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

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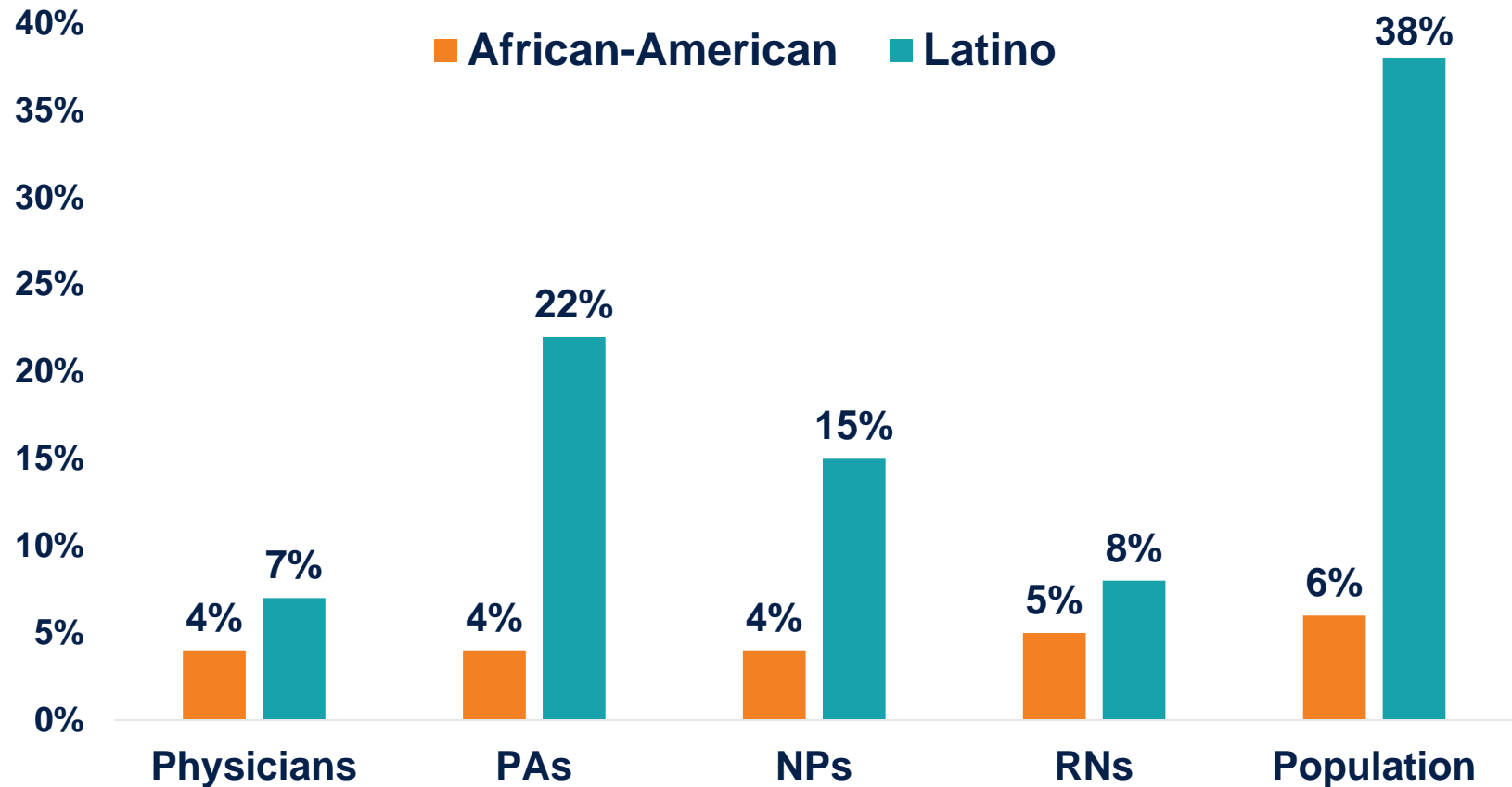
Objectives

- 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 URMs
 - 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

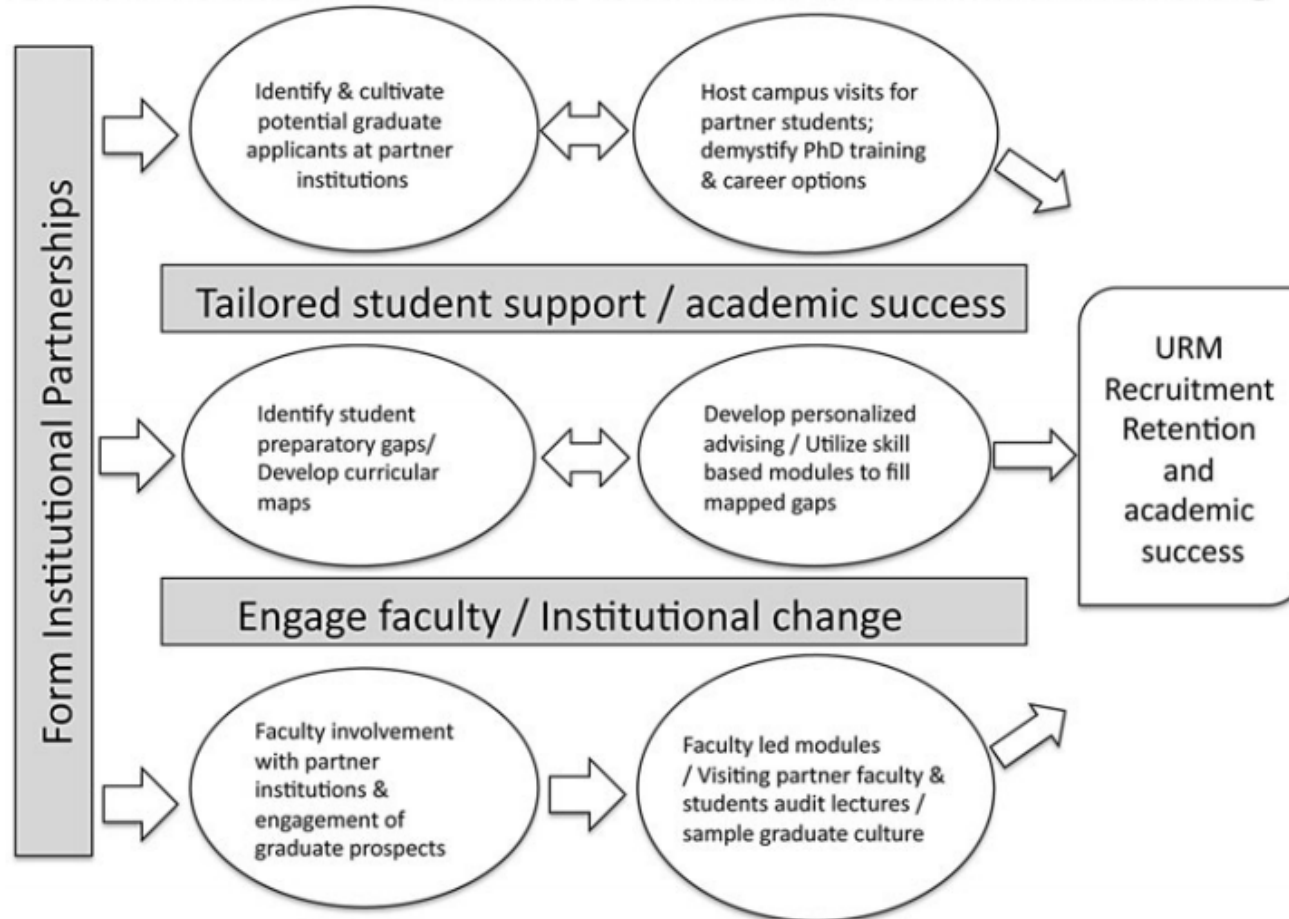
Institutional Barriers

- 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)

Model for student recruitment, retention and success in PhD training



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

Academic/Career support:	study skills, tutoring, mentoring, summer enrichment, career advising, admissions advising and prep
Emotional support:	counseling services, workshops for families
Social support:	peer, faculty, alumni, and community mentors
Financial support:	scholarships, paid internships, loan repayment, assistance with child care and transportation

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)

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

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

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