



# **Compendium of Strategies to Increase Health Workforce Diversity**

Social Mission Alliance  
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While the Supreme Court has banned the consideration of race in admissions policies, numerous studies have documented the benefits of a diverse student body and health workforce on quality and access to health care. A diverse health workforce is one component of a health care system designed to address health disparities.

This compendium describes a range of policies and programs that can contribute to a more diverse health workforce without considering race in admissions. This includes non-race based admissions policies as well as other strategies, such as pathway programs for low income and underrepresented populations. In many cases, these programs and policies can benefit rural communities, disabled individuals and others as well as Black, Hispanic and Native American individuals not well represented among health professionals.

This compendium is not an exhaustive list; it is intended to evolve over time as we learn more about the experience of educational programs, state policies and programs supported by philanthropic organizations. We welcome suggestions as to other programs and strategies as well as which strategies readers think are most effective.

[Submit your responses here.](#)

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## Alternative Admission Criteria

**Description:** While the Supreme Court has ruled against the use of race in admissions, other criteria, such as socioeconomic status, wealth, being from an underserved community or being the first in a family to attend college can be considered in admissions and would support a racial and economically diverse student body.

### **Evidence + Examples:**

- Webinar documenting how [UC-Davis School of Medicine](#) used holistic review to create a diverse student body without the use of race-conscious strategies
  - Use of **socioeconomic disadvantage score** to understand applicant's life-history; focused on what a student has overcome. This score is based on if the student had a **fee waiver on MCAT, family income, if they grew up in an underserved area, and parent education/occupation.**
  - Importance of not devaluing community college education for undergraduate degrees
  - Use of Multiple Mini-Interviews: reducing biases and increasing representation among admissions committee
- [Innovative Practices of Interest](#), created by the College Board, gives six case study examples of new strategies of holistic admission criteria in undergraduate institutions. It discusses why schools chose these practices, how they were developed, and their impact.
- [Race-Conscious Affirmative Action: What's Next](#) by the Georgetown Center on Education and the Workforce details six admission models and their likely effects on student diversity. They find increased diversity can be achieved using **class-conscious admission criteria, expanding the pool of candidates** considered for admission, and **removing preferential admission** for privileged groups (such as legacy and student athletes).

### **Resources:**

- [Landscape](#), a tool created by the College Board to contextualize a student's qualifications to their community. For example, it has data specific to the student's neighborhood regarding average SAT/ACT scores, AP class availability, number in recent graduate class, and more. The tool does not contain any information regarding race.

- AAMC [holistic review website](#), including multiple links to other resources, research, and webinars, including the [Holistic Considerations for the Admissions Cycle](#) PDF document

## Prior to College

### Pathway programs

**Description:** Pathway programs provide support and remove barriers for primary and secondary education students who may be interested in health careers. Pathway programs can provide academic resources, information on health careers and encouragement to promote and prepare students interested in entering healthcare professions. Programs can involve many activities, such as summer camps, after-school programs, SAT preparation, mentorship opportunities, funding for educational materials, and more.

### **Evidence + Examples**

- [A New Way of Evaluating Effectiveness of URM Summer Pipeline Programs](#) demonstrates the effectiveness of a pathway program based on increase in student confidence, interest, sense of belonging, college mentorship, and physician mentorship.(Hill et al., 2021). Includes an example of a summer mentorship program at the University of Pennsylvania.
- [CUNY School of Medicine](#) developed a pipeline program for high school juniors, called the [Health Professions Mentorship Program](#). This two-year program includes summer sessions, a community based project, and mentorship sessions led by CUNY faculty and students. The program focuses on mentorship, community engagement, and peer support, with hopes of developing long-term interest in medicine.
- **Health Careers Recruitment and Preparation:** AHECs offer health career camps, science enrichment programs, healthy lifestyle programs, health careers curricula and programs for elementary, middle school, and high school students. These programs introduce students to a wide assortment of health career possibilities, guide them in goal setting and educational planning, and offer science courses to strengthen critical thinking skills. Working with K-12 schools, colleges and community partners, AHECs target both economically disadvantaged students and those from underrepresented minority groups in school programs and summer institutes.
- **The Health Careers Opportunity Program (HCOP)** provides grants to projects designed to increase and support opportunities for individuals from disadvantaged backgrounds to enter and graduate from health professions. National HCOP Academies strengthen the health workforce pipeline in medically underserved and

rural areas by providing both academic and social supports to students from disadvantaged backgrounds.

- [Doctors back to school program](#), run by the AMA to increase awareness and inspire students to pursue medicine.

**Resources:**

- [Pipeline Programs in the Health Professions, Part 1: Preserving Diversity and Reducing Health Disparities](#): gives specific recommendations for how to create successful partnerships with schools:
  - Start academic prep programs early, and make them invasive and persistent
  - Programs need to appeal to teachers and school systems that will need to support them
  - Increase funding for education
  - PR campaign on diversifying the health workforce, for example, AAMC's '[Aspiring Docs](#)', and [ExploreHealthCareers.org](#)
  - Ensure stable institutional support

### Summer work experience/ shadowing

**Description:** Shadowing and working experiences serve to promote interest in health professions. These experiences offer students the opportunity to see what a job in healthcare may look like, and directly interact with the healthcare system from the view of a provider rather than patient.

**Evidence + Examples:**

- The [Stanford Medical Youth Science Program \(SMYSP\)](#) is a 5-week summer residential program for low-income high school students. [A retrospective study](#) on over 460 participants found that African American, Latino, and Native American students had significantly higher rates of undergraduate degrees and enrollment in health professional education (Winkleby et al., 2009). When asked to rank the different components of SMYSP, students reported **anatomy labs** and **hospital internships** were the most useful for their academic success.
- The MERIT ([Medical Education Resources Initiative for Teens](#)) program “provides seven years of academic, professional, and social support” to students interested in

medicine. During this program, students have multiple shadowing opportunities with healthcare professionals. [One study](#) found that URM students in this program were more likely to think of the person they were shadowing as a mentor if they seemed to be the same race/ethnicity as the student (Kendrick et al., 2020).

## Post-Baccalaureate Programs

**Description:** Post-baccalaureate programs are programs that provide college graduates with pre-dental, medical, or other health professions education. These programs are used to strengthen a student's application or provide them with pre-requisites they need to apply.

### **Evidence + Examples:**

- UC Davis School of Medicine runs a [Post Baccalaureate Reapplicant Program](#) intended for students who applied, but did not get into, medical school. During the program, students prepare for the MCAT, receive AMCAS application support, learn test-taking strategies, enroll in courses at UC Davis, attend minority health care issues and leadership seminars, participate in mock interviews and more. Between 1991-2019, 71% of participants were from a racial/ethnic group underrepresented in medicine, and 85% (total of 441) matriculated to medical school (Poster by Campa et al., 2019; [link to .ppx](#))

### **Resources:**

- AAMC [repository of Postbaccalaureate Premedical Programs](#)



## Undergraduate and Professional Education

### Partnerships with HBCUs, Community Colleges

**Description:** Health professional education programs can directly partner with HBCUs through pathway programs, reserved spots, summer programs, and more, in order to recruit more Black students. Partnerships with community colleges through similar programs also seek to increase racial diversity, given that a community college education is more common among URM students.

#### **Evidence + Examples:**

- The Perelman School of Medicine expanded their [Penn Access Summer Scholars \(PASS\)](#) program to partner with five HBCUs. Each year, the PASS program admits students for a 2 year commitment to prepare undergraduate students for medical school through shadowing, research, and other enrichment experiences.
- Texas A&M University Health Science Center College of Medicine developed an [undergraduate medical academy](#) with Prairie View A&M University, an HBCU.
- [Data from the 2012 AAMC matriculant and applicant files](#) show that URM students used community college pathway programs at a higher rate compared to white students. This suggests that increasing the use of such programs will lead to increased URM representation.
- The [California Medicine Scholars](#) Program connects students from community colleges to a support system that helps students prepare for and succeed in medical school and other health professions education programs.

### Partnerships with Minority Student Organizations

**Description:** Minority student organizations can partner with admission offices to aid in recruitment. By playing an active role in the admission process, minority student organizations create better applicant experiences for future students and increase the diversity of an admitting class.

#### **Evidence + Examples:**

- [Rumala and Cason \(2007\)](#) show the effectiveness of a collaboration at the University of Toledo College of Medicine and a minority medical student organization to recruit

more minority students. The student organization worked to identify challenges in recruiting URM students, and actively played a role in suggested strategies.

- The NYU Grossman School of Medicine [formed a partnership](#) between their Office of Admissions, Black and Latinx Student's Association, and LGBTQMed. Prospective students can request to be matched with a student liaison, and normally meet for lunch or coffee.

## Mentorship

**Description:** Mentors provide guidance to their mentee based on previous experience and developed knowledge. To promote diversity in health professions education, mentorships can seek to engage with students that are underrepresented in health professions at the mentor and mentee levels.

### ***Evidence + Examples:***

- [Mentorship of Underrepresented Physicians and Trainees in Academic Medicine: a Systematic Review](#) (Bonifacino et al., 2021): review of 28 mentorship programs in academic medicine. Identified themes for best practices:
  - Alignment of mentorship with institutional goals/resources
  - Mentorship programs need to be tailored to specific needs to optimize available resources
  - Important to train mentors to ensure effectiveness.
- [Person First, Student Second: Staff and Administrators of Color Supporting Students of Color Authentically in Higher Education](#) finds that relationships between faculty and students of color are effective (Luedke, 2017)
- [Cascading mentorship program at the University of California Irvine School of Medicine](#), involving high school, undergraduate, and medical students.
  - Summer program to promote interest of high school students to health professions, while advancing undergraduate student and graduate student education.
  - Mentor/mentee relationships:
    - Faculty provided networking opportunities, motivated medical students, and helped with workshops

- Medical students helped with recruiting, creating course material, nominating faculty speakers, role models for college students with similar personal/cultural backgrounds
  - College students coached high school students, interactive mock patient interviews.
  - High School students took part in all hands on activities and worked on teams under the guidance of faculty and coaches
- [MiMentor](#) is a mentoring network with a stated mission to “develop and support innovative and inclusive mentorship opportunities that will inspire the next generation of diverse healthcare leaders for underserved communities.” Members of MiMentor stay connected through a [mobile app](#) and in-person events held throughout the United States.

***Resources:***

- [Best Practices for Facilitating the Mentoring Experience for Nursing Students of Color](#)

## Scholarships

***Description:*** Cost of higher education is often cited as one of the most common barriers among prospective students, particularly for those from low-income backgrounds. More opportunities for financial support will attract more students to pursue higher degrees.

***Evidence + Examples:***

- **Promise programs** give scholarships to students for schools near or within their community, known as place-based scholarships. These programs may cover up to 100% of tuition and fees. A [review of promise programs from North Carolina](#) community colleges reports on past success of promise programs increasing education attainment and suggests three main effective elements.
- Study by [Nivet \(2010\)](#) found that merit-based scholarships increase the likelihood that a student will graduate, whereas loan aid does not.

## Anti-bias training in admissions

**Description:** Implicit bias can effect the evaluation of candidates at any of the stages of the admission process. Engaging admission committee members in anti-bias training attempts to mitigate the impacts of their implicit biases, which could be negatively impacting applicants.

### ***Evidence + Examples:***

- A study by [Caspers et al. \(2017\)](#) used the Implicit Association Test to evaluate and report scores back to admission committee members. While the number of URiM students *accepted to the medical school* evaluated did not change, the number of URiM students who *accepted their admission* increased. This suggests the experiences that URiM students had with the admission committee members may have been improved from the use of the IAT, and holds implications for the use of more standardized anti-bias training.
- [Bias Breakers: Continuous Practice for Admissions and Selection Committees](#) (Nakae et al., 2022)

### ***Resources:***

- AAMC webinar: [The Science of Unconscious Bias and What to do About it in the Search and Recruitment Process](#)
- [Bias Breakers: Continuous Practice for Admissions and Selection Committees](#) describes a workshop, with implementation guidance, for addressing bias in admission committees

## Supportive environment

**Description:** Supportive environments are ones which make students feel welcome, wanted, and heard at their institutions. This typically involves the use of student organizations that attract and retain students by making them feel more welcome among peers. Supportive environments also include access to academic support, such as advising, tutoring, or academic counseling.

### ***Evidence + Examples:***

- [Study from the HRSA Bureau of Health Workforce](#) reported that colleges/universities commonly attributed success for students from disadvantaged backgrounds to the use

of ‘wraparound’ services, including mentorship, tutoring, and/or other services like academic counseling.

- Academic counselors are less likely to encourage URM students to pursue a career in healthcare and are more likely to have a [negative influence on URM student interest](#) in health careers.

## Diverse faculty

**Description:** A more racially diverse faculty is one with a greater number and proportion of faculty members with differing racial/ethnic backgrounds. can help attract and retain students of color to a particular institution. A more diverse faculty leads to a greater number of race-concordant mentorship opportunities for URM students. Additionally, greater diversity among faculty can

### ***Evidence + Examples:***

- [DiBaise et al. \(2015\)](#) used survey analysis to show that a higher proportion of admission faculty identifying as African American or Hispanic was correlated with increased URM matriculation into PA programs.
- A [review of past studies](#) on increasing diversity among faculty at academic medical centers identified effective strategies related to changes to recruitment and/or hiring, retention, promotion and leadership, and research productivity.

## **Additional guides referencing multiple strategies**

[Improving and Expanding Programs to Support a Diverse Health Care Workforce: Recommendations for Policy and Practice](#) from the Urban Institute

[Who Enters the Health Workforce? An Examination of Racial and Ethnic Diversity](#) by the Fitzhugh Mullan Institute for Health Workforce Equity

[Revolutionizing Health Professions Admissions to Achieve an Inclusive Workforce](#) by Nguyen et al., 2023

[Physician Pipeline and Pathway Programs: An Evidence-based Guide to Best Practices for Diversity, Equity, and Inclusion from the Council of Residency Directors in Emergency Medicine](#) by Parsons et al., 2022

[Factors and Barriers that Influence the Matriculation of Underrepresented Students in Medicine](#) by Tello and Goode, 2023