Challenge of Increasing Diversity with a Focus on Health Professions Students at College and Professional Schools

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October 26, 2017
Objectives

• To summarize findings from literature and interviews on
  • Barriers to increasing racial/ethnic diversity among health professions students at college and professional school levels
  • Strategies for increasing racial/ethnic diversity at these levels

• To elicit participants’ input on the effectiveness of
  • Well-established strategies
  • Less established strategies
Introduction

• Despite concerted efforts to increase racial/ethnic diversity, Latinos, African-Americans, and Native Americans remain underrepresented in most health professions that require a college or graduate degree

• Challenged by the California Wellness Foundation to identify new strategies to accelerate progress
Diversity of Clinicians Compared to California’s Population, 2015

Barriers to Increasing Racial/Ethnic Diversity in the Health Professions
Limited Exposure to Health Care Careers

• Many URM
  • Are the first person in their family to go to college
  • Do not have health professionals in their families or social networks

• Some are not aware of opportunities in health care fields other than medicine and nursing

• May not understand the importance of internships or know how to find them
Financial and Opportunity Cost Barriers

• Costs associated with the program, especially if at a private institution

• Need to work for wages limits access to internships in research and clinical care

• Length of education
  • MD and DO requires at least 7 years post bachelor’s degree
  • DDS and PharmD require at least 4 years post bachelor’s
  • Doctorate of Physical Therapy requires at least 3 years post bachelor’s
Academic Barriers

• Inadequate preparation for
  • Prerequisite courses
  • Courses required to complete major
  • Courses required to pursue a graduate degree

• “Impacted” courses and majors make it difficult for students to
  • Complete prerequisite courses
  • Obtain admission to health professions majors

• Additional challenges for students who start at a community college and seek to transfer
Academic Barriers

- Negative experiences in “gateway courses,” especially chemistry
  - Low grades
  - Lack of support from professor and/or TAs

- Unable to secure admission to professional school due to lack of competitive
  - Scores on standardized tests
  - Grades
  - Essay writing skills
  - Interview skills
Psychological and Social Barriers

• Stereotype threat
  • Negative stereotypes about the intellectual capacity of underrepresented minority students negatively affect performance

• Lack of sense of belonging

• Lack psycho-social support

• Lack of role models concordant with student’s race/ethnicity
Institutional Barriers

- Institution’s leaders do not have a demonstrated commitment to diversity
- Unsupportive/unhelpful pre-health advisors
Strategies for Increasing Racial/Ethnic Diversity of Health Professions Students
Model for Success in PhD Training (adapting to health professions)

Source: Thompson, Nancy. *Addressing the Challenge of Diversity*
Well-Established Strategies

• Recruitment partnerships
• Comprehensive support tailored to students’ needs
• Post-baccalaureate programs
Recruitment Partnerships

- Collaboration between health professions schools and high schools and colleges to identify and recruit URM students
  - Partner with pre-health student organizations
  - Pre-health conferences for students and/or advisors
  - Recruiting trips to meet with students and pre-health advisors
  - Campus visits for pre-health students
  - Summer or academic year enrichment programs
  - Mentoring/shadowing opportunities
## Comprehensive Support Tailored to Students’ Needs

<table>
<thead>
<tr>
<th>Category</th>
<th>Support Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic/Career support</strong></td>
<td>study skills, tutoring, mentoring, summer enrichment, career advising, admissions advising and prep</td>
</tr>
<tr>
<td><strong>Emotional support</strong></td>
<td>counseling services, workshops for families</td>
</tr>
<tr>
<td><strong>Social support</strong></td>
<td>peer, faculty, alumni, and community mentors</td>
</tr>
<tr>
<td><strong>Financial support</strong></td>
<td>scholarships, paid internships, loan repayment, assistance with child care and transportation</td>
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</tbody>
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Post-baccalaureate Programs

• Some programs focus on re-applicants
• Components typically include
  • Admissions test prep
  • Science courses
  • Study skills training
  • Writing/interview skills training
  • Clinical or research experiences
• Evidence that participants in some programs are more likely to care for underserved populations
Less Established Strategies

• Change remediation
• Change how science is taught to undergraduates
• Implement conditional admission
• Shorten time to degree
• Change admissions requirements
Change Remediation

• More than 2/3rd of community college students required to take one or more remedial classes

• Initiatives to improve remediation include
  • Enhancing summer prep courses
  • Replacing non-credit remedial courses with courses that combine remedial and college level content
  • Allowing less prepared students to take courses at a slower pace
  • Emphasizing thinking not memorization
  • Providing psycho-social support
Change How Science is Taught to Undergraduates

• Change teaching methods (e.g., flipped classroom)

• Provide more practical experience/opportunities for students to apply what they learn

• Teach students to synthesize information across disciplines

• Promote formation of student study groups
Change Admissions Requirements

• Focus on principles of human biology, including molecular biology and genetics

• Replace one semester of organic chemistry with biochemistry

• Add probability and statistics

• Add behavioral and social sciences (new MCAT requirement)

Sources: Dienstag 2008; Kaplan et al. 2012.
Change Admissions Requirements

• Holistic review that foregoes or at least deemphasize scores on standardized tests

• Place greater emphasis on distance traveled

• Focus on applicants who transferred from a community college to a four-year college

• Increase the length of interviews
Conditional Admission

• Undergraduate students guaranteed admission to a medical school if they complete prerequisites

• Allows students greater flexibility to major outside the basic sciences

• Some programs include summer enrichment experiences

• Programs vary with regard to requirements for
  • Minimum GPA
  • Minimum MCAT score
Conditional Admission

• Mount Sinai Medical School Humanities and Medicine Program
  • Open to sophomores and juniors majoring in humanities or social science
  • Guaranteed admission if complete a bachelor’s degree
  • Not required to take the MCAT
  • Must earn at least a B in biology and chemistry
  • Summer sessions after junior year and summer before matriculation

Source: Muller and Kase 2010.
Shorten Time to Degree by Combining Undergraduate and Graduate Education

• Sophie Davis BS/MD program
  • Focus on training underrepresented minority physicians to provide primary care in underserved areas
  • Curriculum emphasizes population health and community-oriented primary care
  • Mastering prerequisite courses framed a goal not a hurdle
  • If complete three-year sequence at the BS level, enter CUNY School of Medicine with advanced standing

Sources: Roman 2004. Sophie Davis website
Shorten Time to Degree by Shortening Medical School

- UC-Davis Accelerated Competency-based Education in Primary Care
  - Partnership with Kaiser Permanente
  - Students complete medical school in 3 years instead of 4 years
  - Primary care clerkship at Kaiser all 3 years
  - Strong preference for
    - Speaking language other than English
    - First in family to complete bachelor’s degree
    - Community health and primary care experience
Discussion