REPORT 5 OF THE COUNCIL ON MEDICAL EDUCATION (June 2021)
Promising Practices Among Pathway Programs to Increase Diversity in Medicine
(Reference Committee C)

EXECUTIVE SUMMARY

In the early 1960s, cross-sectional efforts began to support increased diversification of the medical workforce through "pipeline programs" in response to a projected nationwide shortage of physicians. The shortage of physicians who are underrepresented in medicine (URM) was a consequence of structural factors that contributed to the marginalization of Black, Hispanic/Latinx, and Indigenous people, including exclusion from participation in medical education and careers in medicine. Legislative efforts such as Title VII programs were a means to improve the maldistribution of physicians and other health professionals and to improve the racial and ethnic diversity of the health care workforce. The two Title VII pipeline programs with the largest impact on enrollment of historically underrepresented groups in medicine are the Health Career Opportunity Program (HCOP) and the Centers of Excellence (COE). Over time, the term pipeline evolved to "pathway" to reflect the multiple paths to a career in medicine and to move away from the negative connotation associated with "pipeline." These pathway programs have provided opportunities to support the increase of racial, ethnic, gender, and socioeconomic diversity of the medical workforce. In addition to these public programs, there are numerous private pathway programs across the continuum of medical education to support diversity in medicine and access to care for the underserved.

Although there is limited evidence on the effectiveness of pathway programs, high quality studies suggest that interventions such as targeted recruitment and revised admissions policies; curriculum changes; summer enrichment programs; and comprehensive programs that integrate multiple interventions, such as financial, academic, and social support, can exert a meaningful, positive effect on student outcomes and increase diversity across various levels of educational settings.

The success of "pathway programs" has been hindered by anti-affirmative action initiatives; inconsistent funding for Title VII programs; disparities in the development of an adequate applicant pool for medical school admissions; disparities in the admissions, recruitment, and retention rates for historically underrepresented groups in medical education and medicine; and negative social integration into the campus, training, and work environment. Efforts to make the medical workforce more reflective of the nation's diversity will have to address multiple factors along the continuum of the education system and professional development. Additionally, it should be noted that oppressive structures, policies, and culture are perpetuated in various forms today and new pathway programs have emerged to expand gender equity among specific specialties such as radiology, orthopaedic surgery, and obstetrics/gynecology.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 5-JUN-21

Subject: Promising Practices Among Pathway Programs to Increase Diversity in Medicine

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Referred to: Reference Committee C

INTRODUCTION

AMA Policy D-200.985 (13), "Strategies for Enhancing Diversity in the Physician Workforce," asks that the AMA (a) support the publication of a white paper chronicling health care career pipeline programs (also known as pathway programs) across the nation aimed at increasing the number of programs and promoting leadership development of underrepresented minority health care professionals in medicine and the biomedical sciences, with a focus on assisting such programs by identifying best practices and tracking participant outcomes; and (b) work with various stakeholders, including medical and allied health professional societies, established biomedical science pipeline programs, and other appropriate entities, to establish best practices for the sustainability and success of health care career pipeline programs.

The Council on Medical Education offers this report to provide an overview of interventions used by "pathway programs" based on targeted milestones along the journey to becoming a physician; to identify institutional and structural factors that interfere with or create attrition on the journey; and to discuss recommendations to minimize interference/attrition on the journey to becoming a physician.

DEFINITION OF PIPELINE/PATHWAY PROGRAMS IN MEDICINE

Historically, the term "pipeline" in medical education has been used as a metaphor to describe the progression of individuals from one level of medical education to the next.[1] However, it should be noted that use of this term has been criticized as the model erroneously presents a series of invariant steps necessary to pursue a career in medicine. This rigid and reductionist approach can have an especially negative impact on women and underrepresented groups in their pursuit of medical careers.[2] More recently the adoption of the term "pathway" has gained favor as it symbolizes a more flexible and less restrictive course that individuals can take on their path to becoming physicians. For the purposes of this report, the term "pathway programs" will be used to describe the progression of individuals from one level of medical education to the next. The pathway therefore begins as early as prekindergarten and extends through college, medical school, graduate medical education (GME), and up to faculty development. Pathway programs are designed to assist individuals, particularly those who have been historically underrepresented in medicine (URM), to envision a career in medicine and successfully transition from any one stage of education to the next with the goal of bolstering care for historically marginalized and minoritized patients. Some of the ways that pathway programs support learners include providing supplemental academic enrichment programs, experiential learning in medical/clinical settings, research experience, career/college counseling, standardized exam preparation, and mentorship.

Given that health inequities are identified in all areas, URM individuals can be expected to enhance outcomes in any clinical discipline and deserve the opportunity for a rewarding career in medicine. The rationale for encouraging the creation of programs to enhance medical student diversity is that racial and ethnic diversity among health professionals has been shown to promote better access to health care, improve health care quality for underserved populations, and better meet the health care needs of an increasingly diverse population.[3] While it is a duty of all physicians to aid serving the underserved and support primary care, URM physicians have been found to be more likely to work in underserved areas and thereby increase access to health care for historically marginalized and minoritized patients. Additionally, diverse learners add value to medical education and research environments by broadening perspectives represented in discussions, thus influencing peers and improving the cultural competence of the entire physician workforce.[4,5]

HISTORY OF THE CREATION OF PATHWAY PROGRAMS IN THE UNITED STATES

For the first two-thirds of the twentieth century, U.S. medical schools were de facto segregated, since few medical schools would admit Black students. In 1900, Black students who aspired to have a career in medicine could only choose from 10 schools in the U.S.[6] Following the establishment of the Council on Medical Education in 1904, the Council adopted an "ideal standard" that medical schools ought to require preliminary education sufficient to enable the candidate to enter a recognized university; a five-year medical course; and a sixth year as an intern in the hospital. In 1906, the Council was tasked with rating medical schools and surveyed 160 schools regarding performance of graduates on state licensure examinations. The schools were graded as "acceptable," "doubtful," or "nonacceptable" based on a set of 10 defined qualifications. Only 82 schools receive an "acceptable" rating. The Council partnered with the Carnegie Foundation in 1909 to conduct a follow up study, entitled "Medical Education in the United States and Canada, a Report to the Carnegie Foundation for the Advancement of Teaching," which was known as the Flexner Report of 1910.

The Flexner Report of 1910, which shaped medical education in the subsequent century, alleged support of medical education at the historically Black colleges and universities to provide a physician workforce that would serve Black Americans, yet its recommendations resulted in the closure of 89 medical schools, including five of the remaining seven medical schools that trained Black physicians, due to these schools' inability to meet the standards set at the time.[7] The report also went beyond describing the substandard conditions at medical schools; it prescribed a limited role for Black physicians in their practices and hinted that Black physicians possessed less potential and ability than their white counterparts. Among his other findings, Flexner concluded that "educating the [Black] race to know and to practice fundamental hygienic principles" fell naturally to the Black doctor. Thus, "a well-taught negro sanitarian will be immensely useful." Flexner not only limited the role of African American physicians to caring for other African Americans but further restricted Black doctors to matters of public health.[8] While he viewed both Meharry Medical College and Howard University as being suitable for training Black physicians, he recommended divestment from the five underperforming institutions serving Black medical students and reallocation of those resources to Meharry Medical College in Nashville, Tennessee, and Howard University Medical Department in Washington, DC.

As recently as 1964, 93 percent of all medical students in the United States were men and 97 percent of those students were non-Hispanic white. Of the remaining three percent of medical students, all but a few were enrolled in Howard University and Meharry Medical College. At that time, less than 0.2 percent of all medical students were Mexican American, Puerto Rican, American Indian, or Alaska Native. Prevailing societal values and practices within the profession were reflected in restricted opportunities for URM medical school graduates to participate in

specialty training, medical society membership, hospital staff membership, and other professional activities.[7]

Beginning in the early 1960s, cross-sectional efforts began to support increased diversification of the medical workforce. In 1963, Congress passed the Health Professions Educational Assistance Act (P.L. 88-129, amending the Public Health Service Act or PHSA) in response to a projected nationwide shortage of physicians. The act was the first comprehensive legislation to address the supply of health care providers and initially authorized grants for the construction of new teaching facilities and loans to support students in the study of medicine, dentistry, and osteopathic medicine. The emphasis of Title VII programs shifted through several reauthorizations in the 1970s and 1980s. Title VII programs were seen as a means to improve the maldistribution of physicians and other health professionals. Programs were authorized to increase the numbers of health professionals in underserved (mostly rural or inner-city) areas and to improve the racial and ethnic diversity of the health workforce by increasing the numbers of those who had been historically excluded from careers in medicine. In addition, programs were developed to counter the nationwide trend of medical specialization. The major objective of these programs was to increase support for training and curriculum development in primary care.[9] Title VII programs are administered by the Bureau of Health Professions at the Health Resources and Services Administration (HRSA) in the Department of Health and Human Services (HHS).

The adoption of pathway programs by the Association of American Medical Colleges (AAMC) as a strategic way to increase the number of URM physicians also emerged from the civil rights activism of the 1960s. Nickens et al. explain that "actions to promote diversity in medical schools reflected the heightened sensitivity to racial injustice spurred by the civil rights movement."[10] In 1964, only 2.2 percent of the total 32,000 medical students enrolled nationwide were Black, and the two historically Black colleges and universities (HBCUs) enrolled 76 percent of these students. On average all other medical schools enrolled a single Black student every two years.[8] At the 1968 AAMC annual meeting, medical students, faculty, and administrators asked for the creation of a task force and strategies to increase enrollment among URM students. The underrepresentation of these groups was found to be so great that the task force placed highest priority on increasing the number of URM medical students from 2.8 percent to 12 percent within five years.[9] The other recommendations centered around retention of students on the medical career pathway, providing financial assistance, and recruitment of students into the medical pathway.[9] At the same time, there was widespread implementation of new "academic-enrichment programs" for premedical and post-baccalaureate students.[8] These enrichment programs as well as a rise in Black college student enrollment and the use of affirmative action in medical school admission led to a rapid increase in medical student enrollment among URM students from 3 percent in 1968 to 10 percent by 1974.[11] Data on the enrollment of non-Black minoritized individuals was not collected until 1971.

Although these programs remained in place from 1974-1990, the general population rate of minoritized communities increased faster than medical school enrollment among those who had been historically excluded from medicine, so there was greater underrepresentation of these groups in medical schools in 1990 than in 1975. By 1990, the general minoritized population was 20 percent while URM medical students represented 9 percent of all medical students. In 1990, the AAMC launched the *3000 by 2000* initiative, which aimed to enroll 3000 URM medical students annually by the year 2000. As part of this initiative, the AAMC adopted the "pipeline" metaphor that had been previously used in the science and engineering fields.[10] The first major aspect of this initiative encouraged medical schools to partner with local magnet high schools to provide minoritized students early exposure to the health professions and to academically prepare students to undertake rigorous pre-medical or pre-health professional coursework in college. The second aspect of the initiative included forming more articulated agreements between undergraduate

institutions and medicals schools to encourage the enrollment and advancement of URM students into and through medical school. Last, the initiative encouraged science-education partnerships between academic health education centers (AHECs) and local primary school systems wherein AHEC faculty helped design scientific curricula that encouraged critical thinking and problem solving rather than simple memorization in the public school system. Although the *3000 by 2000* initiative did not achieve its enrollment goal, partially due to national resistance against affirmative action at the time, it paved the way for widespread pathway partnerships between medical schools, undergraduate institutions, and primary schools, many of which remain to this day.[10]

In 2009, the Liaison Committee on Medical Education (LCME), which accredits medical education school programs in the United States and Canada, revised its diversity standards to require that all U.S. allopathic medical schools engage in systemic efforts to attract and retain students from diverse backgrounds. The diversity standards were defined by the medical schools and the standards did not set numerical goals, but sought to ensure that all medical schools had a "mission-appropriate" diversity policy.[12] Evaluation of these medical school programs, some of which are pathway programs, has demonstrated modest enrollment increases in the proportions of URM medical students.[4] According to data collected for the 2019-2020 academic year, 149 (97 percent) of LCME-accredited medical schools have or support at least one pathway program to prepare participants (from the school's diversity categories) for potential admission to medical school. Table 1 summarizes the types of "pipeline programs" in U.S. MD-granting medical schools.

Table 1 Types of Pipelines Programs in U.S. MD-Granting Medical Schools, 2019-2020

Type of Pipeline Program[a]	No. (%) of Medical Schools[b]
Pre-college-level only	6 (4.0)
College-level only	13 (8.7)
Postbaccalaureate only	1 (0.7)
Pre-college and college-levels	59 (39.6)
Pre-college, college, and postbaccalaureate levels	54 (36.2)
College and postbaccalaureate levels	12 (8.1)
Pre-college and postbaccalaureate levels	4 (2.7)

Source: LCME, 2020

[a]Pre-college level includes programs at the middle school and/or high school levels
College level includes programs at the college/university level and/or BA/MD programs/guaranteed medical school admission programs
Postbaccalaureate programs include programs for college graduates to complete additional course requirements or other pre-medical requirements

[b]149 medical schools reported having one or more pipeline programs: middle school (69 schools), high school (122 schools), college/university (123 schools), BA/MD or guaranteed admission programs (49 schools), postbaccalaureate programs (71 schools)

Table 2 summarizes the number of new medical students matriculating into a U.S. MD- or DO-granting medical school who came from at least one of a school's supported pathway programs.

Table 2 New Medical Students Who Came from a Pathway Program in 2019-2020

Type of Program	# Matriculating to Respondent's Medical School	# Matriculating to Another U.S. MD/DO Granting Medical School
Middle school program only	7	0
High school program only	158	55
College program only	872	580
BA/MD/guaranteed-admission program only	921	47
Postbaccalaureate program only	907	637
More than one type of the school's pipeline program	210	39

Source: LCME, 2020

However, although absolute numbers of Black and Hispanic/Latinx matriculants have increased since 2009, representation of these groups in medicine as a proportion of the general population has not increased.[5] Additionally, Lett et al. found "no statistically significant trend towards increased representation of Black and Hispanic/Latinx male individuals and a modest trend towards increased representation for Hispanic/Latinx female applicants." In fact, they found "that Hispanic/Latinx individuals are underrepresented among medical school applicants and matriculants by nearly 70% relative to the age-adjusted U.S. population; Black male applicants and matriculants, nearly 60%; Black female applicants, nearly 30%; and Black female matriculants, nearly 40%." Additionally, Lett et al demonstrated that the representation of minoritized faculty relative to the general population has actually decreased in almost all specialties and across all faculty rankings since 2009.[13]

EVOLUTION FROM "PIPELINE" TO "PATHWAY" PROGRAM

It is important to consider the implications of using specific terminology about programs focused on increasing diversity in medicine. The term "pathway program" is gaining favor as it suggests a more open and flexible path to becoming a physician; the term "pipeline program," however, is still prevalent both in the literature and in everyday conversations. Some believe the metaphor of the "pipeline" is misleading and inaccurate. The pipeline metaphor suggests there is a single path to becoming a doctor with a single entry and exit point.[14] Many URM medical students follow a non-traditional path to medical school, such as participating in post-baccalaureate programs to strengthen their academic profile, so the idea of a rigid pipeline that requires early access and success in science and medicine may be particularly discouraging to minoritized students.[13] Giordani et al. demonstrated that non-traditional students with lower Medical College Admission Test (MCAT) scores and undergraduate GPAs who pursue post-baccalaureate programs are just as likely as their traditional peers to succeed once they enter medical school.[15] Another reason some criticize the term "pipeline" is its allusion to the "school-to-prison pipeline," a phenomenon known to disproportionately impact minoritized youth.[16] While the criminalization of minoritized children in schools is a worthwhile concern to address in pathway programs—minoritized students cannot be guided toward academic success when trapped in a "pipeline" of isolation, punishment, aggressive school policing, and inadequate academic preparation due to lack of resources—echoing the same terminology for a program promoting equity is inappropriate. Additionally, the word "pipeline" has negative connotations in Native American communities that are a prioritized group for recruitment. "Pipelines" within Indigenous communities are often literal, calling to mind current struggles with oil industries against environmental degradation, threats to communities' health and safety, and continued colonization. Alternatively, the term "pathway" implies learners' agency and offers more than a single path to medicine, which can include non-traditional students,

individuals who change careers later in life, and those who did not have early exposure to medicine.[13]

CURRENT FEDERAL PATHWAY PROGRAMS

The Title VII health professions and Title VIII nursing workforce development programs, which are authorized under the Public Health Service Act and administered by the HRSA, increase the supply, distribution, and diversity of the health care workforce, reaching over 400,000 participants.[17] These programs improve access to, and quality of care for, vulnerable populations, including children and families living on low incomes and in rural and underserved communities. In addition, as ever-changing public health threats such as the COVID-19 pandemic and substance use disorder epidemics, impact patients across the country, continued investment in Title VII programs is essential to addressing the health challenges of today and the future.

Title VII programs play an essential role in improving the diversity of the health care workforce and connecting students to health careers by supporting recruitment, education, training, and mentorship opportunities. Inclusive and diverse education and training experiences expose physicians and other health care professionals to backgrounds and perspectives other than their own and heighten cultural awareness in health care, resulting in benefits for all patients. The Title VII programs include:

- *Centers of Excellence*: Provides grants for mentorship and training programs. In academic year 2018-19, this program supported over 1,300 trainees, of whom 99% were underrepresented minorities and 64% were from financially or educationally disadvantaged backgrounds.

- *Health Career Opportunity Program*: Invests in K-16 health outreach and education programs through partnerships between health professions, schools, and local community-based organizations. In academic year 2018-19, over 4,000 students from rural and disadvantaged backgrounds were exposed to the health professions pathway.

- *Primary Care Training and Enhancement (PCTE*): Supports training programs for physicians and physician assistants to encourage practice in primary care, promote leadership in health care transformation, and enhance teaching in community-based settings. In academic year 2018-19, PCTE grantees trained over 13,000 individuals at nearly 1,000 sites, with 61% in medically underserved communities and 30% in rural areas.

- *Medical Student Education:* Supports the primary care workforce by expanding training for medical students to become primary care clinicians, targeting institutions of higher education in states with the highest primary care workforce shortages. The grants develop partnerships between institutions, federally recognized tribes, and community-based organizations to train medical students to provide care that improves health outcomes for those living on tribal reservations or in rural and underserved communities.

- *Area Health Education Centers (AHECs)*: Responds to local health needs and serves as a crucial link between academic training programs and community-based outreach programs. In academic year 2018-19, AHECs supported 192,000 pathway program participants, provided over 34,000 clinical training rotations for health professions trainees, and placed over 92,000 trainees in rural and underserved training sites.

- *Mental and Behavioral Health*: Funds training programs to expand access to mental and behavioral health services for vulnerable and underserved populations. In academic year 2018-19, the Graduate Psychology Education program partnered with 184 sites to provide clinical training experiences for psychology students. Of these sites, 48% offered substance use disorder treatment services, and 38% offered telehealth services.

HRSA also administers the Minority Faculty Fellowships Program, with the goal of increasing the number of minoritized faculty at awardee institutions. The program awards 50 percent of faculty salary, with the institution matching funds. Fellows are prepared to assume tenured faculty positions at the institution and to provide services in underserved areas.[8]

Additionally, and as previously reported in Council on Medical Education Report 5-A-18, "Study of Declining Native American Medical Student Enrollment," the Indian Health Service (IHS) supports American Indian/Alaska Native (AI/AN) entry into the health professions and provides opportunities to explore career paths in AI/AN health care. The IHS Scholarship program has awarded more than 7,000 health professions scholarships since 1978. The IHS website provides links to allow potential students to arrange IHS externships (with salary) and to coordinate AI/AN clerkship opportunities for medical students. In addition, post-graduation financial support is available through the IHS, with a loan repayment program of $20,000 per year of commitment (maximum $40,000) for health professions education loans, as well as a supplemental loan repayment program. The IHS also participates in the National Health Service Corps loan repayment program, with awards up to $50,000 for a two-year commitment.[18]

CURRENT UNDERGRADUATE PATHWAY PROGRAMS

The CUNY School of Medicine (formerly Sophie Davis Biomedical Education Program), located in Harlem, recruits and educates a diverse, talented pool of students to its MD and physician assistant programs, expanding access to medical education to URM individuals from underserved communities of limited financial resources. The BS/MD degree program admits students directly from high school into an undergraduate biomedical program with a seamless transition into the medical school curriculum based on a seven-year curriculum. The program has graduated over 2,000 alumni who have become physicians, many of whom practice in underserved communities.

The Summer Health Professions Education Program (SHPEP) was initially established following a study by the Robert Wood Johnson Foundation (RWJF) in 1984 to identify strategies to reverse trends dating back to 1977 of declining URM medical school applicants. The program was originally known as the Minority Medical Education Program (MMEP), which was intended to increase the acceptance rates among medical school applicants who were African Americans, Mexican Americans, mainland Puerto Ricans, and AI/AN, as these groups have historically been underrepresented in medicine due to structural racism. Over the years, MMEP's intensive academic preparation program expanded to 11 medical school campuses and the AAMC assumed the role of National Program Office in 1993. The program changed its name in 2003 to the Summer Medical Education Program (SMEP) to reflect the inclusion of students representing a range of economic, cultural, and geographic diversity. The program continued to evolve in 2006 when it expanded to include dentistry and was renamed the Summer Medical and Dental Education Program (SMDEP). SMDEP focused on students in the first two years of their college education because the experience of previous programs indicated that this is when students derive the most benefit. Most recently, the program expanded again in 2016 to include a range of health professions due to the growing importance of team-based care and interprofessional collaboration, leading to the most recent change in the program name, to SHPEP.[19] As of 2020, the program has served 27,164 participants at 12 universities across the U.S.

Doctors Back to School (DBTS) was launched by the AMA Minority Affairs Consortium (now called the Minority Affairs Section) in 2002. The DBTS program encourages Black, Indigenous, and Hispanic/Latinx students to enter the health care pathway through conversations with these children in a classroom setting. DBTS has developed a Doctors Back to School™ Kit to support physicians and medical students who act as role models by visiting elementary and high schools to talk with marginalized students about careers in medicine. The program demonstrates to marginalized students that a medical career is well within their reach. In 2016, the program declared the second Wednesday in May as National Doctors Back to School™ Day.

The American Academy of Ophthalmology and the Association of University Professors of Ophthalmology partnered to provide first- and second-year URM medical students one-on-one mentorship, valuable guidance in medical career planning, networking opportunities, and access to a variety of educational resources through their Minority Ophthalmology Mentoring (MOM) program. The MOM Class of 2020 provided opportunities for 50 students. Additionally, the National Medical Association developed the Rabb-Venable Excellence in Ophthalmology Research Program to help increase exposure to ophthalmology as a potential specialty choice among URM students and residents/fellows.

In addition to these national programs, there are numerous programs in the U.S. to boost diversity across the medical continuum. Mentoring in Medicine (MIM) prepares marginalized students in 3rd grade to become biomedical professionals by enabling them to interact with, and learn from, experienced health care professionals and scientists from health professional schools around the U.S. MIM offers an array of age-appropriate programs that involve reaching out to students on a regular basis, creating supportive social circles, providing academic enrichment, exposing students to hospital and research environments, coaching them on leadership and life skills, and providing prospective medical students with exposure to a supportive, but rigorous boot camp. Tour for Diversity (T4D) educates, inspires, and cultivates the future generation of URM physicians, dentists, and pharmacists by conducting national tours in February and September to provide comprehensive workshops to high school and college students that focus on motivating them toward a strong career path, building critical skills, optimizing the application process, and developing mentoring relationships. T4D also provides students with virtual opportunities via hosted webinars that are both interactive and recorded. Building the Next Generation of Academic Physicians (BNGAP) was established in 2008 to address the lack of URM individuals serving as faculty at academic health centers and works to promote diversity and inclusion in the academic medicine workforce.

There are also programs that focus on the development of the health care workforce to increase access to care for underserved people such as those in rural communities. Successfully Training and Educating Pre-medical Students (STEPS) aims to increase the number of primary care physicians in northeast Kentucky by providing opportunities such as physician shadowing, mock interviews, and MCAT practice exams for pre-medical students in the Appalachian region. Frontier Area Rural Mental Health Camp and Mentorship Program (FARM CAMP) strives to reduce the shortage of behavioral health professionals in rural Nebraska. FARM CAMP offers a week-long camp to teach high school students in rural and tribal communities about different career options in behavioral health and provides mentorship after the camp ends. Frontier and Rural Workforce Development New Mexico (FORWARD NM) Pathways to Health Careers was established to address the chronic shortages of primary care physicians and other health care professionals in New Mexico's southwestern counties of Hidalgo, Catron, Luna, and Grant; additionally, New Mexico has the oldest physician population in the country. This comprehensive workforce pathway program includes programming for middle and high school students, undergraduate and graduate students, primary care program students, and medical and dental residents.[20]

Additionally, in 2010, Columbia University College of Physicians and Surgeons and Bassett Medical Center joined forces to launch a new model of medical training to address the severe shortage of rural physicians and train a new generation of doctors capable of leading health systems that promote both quality of practice and cost-effective delivery of care. Students begin their training for 18 months in Manhattan and then head to Cooperstown, N.Y., for two and a half years to obtain clinical training. Students experience both an urban health care setting and a rural health care environment, while being exposed to features not typically part of the medical school curriculum, such as finance, risk management, patient safety, quality improvement, and medical informatics. In addition, every Columbia-Bassett student receives grant funding at a minimum of $30,000 per year for all four years.

To help highlight the needs of the Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) community, in 2020 the American Medical Association Foundation (AMAF) established its LGBTQ Fellowship Program to influence the future of LGBTQ health. The new initiative will create a cadre of LGBTQ health specialists through a national fellowship program to promote best practices and shared outcomes, while improving the quality of LGBTQ health care across the nation. The program was created to address the intersectional issues of discrimination, stigma, and limited access to and lower quality of care experienced by lesbian, gay, bisexual, and transgender individuals. A primary goal of the program is to create a pathway for LGBTQ health specialists who are able to serve the health care needs of the LGBTQ community while growing the pool of competent instructors able to “pay it forward” by passing on their knowledge to the next generation of LGBTQ physicians.

CURRENT GRADUATE MEDICAL EDUCATION PATHWAY PROGRAMS

There are also initiatives to increase diversity in competitive specialties such as orthopaedic surgery and radiology, as well as expand gender equity in the specialties of family medicine and obstetrics and gynecology. Nth Dimensions was founded in 2004 by orthopaedic surgeons working collaboratively with academic institutions, community surgeons, and industry to address the dearth of women and other URM groups in orthopaedic surgery. Nth Dimensions offers an eight-week clinical and research internship with a practicing researcher, which also includes a full-day orientation and culminates in the student presenting a research poster at the annual National Medical Association assembly. Following successful completion of the summer internship program, students receive scholarships to participate in a designated Step 1 board review course, which is conducted throughout their second year in medical school. Nth Dimension also offers clinical correlations lectures and hands-on workshops to increase awareness of the specialty being addressed through surgeon-led lectures and hands-on workshops with target groups of URM groups and women. The American College of Radiology established the Pipeline Initiative for the Enrichment of Radiology (PIER) internship program for first-year medical students at institutions across the U.S. in hopes of giving women and other URM groups an opportunity to explore the radiology specialty and engage in research. The internship begins in June and culminates with presentation of the students’ research to the radiology section of the National Medical Association. Additionally, the AMA Reimagining Residency initiative is currently sponsoring two innovative pathway programs. California Oregon Medical Partnership to Address Disparities in Rural Education and Health (COMPADRE) is a collaboration between Oregon Health & Science University and University of California, Davis, 10 health care systems, 10 institutional sponsors, and a network of federally qualified health centers that aims to jointly address workforce shortages in rural, tribal, urban, and other disadvantaged communities between Sacramento and Portland. The University of North Carolina has developed Fully Integrated Readiness for Service Training (FIRST): Enhancing the Continuum from Medical School to Residency to Practice, which expands the geographic and specialty reach of the University of North Carolina School of Medicine’s

established residency readiness program. Its additional aims include developing and implementing a generalizable health systems science curriculum for GME and competency-based assessment tools that span the educational continuum.

INSTITUTIONAL AND STRUCTURAL FACTORS THAT INTERFERE WITH PATHWAY PROGRAM SUCCESS

Although many students who indicate an early interest in medicine do not progress from one phase to the next, the attrition rate of URM medical students is even higher than those of their non-minoritized counterparts.[1,21] This disproportionate attrition rate is multifactorial and occurs in all phases of the pathway. Some factors that disproportionally affect URM students include attending lower performing high schools and colleges, financial barriers to higher education, lower levels of academic attainment among parents of minoritized students (which has been found to link to a child's outcomes such as academic achievement), and experiences of racism and implicit bias that deter students from continuing with their trajectory.[4,10] A 2019 study published in *JAMA* found that while the U.S. population of male and female 24- to 30-year-olds, who are Black, Hispanic/Latinx, and Native Hawaiian or Pacific Islander (NHOPI) increased between 2002 and 2017, there were no significant increases in medical school applicants and attendees from these groups over the same period. The study also found that from 2002 to 2012, the proportion of Black, Hispanic/Latinx, NHOPI, and AI/AN medical school matriculants remained relatively unchanged and Black, Hispanic/Latinx, and AI/AN students remain underrepresented among medical school matriculants compared with the U.S. population.[5] Another study the same year found that as medical school enrollment doubled over the past two decades, the percentage of entering underrepresented students actually fell by 16%.[22] There are several possible factors that may explain why these groups are still underrepresented in medicine.

While affirmative action efforts helped initially increase enrollment among URM medical students, these initiatives have been met with resistance. In 1974, a reverse discrimination lawsuit brought by Allan Bakke against the University of California (UC) transformed how colleges think about race and equality in admissions. Bakke was a white man who had twice been denied admission to the medical school at UC Davis during the time when positions in the entering class were "reserved" for qualified minoritized students. The case was ultimately heard by the U.S. Supreme Court. Justice Lewis Powell, in the deciding opinion in the case, wrote "the State has a substantial interest that legitimately may be served by a properly devised admissions program involving the competitive consideration of race and ethnic origin" and concluded that "you could use race as a factor in admissions, but that you could not use quotas" (Powell L. 1978. Bakke*,* 438 US at 312–13 n.48). The Court's decision in *Regents of the University of California v. Bakke* changed the definition of the Equal Protection Clause and inadvertently changed how colleges approached recruiting and enrolling URM in medicine. According to law professor Kevin Brown at Indiana University, the Equal Protection Clause is a short but critical line in the Fourteenth Amendment that states that Americans in similar circumstances should be treated equally under the law. This clause historically aimed to help "discrete and insular minoritized groups."[23] The decision upended that view. Bakke was admitted to medical school at UC Davis and the school transitioned to a panel of markers that they term "distance traveled," which is not race-based but serves to support marginalized people based on non-race indicators of socioeconomic disadvantage. However, the Court's decision affirmed the use of race as one among many factors that could be considered as part of the medical school admissions process.[10] The Court's decision provided the window to weaken the practice of race-based affirmative action and as a result enrollment among minoritized groups stagnated.

There were additional anti-affirmative action initiatives to follow that negatively impacted efforts to increase diversity in medicine. Most notable was *Hopwood v. University of Texas* in 1996, in which the United States Court of Appeals for the Fifth Circuit held that "any consideration of race or ethnicity by the law school for the purpose of achieving a diverse student body is not a compelling interest under the Fourteenth Amendment."[24] This decision prohibited public universities under its jurisdiction (in Texas, Mississippi, and Louisiana) from taking race into account in their admissions policies. The same year, Proposition 209 was passed in California with nearly 55 percent of the vote, banning consideration of race and gender in admissions in the state's public universities. In 2008, the University of California (UC) "clarified" their policy in recognition that Native Americans enrolled in a federally recognized tribe enjoy a political status that enables them to be offered affirmative action, even when the consideration of race or ethnicity is banned. This policy shift led to a statistically significant surge in the Native American applicant share, acceptance rate, admit share, and enrollment share. Enrollment share increased by 56% from 2008 to 2010 at the UC.[25] In November 2020, nearly 25 years later, voters in California had the opportunity to repeal Proposition 209 through the work of Assemblywoman Shirley Weber (D-San Diego), chairwoman of the Legislative Black Caucus and principal author of the proposed constitutional amendment.[26] This effort was unsuccessful, and the amendment was not approved by voters. Presently, Arizona, Georgia, Michigan, Nebraska, New Hampshire, Oklahoma, and Idaho have banned affirmative action. A study of 19 public universities in six of these states (Arizona, Georgia, Michigan, Nebraska, New Hampshire, and Oklahoma) found that the elimination of affirmative action has led to persistent declines in the share of URM medical students among students admitted to and enrolling in flagship public universities in these states.[27]

In June 2003, the US Supreme Court ruled on two separate but parallel admissions cases, *Grutter v. Bollinger* and *Gratz v. Bollinger*, involving the University of Michigan and the constitutionality of using race-conscious decisions as part of its admissions process. Although neither case directly involved the medical school or other health profession admissions, the Court's ruling was widely recognized as one that would have profound bearing on the future of affirmative action in public higher education nationwide. With these rulings, the Supreme Court recognized the value of diversity in higher education and preserved the ability to consider race as a factor in admissions decisions.[10]

Aside from the impact of court rulings on affirmative action, support for Title VII programs has been inconsistent over the last decade. In 2005, the Office of Management and Budget (OMB) published its review of the health professions training programs under Title VII. After years of effective ratings for Title VII programs, the OMB concluded that these programs were ineffective. As a result, the HRSA administrator, Elizabeth Duke, informed COE and HCOP grantees that the administration would no longer support their programs, and in 2006, the federal government cut its funding abruptly and drastically reduced the number of Centers of Excellence and Health Careers Opportunity Programs. In February 2006, the Government Accountability Office (GAO) issued a report entitled *Health Professions Education Programs: Action Still Needed To Measure Impact,* which reviewed HRSA's evaluation of the Title VII and VIII (nursing) programs against its overall performance goals and found that these goals did not apply to all of the health professions programs and that HRSA's tracking data was problematic.[28] HRSA was criticized for failing to publish national supply, demand, and distribution projections for the physician and dentist workforces.

In July 2020, the House Appropriations Committee released their Committee Report accompanying the Labor-HHS-Education FY 2021 allocations, which would provide Title VII Health Professions and Title VIII Nursing Workforce Development Programs with a total of $782.5 million, a $48 million increase (6.5%) from FY 2020 enacted levels.[29] In December 2020, the Consolidated

Appropriations Act of 2021 passed which includes $50,000,000 for grants to public institutions of higher education to expand or support graduate education for physicians provided by such institutions. Priority will be given to public institutions located in states with a projected primary care physician shortage in 2025 and are limited to public institutions in states in the top quintile of states with a projected primary care physician shortage in 2025.[30]

Historically, disparities in medical school admissions have encompassed more than racial and ethnic gaps. One root cause for this disparity is a lack of resources to support the development of education necessary to be an adequate applicant for medical school admission. While overall educational attainment is increasing, college completion rates and attainment patterns differ considerably across demographic groups. Household income and education levels are tightly linked. Consequently, lower levels of education are correlated with lower household income as well.[31] This has direct implications for the economic diversity of applicants to medical school. According to a 2018 study conducted by AAMC, roughly three quarters of medical school matriculants come from the top two household-income quintiles, and this distribution has not changed in three decades. Black and Hispanic/Latinx medical students are three times as likely as their white counterparts to come from families with combined parental incomes of less than $50,000. Black and Hispanic/Latinx students are also much more likely than white students to have attended high poverty primary and secondary schools which strongly affects educational achievement and often leaves these individuals less competitive on traditional academic measures such as MCAT scores and grade-point averages.

The lower admission rate for URM groups is another challenge to diversification of the medical workforce due to bias. Community college attendance is often viewed negatively by medical schools in the admissions process, despite being a critical educational pathway for many URM students.[31] To counter this bias, there is a growing trend of holistic review as an admissions strategy to assess an applicant's unique experiences alongside traditional measures of academic achievement such as grades and test scores. It is designed to help admission committees consider a broad range of factors reflecting the applicant's academic readiness, contribution to the incoming class, and potential for success, both in school and later as a professional. Holistic review, when used in combination with a variety of other mission-based practices, constitutes a "holistic admission" process. A key element is that this review concomitantly reduces historical singular focus on metrics that are flawed from the perspective of equity for URM medical students, specifically standardized testing and GPA or the "caliber" of college attended. A holistic admission process is necessary at the collegiate level to increase the pool for subsequent undergraduate medical education, GME, and faculty recruitments. In 2003, the U.S. Supreme Court officially described the strategy as a "highly individualized, holistic review of each applicant's file, giving serious consideration to all the ways an applicant might contribute to a diverse educational environment" (*Grutter v. Bollinger*, 539 US 306, 2003). The AAMC has promoted holistic review in the admissions process to broadly assess how a candidate might contribute value as a medical student and physician. Although practices vary widely, a national survey of health professional schools showed that institutions incorporating "many elements of holistic review" reported increases in class diversity as compared with institutions incorporating few or no elements.[32]

Diversity in the ranks of faculty and administration of medical schools is central to creating a welcoming environment for all students.[31] However, a study to evaluate trends in racial, ethnic, and gender representation at U.S. medical schools across 16 specialties from 1990–2016 found that the gap between the URM population in the academic physician workforce widened over time for nearly all specialties and faculty rankings.[33] This is problematic, as URM faculty often serve as important role models and mentors for URM medical students and trainees who may struggle with systemic racism in their schools and training environments.[34] URM faculty can also promote

academic excellence and enhance training across all domains to improve outcomes for all students related to cultural humility, humanism, empathy, and professionalism. "Most institutions recognize the value of multi-cultural outreach and engagement, but often fail in reconciling the associated implications for organizational decision-making. In other words, institutional leaders recognize the benefits of recruiting URM groups into medicine and gaining ideas from diverse sources but lack the understanding or will to ensure that they are integrated into an environment of respect, inclusion and meaningful engagement."[34]

Lastly, negative social integration into the campus environment impacts retention among minoritized and marginalized groups. Tinto's theory of student departure claims that a student's individual characteristics (including personal attributes, family background, and high school experiences) directly influence the student's commitments to an institution, the goal of graduation, and, ultimately, the departure decision.[35] Braxton et al. revised the model in 2004 by placing social integration as the pivotal factor in retention and claiming that student characteristics (e.g., gender, race/ethnicity, socioeconomic status, academic ability, high school preparation, and self-efficacy) shape initial commitments to attaining a degree and to the institution.[36] Significant factors for minoritized and marginalized student retention include racial climate, presence of an ethnic community, community orientation, campus involvement, acclimation to the academic culture, social connectedness, and the role of religion.[37] These factors may be interconnected as having the presence of a similar ethnic community may increase a student's feelings of support in the event of a racially insensitive incident. Some recent examples of these type of incidents include white students posting photographs of themselves in blackface and disseminating the photos via social media, along with graffiti with swastikas and other "hateful language" in dormitories and on campus buildings; however, incidents do not have to be blatant to be harmful.[38] Microaggressions which are brief yet common verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults toward people of color can also negatively impact one's experience in the classroom, training environment and workplace. URM groups have reported commonly experiencing microaggressions in school and in the workplace. These experiences of microaggressions have been associated with harmful psychological outcomes including anxiety and depression. Moreover, because microaggressions seem benign, they are rarely reported in the workplace.[39] The absence of a supportive affinity community may lead a student to experience an estrangement process, which begins with feelings of alienation that evolve into disillusionment and emotional rejection, and end with the student physically rejecting the campus environment and withdrawing from the institution.[40]

ADDITIONAL CONSIDERATIONS FOR PATHWAY PROGRAMS

As the focus of this report is on existing promising practices to promote a diverse medical workforce, the Council would like to address the importance of gender equity across medical specialties. Table 3 highlights the gender imbalances among the medical specialties according to the 2018 National GME Census, which is compiled by the AMA and the AAMC. It is worth noting the lack of data on physicians who identify as non-binary when evaluating the balances in the specialties.

Table 3 Top Medical Specialties by Gender, 2018-2019

Female-dominated specialties		Male-dominated specialties	
Obstetrics and gynecology	83.4%	Orthopaedic surgery	84.6%
Allergy and immunology	73.5%.	Neurological surgery	82.5%
Pediatrics	72.1%	Interventional radiology (integrated)	80.8%
Medical genetics and genomics	66.7%	Thoracic surgery	78.2%
Hospice and palliative medicine	66.3%	Pain medicine	75.3%
Dermatology	60.8%	Radiology	73.2%

Source: 2018 National GME Census

While efforts are underway to increase diverse representation in orthopaedic surgery and radiology, recent attention has also been given to the dramatic decline of men in obstetrics/gynecology. In an effort to identify how to recruit more male students into the field of obstetrics/gynecology, a study was conducted to identify when students make their decisions on career choice and found that >70% of obstetrics/gynecology residents decided to pursue the specialty during or after their third-year clerkship.[41] Another study found that 78% of male students believed their gender adversely affected their obstetrics/gynecology clerkship experience.[42] The authors recommended the following efforts to increase representation of men in obstetrics/gynecology: improving the quality of the obstetrics/gynecology clerkship experience, engaging students early in their medical school careers, and frankly addressing gender and lifestyle issues that dissuade students from choosing obstetrics/gynecology.

RELEVANT AMA POLICY

Our AMA has a number of existing policies and directives that are relevant to the topic of pathway programs; these are shown in the appendix.

SUMMARY AND RECOMMENDATIONS

There is limited evidence on the effectiveness of pathway programs and more rigorous evaluation is needed. That said, the following promising practices to increase diversity across the various educational settings are supported in the literature: targeted recruitment; revised admissions policies; summer enrichment programs; and comprehensive programs that integrate multiple interventions such as financial, academic, and social support.[43] Snyder et al. found that "high quality studies suggest that pipeline program interventions can exert a meaningful, positive effect on student outcomes."[44] The limited evidence available provides reason to be optimistic that these programs are beneficial. For example, a study of three HCOP projects in Kentucky, Tennessee, and Virginia during the years 1990-1999 found that students who participated in HCOP programs were likely to enroll in college (93 percent), major in a health profession program (77 percent), and graduate (58 percent). A total of 87 percent of those who graduated from college were enrolled in a health professions program.[45] Efforts to increase diversity in medicine are needed across multiple levels. Where legally possible, institutions should utilize affirmative action policies to bolster efforts to increase diversity in medicine. University leaders committed to diversity should select deans of their medical programs with a record of active support in this area. Medical programs, through their leaders, at the school and department levels, should support continuing pathway efforts by making statements of support, by cultivating and funding programs that support a culture of diversity on campus, and by recruiting faculty and staff who share this goal. Policymakers at the state level must work to alleviate pre-K-12 educational disparities and improve the college readiness of URM students. Additionally, the efforts to increase gender equity across medical specialties should be encouraged as diverse learners add value to medical education and research

environments by broadening perspectives represented in discussions, thus influencing peers and improving the cultural competence of the entire physician workforce.

The Council on Medical Education therefore recommends the following recommendations be adopted and the remainder of this report be filed:

1. That our AMA recognize some people have been historically underrepresented, excluded from, and marginalized in medical education and medicine because of their race, ethnicity, sexual orientation, and gender identity due to structural racism and other systems of oppression. (New HOD Policy)

2. That our AMA commit to promoting truth and reconciliation in medical education as it relates to improving equity. (New HOD Policy)

3. That our AMA recognize the harm caused by the Flexner Report to historically Black medical schools, the diversity of the physician workforce, and the outcomes of minoritized and marginalized patient populations. (New HOD Policy)

4. That our AMA work with appropriate stakeholders to commission and enact the recommendations of a forward-looking, cross-continuum, external study of 21st century medical education focused on reimagining the future of health equity and racial justice in medical education, improving the diversity of the health workforce, and ameliorating inequitable outcomes among minoritized and marginalized patient populations. (New HOD Policy)

5. That our AMA amend Policy H-200.951, Strategies for Enhancing Diversity in the Physician Workforce by addition and deletion to read as follows: (4) encourages medical schools, health care institutions, managed care and other appropriate groups to adopt and utilize activities that bolster efforts to include and support historically underrepresented groups in medicine, by developing policies that articulate~~ing~~ the value and importance of diversity as a goal that benefits all participants, cultivating and funding programs that nurture a culture of diversity on campus, and recruiting faculty and staff who share this ~~and strategies to accomplish that~~ goal. (5) continue to study and provide recommendations to improve the future of health equity and racial justice in medical education, the diversity of the health workforce, and the outcomes of minoritized and marginalized patient populations. (Modify Current HOD Policy)

6. That our AMA amend Policy H-60.917, Disparities in Public Education as a Crisis in Public Health and Civil Rights (3) by addition to read as follows: Our AMA will support and encourage the U.S. Department of Education to develop policies and initiatives to 1) increase the high school graduation rate among historically underrepresented students 2) increase the number of historically underrepresented students participating in high school Advanced Placement courses and 3) decrease the educational opportunity gap. (Modify Current HOD Policy)

7. That our AMA amend Policy D-200.985 (13), "Strategies for Enhancing Diversity in the Physician Workforce," by deletion to read as follows: ~~(a) supports the publication of a white paper chronicling health care career pipeline programs (also known as pathway programs) across the nation aimed at increasing the number of programs and promoting leadership development of underrepresented minority health care professionals in medicine~~

~~and the biomedical sciences, with a focus on assisting such programs by identifying best practices and tracking participant outcomes; and.~~ (Modify Current HOD Policy)

8. That our AMA reaffirm Policy D-200.982, "Diversity in the Physician Workforce and Access to Care."

Fiscal note: $5,000.

APPENDIX: RELEVANT AMA POLICY

D-200.982, Diversity in the Physician Workforce and Access to Care

Our AMA will: (1) continue to advocate for programs that promote diversity in the US medical workforce, such as pipeline programs to medical schools; (2) continue to advocate for adequate funding for federal and state programs that promote interest in practice in underserved areas, such as those under Title VII of the Public Health Service Act, scholarship and loan repayment programs under the National Health Services Corps and state programs, state Area Health Education Centers, and Conrad 30, and also encourage the development of a centralized database of scholarship and loan repayment programs; and (3) continue to study the factors that support and those that act against the choice to practice in an underserved area, and report the findings and solutions at the 2008 Interim Meeting.

D-200.985, Strategies for Enhancing Diversity in the Physician Workforce

1. Our AMA, independently and in collaboration with other groups such as the Association of American Medical Colleges (AAMC), will actively work and advocate for funding at the federal and state levels and in the private sector to support the following: (a) Pipeline programs to prepare and motivate members of underrepresented groups to enter medical school; (b) Diversity or minority affairs offices at medical schools; (c) Financial aid programs for students from groups that are underrepresented in medicine; and (d) Financial support programs to recruit and develop faculty members from underrepresented groups.
2. Our AMA will work to obtain full restoration and protection of federal Title VII funding, and similar state funding programs, for the Centers of Excellence Program, Health Careers Opportunity Program, Area Health Education Centers, and other programs that support physician training, recruitment, and retention in geographically-underserved areas.
3. Our AMA will take a leadership role in efforts to enhance diversity in the physician workforce, including engaging in broad-based efforts that involve partners within and beyond the medical profession and medical education community.
4. Our AMA will encourage the Liaison Committee on Medical Education to assure that medical schools demonstrate compliance with its requirements for a diverse student body and faculty.
5. Our AMA will develop an internal education program for its members on the issues and possibilities involved in creating a diverse physician population.
6. Our AMA will provide on-line educational materials for its membership that address diversity issues in patient care including, but not limited to, culture, religion, race and ethnicity.
7. Our AMA will create and support programs that introduce elementary through high school students, especially those from groups that are underrepresented in medicine (URM), to healthcare careers.
8. Our AMA will create and support pipeline programs and encourage support services for URM college students that will support them as they move through college, medical school and residency programs.
9. Our AMA will recommend that medical school admissions committees use holistic assessments of admission applicants that take into account the diversity of preparation and the variety of talents that applicants bring to their education.
10. Our AMA will advocate for the tracking and reporting to interested stakeholders of demographic information pertaining to URM status collected from Electronic Residency Application Service (ERAS) applications through the National Resident Matching Program (NRMP).

11. Our AMA will continue the research, advocacy, collaborative partnerships and other work that was initiated by the Commission to End Health Care Disparities.
12. Our AMA opposes legislation that would undermine institutions' ability to properly employ affirmative action to promote a diverse student population.
13. Our AMA: (a) supports the publication of a white paper chronicling health care career pipeline programs (also known as pathway programs) across the nation aimed at increasing the number of programs and promoting leadership development of underrepresented minority health care professionals in medicine and the biomedical sciences, with a focus on assisting such programs by identifying best practices and tracking participant outcomes; and (b) will work with various stakeholders, including medical and allied health professional societies, established biomedical science pipeline programs and other appropriate entities, to establish best practices for the sustainability and success of health care career pipeline programs.
14. Our AMA will work with the AAMC and other stakeholders to create a question for the AAMC electronic medical school application to identify previous pipeline program (also known as pathway program) participation and create a plan to analyze the data in order to determine the effectiveness of pipeline programs.

D-305.972, Title VII Funding

Our AMA will (1) partner with all relevant stakeholders to petition Congress to reinstate funding for Title VII to at least fiscal year 2005 levels of $300 million and (2) endeavor to educate legislators in Congress about how Title VII-supported programs address health professional shortages, increase the diversity of the workforce, equip health professions students to work in health centers and underserved communities, and ensure that health professionals are ready to address health-related emerging issues.

H-180.944, Plan for Continued Progress Toward Health Equity

Health equity, defined as optimal health for all, is a goal toward which our AMA will work by advocating for health care access, research, and data collection; promoting equity in care; increasing health workforce diversity; influencing determinants of health; and voicing and modeling commitment to health equity.

H-200.951, Strategies for Enhancing Diversity in the Physician Workforce

Our AMA (1) supports increased diversity across all specialties in the physician workforce in the categories of race, ethnicity, gender, sexual orientation/gender identity, socioeconomic origin and persons with disabilities; (2) commends the Institute of Medicine for its report, "In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce," and supports the concept that a racially and ethnically diverse educational experience results in better educational outcomes; and (3) encourages medical schools, health care institutions, managed care and other appropriate groups to develop policies articulating the value and importance of diversity as a goal that benefits all participants, and strategies to accomplish that goal.

H-350.960, Underrepresented Student Access to US Medical Schools

Our AMA: (1) recommends that medical schools should consider in their planning: elements of diversity including but not limited to gender, racial, cultural and economic, reflective of the diversity of their patient population; and (2) supports the development of new and the enhancement of existing programs that will identify and prepare underrepresented students from the high-school level onward and to enroll, retain and graduate increased numbers of underrepresented students.

H-350.970, Diversity in Medical Education

Our AMA will: (1) request that the AMA Foundation seek ways of supporting innovative programs that strengthen pre-medical and pre-college preparation for minority students; (2) support and work in partnership with local state and specialty medical societies and other relevant groups to provide education on and promote programs aimed at increasing the number of minority medical school admissions; applicants who are admitted; and (3) encourage medical schools to consider the likelihood of service to underserved populations as a medical school admissions criterion.

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.

Code of Ethics 8.5, Disparities in Health Care

Stereotypes, prejudice, or bias based on gender expectations and other arbitrary evaluations of any individual can manifest in a variety of subtle ways. Differences in treatment that are not directly related to differences in individual patients' clinical needs or preferences constitute inappropriate variations in health care. Such variations may contribute to health outcomes that are considerably worse in members of some populations than those of members of majority populations.
This represents a significant challenge for physicians, who ethically are called on to provide the same quality of care to all patients without regard to medically irrelevant personal characteristics. To fulfill this professional obligation in their individual practices physicians should:
(a) Provide care that meets patient needs and respects patient preferences.
(b) Avoid stereotyping patients.
(c) Examine their own practices to ensure that inappropriate considerations about race, gender identify, sexual orientation, sociodemographic factors, or other nonclinical factors, do not affect clinical judgment.

(d) Work to eliminate biased behavior toward patients by other health care professionals and staff who come into contact with patients.
(e) Encourage shared decision making.
(f) Cultivate effective communication and trust by seeking to better understand factors that can influence patients' health care decisions, such as cultural traditions, health beliefs and health literacy, language or other barriers to communication and fears or misperceptions about the health care system.
The medical profession has an ethical responsibility to:
(g) Help increase awareness of health care disparities.
(h) Strive to increase the diversity of the physician workforce as a step toward reducing health care disparities.
(i) Support research that examines health care disparities, including research on the unique health needs of all genders, ethnic groups, and medically disadvantaged populations, and the development of quality measures and resources to help reduce disparities.

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