

## REPORT OF THE COUNCIL ON MEDICAL EDUCATION

The following report was presented by Melissa K. Thomas, MD, Chair

### 1. STRATEGIES FOR ENHANCING DIVERSITY IN THE PHYSICIAN WORKFORCE

#### HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS IN LIEU OF RESOLUTIONS 828 AND 830 AND REMAINDER OF REPORT FILED

Resolution 304 (A-06), which was submitted by the Minority Affairs Consortium and adopted by the House of Delegates, asks our American Medical Association to "...develop recommendations for specific strategies to increase workforce diversity..."

This report describes diversity in the current population of medical students and resident physicians, discusses the factors that positively or negatively affect the ability to recruit and train a diverse physician workforce, describes mechanisms that are being used to enhance the diversity of physicians-in-training, and makes recommendations for action by the American Medical Association and others aimed at enhancing diversity in medical education.

#### THE IMPORTANCE OF FOSTERING DIVERSITY IN THE PHYSICIAN WORKFORCE

Most studies addressing the importance and utility of a diverse physician workforce have focused on racial and ethnic diversity, especially related to the participation of underrepresented minorities. The Institute of Medicine's 2004 report *Health Care's Compelling Interest: Ensuring Diversity in the Health-Care Workforce* identified three reasons why diversity is important.

- *Access to care.* Racial and ethnic minority health professionals are significantly more likely to serve minority and underserved communities.
- *Minority patient satisfaction.* Minority patients, when they have a choice, are more likely to select health professionals from their own backgrounds and are more satisfied with care provided by minority professionals.
- *Contribution to education.* A diverse student body facilitates efforts to instill cultural competence and enhances the learning outcomes and community involvement of all students.

The contention that minority representation in medical school will enhance the cultural competence of all physicians-in-training was echoed in the Seventeenth Report of the Council on Graduate Medical Education (COGME), *Minorities in Medicine: An Ethnic and Cultural Challenge for Physician Training*. There is evidence, in turn, that cultural diversity training and cultural competence enhance clinical practice. The COGME report also noted that more underrepresented physicians are needed to help reduce health disparities among racial and ethnic groups.

#### *Definitions*

Initiatives to enhance diversity in medicine have focused on groups identified as underrepresented. The Association of American Medical Colleges (AAMC), for example, approved the following definition of underrepresented minority in June 2003.

Underrepresented in medicine means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population. (AAMC Executive Council)

The following racial/ethnic groups typically have been considered underrepresented in medicine at the national level: African Americans, Native Americans (American Indians, Alaskan Natives, Native Hawaiians), Mexican Americans, and Mainland Puerto Ricans.

There also is under-representation in medicine of individuals from low-income families. While racial/ethnic status and socioeconomic status are correlated, there is utility in explicit inclusion of socioeconomic status in the definition of diversity if the goal is to enhance access to care for underserved populations. For example, certain groups (for

example, residents of Appalachia and some other rural areas) are white and underserved, and few physicians come from this population due, in part, to economic barriers.

This report, therefore, includes race/ethnicity, gender, and socioeconomic status as key elements in the definition of diversity. It is understood that these variables are not totally independent of each other. Other variables, such as sexual orientation/gender identity, also contribute to the positive effects of diversity. These have been less comprehensively studied.

#### DIVERSITY IN THE PHYSICIAN WORKFORCE

In 2004, of the 884,974 US physicians in the AMA Physician Masterfile, data on race/ethnicity were known for about 60% (563,914). Of the physicians for whom racial/ethnic status was known, 74.7% were white, 13.0% were Asian, 5.0% were Hispanic, 3.7% were African American, 0.9% were Native American/Alaskan Native, and 3.5% were another racial/ethnic category. Of all physicians in the AMA Physician Masterfile, 235,627 (26.6%) were women.

#### DIVERSITY IN THE POPULATION OF PHYSICIANS-IN-TRAINING

##### *Trends in Medical School Applicants and Entrants*

In the 1969-1970 academic year, 2.7% of enrolled medical students were African American, 0.2% were Mexican-American, and 1.3% were Asian. About one-half of the African-American students were enrolled in Howard and Meharry medical schools. In that same year, 9% of enrolled students were women. Over the past 30 years, the proportion of women and some minority groups (Asians) in medical schools has increased significantly. Other groups have not experienced the same degree of growth.

The Appendix shows current data on medical school applicants and first-year students. Of the 37,364 applicants for the 2005 entering class in MD-granting schools, 8.0% were African-American, 1% were Native American, 22% were Asian, 0.3% were Hawaiian, 60.9% were white, 7.2% were Hispanic, and 3.2% were foreign (see Table 1). First-year entrants to MD-granting schools in that year were as follows: 7.3% African American, 1% Native American, 21.5% Asian, 0.2% Hawaiian, 62.8% white, 7.6% Hispanic, and 1.5% foreign (see Table 2). For DO-granting schools (see Table 3), first-year enrollment in 2004 was 4.0% African American, 0.5% Native American, 15% Asian, 72.5% white, 3.2% unknown, and 0.7% foreign.

Women (see Table 4) were 49.6% of first-year students in MD-granting schools and 50.2% of students in DO-granting schools during 2003-2004.

US medical students tend to come from the highest socioeconomic categories. Between 1987 and 2003, about 60% of matriculating students came from families in the top quintile of family income (in 2002, this included family incomes in excess of about \$74,000). In contrast, 20% come from the lowest two quintiles.

##### *Resident Physicians*

Resident physicians enter graduate medical education from a variety of educational pathways. In 2004-2005, 67.8% entered from US MD-granting medical schools, 26.4% were from international medical schools (non-Canadian), 5.6% were from DO-granting US medical schools, and 0.4% were from Canadian medical schools.

Of the 101,291 resident physicians enrolled in Accreditation Council on Graduate Medical Education-accredited and combined programs in 2004-2005 (Table 5), 5.3% were black, 0.3% were Native American, 24.9% were Asian, 0.6% were Native Hawaiian, 54.5% were white, and 14.5% were of other/unknown race/ethnicity. Of the total residents, 6.5% were Hispanic (of any race). Of all resident physicians, 41.8% were women.

## ENVIRONMENTAL FACTORS AFFECTING ACCESS TO MEDICAL EDUCATION

The following factors appear to have an impact on the ability to recruit a diverse student body into medical school.

### *Access to and Completion of Higher Education*

In 2000-2002, high school completion rates were 87% for white students, 77% for African-American students and 62% for Hispanic students. Of students entering college in 1995-1996, 62% of Asian American students, 58% of white students, 42% of Hispanic students, and 36% of African American students had attained a bachelors degree within five years.

### *Affirmative Action*

Over the past 15 years, the ability of medical schools to engage in affirmative action in the admissions process has varied, based on legal action and legislation. In the 1978 *University of California Regents vs Bakke* case, the US Supreme Court ruled that colleges and universities could consider race as a “plus” in the admissions process, but could not impose quotas. However, in the 1996 *Hopwood vs Texas* case, the 5<sup>th</sup> Circuit Court of Appeals ruled that any consideration of race, even as one among many factors, was unconstitutional. This ruling, which affected public universities in Louisiana, Texas, and Mississippi, was not reviewed by the Supreme Court. Also in 1996, a state ballot initiative (“Proposition 209”) was voted into law in California. Proposition 209 prohibited preferences on the basis of race and sex in public education, as well as in public contracting and public employment. The 9<sup>th</sup> Circuit Court of Appeals upheld the proposition and the US Supreme Court declined to hear the case. In 2003, the US Supreme Court, in *Grutter vs Bollinger, et al.* ruled that diversity is a compelling interest. There could be a consideration of race as a “plus” factor in admissions as long as there was an individual consideration of each applicant’s ability to contribute to a diverse student body. The ruling specifically referred to the educational benefits from a diverse student body.

### *Socioeconomic Status*

As noted previously, medical students tend to come from families in higher income categories. Socioeconomic status, alone and also related to minority status, impacts such things as access to appropriate premedical education. This decreases the “supply” of students from diverse backgrounds who are available to enter medical school.

Once the individual is enrolled in medical school, socioeconomic status affects borrowing patterns and debt. Average debt for students from the wealthiest families is much less than the debt of students from families with lower incomes. For example, the average total educational debt of students from families with incomes over \$200,000 was about \$60,000 in 2004 as compared with about \$105,000 for students from families with less than \$75,000 in annual income. Whether the knowledge of the high level of debt that will be accumulated affects the decision to apply to medical school is an important question.

## INITIATIVES TO ENCOURAGE DIVERSITY

### *Programs to Encourage Retention in the Educational Pipeline*

Many medical schools have established “pipeline” programs to interest individuals from underrepresented groups to consider medicine or other health careers and to prepare them for entry. These programs may reach as far as secondary school or earlier, though many concentrate on students in college. The programs may take a number of forms.

- Postbaccalaureate programs concentrate on individuals who have completed college but have either been rejected for admission to medical school or have not yet applied. For example, a program at the University of California-Davis, the Postbaccalaureate Reapplicant Program, has matriculated over 80% of its students into medical school or other health career programs.
- Preparation programs help college students acquire the knowledge and skills that prepare them for entry to medical education and other health careers. The Southern Illinois University School of Medicine MEDPREP program is directed at minority and disadvantaged undergraduate students enrolled in the University, and has doubled the number of students able to enter medicine or another health career. The

Premedical Honors College of the Baylor College of Medicine/The University of Texas-Pan American is an eight-year BS-MD program that targets students from a predominantly Hispanic underserved area. These types of programs typically concentrate on knowledge development as well as on academic skills.

- Medical schools also may form partnerships with their communities to influence K-12 education. The Association of American Medical Colleges, with support from the Robert Wood Johnson Foundation and W. K. Kellogg Foundation, started the Health Professions Partnership Initiative (HPPI) in the 1990s. Funding was provided to 26 programs. HPPI supported collaboration among health professions schools, colleges, K-12 school systems and community-based organizations. Such initiatives also have been funded by the public sector. The Kids into Health Careers grant program sponsored by the Health Resources and Services Administration (HRSA) encourages grant recipients to work with school systems to support and promote health and science.
- There also are summer research programs offered for college and high school students on medical school campuses, to familiarize young people from minority and disadvantaged groups with the medical school environment.

The Association of American Medical Colleges (AAMC) is initiating a new project, titled “closing the gap,” that will utilize a variety of communication tactics to attract well-prepared minority students to consider a career in medicine and to market medicine as a career. The campaign centers on a new, interactive web site that allows users to communicate with experts and to learn about medical education. In addition, the marketing campaign will be pilot tested at several institutions in the fall of 2006.

#### *Financial and Organizational Support*

Federal financial assistance programs that are aimed at or include underrepresented minorities at the student and faculty level are primarily based in HRSA, which administers Title VII (medicine and dentistry) and Title VIII (nursing) of the Public Services Act. These programs remain under severe threat in the federal budget.

Many medical schools and universities have established offices of minority affairs, which offer support programs for minority students (some of which may be open to all students), and also coordinate outreach and recruitment efforts. Offices have been funded through several mechanisms, including institutional support and federal grant programs. For example, the Health Resources and Services Administration (HRSA) Health Careers Opportunity Program (HCOP) has supported offices of minority affairs and funded summer educational programs and other offerings at medical schools. HCOP funding also is in danger of elimination.

#### *Availability of Medical School Faculty Mentors*

Faculty diversity can contribute to the medical school and residency program learning environment and faculty role models may help to attract a diverse student body. However, nationally the diversity of full-time faculty is less than that of medical students or resident physicians. For example, in MD-granting schools in 2005-2006, 1.5% of basic science faculty members and 3.4% of clinical faculty members were black and 3.0% of basic science and 4.2% of clinical faculty were Hispanic (see Table 6). In the basic science departments, 27.8% of faculty (across all ranks) were women; in the clinical departments, women were 31.5% of the total.

There are some private-sector programs directed at enhancing the number of faculty members from underrepresented minority groups, including the Bristol-Myers-Squibb Company Fellowship Program in Academic Medicine and the Minority Medical Faculty Development Program established by the Robert Wood Johnson Foundation. In addition, the federal government (National Institutes of Health and HRSA) has fellowship and loan repayment programs directed at minority faculty.

#### *Accreditation Requirements*

The Institute of Medicine recommended that accreditation bodies “be responsive to demographic changes” and develop policies and practices that would enhance health workforce diversity. The Liaison Committee on Medical Education (LCME), the accrediting body for medical education programs leading to the MD degree, has standards directly relating to diversity in the student body and in the faculty.

MS-8. Each medical school should have policies and practices ensuring the gender, racial, cultural, and economic diversity of its students.

FA-1. The recruitment and development of a medical school's faculty should take into account its mission, the diversity of its student body, and the population that it serves.

The diversity of the student body and the faculty are explicitly examined during accreditation reviews, and compliance is judged in the context of each institution's educational goals and mission. The LCME has a work group examining its accreditation standards to ensure that they facilitate attainment of the desired level of institutional diversity.

The Accreditation Council for Graduate Medical Education (ACGME) Institutional Requirements state

ACGME-accredited programs must not discriminate with regard to sex, race, age, religion, national origin, disability, or veteran status.

#### AMA POLICY

Existing AMA policy strongly supports the concept of increasing diversity in medical education as a way to enhance service to the underserved. Policy H-200.955 (AMA Policy Database) states that "there is a need to enhance underrepresented minority representation in medical schools and in the physician workforce, as a means to ultimately improve access to care for minority and underserved groups." This sentiment also is echoed in Policy H-350.963.

As a means to that end, our AMA opposes the elimination of programs or mechanisms designed to increase the number of minority physicians (Policies H-350.964, H-350.969). AMA Policy recommends that state and local governments make quality elementary and secondary education available and that medical schools initiate or strengthen programs that offer premedical or pre-collegiate preparation to underrepresented minorities (Policies H-350.970, H-350.979). The AMA also encourages educational institutions to take responsibility for increasing enrollment of members of underrepresented minority groups (Policy H-350.978).

#### CURRENT AMA INITIATIVES

The Commission to End Health Care Disparities, led by the AMA, the National Medical Association, and the National Hispanic Medical Association, has four areas as a focus:

- increasing awareness of disparities
- promoting better data gathering
- promoting workforce diversity
- increasing education and training.

The Commission's Workforce Diversity Committee will:

- create a comprehensive website with information on medical careers;
- work through the Commission to expand the Doctors Back to School Program, developed by the AMA's Minority Affairs Consortium; and
- Develop additional reports on diversity in medical education.

The AMA Minority Affairs Consortium "Doctors Back to School" Program aims to interest minority children in medicine as a career by sending minority physicians and medical students to visit schools and community organizations. The program provides informational materials for the physicians to use as background.

## SUMMARY AND RECOMMENDATIONS

While there has been some progress in increasing the diversity of the educational pipeline into medicine, the representation of some groups, including African-Americans, Hispanics, and the economically disadvantaged, remains well below desired levels. No single solution can address this problem. The medical profession and the medical education community must identify partners in many sectors in order to be successful. There also is a need to consider how access to care for diverse populations can be enhanced. Therefore, the Council on Medical Education recommends that the following be adopted and that the remainder of this report be filed.

1. That our American Medical Association support 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. That our AMA, independently and in collaboration with other groups such as the Association of American Medical Colleges (AAMC), actively work and advocate for funding at the federal and state levels and in the private sector to support the following:
  - Pipeline programs to prepare and motivate members of underrepresented groups to enter medical school;
  - Diversity or minority affairs offices at medical schools;
  - Financial aid programs for students from groups that are underrepresented in medicine; and
  - Financial support programs to recruit and develop faculty members from underrepresented groups.
3. That our AMA work to obtain full restoration and protection of federal Title VII funding, and similar state funding programs, for the Centers of Excellence Program, for the Health Careers Opportunity Program, Area Health Education Centers, and other programs that support physician training, recruitment, and retention in geographically underserved areas.
4. That our AMA 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.
5. That our AMA encourage the Liaison Committee on Medical Education to assure that medical schools demonstrate compliance with its requirements for a diverse student body and faculty.
6. Through the identification of models and strategies at the national and state/regional levels, our AMA study and report back at the 2009 Annual Meeting on the following:
  - The status of efforts to assure adequate funding for diversity initiatives;
  - The current status of underservice and access to care in the US (regionally and by population); and
  - The recruitment and retention of physicians to practice in underserved areas and to work with underserved populations.
7. That our AMA collaborate with the AAMC, the Educational Commission for Foreign Medical Graduates, and the Federation of State Medical Boards to study the contribution of international medical graduates to the overall diversity and distribution of the US medical workforce and report at the 2008 Annual Meeting.

(References for Report 1 of the Council on Medical Education are available from the Medical Education Group.)

## APPENDIX

Table 1: Racial/Ethnic Composition of Medical School Applicants to MD-Granting Schools

| Academic Year | African American* | Native American* | Asian* | Native Hawaiian* | White* | Hispanic† | Foreign | Total  |
|---------------|-------------------|------------------|--------|------------------|--------|-----------|---------|--------|
| 2003-2004     | 2962              | 342              | 6835   | 98               | 21,328 | 2484      | 957     | 34,791 |
| 2004-2005     | 3004              | 383              | 7463   | 103              | 21,994 | 2545      | 1025    | 35,735 |
| 2005-2006     | 3006              | 382              | 8053   | 102              | 22,742 | 2708      | 1204    | 37,364 |

Source: Association of American Medical Colleges (AAMC Data Book, Table B2)

\* Race Alone or in Combination, Non-Hispanic

† Hispanic Alone or in Combination, of any Race

Table 2: Racial/Ethnic Composition of First-Year Students in MD-Granting Medical Schools

| Academic Year | African American* | Native American* | Asian* | Native Hawaiian* | White* | Hispanic† | Foreign | Total  |
|---------------|-------------------|------------------|--------|------------------|--------|-----------|---------|--------|
| 2003-2004     | 1277              | 160              | 3515   | 37               | 10,841 | 1157      | 219     | 17,035 |
| 2004-2005     | 1276              | 178              | 3491   | 36               | 10,969 | 1297      | 230     | 17,059 |
| 2005-2006     | 1260              | 173              | 3730   | 42               | 10,919 | 1320      | 263     | 17,376 |

Source: Association of American Medical Colleges (AAMC Data Book, Table B4)

\* Race Alone or in Combination, Non-Hispanic

† Hispanic Alone or in Combination, of any Race

Table 3: Racial/Ethnic Composition of First-Year Students in DO-Granting Medical Schools

| Academic Year | African American | Native American | Asian | Hispanic | White | Other/Unknown | Foreign | Total |
|---------------|------------------|-----------------|-------|----------|-------|---------------|---------|-------|
| 2002-2003     | 120              | 26              | 450   | 120      | 2274  | 89            | 21      | 3100  |
| 2003-2004     | 132              | 18              | 514   | 124      | 2412  | 108           | 23      | 3331  |

Source: 2004 Annual Report on Osteopathic Medical Education (June 2005)

Table 4: First-year Enrollment of Women in MD and DO-Granting Schools

| Academic Year | Number (%) Women in MD-Granting Schools | Number (%) Women in DO-Granting Schools |
|---------------|---|---|
| 2003-2004     | 8212 (49.6%)                            | 1662 (50.2%)                            |
| 2004-2005     | 8235 (49.5%)                            | NA                                      |

Source: Association of American Medical Colleges (Data Book, Table B9) and 2004 Annual Report on Osteopathic Medical Education (June 2005)

Table 5: Racial/Ethnic Composition of Resident Physicians in ACGME-Accredited and Combined Residency Programs

| Academic Year | African American | Native American. | Asian  | Native Hawaiian | White  | Other/Unknown | Total   |
|---------------|------------------|------------------|--------|-----------------|--------|---------------|---------|
| 2003-2004*    | 5359             | 225              | 25,623 | 411             | 54,252 | 14,094        | 99,964  |
| 2004-2005†    | 5330             | 258              | 25,182 | 643             | 55,202 | 14,676        | 101,291 |

Source: AMA/AAMC GME Track as published in the *Journal of the American Medical Association*

\* Hispanic origin = 6419

† Hispanic origin = 6578

Table 6: Race/Ethnicity of Medical School Faculty (2005)

|               | African American | Native American | Asian  | Native Hawaiian | White  | Other/Unknown | Multiple Race | Hispanic | Total  |
|---------------|------------------|-----------------|--------|-----------------|--------|---------------|---------------|----------|--------|
| Basic Science | 263              | 15              | 2583   | 2               | 12,303 | 1724          | 109           | 534      | 17,533 |
| Clinical      | 3256             | 96              | 12,099 | 10              | 69,034 | 6718          | 1595          | 4103     | 96,911 |

Source: Association of American Medical Colleges (AAMC Data Book, Table C4)