Transforming the Health Workforce to Improve Population Health: Innovative Approaches in Medical Education

JSPH Population Health Forum

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Today’s Learning Objectives

- Understand the social determinants of health that affect the health outcomes of patients and their communities

- Describe the significance of developing a health workforce that has the background, qualities, and skills to care for a diverse patient population and to promote health equity

- Discuss the opportunities in academia and practice across the health professions to enhance the teaching of population health concepts
Health Care Reform Reality Check

What will the newly insured look like?
The newly insured compared to the currently insured are...

- **Race**
  - ...less likely to be white
  - White: 75%

- **Health status**
  - ...less likely to rank self excellent/very good/good
  - Excellent/Very good/Good: 88%

- **Marital status**
  - ...more likely to be single
  - Single: 92%

- **Language**
  - ...less likely to speak English
  - English: 69%

- **Educational attainment**
  - ...less likely to have a college degree
  - College degree or higher: 14%

- **Employment status**
  - ...less likely to have full-time employment
  - Employed full-time: 37%

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Sources: PwC HRI analysis for year 2021, Current Population Survey, Medical Expenditure Panel Survey and CBO

<table>
<thead>
<tr>
<th></th>
<th>Median age</th>
<th>Median income</th>
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<tbody>
<tr>
<td>Newly insured</td>
<td>33</td>
<td>166% FPL</td>
</tr>
<tr>
<td>Currently insured</td>
<td>31</td>
<td>333% FPL</td>
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Social Determinants of Health

The conditions in which people are born, grow up, live, work and age. (WHO, 2011)

Sources:
Fixing the Imbalance

Health Care Reform

Health Workforce

Increased coverage
Increased access

Quality care
Shortages
Geographic maldistribution
Racial & ethnic composition
How can we develop a workforce that is poised to improve population health?
Academic Medical Centers: Areas of Impact

Access

Educational Opportunity

Competence
Core Areas of Impact: Access

Universities can help increase access to care in underserved communities by graduating more health professionals who will serve in those communities.
How does diversity impact distribution?

Figure 1: Percent U.S. Physician Participation in Various Practice Locations, by Race and Ethnicity

Source: 2012 AMA Physician Masterfile; 2013 AAMC Minority Physician Database

Source:
Contribution of URM Primary Care Physicians to Overall Population Spatial Accessibility to Primary Care Physician Services

Percent
0.0% - 2.5%
2.6% - 5.0%
5.1% - 10.0%
10.1% - 15.0%
15.1% - 100.0%

Data Source: 2012 AMA Physician Masterfile; 2010 Census
What influences where clinicians practice?

Proportion of Physicians Practicing in HPSAs by Perception of Instruction

- Did not plan to practice in underserved areas
- Did not know if they would practice in underserved areas
- Planned to practice in underserved areas

UIC Urban Health Program

- Recruit and support students from Chicago & other underserved communities into degree programs leading to a health care career
- Expands the health workforce in urban communities

Source:
University of Illinois at Chicago. Urban Health Program.
http://www.uic.edu/depts/uhealth/index.html
Universities can provide more educational opportunities and support for students who are underrepresented in the health professions.
The U.S. Education System

- Majority low income
- Academically lagging
- Limited support

Source:
STEM Education in Our Schools

- High school graduates are not ready academically for STEM careers, particularly minority students
  - 44% are ready for college-level math
  - 36% are ready for college-level science

Source:
National Math and Science Initiative, STEM Education Statistics.
https://www.nms.org/AboutNMSI/TheSTEMCrisis/STEMEducationStatistics.aspx
NEOMED Health Professions Affinity Community (HPAC) Program

Program Goals:

- Offer multiple pathways to the health professions
- Promote student academic and career success
- Advance the health and vitality of communities through community engagement

Source: Northeast Ohio Medical University. HPAC. http://www.neomedi.edu/admissions/programs/hpac. Material also adapted from a presentation given by Gina Weisblat, PhD & Erik Porfeli, PhD for Urban Universities for HEALTH on 10/6/14.
Summer Medical and Dental Education Program (SMDEP)

- 22,293 undergraduate students have participated since 1989
- Of the 14,659 MMEP and SMEP participants, 65% applied to MD granting institutions, of that group, 65.8% were accepted
- 5,496 have graduated from MD granting institutions

Source: Summer Medical and Dental Education Program. [http://www.smdep.org](http://www.smdep.org). Material also adapted from a presentation given by Bridgette Hudson, MPA, Norma Poll-Hunter, PhD, & Mark Lopez, PhD for the 2014 NAAHP National Meeting.
Universities can work to ensure their graduates have the background, qualities, and skills needed to provide effective and equitable care.
Core Areas of Impact: Competence

- Race/Ethnicity
- Language
- Cultural Competence
- Population Health Perspectives
- Other
Changing Demographics

- U.S. is projected to become a majority-minority nation for the first time in 2043
- Minorities are projected to compromise more than half of the population by 2060
- Cultural Competence Matters

Sources:


Training Shift in Medicine

**Traditional**
- Expert-centered
- Monolithic
- Individualistic
- Basic or clinical science
- Tactical
- Knowledge-centered
- Incremental
- Status/titles/income

**Future-Oriented**
- Patient-centered
- Diverse
- Teamwork/collaboration
- Translational
- Strategic
- Competence-centered
- Breakthrough
- Ethical fulfillment
The New York-Presbyterian Regional Health Collaborative

- Engaged learners in the process of quality improvement
- Reduction in ED visits and hospitalizations
- 30-day readmissions and average length of stay declined
- Improved patient satisfaction scores
- Short-term return on investment

Source:
MCAT\textsuperscript{2015}

The Biological & Biochemical Foundations of Living Systems

www.aamc.org/mcat2015
AAMC-CDC Public Health Policy Fellowship – Beginning July 2015

- Public health policy experiential learning opportunities for early-career physicians
- Fellows train with CDC policy experts to understand how policies and legislation impact individual and population health at multiple levels
AAMC is pleased to announce the launch of **Public Health Pathways**

A new online searchable database of domestic and international public health training opportunities for:

- Pre-med Students
- Medical Students
- Residents
- Early Career Physicians

Please visit **Public Health Pathways** at:

[www.aamc.org/phpathways](http://www.aamc.org/phpathways)
Public Health in Medical Education
Online Community of Practice

Discussions

- UME Curriculum in Healthcare Financing
- Global Health Programs
- Brainstorming: Public Health Webinar Series
- Interprofessional Community-engaged Longitudinal Curriculum Addressing Public Health
- Proposed Changes: LCME Accreditation Standards
- Technology & Social Media in Academic Medical Centers
- Has healthcare reform encouraged public health integration?
- How Can We Help You?
- One-Week Immersion Programs for Medical Students
- Public Health and GME
MedEdPORTAL Public Health Collection

Consider submitting your curricular innovation to be included in the Public Health Collection of AAMC’s MedEdPORTAL®
Key Workforce Strategies

- Align institutional mission with community needs
- Align program goals to institutional mission
  - Pipeline
  - Admissions
  - Faculty Development
  - Student Training
  - Tracking and Quality Improvement
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