

AMERICAN MEDICAL ASSOCIATION  
MEDICAL STUDENT SECTION

Resolution  
(I-14)

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Subject: Expanding Supportive Efforts in Pre K-12 Education for Minorities

Referred to: MSS Reference Committee  
(Marielle Brenner, Chair)

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1 Whereas, The admission rate of underrepresented minorities (URMs; composed of people who self-  
2 identify as members of African-American, Mexican Americans, American Indians, Alaskan Natives,  
3 Hawaiian Natives and Puerto Rican descent) to medical schools are not proportionately represented in  
4 relation to national population increases;<sup>1-3</sup> and

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6 Whereas, URM physicians are needed to expose, advocate and strengthen the commitment to help care  
7 for the underserved and the diseases that predominantly affect this population;<sup>1,4-6</sup> and

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9 Whereas, URMs historically have poor exposure to basic mathematics information from as early as pre-K  
10 education, they face developmental gaps in STEM (science, technology, engineering and mathematics)  
11 courses that are considered pre-requisites for a career in medicine;<sup>7</sup> and

12  
13 Whereas, URM members also are more likely given instruction in prerequisite STEM (science,  
14 technology, engineering and mathematics) courses by unqualified/under-qualified teachers in primary  
15 and/or secondary schools;<sup>6,8-11</sup> and

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17 Whereas, The lack of encouragement from supporting institutions (such as schools and families) can  
18 contribute to lessened expectations for URMs to excel in education and subsequently pursue a career in  
19 medicine;<sup>3,6,12-16</sup> and

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21 Whereas, Intervention to improve URM recruitment in medical professions, such as collaborations  
22 between medical schools (namely University of California San Francisco, University of California San  
23 Diego, University of Maryland, Emory and Stanford) and local schools, have been successful at  
24 increasing interest and STEM skillset among URM members to join the medical profession;<sup>5,11,17-25</sup> and

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26 Whereas, Existing AMA policies address support for outreach, recruitment and support of physicians  
27 within the medical field that self-identify as URMs in order to recognize and ameliorate minority  
28 healthcare issues [H-350.693, H-350.971 and H-350.979]; and

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30 Whereas, Existing AMA policy supports initiatives for furthering STEM education [H-170.985];  
31 therefore be it

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33 RESOLVED, That our AMA-MSS support supplementary programs in STEM education and mentorship  
34 opportunities in medicine for URM students in pre K-12 education; and be it further

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RESOLVED, That our AMA-MSS coordinate their supportive efforts with state educational societies to support the viability of supportive STEM education and mentorship opportunities in pre K-12 education; and be it further

RESOLVED, That our AMA-MSS extend support for mentorship opportunities, especially for URMs, in order to encourage their recruitment in medical careers.

Fiscal note:

### References:

1. Cohen JJ. The consequences of premature abandonment of affirmative action in medical school admissions. *J Am Med Assoc.* 2003;289(9):1143-1149.
2. Cucchiara ST. Expanding the role of student affairs practice in medical institutions to include minority student recruitment. *Journal of Student Affairs at New York University.* 2010;6(1):1-10.
3. Barnett MD, Sonnert G, Sadler PM. More like us: The effect of immigrant generation on college success in mathematics. *International Migration Review.* 2012;46(4):891-918.
4. Huang WY. Learning to care for the underserved - making the most of opportunities in medical school. *American Medical Association Journal of Ethics.* 2011;13(8):544-549.
5. Ready T. A look back at project 3,000 by 2000: Lessons for the future. *US-Mexico Border Center of Excellence Consortium.* 2006:1-4.
6. George YS, Neale DS, Van Horne V, Malcolm SM. In pursuit of a diverse science, technology, engineering, and mathematics workforce. *American Association for the Advancement of Science.* 2001:1-24.
7. Perez-Johnson I, Maynard R. The case for early, targeted interventions to prevent academic failure. *Peabody Journal of Education.* 2007;82(4):587-616. doi: 10.1080/01619560701602983.
8. Plecki ML, Elfers AM, Knapp MS, Loeb H, Perkins C, Boatright B. Who's teaching washington's children. *what we know--and need to know--about teachers and the quality of teaching in the state. Center for Strengthening the Teaching Profession.* 2003:1-79.
9. Educational Opportunity Gap Oversight and Accountability Committee. Recruitment and retention of educators of color. *Educational Opportunity Gap Oversight and Accountability Committee.* 2012:1-8.
10. Mickelson RA, Bottia MC, Lambert R. Effects of school racial composition on K-12 mathematics outcomes: A metaregression analysis. *Review of Educational Research.* 2013;83(1):121-158.
11. Rodriguez R, Amos LB, Jani N, et al. Expanding the K-16 pool of potential STEM graduates. *National Science Foundation Model Institutions for Excellence.* 2007:1-40.
12. Eagan M, Hurtado S, Chang M, Garcia G, Herrera F, Garibay J. Making a difference in science education: The impact of undergraduate research programs. *American Educational Research Journal.* 2013;50(4):683-713. doi: 10.3102/0002831213482038.
13. Mervis J. Straight talk about STEM education. *Science.* 2007;317(5834):78-81.
14. Akos P, Lambie GW, Milsom A, Gilbert K. Early adolescents' aspirations and academic tracking: An exploratory investigation. *Professional School Counseling.* 2007;11(1):57-64.
15. Crosnoe R, López Turley RN. K-12 educational outcomes of immigrant youth. *Future of Children.* 2011;21(1):129-152.
16. Glick JE, Hohmann-Marriott B. Academic performance of young children in immigrant families: The significance of race, ethnicity, and national origins. *International Migration Review.* 2007;41(2):371-402.
17. Perna L, Lundy-Wagner V, Drezner ND, et al. The contribution of HBCUS to the preparation of african american women for stem careers: A case study. *Research in Higher Education.* 2009;50(1):1-23.
18. Carline JD, Patterson DG. Characteristics of health professions schools, public school systems, and community-based organizations in successful partnerships to increase the numbers of underrepresented minority students entering health professions education. *Academic Medicine.* 2003;78(5):467-482.
19. Hibel J, Farkas G, Morgan PL. Who is placed into special education?. *Sociology of Education.* 2010;83(4):312-332.
20. Sadler PM, Sonnert G, Hazari Z, Tai R. Stability and volatility of STEM career interest in high school: A gender study. *Science Education.* 2012;96(3):411-427.
21. Beech BM, Calles-Escandon J, Hairston KG, Langdon SE, Latham-Sadler BA, Bell RA. Mentoring programs for underrepresented minority faculty in academic medical centers: A systematic review of the literature. *Academic Medicine.* 2013;88(4):541-549.

22. Mahoney MR, Wilson E, Odom KL, Flowers L, Adler SR. Minority faculty voices on diversity in academic medicine: Perspectives from one school. *Academic Medicine*. 2008;83(8):781-785.
23. Patterson DG, Carline JD. Promoting minority access to health careers through health profession-public school partnerships: A review of the literature. *Academic Medicine*. 2006;81(SUPPL. 6):S5-S10.
24. Rohrbaugh MC, Corces VG. Opening pathways for underrepresented high school students to biomedical research careers: The emory university RISE program. *Genetics*. 2011;189(4):1135-1143.
25. Winkleby MA, Ned J, Ahn D, Koehler A, Kennedy JD. Increasing diversity in science and health professions: A 21-year longitudinal study documenting college and career success. *Journal of Science Education and Technology*. 2009;18(6):535-545.

#### **Relevant AMA and MSS Policy:**

##### **H-170.985 Science, Technology, Engineering and Mathematics Education**

Our AMA is committed to working with other concerned organizations and agencies to improve science, technology, engineering and mathematics (STEM) education and literacy in the nation, and to increase interest in STEM on the part of the nation's youth, particularly underrepresented minorities. (Res. 2, A-88; Reaffirmed: Sunset Report, I-98; Modified and Reaffirmed: CSAPH Rep. 2, A-08; Reaffirmed in lieu of Res. 514, A-09; Reaffirmed in lieu of Res. 524, A-09; Modified: Res. 516, A-14)

##### **H-350.693 Minority Physician Recruitment**

Our AMA (1) supports national efforts to improve the health services to underserved minority communities; and (2) encourages recruitment of qualified underrepresented minorities to the profession of medicine. (Res. 320, A-05)

##### **H-350.971 AMA Initiatives Regarding Minorities**

The House of Delegates commends the leaders of our AMA and the National Medical Association for having established a successful, mutually rewarding liaison and urges that this relationship be expanded in all areas of mutual interest and concern. Our AMA will develop publications, assessment tools, and a survey instrument to assist physicians and the federation with minority issues. The AMA will continue to strengthen relationships with minority physician organizations, will communicate its policies on the health care needs of minorities, and will monitor and report on progress being made to address racial and ethnic disparities in care. It is the policy of our AMA to establish a mechanism to facilitate the development and implementation of a comprehensive, long-range, coordinated strategy to address issues and concerns affecting minorities, including minority health, minority medical education, and minority membership in the AMA. Such an effort should include the following components: (1) Development, coordination, and strengthening of AMA resources devoted to minority health issues and recruitment of minorities into medicine; (2) Increased awareness and representation of minority physician perspectives in the Association's policy development, advocacy, and scientific activities; (3) Collection, dissemination, and analysis of data on minority physicians and medical students, including AMA membership status, and on the health status of minorities; (4) Response to inquiries and concerns of minority physicians and medical students; and (5) Outreach to minority physicians and minority medical students on issues involving minority health status, medical education, and participation in organized medicine. (CLRPD Rep. 3, I-98; Reaffirmed: CLRPD Rep. 1, A-08)

##### **H-350.979 Increase the Representation of Minority and Economically Disadvantaged Populations in the Medical Profession**

Our AMA supports increasing the representation of minorities in the physician population by: (1) Supporting efforts to increase the applicant pool of qualified minority students by: (a) Encouraging state and local governments to make quality elementary and secondary education opportunities available to all; (b) Urging medical schools to strengthen or initiate programs that offer special premedical and precollegiate experiences to underrepresented minority students; (c) urging medical schools and other health training institutions to develop new and innovative measures to recruit underrepresented minority students, and (d) Supporting legislation that provides targeted financial aid to financially disadvantaged students at both the collegiate and medical school levels. (2) Encouraging all medical schools to reaffirm the goal of increasing representation of underrepresented minorities in their student bodies and faculties. (3) Urging medical school admission committees to consider minority representation as one factor in reaching their decisions. (4) Increasing the supply of minority health professionals. (5) Continuing its efforts to increase the proportion of minorities in medical schools and medical school faculty. (6) Facilitating communication between medical school admission committees and premedical counselors concerning the relative importance of requirements, including grade point average and Medical College Aptitude Test scores. (7) Continuing to urge for state legislation that will provide funds for medical education both directly to medical schools and indirectly through financial support to students. (8) Continuing to provide strong support for federal legislation

that provides financial assistance for able students whose financial need is such that otherwise they would be unable to attend medical school. (CLRPD Rep. 3, I-98; Reaffirmed: CLRPD Rep. 1, A-08)

#### **295.005MSS Availability of Medical Education**

AMA-MSS supports the following principles: (1) A determined, conscientious effort to accept, matriculate, and graduate minority physicians must be undertaken. (2) Support for programs with a commitment to the training of minority medical professionals, particularly the three predominantly black medical schools (Howard, Meharry, Morehouse) must be increased as necessary and maintained. (3) Adequate financial aid packages for minority students must be provided. These may include combinations of grants, loans, scholarships, or service- obligated programs. (4) Efforts should be made to increase the proportion of minorities in medical school faculties and administrative positions. (5) Efforts must be made to improve retention rates of minority students in medical schools. (MSS Position Paper #2, A-83) (Reaffirmed: MSS COLRP Rep B, I-95) (Reaffirmed: MSS Rep B, I-00) (Reaffirmed: MSS Rep E, I-05) (Reaffirmed: MSS GC Rep F, I-10)

#### **295.054MSS Commonwealth Puerto Rican as a Minority Group**

AMA-MSS will ask the AMA to recognize all Puerto Ricans, regardless of place of residence (Commonwealth or mainland), as an underrepresented minority when applying to mainland medical schools and convey this policy to the Association of American Medical Colleges and other bodies as appropriate. (MSS Rep C, I-94) (AMA Res 313, A-95, Referred for decision) (Reaffirmed: MSS Rep B, I-00) (Reaffirmed: MSS Rep E, I-05) (Reaffirmed: MSS GC Rep F, I-10)

#### **350.001MSS Minority and Disadvantaged Medical Student Recruitment and Retention Programs**

AMA-MSS will ask the AMA to encourage medical schools to continue and/or develop programs to expose economically disadvantaged students to the career of medicine; special summer programs to bring minority and economically disadvantaged students to medical schools for an intensive exposure to medicine; and conduct retention programs for minority and economically disadvantaged medical students who may need assistance. (AMA Res 35, I-79, Referred) (CME Rep T, I-79, Adopted) (Reaffirmed: MSS COLRP Rep B, I-95) (Reaffirmed: MSS Rep B, I-00) (Reaffirmed: MSS Rep E, I-05) (Reaffirmed: MSS GC Rep F, I-10)

#### **350.003MSS Minority Representation in the Medical Profession**

AMA-MSS will ask the AMA to: (1) support Affirmative Action in recruitment, retention, and graduation of minorities by all medical schools; and (2) urge private sources and federal and state governments to ensure sufficient funding to support increases in minority and economically disadvantaged student representation in medical schools. (AMA Res 85, I-81, Referred) (CME Rep C, A-82, Adopted in lieu of AMA Res 85, I-81) (Reaffirmed: MSS COLRP Rep B, I-95) (Reaffirmed: MSS Rep B, I-00) (Reaffirmed: MSS Rep E, I-05) (Reaffirmed: MSS GC Rep F, I-10)

#### **350.004MSS Funding for Affirmative Action Programs**

AMA-MSS will ask the AMA to: (1) support counseling and intervention designed to increase minority enrollment, retention, and graduation of medical students; and (2) support increased funding appropriations to DHHS Health Careers Opportunities Program. (AMA Res 92, I-83, Adopted [350.994]) (Reaffirmed: MSS COLRP Rep B, I-95) (Reaffirmed: MSS Rep B, I-00) (Reaffirmed: MSS Rep E, I-05) (Reaffirmed: MSS GC Rep F, I-10)

#### **350.005MSS The Disadvantaged Minority Health Improvement Act of 1989**

AMA-MSS will ask the AMA to continue its efforts to increase the proportion of underrepresented minorities and women in medical schools and medical school faculties. (AMA Sub Res 79, I-89, Adopted in lieu of AMA Res 167, I-89) (Reaffirmed: MSS Rep D, I-99)

#### **350.011MSS Continued Support for Diversity in Medical Education**

AMA-MSS publicly states and reaffirms and will ask the AMA to publicly state and reaffirm its stance on diversity in medical education and its strong opposition to the reduction of opportunities used to increase the number of minority and premedical students in training. (MSS Res 3, A-03) (AMA Res 325, A-03, Adopted [295.963]) (Reaffirmed: MSS Rep E, I-08)

#### **630.49MSS AMA Medical Student Section Vision Statement**

The AMA-MSS supports the following vision statement for the AMA-MSS: (1) The AMA-MSS core purpose is: the AMA-MSS is dedicated to representing medical students, improving medical education, developing leadership and promoting activism for the health of

America. (2) The AMA-MSS Envisioned Future is: The AMA-MSS strives to be the medical students' leading voice for improving medical education, advancing health care and advocating for the future of medicine. (3) The AMA-MSS Objectives are: (a) The leading medical student organization for advancing issues of public wellness, community service, ethics, and health policy; (b) The principal source for obtaining and disseminating information for medical students regarding medical education, residency training, and medical practice; (c) The most representative voice and influential advocate for medical students and their patients; and (d) A dynamic organization that provides value to its medical student members. The AMA-MSS Core Values are: (a) *Advocacy*: Caring advocates for our patients, our profession, and our medical student members. (b) *Leadership*: The stewards of the future of medicine. (c) *Excellence*: Commitment to provide the highest quality service, products, and information for our members. (d) *Integrity*: Ethical behavior forms the basis for trust in all our relationships and actions. (MSS COLRP Rep B, A-98) (Reaffirmed: MSS Rep E, I-03) (Reaffirmed: MSS Rep E, I-08)