- Elective (4 weeks)

Family Medicine Continuity Site

Year 4

- Optional Study Month (4 weeks)
- Elective Audition Rotation (4 weeks)
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- Elective (4 weeks)
- MEDE 8433 Core Rural Clerkship - Geriatrics (4 weeks)
- MEDE 8432 Core Rural Clerkship - Primary Care Partnership (4 weeks)
- MEDE 8430 Core Rural Clerkship - Subspeciality (4 weeks)
- MEDE 8403 Core Clerkship - Emergency Medicine (4 weeks)
- MEDE 8440 Core Rural Clerkship - Cardiology* (4 weeks)

*May be completed as the Year 3 Elective.

Family Medicine Continuity Site

Revised 7/25/2013
Public Health Modules

• **Goal:** To increase competencies in public health and preventive medicine in the rural physician workforce

• Each module consists of:
  • 6-7 contact hours
  • School of Public Health faculty lead sessions
  • Case studies related to rural health
Module Framework

- Each module - 3 sessions
- 2-3 hours each
- Quiz
- Review topics
- Case Study related to rural health
- Team-based class discussion
Public Health Modules

Year 1
Semester 1: Epidemiology
Semester 2: Biostatistics, Community Health

Year 2
Semester 3: Environmental Health
Semester 4: Health Systems and Policy
## Module Topics

<table>
<thead>
<tr>
<th>Epidemiology</th>
<th>Biostatistics</th>
<th>Community Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Descriptive epidemiology</td>
<td>• Study design</td>
<td>• Determinants of health</td>
</tr>
<tr>
<td>• Surveillance</td>
<td>• Descriptive statistics</td>
<td>• Social determinants of health</td>
</tr>
<tr>
<td>• Screening</td>
<td>• Inferential statistics</td>
<td>• Behavior change and motivational interviewing</td>
</tr>
<tr>
<td>• Prevention and control of communicable and non-communicable diseases</td>
<td></td>
<td>• Smoking cessation</td>
</tr>
<tr>
<td>• Study design</td>
<td></td>
<td>• Immunizations</td>
</tr>
</tbody>
</table>
Module Topics

Environmental Health
- Environmental pollutants
- Outcomes of environmental exposures
- Environmental policies
- Regulatory agencies
- Injuries
- Rural environmental exposures
- Occupational health and safety

Health Systems and Policy
- Core functions of public health
- Public health governmental agencies
- U.S. health policy process
- Health care utilization and costs
- Health insurance
- Health care systems
Example of Module Objectives

• Epidemiology

Session Learning Objectives
By the end of this session, the student should be able to:

- Define the terms epidemiology, epidemic, epidemiologist, and explain their importance.
- Define, calculate and use the most commonly used rates.
- Define the terms incidence and prevalence, and provide examples of each.
- Identify, locate, and use existing sources of data.

AACOM Osteopathic Core Competencies for Medical Students:

<table>
<thead>
<tr>
<th>VIII</th>
<th>Counseling for Health Promotion/Disease Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Apply quantitative epidemiological principles to inform clinical practice with regard to screening and prevention (include limitations of study designs).</td>
</tr>
<tr>
<td>6.</td>
<td>Identify and use existing sources of health data as well as appropriate prevention guidelines.</td>
</tr>
</tbody>
</table>

Community Health

Session Learning Objectives
By the end of this session, the student should be able to:

- Understand the framework of social determinants of health.
- Understand the impact that social determinants have on the health of individuals and communities.
- Identify the importance and effectiveness of health behavior change counseling.
- Describe the theoretical basis for modern approaches to behavior change counseling.

AACOM Osteopathic Core Competencies for Medical Students:

<table>
<thead>
<tr>
<th>IX</th>
<th>Cultural Competencies</th>
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</thead>
<tbody>
<tr>
<td>7.</td>
<td>Demonstrate effective communication that takes into consideration the ability to elicit another’s perspective, present concerns from another’s perspective, refrain from behaviors that cause others to become defensive.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>XII.</th>
<th>Public Health Systems Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Apply understanding of the interaction of public health and health care systems in the practice of osteopathic medicine as it affects health promotion and disease prevention.</td>
</tr>
</tbody>
</table>
Environmental Health

Session Learning Objectives
By the end of this session, the student should be able to:

• Identify and describe environmental policies and regulatory agencies, and their role in rural environmental health and safety

• Describe the importance of injuries as a community health problem

• Synthesize and discuss challenges faced by rural health physicians of environmental exposures in the rural community

AACOM Osteopathic Core Competencies for Medical Students:

<table>
<thead>
<tr>
<th>XI</th>
<th>Environmental and Occupational Medicine (OEM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Understand the policy framework and major pieces of legislation and regulations related to environmental and occupational health</td>
</tr>
<tr>
<td>4.</td>
<td>Complete an environmental health history, recognize potential environmental hazards and sentinel illnesses, and make referrals for conditions with environmental etiologies.</td>
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</table>

<table>
<thead>
<tr>
<th>XII</th>
<th>Public Health Systems</th>
</tr>
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<tbody>
<tr>
<td>6.</td>
<td>Recognize the impact of environmental influences on human health.</td>
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</table>
# Health Systems and Policy

## Session Learning Objectives

By the end of this session, the student should be able to:

- State the three core functions of public health.
- Be able to discuss factors driving growth in U.S. health care costs.
- Become familiar with current trends in health insurance.

## AACOM Osteopathic Core Competencies for Medical Students:

<table>
<thead>
<tr>
<th>XII</th>
<th>Public Health Systems</th>
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<tbody>
<tr>
<td>3.</td>
<td>Assess and address the factors influencing the use of health services.</td>
</tr>
<tr>
<td>8.</td>
<td>Understand the role of health policy on populations and individuals.</td>
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</tbody>
</table>
Session Learning Objectives
By the end of this session, the student should be able to:

• Describe the key characteristics of experimental, quasi-experimental and observational studies (cross-sectional, case control, cohort and ecologic studies).

• Evaluate the quality of studies and level of evidence studies provide.

• Apply principles of descriptive and analytic biostatistics to evaluate scholarly literature.

AACOM Osteopathic Core Competencies for Medical Students:

<table>
<thead>
<tr>
<th>X</th>
<th>Evaluation of Health Sciences Literature</th>
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<tbody>
<tr>
<td>2.</td>
<td>Use appropriate tools to critically appraise health science literature for its validity, reliability, impact, and applicability.</td>
</tr>
<tr>
<td>4.</td>
<td>Judge the statistical and clinical significance of findings in the health science literature.</td>
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</tbody>
</table>
Prevention topics

Year 1
- Cancer prevention and screening
  - Skin cancer
  - Lung cancer
  - Colorectal cancer

Year 2
- Lifestyle modifications in CV disease
- Oral health preventive dentistry
- Disaster preparedness
- Well woman exams

Year 3
- Asthma
- Tuberculosis
- COPD
- Cardiac conditions management and prevention
- Diabetes management and prevention
- Women’s health
- Psychosocial problems
Successes and Challenges

Successes
• All 5 modules have been implemented
• Prevention threads incorporated
• SPH faculty developed great case presentations

Challenges
• Agreeing and selecting the content
• Understanding and integrating two different learning models
• Scheduling
Dual Degree Fellowship
DO/MPH

• **Goal:** To increase the number of rural physicians with public health training in the form of a Master of Public Health

• 2 options to obtain an MPH
  • Through on-line classes
  • Taking year off between 3\textsuperscript{rd} and 4\textsuperscript{th} year

• Full Tuition Scholarship and Stipend

• MPH – Professional Option
  • 12 transfer credits – TCOM, 30 SPH credits
Community Health Research Project

- Community Health Research Project
  - Part of Rural Scholars Curriculum
  - Takes place throughout 4 years of medical school
  - Give students experience in community responsiveness, leadership, and scholarly activity.
  - Interprofessional Goal: To promote interprofessional collaboration between medical and public health professions.
QUESTIONS?