

The Color of Medicine: *Strategies for Increasing Diversity in the U.S. Physician Workforce*



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Executive Summary and Introduction

The U.S. medical profession is on a demographic collision course with an increasingly diverse nation. Despite years of effort aimed at increasing the number of underrepresented minorities in the medical profession, the number of African Americans, Hispanics and American Indians in U.S. medical schools has stagnated. This stalemate comes as racial and ethnic minorities are among the fastest growing communities in America and continue to face staggering health disparities. As this report documents, minority students face an uphill struggle in moving beyond the schoolhouse door of many medical schools and into the field of medicine. This gap is contributing to unequal access for many minority communities to health care and is hindering other efforts to curb inequalities in health. Unlike other intractable problems facing the health care system, this is a problem of manageable size and magnitude that can be solved with the necessary will to do so.

Although racial and ethnic minorities make up an increasing percentage of the U.S. population, certain minorities are significantly underrepresented in the U.S. physician workforce. Latinos, African Americans, and Native Americans account for about 25 percent of the U.S. population, yet they represent only about 6 percent of practicing physicians in the United States. In recent years, those same three minority groups have made up only about 15 percent of medical school graduates.¹ These groups are the focus of this study, primarily because there are data on their level of participation in the profession (*Appendix A and B*). They are the ones referred to when the terms “minority” or “underrepresented minority” are used.² It is these gaps that can and must be filled.

The continued underrepresentation of racial and ethnic minorities among practicing physicians is a problem for two reasons. First, it is an equity issue. Full minority participation and representation in medical education and health care delivery should be a given. While some progress in achieving diversity in the medical profession has been made, there are historical hurdles that require an extra effort to

clear. For example, during a period lasting almost one hundred years, acceptance in the American Medical Association was limited to whites. Questionable medical research, cost, and access to care issues have also contributed historically to a distance between the minority and medical communities.

A second and equally compelling reason the scarcity of minority physicians is of national concern is that there is growing evidence it has an impact on health care access and quality. With regard to access, recent research suggests that African American and Hispanic physicians see significantly more African American and Hispanic patients than other physicians. It also suggests that physicians from racial and ethnic minority groups are far more likely than white physicians to treat Medicaid patients as well as the uninsured.³ In addition, medical training programs that recruit and admit students from rural and underserved areas have been shown to consistently graduate a higher proportion of students who enter primary care and work in underserved areas.⁴ Increasing the numbers of physicians from these groups, and the diversity of the health care workforce overall, will help improve access to care, with the longer-term benefit of improving minority health status.

The concern about quality of care is based on the rapidly shifting demographics of the U.S. population. In 1995, racial and ethnic minorities made up just over 26 percent of the U.S. population. Based on current projections, racial and ethnic minorities will constitute 32 percent of the U.S. population in 2010, and 40 percent in 2030.⁵ Over the next several decades, physicians and other health care professionals will be serving a population with markedly different racial, ethnic, and cultural characteristics. Meeting the needs of this population ultimately will also require adopting a concept of medical workforce diversity that is much broader than the one used in this paper.

Racial or ethnic physician-patient congruency is important for the following reasons. People who share the same backgrounds, cultural norms, experiences, and values are more likely to feel comfortable with each other and to communicate well.⁶ Indeed, there is some evidence that minorities who can choose their own physicians will choose one who is a member of the same minority group, even after adjusting for geographic proximity.⁷ Good communication may well lead to good care. Thus, if the medical workforce does not reflect the anticipated demographics, then the delivery of quality care could be compromised. This surely will have broader public health implications.⁸

Over the last 25 years there have been a myriad of publicly supported programs and voluntary initiatives aimed at bringing underrepresented minorities into the medical profession. Although many of these efforts are worthy and deserve to be supported in some fashion going forward, the current demographic profile of the profession and the trends suggest that much more needs to be done. The logical conclusion is that additional approaches must be developed.

Project Origin

For more than a decade, the W.K. Kellogg Foundation has been actively engaged in initiatives that help medical education institutions keep abreast of important trends in areas such as new health care delivery systems, the changing demographics of the U.S. population, and advances in medicine and education. It also has a long-standing interest in encouraging positive engagement between health care institutions and the communities in which they operate. The Foundation has devoted considerable resources to building the racial and ethnic diversity of the physician workforce. A primary focus has been the development and support of educational “pipeline” programs intended to increase the pool of racial and ethnic minorities who enter the medical profession.

Community Catalyst’s expertise is in providing support—legal, technical, health policy, and organizing—to consumer and community groups so that they can participate effectively in health system change. It helps these groups focus on expanding health care access, preserving health services in the face of market-driven restructuring, and improving health care quality. With support from the Kellogg Foundation, Community Catalyst staff have worked closely with the groups on issues of institutional accountability to the local community. This paper is an outgrowth of that shared interest.

The approach to this paper encompassed legal research, a review of relevant literature, and consultation with a broad array of issue stakeholders and subject matter experts. The legal research and literature review included the following:

- Documenting the medical education process;
- Identifying and analyzing the applicability of civil rights laws and regulations to medical training institutions and affiliated organizations;
- Documenting the various types of public funds these institutions receive and any requirements attached to them;
- Examining any unique charitable or public accountability obligations of educational institutions that might be analogous to the community benefit obligations of health institutions;
- Examining regulatory and institutional roadblocks to the licensing of foreign-trained physicians;
- Reviewing relevant work already done in this or related areas; and
- Looking at other industries and any related statutory or regulatory schemes that might suggest new approaches.

The consultation component provided valuable information, and it gave the issue a human face. More than 40 individuals—including 15 medical students, both minority

and non-minority—were interviewed individually by the project team. In addition to the students, other expertise included:

- Experts in medical training programs, including individuals with knowledge of and expertise in medical school and residency program admissions processes and criteria;
- Policy and regulatory experts in community benefits as they relate to both health care and non-health care institutions;
- Minority and non-minority physicians;
- Experts in civil rights laws, including former staff of the U.S. Department of Health and Human Services' Office for Civil Rights;
- Experts in minority workforce development issues, including educational “pipeline” program directors and government officials; and
- Community organizations and local leadership at several of Community Catalyst’s partnership sites who could speak to the human impact of the lack of diversity in the healthcare professions, and who could assess the feasibility of action to promote change.

The Kellogg Foundation also sponsored three convenings, one in October 2000, another in October of 2001, and a third in February of this year. Attendees included individuals with expertise in medical school administration, minority affairs programming, civil rights law, community organizing, and philanthropy. The Foundation also distributed drafts of this paper to a number of readers, with a particular focus on individuals who have expertise in academic medicine and public policy. The discussions at the three convenings, and the comments of the readers, were extremely useful in shaping the final version of the document. These discussions have also yielded areas of general agreement about the need for change (*Appendix G*).

The texture of this research helped reach beyond the glossy pages of medical school admission brochures and the conventional wisdom of what will work and what will fail in making U.S. medical schools more reflective of the entire population. It will help in developing new ideas, approaches and solutions to a critical problem. It is important that changing medical school enrollment not be bogged down in a quagmire over what has failed, but instead focuses on what will work.

This paper identifies a range of strategies and approaches that have the potential to influence institutional behavior. They include:

- Civil rights and equal opportunity approaches
- Community benefit approaches
- Government “purse string” approaches
- Public “permitting” approaches
- Private “licensing” approaches

- Philanthropy approaches
- Marketplace approaches

These strategies suggest a range of potential actors. They include civil rights organizations; community benefit advocates; foundations; federal, state, and local legislators and regulators; federal grant-making agencies; accrediting organizations; and the business community. In addition, community groups, minority medical students, and minority physician organizations will need to play a role as change agents.

Applying community benefit principles offers a promising approach to increasing the diversity of the medical profession. Because medical education receives such a large amount of public support through the tax system and through federal and state funding, the community has a right to expect certain public benefits as a result of that support. But community benefits cannot be the sole focus. There is no “magic bullet.” The key is to transform the norms of the medical education community, challenging notions about what makes a good doctor and what makes a good medical educator. This kind of change will only happen through a broad-based effort from both inside and outside the medical profession that engages individuals and groups and that employs a range of approaches. The philanthropic community—and health foundations in particular—can and will need to play a central role in launching such an effort. But given the cost of medical education and the amount of public support that medical education institutions receive, private foundations cannot and should not bear the cost alone.

In moving forward, this report offers two broad recommendations. The first is to assess the potential for creating a broad base of political leadership drawn from both inside and outside of academic medicine. This group would develop and lead a campaign at the national, state, and local levels challenging the medical education system to confront the issue of diversity in a thoughtful and meaningful way. Second, is to begin to develop a broad reform agenda that would address current barriers to change and identify the most promising approaches to eliminating those barriers. Although the leadership group should finalize and implement the agenda, some items, such as supporting pilot efforts by community groups in key states to engage medical institutions, could be initiated in the interim.

In conclusion, much of what is currently being done to address the issue of physician workforce diversity will need to continue. At the same time, fundamental change will require a strategy that strengthens the hands of those who have been leading the efforts, brings in new allies, and takes advantage of new organizing opportunities. As the nation approaches the 50TH anniversary of the landmark Supreme Court ruling in *Brown v. Board of Education*, there is no better time to ensure that our health system—from the training of physicians, to access to care in all our communities—is no longer considered separate but equal.

The Medical Education Continuum

A description of the medical education continuum is important to understanding some of the barriers to greater diversity within the medical profession. This is because there are multiple points along that continuum where current practices and standards impact workforce composition. The starting point in this description is pre-medical educational preparation, and the end point is the development of medical school faculty. The description of each component of the process begins with a summary of the concerns articulated by key informants and identified in the literature.

Medical School Preparation and Application

Summary of Concerns

- Elementary and secondary educational preparation that is highly variable in content and quality;
- Low professional aspirations among minority high school and undergraduate students;
- Undergraduate academic advising that is not always comprehensive or tailored to minority needs and issues;
- Over reliance by some medical schools on admissions tools like the Medical College Admission Test on which underrepresented minorities historically have performed less well;
- The costs associated with the medical school application process; and
- Medical school admissions committees that do not have meaningful minority representation.

Academic Preparation

All of the medical students who agreed to be interviewed for this paper—both minority and non-minority—described the undergraduate pre-medical curriculum as extremely rigorous, especially for those with weak high school preparation. Students and educators both talked about the poor quality of public education in the country at the elementary and high school levels and the disproportionate impact that it has on minorities. They all acknowledged that educational

pipeline programs have been helpful in expanding the pool of minority medical school applicants, that the number of programs should be increased, and that the availability of the programs should be better publicized. But they also pointed out that such programs are not enough. They believe the problems with the educational system are so deeply entrenched that until they are addressed, the minority applicant pool will not expand significantly.

A different but related issue is that of minority student aspirations. A number of the medical students participate in programs that encourage minority high school and college students to choose medical careers. They are uniformly struck by the low expectations so many minority students have for themselves. Those students typically will say that being a doctor would be nice, but “there’s no way I could ever become one.” They are generally unaware of educational pipeline opportunities, and they have no information about what kind of academic program is required. A consistent message from the students who were interviewed was that much more needs to be done, and at earlier academic levels. Not only do students need information, but they also need to see role models who can convey a message of possibility.

The standard pre-medical program for undergraduates includes the following courses at a minimum:

- A year of physics with lab
- A year of general chemistry with lab
- A year of organic chemistry with lab
- A year of biology with lab
- A year of English with a writing component
- A year of calculus or other advanced math, such as statistics

In addition, most medical schools recommend a broad background in the social sciences and humanities. Applicants who can demonstrate breadth, focus, and challenge in their undergraduate coursework are at an advantage.

Good undergraduate academic advising is essential. A number of people interviewed, both educators and students, made the point that many non-minority pre-medical students get advice from family members or friends in the medical profession. This generally is not the case for minority students since they don’t have the same kind of access. As a result, it is imperative that they receive guidance from knowledgeable sources on academic programs, summer opportunities, extracurricular activities, and the medical school application process.

Several students said that the sequencing of science courses is very important. Too heavy a load may result in poor performance, and too light a load may mean that not all requirements are completed by the beginning of senior year when medical school applications are submitted. It is generally recommended that no more than two science courses be taken in any academic year. Some students who took a number of

the science courses simultaneously in their freshman and sophomore years said the workload was so demanding that their grades suffered. The result was that they had to re-take the courses, at considerable additional expense, or they re-calibrated their aspirations and applied to less selective medical schools. It is possible to lighten the course load by taking one of the science sequences in the summer, but this can be expensive. In addition, some pre-medical advisers suggest that a medical school admissions committee may weigh this against an applicant because it suggests the student can't handle a heavy science course load.⁹

Students also indicated it was important for undergraduate advising to include guidance about appropriate summer employment, extracurricular activities, the medical school application process, preparation for the Medical College Admission Test, and preparation for the medical school interview. Several students cited the pre-medical advising program at Xavier University in New Orleans as a model. Xavier students who might be interested in a medical career are identified early in their freshman year. They then meet on a regular basis with a faculty adviser for the entire four years. They hear guest lecturers talk about the medical profession, they receive preparation for the Medical College Admission Test, they have mock admissions interviews, and their medical school application essays are reviewed. As a result, Xavier ranks first in the nation in the number of African American college graduates who go on to medical school.

The Medical College Admission Test

A critical milestone in the medical school admissions process is the Medical College Admission Test (MCAT). The MCAT is a standardized test developed by the Association of American Medical Colleges (AAMC)¹⁰ and its member medical schools. It is administered in April and August of each year, and it includes four components:

- Verbal reasoning
- Physical sciences
- Biological reasoning
- Writing sample

Each of the first three components is graded from 0 to 15. The writing sample is graded on an 11-point alphabetical scale ranging from J to T, with T being the highest grade. The fee for taking the MCAT is \$175, although individuals with “extreme financial limitations” may apply for a fee reduction and pay no more than \$70.¹¹ A number of test preparation companies offer MCAT courses. The cost of such courses is generally about \$500 for an online course to \$1300 for a multi-week classroom course that includes lectures, instruction materials, and practice exams. There are also books of MCAT review materials with practice exams that students can use for

self-study. The consensus among students interviewed is that the course and its accompanying materials are important and helpful *not* because they increase substantive knowledge but because they provide valuable test-taking strategies. Nevertheless, a number of the students identified the cost of courses and materials as a barrier to adequate preparation.

Underrepresented minority students historically have performed less well than non-minority students on the MCAT. *Appendix C* is a graphic depiction of the performance gap from the April and August 2000 and 2001 MCAT administrations. Prior years' results reflect a similar pattern. *Appendix D* contains a more complete table of data from the April/August 2000 and 2001 MCAT results.¹²

Many of the minority students interviewed believe that a number of schools—and public medical schools in particular—use the MCAT score alone to determine which applicants they will consider. Thus if a student has an otherwise satisfactory record but an MCAT score that is below the threshold, he or she will not be considered further in the application process. The MCAT “threshold” score is believed to be about 30.

The MCAT is a source of much controversy. Its validity as a predictor of medical licensing examination performance and clinical performance has been the subject of a several research studies, most of them published in the AAMC's journal, *Academic Medicine*. Some findings from the research to date are:

- MCAT scores and undergraduate grade point averages (GPAs) are good indicators of performance on Step 1 of the U.S. Medical Licensing Examination which tests basic science knowledge;¹³
- Neither MCAT scores nor GPAs are particularly useful in predicting clinical performance;¹⁴
- The predictive value of all preadmission data varies greatly among medical schools—from substantial to minimal.¹⁵

Some admissions officials characterize MCAT scores as the only “objective” information about an applicant. They reason that academic rigor and grading policies vary from college to college, teacher recommendations are highly subjective, and personal essays can be heavily edited. The fundamental issue with any standardized test, however, is what it measures, and whether there is a strong positive correlation between what it measures and the requisite competencies for real world performance—in this case, for practicing medicine. Overall, MCAT research suggests that while there is some predictive value to the test, it should be just one of a number of criteria that are used in the admissions process. It should not be used by itself for any purpose.

The Medical School Application Process

Applications to medical school are generally made between the junior and senior year of college. They cannot be submitted until the MCAT results are available. Most medical schools use the American Medical College Application Service (AMCAS) application. AMCAS is a non-profit, centralized application processing service that is operated under the umbrella of the AAMC. The application, which is similar in concept to the “Common Application” that many undergraduate schools use, can be completed and submitted electronically.

The application requests the usual information about academic background and extracurricular activities. It offers the applicant the option of providing information on race and ethnicity. In addition, it allows the student to identify him- or herself as “disadvantaged.” An applicant wishing to be identified as disadvantaged must specify whether the source of the disadvantage is social, economic, or educational. For example, the applicant is required to provide information about where he or she grew up, whether that area was medically underserved, and whether his or her family used state or federal assistance programs. Additionally, the applicant must provide information on what the family income was, whether he or she worked while in school, and whether any of the hardships interfered with educational pursuits.

Once the application is complete, it is returned to AMCAS. AMCAS prepares a “transmittal notification” for each applicant that is a summary sheet of pertinent information. This sheet includes the applicant’s MCAT score, the grade point average (GPA),¹⁶ and the name of the undergraduate school. The transmittal notification is attached as a face sheet to the completed application, and then AMCAS sends the package to the medical schools designated by the applicant. The transmittal notification format was changed in the spring of 2001. Up until that time, it had included information about race and ethnicity. Now the transmittal notification indicates only whether the applicant has claimed “disadvantaged” status.

The AMCAS application fee is \$150 for the first medical school and \$30 for each additional school. Most student guides to medical education recommend applying to at least 10 schools. AMCAS uses the same fee waiver process as the MCAT. If a waiver is granted, the applicant can apply to up to 10 medical schools for free. Additional applications are \$30 per school, just as they are for students without fee waivers.

In addition to the AMCAS application, students must complete each medical school’s own application. This school’s application generally requires additional materials, such as letters of recommendation and more personal essays. Medical schools also charge their own application-processing fee, but if a student has received a waiver of MCAT or AMCAS fees, the medical school usually will waive its fee as well. Secondary application fees range from \$40 to \$75 per application.

Once the AMCAS and secondary application have been submitted, the

medical school reviews the materials and determines if it wants to invite the applicant for an interview. Not all applicants are invited to interview, and the applications of those who are not invited generally are not considered further. Applicants who are invited usually spend an entire day at the medical school during which they receive a tour, meet with medical students, and are interviewed by faculty and admissions officials.

Admissions Standards and Criteria

Admissions standards and criteria are developed by each institution working within certain legal and accreditation parameters. Medical schools are subject, for example, to all applicable federal and state laws and regulations regarding non-discrimination. In addition, medical schools are expected to have policies in place that are consistent with the requirements of the recognized medical school accreditation body. The topic of accreditation will be dealt with at greater length in a subsequent section, but for now it is important to note that all U.S. medical schools receiving federal funds for research and/or student financial aid—which all of them do—must be accredited by the Liaison Committee on Medical Education (LCME). Accreditation standards applicable to admissions include the following:

- The faculty of each school should develop criteria and procedures for the selection of students, which should be published and available to potential applicants and to their collegiate advisors.
- To further the accomplishment of its purposes, each medical school should have policies and practices addressing the gender, racial, cultural, and economic diversity of its students.
- There must be no discrimination on the basis of sex, age, race, creed or national origin.¹⁷
- The student body should be drawn from a wide spectrum of economic backgrounds.

Multiple factors are used in the admissions process, although not all schools may use all of them, and the weight accorded to different factors may vary. Factors viewed by admissions officials as having high or moderate importance are:¹⁸

- Prior academic performance
- Standardized test performance (MCAT)
- Selectivity of undergraduate school

Other factors include:¹⁹

- Content and breadth of scholastic preparation
- Oral and written communication skills
- Community service activities

- Extracurricular accomplishments
- Achievement in scientific research and/or medically related service
- “Diversity” of experience in a variety of areas, including, for example, such things as professional or educational experience, family or cultural background, and avocation activities

A number of students, including one who served on his school’s admissions committee, expressed concern about a perceived over reliance on numerical criteria, specifically the MCAT score and the GPA. With regard to those two measures, the research cited above suggests that they are not reliable predictors of clinical performance. With regard to selectivity of undergraduate institution, at least one study suggests that using such a criterion may not be necessary, and further, that “use of institutional selectivity indices or categorizations may discriminate against applicants with other desirable characteristics who have been granted degrees from less selective undergraduate institutions.”²⁰

Most of the individuals interviewed felt that medical schools would continue to rely heavily on numbers in the admissions process despite their shortcomings, because it is less labor intensive for admissions staff and committees. Also, it is viewed as a way of avoiding affirmative action challenges, even though the result is a less diverse student body, and a less diverse profession. It is worth noting here the findings of a 1997 study documenting the experience of students at one medical school who were admitted through a special admissions process that used race as a factor. The difference between the graduation rate of these “special consideration” students and that of “regular admissions” students was minimal. Furthermore, there was no difference in the completion of residency training or performance evaluation by residency directors. The authors concluded that “[A]n admissions process that allows for ethnicity and other special characteristics to be used heavily in admission decisions yields powerful effects on the diversity of the student population and shows no evidence of diluting the quality of graduates.”²¹

The AAMC staff have developed a workshop to assist admissions committees in using non-cognitive variables to assess minority applicants. The workshop offers interviewing strategies and provides background on multiculturalism and the predictive value of cognitive factors. The non-cognitive factors that the workshop focuses on are leadership, realistic self-appraisal, determination and motivation, family and community support, social interest, maturity and coping capability, and communication skills.²² According to AAMC staff, the program’s effectiveness has yet to be evaluated, although one is underway. One faculty member who was interviewed felt quite strongly that the workshop is valuable even if it only functions as an introduction to admissions officials of a different and broader way of thinking about applicants.

Admissions Committee Composition

Admission decisions are made by an admissions committee. The composition of the committee varies from school to school. In addition to faculty and administrators, some medical schools include students on their admissions committees. Accreditation standards provide that “[T]he selection of students for the study of medicine is the responsibility of the medical school faculty through a duly constituted committee. Persons or groups external to the medical school may assist in the evaluation of applicants, but the final responsibility must not be delegated outside the medical faculty.”²³

Most students interviewed felt it was important there be minority representation—and preferably minority *student and faculty* representation—on admissions committees. They saw a need for committees to include one or more individuals who can appreciate the minority applicant experience and function as advocates within the committee. They felt this was especially critical to counter any over reliance on numerical criteria. Several minority students also felt that the minority community as a whole should be represented on the committee. Their rationale for this was twofold. First, they generally view medical schools as being inwardly focused, so it is important to hear from “end-users” about what qualifications make a good physician. Second, they believe that including a minority community member on a medical school’s admissions committee would serve as a powerful public declaration of a commitment to building diversity and addressing the issues of the underserved.

The Medical School Experience

Summary of Concerns

- Limited options for medical school financing, with the result that most students graduate with massive amounts of debt;
- Limited subsidized clerkship opportunities; and
- Highly variable recruitment, academic and social support, and retention efforts among medical schools.

Medical School Cost

A medical education represents a significant investment. Average tuition and fees for first year students in 2000 ranged from \$12,033 at public medical schools for in-state residents to \$29,823 at private medical schools.²⁴ Living expenses are additional, and most schools estimate that they will range from \$7,000 to \$12,000 a year, depending on the cost of living in the area and the type of living arrangement the student chooses. Loans, scholarships, and other types of financial assistance are available depending on need. For example, the military branches and the

U.S. Public Health Service offer assistance in exchange for a post-graduate practice commitment. Still, according to a survey of 2001 medical school graduates conducted by the AAMC, the average medical school student has incurred \$99,089 in debt by graduation, and over 81% of all medical students graduate with some amount of debt.²⁵

There was near unanimous agreement among those interviewed that the prospect of such a debt burden is a major barrier to the kind of broad participation in medical education that is necessary to achieve a diverse medical profession. Several of the individuals we spoke with also suggested that certain federal policies on financial aid might function as a barrier to greater diversity among medical school student bodies. First, federal regulations provide that institutions receiving federal funds may extend financial aid only to individuals who are U.S. citizens or those with permanent resident status. The effect is to keep minority students who may not yet be U.S. citizens or have permanent resident status from even considering medical school if they don't have independent means. Second, many federal loan programs now require a credit check for loan applicants. Because many minority medical school applicants are from disadvantaged backgrounds and may have had limited ability to establish credit, this requirement may close off a critical subsidized financing option.

Graduating with substantial debt also has an impact on minority physician career paths. As will be discussed at greater length in a subsequent section, minority students and medical residents who might otherwise seek a career in academic medicine may feel they can't afford to spend the time necessary to train when they can go into practice immediately after their residency and begin reducing their debt load.

Medical School Curriculum

Medical school curriculums are developed by the individual medical school, subject to the broad requirements of the LCME. In addition to basic science requirements, medical schools must teach ethical, behavioral, and socioeconomic subjects pertinent to medicine. A recently implemented accreditation standard also requires medical school faculty and students to "demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments." Medical school performance with regard to this standard will be assessed for the first time this year. A number of those interviewed noted that the existence of this standard has prompted schools to institute cultural competency programming even though their next accreditation site visit may be several years away. While there are open questions about cultural competency programming including how to define it, what kind of training is most effective, and how to measure success, this standard was viewed by most of those interviewed as a positive step. While some medical schools already have courses that touch on these issues, medical students in particular feel that more could be done. Several students suggested that minority students could be very

helpful in program development. These same students also noted that an effective way to teach cultural competence is to have diverse medical school student bodies. That way, students can learn from each other.

While the first two years of medical school are primarily classroom based, the second two years consist largely of clinical training. Students do rotations—called clerkships—in both inpatient and ambulatory care settings in a variety of clinical areas. LCME accreditation requirements specify that medical schools must have written agreements with their clinical affiliates that define the responsibilities of each party. Medical students actually perform patient care duties during their clerkships, supervised by medical school faculty and medical residents.

Clerkships are critical to clinical training, and they also provide students with early exposure to residency programs and the program directors. Several people interviewed observed that students who perform well during a particular clerkship often have a significant advantage in the residency program application process. As will be discussed more fully below, several of those interviewed who have served as medical school faculty or residency program directors said that a critical step in the long journey to the ranks of medical leadership is to participate in one of the “elite” residency programs. They suggested that opportunities to do clerkships in certain “elite” teaching hospitals would be important in getting minority students on this medical leadership track. Often, however, elite programs and the hospitals and medical schools with which they are affiliated provide little outreach to those students. Additionally, the costs of travel and room and board can be prohibitive unless the home medical school or the sponsoring program subsidizes the student.

Medical Student Recruitment

A number of medical students and faculty members observed that some medical schools tend to put more resources into recruiting minority students than into supporting and retaining them. Medical schools will sometimes subsidize campus visits for prospective minority students and otherwise try to encourage them to select the school. When they actually enroll, the reality often is that there are very few services specifically tailored to minority student needs.

Several students reported that while their schools had strong recruitment programs, the burden of program planning generally fell on minority students themselves. At one school, minority students felt it was important to have a program that brings minority undergraduates to campus, gives them a tour, introduces them to faculty members, and generally provides a view of what the medical school experience is like. Such a program has been implemented, but while the school itself provides some financial and administrative support, it is student-initiated and student-run. At another school, the minority student organization sponsors a weekend program to encourage accepted minority applicants to choose that school. Again, the school provides some

financial and administrative support, but minority medical students do all of the planning. In both cases, students felt that while the programs were essential to diversity efforts, primary responsibility for planning and execution should fall to the school.

Medical Student Support and Retention

Medical student well being—physical, psychological, and academic—is addressed in LCME accreditation standards. Medical schools are expected to:

- Have an effective system of personal counseling for students that includes programs to promote mental well-being and facilitate adjustment to the physical and emotional demands of medical school;
- Have standards of conduct in the teacher-learner relationship and procedures for students to report violations of the standards without fear of retaliation; and
- Have a system of academic advising and career guidance for students.

Many students and physicians talked about how grueling, isolating, and stressful medical school can be. They emphasized the importance of having adequate institutional supports, especially for minority students who often account for only a very small part of the class. Several students described incidents in which fellow students and faculty made comments that reinforced stereotypes and negative views of racial and ethnic groups. In some of those cases, medical school administrators did not make any effort to address the issues. Some students reported that they had observed subtle retaliation against students who complained. In one case, a fairly serious issue was not addressed until the students went outside the medical school and obtained support from local minority physicians.

A number of those interviewed also stressed the importance of academic support. Several students reported that a disproportionate number of minority students at their schools had to repeat courses, or even repeat years. Data on this issue is difficult to come by. A medical school administrator estimated the general attrition rate for minority medical students to be in the area of 14 to 16 percent each year. She suggested that most medical schools are not forthcoming with this data partly because they don't provide the support services.

A number of students said that medical schools need to acknowledge that the effects of poor academic preparation are not necessarily erased by undergraduate education, post-baccalaureate programs, or special enrichment or preparatory programs. They also said schools need to acknowledge that the medical student who has some academic struggles because of poor preparation will not necessarily be a

bad physician. While some students are appropriately terminated from programs, those interviewed feel strongly that the medical school has an obligation to do everything possible to retain the students it has accepted. In their view, a genuine commitment to the principle of equal representation requires active, well-advertised academic support programs.

Finally, a number of students felt that the scarcity of minority faculty and lecturers might have an impact on retention rates among minority medical students. Several students commented that virtually none of their classes had been taught by minorities, even though there were highly qualified minority physicians in the community who would have been willing to participate. One student reported that although the county medical examiner, who happened to be African American, had expressed an interest in teaching a class on forensic medicine, the medical school used a non-minority lecturer. A number of the students observed that minority faculty serve as role models for minority students. Several also felt that the presence of minority faculty functions as a clear public statement that the medical school is committed to diversity.

A consistent theme among minority students was that medical schools should have a formal minority affairs function. They also stressed that the program should be adequately funded and staffed, and that it should have some real power within the school. The AAMC's annual guide, "Minority Student Opportunities in United States Medical Schools," provides a range of information for each of the 125 accredited U.S. medical schools on minority enrollment and support programs. The majority of medical schools indicate that diversity programs exist in some form. Students suggested, however, that based on their own experiences and those of their minority friends at other schools, the level and quality of academic, social and psychological support actually provided varies significantly among the schools. One student described his medical school's efforts as "window-dressing." Even students who felt their administration was generally receptive to their concerns expressed a need for effective programs. Students who had observed or personally experienced racial insensitivity or retaliation for making complaints felt that such programs were critical. There was a consensus that a minority affairs function should have the following responsibilities:

- Oversee minority recruitment, including recruitment program planning,
- Serve on the admissions committee,
- Provide a "safe haven" for minority students with concerns,
- Serve as an intermediary or advocate where necessary between minority students and faculty or administration,
- Have regular access to the dean to discuss and resolve issues.

In summary, the majority of students interviewed felt that minority retention would be significantly enhanced by the existence of such a function.

Graduate Medical Education

Summary of Concerns

- Lack of transparency and accountability in the residency admissions process;
- The autonomy of residency programs in designing selection criteria;
- The pervasive nature of informal networks in identifying candidates

Residency Program Admissions Process

Upon graduation from medical school, students who want to become licensed to practice medicine must complete a residency program. This phase of training is referred to as graduate medical education (GME). Successful completion of a residency program is also a prerequisite to obtaining board certification in a medical specialty.²⁶ There are over 7,000 residency programs in the United States. While the majority of them are based at teaching hospitals, some are administered through community health centers and other ambulatory care sites. These programs vary in length from one to seven years.

Students apply to residency programs in their area of clinical interest midway through their fourth year of medical school. The application includes letters of recommendation, summaries of clinical experience, scores on Steps 1 and 2 of the United States Medical Licensing Examination, and grades. Like the medical school application, the residency application is standardized, and it is obtained, completed, and submitted electronically. Residency programs are able to review and sort applications using their own criteria.

Residency Program Admissions Criteria

The Accreditation Council of Graduate Medical Education (ACGME) establishes minimum eligibility and selection criteria for program applicants.²⁷ Residency program applicants must have graduated from a medical school accredited by the LCME or the American Osteopathic Association (AOA).²⁸ The institution sponsoring the program—that is, the hospital or other facility—must ensure that the program selects from among eligible applicants on the basis of their preparedness, ability, aptitude, academic credentials, communication skills, and personal qualities such as motivation and integrity. Programs must not discriminate with regard to sex, race, age, religion, color, national origin, disability, or veteran status. The sponsoring institution must have written policies and procedures for

recruiting and appointing residents that comply with the ACGME requirements, and it must monitor program compliance with them. If a residency program enrolls an individual who does not satisfy the eligibility requirements, the ACGME has the authority to withdraw the program's accreditation.

Beyond the threshold ACGME requirements, residency programs are free to establish their own admissions criteria. These generally are not publicly available. Some programs, for example, are thought to establish a minimum United States Medical Licensing Examination score as a way of winnowing the applicant pool. Several academic medicine professionals believe this sort of criterion adversely affects minority candidates who generally score lower than non-minority students on standardized tests. These same professionals said they believe that some elite residency programs will not even consider students who attend medical schools that they consider to be less competitive, and further, they suggested that historically black medical schools might fall into this category. They feel that these perceptions, even if unsubstantiated, could limit minority candidates by discouraging them from applying to certain programs.

Academic medicine professionals also reported that a variety of informal factors influence the selection of potential residents. Students can position themselves well before their fourth year of medical school by, for example, working with key program faculty during their clerkships or conducting research with prominent individuals in the medical specialty that interests them. In addition, family connections were viewed as being valuable in that they created networking opportunities that might not be available to all students. Medical schools need to be aggressive in making equivalent opportunities available to minority medical students.

A concern voiced by several of those interviewed is that the standardized residency application does not include racial or ethnic identifiers. Although minority applicants can sometimes be identified through their letters of recommendation or personal statements, the absence of any formal way to acquire such information essentially means that residency programs need to work harder to target diverse candidates for recruitment. Those programs that are committed to diversity will take the time to do this. Those that aren't will not.

Early identification of diverse candidates is critical to a successful recruitment process. Those familiar with the process say it is important to begin the effort to establish a relationship with the applicant as soon as possible so as to encourage him or her to follow through on the application. Programs that are committed to diversifying must take steps to foster a sense of community, comfort, and commitment between the applicant and program. Recommended strategies include hosting social events for prospective minority applicants, ensuring that minority applicants are interviewed by minority faculty or one of the program leaders, and maintaining constant communication between applicants, house staff, and faculty.

One program faculty member suggested that residency program directors' ability to diversify their programs appears to be correlated with the program's size. Larger programs that admit 30 to 40 residents may view themselves as having more flexibility to accept candidates who may have slightly weaker academic records but demonstrate strong non-cognitive skills. In contrast, smaller programs that prepare residents for specialties and sub-specialties may feel constrained to offer positions only to those students whose academic track records and backgrounds reflect those of previous students who have successfully completed the program and passed the requisite board qualification examination. This may be due in part to the fact that the ACGME uses program participants' pass rates on board certification examinations as a program evaluation criterion. This perception would give credence to several commentators' observation that many of the specialties lag far behind primary care in terms of their diversity.

On a final note, neither general nor specific data on diversity in residency programs appears to be publicly available. It apparently is not collected by the AAMC in any systematic way, and it does not appear to be readily available from any other source. The absence of such data makes it difficult to establish and analyze patterns of minority participation in residency programs. Some suggest that this contributes to a perception that residency programs are not accountable to any entity or organization other than the ACGME.

The National Resident Matching Program

Once program applications are received, residency program directors select a subset of the applicant pool to interview. When the interviews are completed, both the program director and the applicants rank their choices and submit them to the National Resident Matching Program (NRMP). The NRMP is a private, not-for-profit corporation sponsored by the same organizations that comprise the ACGME.

The NRMP fills positions through a matching algorithm that uses the rank order lists submitted by applicants and programs. If the applicant cannot be matched to his or her first choice program, an attempt is made to place him or her into the second choice program, and so on, until a "tentative" match occurs. Matches are tentative because an applicant who is matched to a program at one point in the process may be removed at some later point to make room for an applicant who is ranked higher on the program's list.²⁹ When all applicants have been considered, the match is complete, and all tentative matches become final. Matches between applicants and programs constitute a commitment between the two parties. Generally, around 95 percent of students participating in the NRMP are matched in a typical year. All U.S. residency programs are encouraged but *not* required to participate in the NRMP. The overwhelming majority of them do participate.

Although the NRMP matching process appears to be entirely quantitative, residency program directors can hold some slots in reserve to fill as they choose. Those who are familiar with the process also noted that program directors have a fairly good sense of the “matching range” on their rank order lists. Thus they can rank less desirable candidates toward the bottom with some assurance that those applicants will not end up in the program. Some feel that this provides a degree of “cover” for program directors to the extent that there might be an institutional interest in diversity. They can say that they included minorities on their rank order list, even though they ranked them out of matching range.

Medical Resident Employment Status

Students receive notification of their residency program “match” in the spring before medical school graduation. Residency programs begin on July 1 each year. Residents—also referred to as house staff—receive stipends and benefits during the program. The stipend generally is in the area of \$30,000 annually. Residents provide direct patient care under the supervision of program faculty. The National Labor Relations Board recently clarified resident employment status ruling that residency programs are “employers.” Thus residents are considered “employees” for purposes of the National Labor Relations Act,³⁰ with the power to organize and engage in collective bargaining. To date, few house staff have done this.

In spite of the fact that residents are considered employees of the sponsoring institution, several of those interviewed stated that residency programs generally operate fairly autonomously with respect to the sponsoring teaching hospital’s administrative structure. The hospital’s chief executive officer is viewed as having little influence on program operations, even though program directors may report to him or her. If the facility has diversity programs or strategies, they generally are not seen as extending to the residency program in any meaningful way.

The Link Between Elite Residency Programs and Medical Leadership

An observation that was made by *all* of the academic medicine professionals interviewed for this paper is that medical leadership in the United States—whether in medical schools, academic medical centers, government or private industry—is disproportionately drawn from a small number of elite residency programs. Most of these same individuals also articulated the belief that until there is more than symbolic minority representation among medical leadership, there will not be a substantial “diversification” of the profession.

The clear message from those interviewed is that if meaningful change is to occur, it needs to begin with the elite programs. Several of them suggested that residency program leadership need to examine their admissions criteria within the

broader context of what the needs of the U.S. population are going to be ten or twenty years in the future. Additionally, if there are program “culture” issues that function as roadblocks to diversity, they need to be scrutinized and addressed. Finally, some of those interviewed felt that while it is appropriate for the programs and their sponsoring institutions to take the first steps, it may be that outside pressure is necessary at some point if there is not measurable progress.

Post-Residency Fellowships

Upon completion of the residency program, some physicians enter a fellowship program in a subspecialty. Fellowship programs qualify the physician to practice in that subspecialty, and they also better position him or her for a faculty appointment. Fellowship programs vary in length from one to several years, and they pay stipends comparable to those paid by residency programs. Program positions are limited, so admission to them is fairly competitive.

Those knowledgeable in this area noted that fellowships, like residency programs, often are difficult for minorities to penetrate, and for the same kinds of reasons. The fellowship program selection process is viewed as having a political dimension in that it is critical for the applicant to have made the “right” contacts and done the “right” kind of work—both technical and interpersonal—in his or her residency. Minority residents may not completely understand the process, or may not know how to make the critical contacts. In the absence of a mentor or some other form of guidance, those interviewed felt it was sometimes difficult for minority students to access these opportunities.

There are also financial barriers to minority participation in fellowship programs. By the beginning of their fourth year out of medical school, many physicians—both minority and non-minority—feel tremendous pressure to start paying off medical school debt. An extra year or two in training often is not feasible. To the extent that minorities are disproportionately affected by higher debt, a fellowship may be out of the question, and any thought of moving into academic medicine may be abandoned.

Physician Licensure

The licensure of physicians is a function of each individual state. All states require physicians to pass the three steps of the United States Medical Licensing Examination (USMLE). Step 1 of the USMLE is an eight-hour multiple-choice exam that measures basic science knowledge. Step 2 is a nine-hour multiple-choice exam that tests the medical knowledge and clinical understanding essential to providing supervised patient care. Step 3 consists of an eight-hour multiple-choice exam and

an eight-hour computer-based case simulation. It tests whether the student can apply medical knowledge and has the requisite level of understanding of biomedical and clinical science essential to the unsupervised practice of medicine.

Step 1 is usually taken at the end of the second year of medical school. Step 2 is usually taken at the end of the fourth year of medical school. Step 3 is taken after graduation from medical school. The fee for Steps 1 and 2 is \$385 for each. The fee for Step 3 is \$530. There does not appear to be any fee waiver program.

In addition to passing the USMLE, applicants for licensure must have completed an accredited residency program. The required program length varies among states. Some states require completion of a one-year program, but most require that it be a three-year program.

State medical licensing authorities also require applicants to provide information about work history and medical history—specifically, any history of drug use or emotional or mental illness. Applicants must report prior arrests and convictions as well. After initial licensure, physicians must periodically renew their licenses and provide updated information on their practice history. Many states also require that physicians complete a specified number of hours of continuing medical education during each licensing period.

Minority Faculty Development

Summary of Concerns

- Insufficient support of mentoring activities;
- Shortage of active, committed, and visible institutional leadership;
- The impact of the “color tax”; and
- The use of promotion criteria that are inflexible and may disproportionately reward non-minority physicians.

Importance of Engaged Institutional Leadership

Upon completion of the residency program, some physicians choose to pursue a career in academic medicine. Although the number of diverse faculty members has increased over time, minorities are still significantly underrepresented, and their rate of promotion lags behind that of non-minority faculty.³¹ Many medical schools have said they want to reduce these disparities, but the faculty interviewed for this paper said they don’t feel these efforts will be successful without a change in the academic culture, and without active, committed, visible and unrelenting institutional leadership.

Those interviewed stressed the importance of attracting minority physicians

into academic medicine. They uniformly believe that a critical mass of diverse physicians in leadership positions at key institutions is necessary to ensure an emphasis on—and sensitivity to—diversity within those institutions *and* within the practice of medicine. They also believe that the existence of a critical mass is essential to changing the culture of medicine. Moreover, a visible presence of minority faculty in teaching hospitals and medical schools improves the ability of those institutions to recruit and retain other minority faculty and students.

Mentoring

Some of those interviewed said that minority medical students and residents sometimes have misperceptions about academic medicine. Many students aren't aware, for example, that faculty can have active clinical practices in addition to teaching and research responsibilities. New minority physicians should have ready access to mentors who can correct those misperceptions and direct the development of their research and clinical expertise in the post-residency years. Most of the minority faculty interviewed felt that they and some of their colleagues try to guide students toward academic medicine by emphasizing the positive attributes, such as the ability to see patients, the opportunity to work in challenging and stimulating clinical and research settings, the opportunity to teach and mentor medical students, and the opportunity to have an impact on the academic medical culture. Faculty mentors can also provide a broad range of important and practical guidance on research funding, interesting clinical opportunities, and institutional idiosyncrasies.

Despite the fact that there is virtually universal acknowledgment of the importance of mentoring early in the academic medicine career, the faculty interviewed for this paper expressed concern about the lack of resources and recognition attached to it. There is no national or centralized resource that provides information on program models or best practices, so many faculty work in isolation and end up developing their own programs. Moreover, mentoring can be a very labor-intensive activity. There generally is little recognition of that in promotion or other evaluative criteria. And finally, mentoring generally is not a reimbursable activity, and this often means that it will not be viewed as an institutional priority.

The “Color Tax”

The “color tax” functions as a significant disincentive for minority students considering academic careers. The “color tax” has been described as an unspoken expectation that minority faculty will assume responsibilities beyond those of other faculty, representing the minority perspective on numerous academic and administrative committees and working to foster a sense of community among students and faculty of color. Because there generally are few minority faculty members, the expectation that they will take significant responsibility for their

institution's physician diversity efforts can be overwhelming. There usually is no formal recognition of how this burden limits the time they can devote to their research, teaching, and clinical activities.

Another aspect of the "color tax" is the pressure—both internal and external—that many minority faculty feel to exceed the achievements of their non-minority counterparts just to be seen as equivalent. Several minorities interviewed felt they had to constantly battle the perception that they were less capable, or that they had been selected under less stringent "affirmative action" standards. They identified this as a significant additional burden for both minority students and physicians.

Promotion Criteria

Individuals with backgrounds in academic medicine noted that promotion criteria are rigorous, and—as discussed previously—it is helpful to have tenured faculty providing active mentoring and support. Junior faculty need to establish a balance between clinical medicine and research. Acquiring the necessary research experience and credentials means, for example, that the individual must obtain research funding. New minority physicians may be hampered because some will lack the necessary contacts. This hurdle can be overcome by creating institutional programs that assist new physicians in securing such funds.

Medical faculty are appointed, promoted and tenured based on criteria that center on the performance of rigorous, scholarly research, and on the publication of research studies and other articles in peer-reviewed journals and other academic outlets. Grant awards from the National Institutes of Health are also highly valued. Although a few medical training institutions have begun to consider adopting broader, more flexible criteria, research and publication continue to be the generally accepted measures.

A review of the literature and interviews with faculty suggest a growing interest in broadening promotion criteria to encompass non-traditional endeavors such as community service. Some schools have begun to experiment with such criteria. Until new standards are commonly accepted though, there is a perception that faculty—and minority faculty in particular—who are committed to teaching, mentoring, serving the community, and engaging in activities that encourage institutions to increase diversity, will not advance because they have not focused sufficiently on traditional "scholarly" activities.

Another concern expressed by some of those interviewed is that quantity often seems more important than quality in academic promotion criteria. There is a perception that promotions often reward those who publish most often or receive the largest grants, putting many of those who are committed to doing the type of research that is inherently slower at a disadvantage. Indeed, the view was that these successes were as likely to represent a sophisticated understanding of how to work the

system and how to be a member of what was termed “the club” as they were with excellence. Minority physicians are under represented in this “club”.

The quantity/quality concern was voiced most clearly and most often with regard to community-based research in underserved areas. There is a tradeoff between efficiency and engagement in performing this kind of research. The concern centers on researchers who maximize their efficiency conducting research and publishing results and who then are viewed favorably in the promotion process because they have published. Those familiar with this issue believe strongly that individuals doing such research have an ethical obligation to establish relationships with their subjects. The proper approach requires significant time and effort, but it is essential to preventing community members from developing false expectations. The problem is that proceeding responsibly by spending the additional time may result in fewer publications. Again, to the extent that minority physicians may place a higher value on working for underserved communities, they are more likely to be impacted by this issue in the tenure process.

Other Concerns

Financial issues may also impact the decision of some minorities not to pursue an academic medical career. To the extent that a disproportionate number of minority students are economically disadvantaged, the decision to select a career path that typically will pay less than a position in private practice position is a difficult one.³² While it may be possible to request medical school debt forbearance for the first few years, interest continues to accrue, increasing the ultimate financial burden.

Finally, a number of those interviewed suggested that many minority physicians—relative to non-minority ones—have an interest in community service and a desire to practice in disadvantaged communities. There is some evidence to support this perception.³³ Entry into academic medicine is viewed by some as conflicting with this interest. If opportunities for engaging with disadvantaged communities could be created within the academic culture, then academic medicine might be more attractive. A necessary pre-condition, however, would be to ensure that such “giving back” is actually *rewarded* by the academic medical structure and not viewed as an impediment to professional advancement.

International Medical Graduates

Summary of Concerns

- The money and time that foreign-born and -trained physicians must spend to be licensed to practice in the U.S.
- The question of bias in the process that determines which medical schools are listed in the World Health Organization's *WORLD DIRECTORY OF MEDICAL SCHOOLS*

Educational Requirements

Several of those interviewed—particularly those who work with grassroots community groups—view foreign-born and -trained medical graduates as an important resource for increasing access to health care and diversifying the U.S. physician workforce.³⁴ International medical graduates (IMGs) appear to be a source of controversy within the medical profession.³⁵ As policymakers grapple with an oversupply and flawed distribution of physicians, certain groups have proposed addressing the problem by reducing the number of IMGs who enter residency training programs.³⁶ Other groups, however, take a more moderate approach, in part because their constituencies include IMGs.³⁷

As described previously, a prerequisite to medical practice in the United States is completion of an ACGME-approved residency training program. This is the case whether the foreign-trained individual is a new medical graduate or has been practicing medicine for years in his or her own country. To be considered for admission to a residency program, the IMG must obtain a valid certificate from the Educational Commission for Foreign Medical Graduates (ECFMG), an entity that is sponsored by the AAMC.³⁸ To obtain a certificate, the IMG must meet all ECFMG examination requirements and be a verified graduate of a medical school listed in the World Health Organization's *World Directory of Medical Schools*.

The ECFMG examination requirements include passage of the first two parts of the U.S. Medical Licensing Examination, passage of the Test of English as a Foreign Language (TOEFL), and passage of the ECFMG-administered Clinical Skills Assessment (CSA).

Immigration Issues

In addition to meeting the ECFMG requirements, IMGs who are not U.S. citizens or who do not have permanent resident status must qualify for one of two types of visas. The first is the Exchange Visitor Program J-1 visa—a visa that is designed for foreign nationals who ostensibly are interested in the exchange of knowledge and skills in education, arts and sciences. The ECFMG sponsors the physician for the J-1 visa. Once a graduate medical education program is completed, the holder of the J-1

visa must return to his or her home country. If the J-1 visa holder wants to apply for permanent resident status to practice in the U.S., he or she must remain outside the country for two years. Waivers of this two-year requirement are available in the following situations:

- The U.S. Immigration and Naturalization Service (INS) determines that a U.S. citizen or permanent resident spouse of the visa holder would face exceptional hardship if forced to leave the U.S.; or
- The INS determines that the visa holder would face persecution if he or she returned home; or
- The visa holder has a statement of support from an interested U.S. government agency such as the Department of Veterans Affairs or the Appalachian Regional Commission; or
- The visa holder has a statement of support from a state department of health or its equivalent.

The individual must also obtain a letter from his or her own government stating that it has no objection to a waiver, *and* he or she must demonstrate a bona fide job offer from a health care facility in a federally designated health professional shortage area. This latter requirement is the basis for the statement of support from a federal or state agency.

The other visa option is the H-1B visa, which is available to highly skilled foreign workers who are sponsored by an employer. There is a yearly cap on the number of H-1B visas. For fiscal year 2001 the cap was 107,500. As part of its sponsorship, the employer must petition the INS and certify that the employee will be paid no less than the prevailing wage, that there is no strike or lockout, and that employment of the individual will not adversely affect the working conditions of similar American workers. This process for obtaining an H-1B visa is a fairly protracted and paperwork-intensive one, so it is less common. The H-1B visa for IMGs is also somewhat controversial within the medical profession because it is theoretically possible for an H-1B visa holder to circumvent the ECFMG requirements and enter a graduate medical education program.³⁹ The H-1B visa is advantageous from the physician's perspective, however, because he or she can remain in this country for up to six years with visa renewals. He or she can also apply for permanent residency status without having to leave the United States for two years.

IMG Practice Trends

It appears that IMGs increase access to health care. Historically, the Medicare financing system made it advantageous for hospitals to have residency programs even though there are more residency program positions than there are graduates of U.S. medical schools. Many of those programs are located in underserved urban

and rural areas that receive few, if any, applications from graduates of U.S. medical schools.⁴⁰ Thus those programs often turn to IMGs to fill their slots so they can qualify for the Medicare funding. The Medicare funding cuts required by the 1997 Balanced Budget Act may ultimately have an impact on the number of IMGs because they will ultimately result in residency program reductions.

In addition to populating less prestigious residency programs, IMGs who receive waivers under the J-1 visa program also perform important safety net functions. As described above, receipt of a waiver generally is conditioned on the applicant's having a bona fide job opportunity in an underserved area. Many safety net providers—and community health centers in particular—have come to rely heavily on IMGs for staffing.⁴¹

Some of those interviewed on this issue expressed concern that the licensure requirements for foreign-trained physicians function as a barrier to a more diverse physician workforce. The cost of retraining can be prohibitive, particularly for physicians who are political refugees. Generally they have not been in a position to plan or save for life in the United States. It was also suggested that the requirements for ECFMG certification might have a disproportionately negative impact on physicians who trained in some of the less developed Third World countries that now have sizeable immigrant populations in the United States. At least one individual who was interviewed thought it might be useful and interesting to see how broadly the *World Directory of Medical Schools* represents the world population, and to review the criteria it uses in deciding which medical schools to include and exclude.

Potential for Action

Having described the medical education process and some of its perceived barriers, the focus now shifts to an assessment of potential change strategies. This section is divided into three parts. The first part identifies “parties of influence”—the institutions or other entities that are the potential objects of any strategy or initiative. The second part analyzes theories for taking action or exerting pressure for change. The third part identifies individuals and groups who might have an interest in initiating or participating in some form of intervention.

Parties of Influence

Several types of institutions and some specific entities within academic medicine control the medical education process. They dictate its content, they determine its entry qualifications, they control the leadership development process, and they wield substantial power in the public policy arena on issues related to health care financing and delivery. As is the case with many professions, academic medicine appears to be relatively impervious to outside influence with respect to those areas it considers to be within its exclusive domain. Because of the power they wield, these entities and institutions are potential partners for collaboration, or logical targets for pressure—or both—in the effort to increase physician diversity. Any initiative to re-examine the current approach to medical education or redefine the notion of what makes a good physician would have to involve these parties in some fashion. What follows is a brief description of the institutions and entities and the role they play.

Medical Schools

Medical schools are the gateway to the medical profession. One cannot practice medicine without a medical degree. Thus, the criteria and practices employed by medical schools in selecting and retaining students have an enormous impact on medicine’s composition and its professional and cultural norms.

There are 125 accredited medical schools in the United States. Of those, 74 are state institutions, 50 are private, non-profit institutions, and 1 is a federally chartered institution. Some are freestanding entities, but most are part of a broader university system. Some medical schools were established specifically to train primary care practitioners, and others appear to place more of an emphasis on training specialists. There is also a small group of medical schools that have a commitment to—and a history of—training minority students. Each of these attributes has an impact on

institutional missions and values.

Medical school financial support comes from a variety of sources. Student tuition covers only a part of institutional costs. Other funds come from the federal government for research, student financial aid, and special programs. Medical schools are also the recipients of private grants and donations, and in some cases they also receive revenues from faculty clinical practices.

Medical school operations are subject to all applicable state and federal laws. As will be described in more detail in a subsequent section, they are also subject to the accreditation requirements of the Liaison Committee on Medical Education (LCME), a joint undertaking of the Association of American Medical Colleges and the American Medical Association's Council on Medical Education.

Association of American Medical Colleges (AAMC)

The AAMC is a membership organization comprised of all the accredited medical schools in the United States and Canada, 400 major teaching hospitals and health systems, and 90 academic and professional societies representing about 100,000 faculty members. Its purpose is “the improvement of the nation’s health through the advancement of medical schools and teaching hospitals.”⁴² Among its functions are: representation of its members’ interests in the federal legislative and regulatory arenas; provision of educational programming for its members on issues of common interest; conduct of research on medical education issues and publication of the findings in reports and in its journal, *Academic Medicine*; collection, analysis and dissemination of most of the data related to medical education; and participation in a range of activities that establish educational and professional standards including MCAT development, medical school and residency program accreditation, and development of standards and requirements for the IMG process.

In connection with its data repository function, the AAMC—with input from its members—chooses what data it will collect, analyze, and disseminate to the public. It is the primary source of information on medical education trends, such as the declining number of applicants, and on the racial composition of the applicant pool and of enrollees. It is difficult, however, to assess the diversity performance of individual medical schools because the AAMC does not make that information generally available.

The AAMC has played an active role in medical education diversity efforts. A number of years ago it developed a project called “3000 by 2000.” The goal of that initiative was to have at least 3000 underrepresented minorities entering medical school each year by the Year 2000. While the goal was not reached, the effort has led to some increases in medical student diversity. AAMC has also worked closely with some of its member medical schools to develop educational pipeline programs. It also has designed and implemented programs that promote diversity among medical

school faculty. It has trained medical school admissions officials in multiculturalism and the use of non-cognitive criteria in the admissions process. Many of these are innovative efforts, yet some of the individuals interviewed see some of these programs as reinforcing the norms of many of the AAMC member institutions. For example, AAMC-sponsored pipeline programs channel funding through the grantee medical schools even when there is a community partner, thus ensuring that the medical school maintains ultimate control over the program. Additionally, faculty development programs utilize the traditional requirements for advancement rather than promoting new approaches and standards.

Liaison Committee on Medical Education

The Liaison Committee on Medical Education (LCME) is the nationally recognized accrediting authority for medical education programs leading to the medical degree in the United States and Canada. The LCME is a joint undertaking of the AAMC and the American Medical Association's Council on Medical Education. The LCME has seventeen members, including medical educators and administrators, practicing physicians, medical students, and members of the public. The LCME sets the standards for function, structure and performance of medical schools and medical education. It assesses compliance with those standards through periodic site surveys. Institutions that are judged to have met those standards fully are accredited for a period of seven years.

Accreditation is essential to medical schools for a number of reasons. First, only accredited medical schools can participate in federal student loan programs. Additionally, most state medical licensure boards require that U.S. medical schools be accredited by the LCME as a condition for licensure of their graduates. Also, in order to be eligible for the USMLE, U.S.-trained students must be enrolled in, or have graduated from, an LCME-accredited institution. Finally, graduation from an LCME-accredited medical school is required for participation in a residency program accredited by the Accreditation Council for Graduate Medical Education.⁴³

Residency Programs

Residency programs are also critical actors in the medical education process. As described earlier, medical school graduates must have successfully completed a residency program in order to become licensed. All residency programs are tied to sponsoring institutions. Sponsoring institutions may be hospitals or other care delivery entities such as community health centers.

As will be described in more detail in a subsequent section, much of the financial support for residency programs comes from federal Medicare funds and from federal and state Medicaid reimbursements. Residency programs play a critical role in providing direct patient care. Under the supervision of program physician staff,

residents generally are the first line of care in teaching facilities' inpatient and outpatient services.

Accreditation Council for Graduate Medical Education

The Accreditation Council for Graduate Medical Education (ACGME) is the private accreditation organization for residency programs in the United States. It establishes the educational standards for programs and their sponsoring institutions, and it monitors compliance with those standards. It is a voluntary association of the AAMC, the American Board of Medical Specialties, the American Medical Association, the American Hospital Association, and the Council of Medical Specialty Societies.

The ACGME is perceived by key informants as wielding significant influence within academic medicine. As the entity that sets accreditation standards, it effectively determines the norms and values for residency programs and their participants. Key informants suggest that it generally places a high value on standardized test scores and peer-reviewed processes that, in their view, serve to reinforce the status quo. While the ACGME board of directors is the ultimate decision maker, the development of standards and the accreditation reviews are performed by one of 26 specialty-specific committees, called Residency Review Committees. These Committees are composed of physicians. Being a member of a Residency Review Committee or another ACGME committee “is considered a prestigious appointment and offers individuals an opportunity to make a meaningful contribution to medical education.”⁴⁴

Teaching Hospitals

Teaching hospitals are the sponsoring institutions for the overwhelming majority of residency programs. They are also the future employers of many of the residents in those programs. In their role as residency program sponsors, teaching hospitals provide the infrastructure and the patients that “make” the programs. Teaching hospitals rely primarily on federal and state program patient service revenues, research funds and GME funds, private patient revenues, and private grant and donor dollars to help cover their operating costs.

Of all of the “parties of influence” described up to this point, teaching hospitals are unique in that they are both training institutions *and* businesses. In this latter role they have many of the same concerns that any business has, including a desire to attract a dominant market share of patients. They are also highly visible entities within their communities. They provide medical care to community members, they are a major employer, and they are subject to certain expectations on the part of the community. Teaching hospitals—particularly those that are non-profit—are generally recognized as having community benefit obligations stemming

from their non-profit tax status. The community benefit concept will be discussed at greater length in a subsequent section, but it is important to note at this point that a principal expectation of the community benefit obligation is that hospitals will consult with their communities to identify benefits that the community considers to be both necessary and appropriate.

Council of Teaching Hospitals

The Council of Teaching Hospitals (COTH) is a primary component of the AAMC. It provides a “forum and environment where policy and support issues which affect health care delivery organizations with a specific commitment to academic medicine can be addressed.”⁴⁵ The types of issues it focuses on include Medicare and Medicaid medical education payments, government regulation of teaching hospitals and physicians, medical education, and physician workforce issues. AAMC staff provide a range of support to COTH, including legislative and regulatory monitoring and advocacy, data collection and comparative data reports, and sponsorship of educational programs and other opportunities for academic medicine leadership to address issues of common interest. Individuals with backgrounds in academic medicine consider COTH to have substantial influence in the public policy arena related to physician training.

Strategic Approaches

The next issue for consideration is what strategies can be used to effect change. Specifically, what kinds of leverage can be used to motivate the institutions and organizations that essentially control the medical education process to change their behavior, or to become more actively engaged in physician diversity efforts? There is a range of possibilities that fall into certain broad categories. They include:

- Civil rights and equal opportunity approaches
- Community benefit approaches
- Government “purse string” approaches
- Public “permitting” approaches
- Private “licensing” approaches
- Marketplace approaches
- Philanthropy approaches

What follows is a description of each approach and how it might be applied, but first, a note of caution. As will be discussed at greater length in the recommendations, no single approach will work by itself. A broad-based program that utilizes all of these tools at different times, in different ways, and to different degrees may be necessary.

Moreover, not all of the approaches suggested will lead directly to an increase in the numbers of minority physicians. Some offer the possibility of “downstream” or lateral pressures that could have a positive longer-term effect. Equally important is that some of the approaches offer the possibility of establishing a dialogue between medical education institutions and the communities that support them—a step that may be critical to any broader physician diversity effort.

Civil Rights and Equal Opportunity Approaches

Civil rights and equal opportunity approaches are considered here in three segments: affirmative action policies, the application of Title VII of the Civil Rights Act of 1964, and the application of Title VI of that same Act.

Affirmative Action

One of the more pernicious effects of recent anti-affirmative action litigation and ballot initiatives is that there is considerable confusion among educators and their institutions as to whether and how racial preferences can be used. A number of those interviewed believe that college and university administrators are erring on the side of caution and steering clear of public statements or admissions policies that specifically reference race and ethnicity. These administrators fear being the target of lawsuits, which is understandable given the controversial nature of affirmative action programs in the current public policy and legal environments. The reality, however, is that most colleges and universities—especially those that are private institutions—still have some latitude to use race and ethnicity as a factor in admissions, or to develop special programs to recruit and support minority students.

The controlling law is the one that was enunciated in the case of *Regents of the University of California v. Bakke*⁴⁶ by the Supreme Court in 1978. That decision essentially provides that public institutions of higher education may not take race into account as a factor in their admissions processes *if* the reason for doing so is to remedy past societal discrimination. Race may, however, be used explicitly as one of a number of factors in the admissions process if the purpose is to further some legitimate educational purpose. Confusion has arisen because in the case of *Hopwood v. Texas*,⁴⁷ the court purports to have overruled *Bakke*. The prevailing view, however, is that the *Hopwood* decision applies only to public colleges and universities and to private colleges and universities—insofar as they receive federal funds—in the three states covered by the Fifth Circuit of the United States Court of Appeals, Texas, Louisiana, and Mississippi.⁴⁸

If race or ethnicity is used as a factor in any action or activity by a public entity such as the federal or a state or local government, the entity must be prepared to demonstrate that the action or activity is narrowly tailored to serve a compelling state interest. This legal standard—also referred to “strict scrutiny”—is the one that

courts must apply when considering the legitimacy of using such factors.

In the affirmative action cases that currently are being litigated in Washington state and Michigan,⁴⁹ the state universities were sued because they had explicit policies that allocated additional points in the admissions ranking process to certain underrepresented minority applicants. In the case involving the University of Washington, the Ninth Circuit Court of Appeals found that *diversity* itself constituted a compelling state interest.⁵⁰ There are two separate cases involving the University of Michigan—one related to the undergraduate college, and the other related to the law school. For both cases, the university submitted to the courts a substantial body of social science research to demonstrate that diversity is essential to the quality of the education its students receive. Its strategy to satisfy the “strict scrutiny” test is to convince the courts that

- The significant educational benefits of diversity as documented by the evidence constitute a compelling state interest, and
- The only way to achieve the goal of diversity is to retain the current admissions process, which allocates additional points to underrepresented racial and ethnic minorities.

To date, one of the cases has been decided in favor of the university, and the other has been decided in favor of the plaintiff law school applicant. Both decisions have been appealed, and oral arguments were recently heard in the Circuit Court of Appeals for the Sixth Circuit. Legal experts expect this case and others like it to make their way to the Supreme Court in the next several years. Until there is a decision of national impact however, a degree of latitude remains—even for public institutions—as long as they are in jurisdictions that are unaffected by the *Hopwood* decision and that do not have anti-affirmative action laws.

Several of those interviewed felt strongly that a defensive strategy should be developed *now* by accelerating research that demonstrates a connection between a diverse medical profession and an improvement in access and quality of care for the underserved. Although they believe that the research to date is compelling, particularly because of its findings that minorities are more likely to practice in underserved areas and that individuals prefer to see physicians from similar racial and ethnic backgrounds, they don’t think it is sufficient. They point to the new medical school accreditation standard on cultural competency as powerful evidence of the profession’s own recognition that medical students must be prepared to handle diversity among patient populations.

Title VII Actions

Recent developments suggest that Title VII of the Civil Rights Act of 1964 may have some utility in addressing certain practices in the medical education

continuum that appear to function as a barrier to minority advancement. Section 703(a)(1) of the Act makes it an unlawful employment practice for an *employer* “to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual’s race, color, religion, sex, or national origin.”

The 1999 National Labor Relations Board ruling that residency programs are “employers” and residents are “employees” for purposes of the National Labor Relations Act⁵¹ brings residency programs within the ambit of Title VII. Title VII case law⁵² suggests a Title VII violation might be found if there are residency selection practices which subject racial or ethnic minorities to “disparate treatment,” or which have a “disparate impact” on them.

A Title VII claim of disparate treatment might arise, for example, from a residency program’s decision to consider only applicants from certain “selective” medical schools where the effect is to exclude applicants from historically black medical schools. A minority plaintiff would need to demonstrate that he or she applied to the residency program and that he or she was qualified for admission. One court suggests that a plaintiff should set forth facts that meet some plausible definition of “qualified,” such as the ACGME’s minimum criteria.⁵³ The plaintiff also would need to show that he or she was not selected and that other similarly situated individuals outside the protected class were matched or admitted. The residency program would then need to show that the plaintiff lacked qualifications, both objective and subjective, relative to the applicants who were selected or ranked higher. In response, the plaintiff would need to demonstrate that the residency program’s reason for rejecting the applicant was a “pretext for discrimination.” The merits of the claim would hinge on the strength of the rejected applicant’s objective criteria, and on evidence showing intentional discrimination.

A disparate treatment claim might also be possible with respect to the operation of the National Residency Matching Program (NRMP). Although neutral on its face, the NRMP may mask discrimination where residency program directors or institutions deliberately or persistently place candidates in a rank order that will result in a non-match. In a recent case, the court found that although a plaintiff employee did not allege that an employer’s layoff process was discriminatory, the process could nonetheless be ‘derivatively’ discriminatory since its calculations were based on discriminatory appraisal scores.⁵⁴ The NRMP algorithm may mask discrimination similar to the employer’s layoff process. For instance, if a program applicant could show evidence that some residency programs categorically refuse to consider applicants from historically black medical schools because the students are minorities, that refusal would be reflected in the rank order lists.

To initiate a case under Title VII on a theory of disparate impact, plaintiffs

need to use statistics to show that a given employment practice or policy discriminates in design or effect.⁵⁵ The composition of the employer's workforce—or in this case, the pool of applicants—is compared to the composition of an outside population. The difference between the workforce composition and the composition of the population is used to prove the discriminatory effect. The assumption underlying the evidentiary use of such comparisons is that, absent discrimination, the composition of the workforce should reflect that of the outside population.

In the situation posited here, the applicant from an historically black medical school would need to offer statistical evidence that if qualified applicants from historically black medical colleges were considered for residencies on an equal basis, then X number or percentage of minority students should have been matched to residency Y. As with disparate treatment cases the defendant residency program would have the opportunity to argue that its criteria and processes did not cause the disparity. The program most likely would also argue that the criteria were job related and a business necessity.

In the context of residency programs, defendants in a disparate impact claim could be any individual or institution responsible for developing or executing medical residency admissions criteria in addition to the program itself. Theoretically, an argument could be made that the ACGME, the NRMP, the AAMC, the ABMS, the AMA, the AHA, and the CMSS are employers because of the degree to which they control the admissions criteria.

It is important to note that Title VII cases are protracted, complex, and difficult to win. Nevertheless, a Title VII victory related to residency program admissions could have a far-reaching impact on the medical education process. Also, sometimes the mere possibility of litigation is enough to persuade institutions and other entities that control a process to take a long, hard look at its operation and its impact, and to address any concerns voluntarily.

Title VI

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin by recipients of "federal financial assistance." The government can bring suit to enforce the law, and so can individuals who are able to demonstrate they are the victims of intentional discrimination. Federal financial assistance includes virtually all forms of direct federal payments—Medicaid and Medicare⁵⁶ payments, federal educational loan payments, federal work-study money, and research grants from federal agencies. Title VI prohibitions apply to the entire institution that is receiving the federal funds, not just to those institutional activities or programs that are the direct recipients of the funds.

The regulations that implement Title VI are broad in scope.⁵⁷ In addition to prohibiting intentional discrimination, they also prohibit the use of "facially neutral"

practices and policies that have a discriminatory effect on minority group members, *regardless of whether the recipient of the federal funds intends to discriminate.*

The ultimate sanction for a violation of Title VI is the withdrawal of federal funds. While the Supreme Court recently decided that *individuals* cannot sue recipients of federal funds under Title VI on a theory of discriminatory impact,⁵⁸ they can file a complaint with the civil rights enforcement office of the appropriate federal agency, and that office can initiate an enforcement action. In the case of funds related to medical education, the appropriate entity would be the Office for Civil Rights (OCR) of the U.S. Department of Health and Human Services (HHS) or its counterpart at the U.S. Department of Education. Where it finds that a complaint has merit, the enforcement agency is required to pursue voluntary compliance first. If the issue is not resolved, it can then terminate federal financial assistance. It can also refer the matter to the U.S. Department of Justice. In any case, the process can be costly and protracted, and it can generate considerable negative publicity and legal costs for the entity that is alleged to have violated Title VI.

Both medical schools and residency programs are subject to the Title VI prohibitions. Medical schools receive federal funds for such things as student loans and faculty research. Residency programs are largely funded by Medicare, and the teaching hospitals within which they operate also receive Medicare, Medicaid, and research funding.

Any practice or policy that has a discriminatory effect on minorities is potentially subject to challenge under Title VI. In the medical school context, several different practices could be implicated. A dismissal policy that results in the disproportionate termination of minority medical students could be a basis. An admissions policy that relies heavily on MCAT scores could be a basis, given the historical under-performance of minorities on the test. In the residency program context, the same fact patterns that trigger a Title VII claim would be applicable to Title VI.

As with Title VII actions, it is important to remember that while it is relatively easy to make out a *prima facie* case of discrimination, it is frequently difficult to prevail ultimately. The medical school and the residency program have the opportunity to prove that the practice or policy is legitimate and necessary to achieve program objectives. The plaintiff must respond to those claims by showing that a reasonable result could have been achieved in a less discriminatory way. In short, cases are complicated and often depend on the development and presentation of complex statistical analysis. Nevertheless, the right fact pattern could result in a decision that would have a significant impact on medical education.

Community Benefit Approaches

One of the Kellogg Foundation’s questions at the outset of this project was whether community benefit principles might be a useful tool for increasing diversity in the medical profession. The community benefit concept is predicated on the idea that in exchange for the broad public support they receive, non-profit health care institutions have an obligation to ensure that at least some of their activities benefit the community *as a whole*. In other words, their activities must provide some tangible benefit to the broader community in addition to benefiting those individuals who actually use the institutions’ services.

The community benefit concept originated in federal tax policy. Federal law defines the organizations that are exempt from federal taxes to include “[C]orporations, and any community chest, fund, or foundation, organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, or educational purposes...” Two additional requirements for exemption from federal taxes are that (1) no part of the net earnings of an organization may inure to the benefit of any private individual, and (2) no substantial part of the organization’s activities may be to influence legislation or intervene in any political campaign for or against any candidate for public office.⁵⁹

Entities that fall into one of the categories enumerated in the law are not *per se* entitled to tax exempt status. They must demonstrate that their activities fit within the common-law concept of charity. Specifically, the activities must serve a useful public purpose, and must not be contrary to established public policy.⁶⁰ “[T]he common element of all charitable purposes is that they are designed to accomplish objects which are beneficial to the community.”⁶¹

Tax-exempt status confers a number of advantages. A significant one is that the contributions and gifts received by tax-exempt entities are tax deductible for their donors.⁶² Moreover, many tax-exempt organizations reap substantial benefits—both tangible and intangible—from their reputation and status as charitable, mission-driven institutions. They often are the beneficiaries of volunteer time and the objects of considerable public good will. Tax-exempt organizations are able to use their excess revenues to further their missions. Health care institutions, for example, may use them to fund improvements in patient care, medical education and training, and research. Many institutions have achieved national stature as a result of their ability to reinvest in this way.

Non-profit health care institutions have long been subject to a fairly specific community benefit standard pursuant to federal tax regulation although the nature of the obligation has changed somewhat over the years.⁶³ The original focus of community benefit was on the provision of free care—also called charity care—to indigent community members.⁶⁴ With the advent of publicly financed insurance and other health coverage programs, the focus has become much broader.⁶⁵ Now

community benefits are seen as encompassing a range of activities with a particular focus on those that contribute to health promotion, health protection, and disease prevention within the broader community.

A determination of whether a hospital is providing a level of community benefits sufficient to maintain tax-exempt status is based on a review of all facts and circumstances.⁶⁶ Activities that have been found to justify the tax exemption include those that contribute to the relief of poverty, such as the provision of free care, and those that promote health, such as the operation of an active and accessible emergency room. In every case, the class of persons that benefits from the hospital's activities must be fairly broad. That is, the class must extend beyond the paying patients who receive hospital services. Additionally, the benefit must not be insubstantial. If, for example, a hospital claims that it provides free care to community members, it must be able to document, among other things, that it has policies in place that publicize the availability of free care. It must also be able to show that it actually provides free care.⁶⁷ If a non-profit health plan claims it offers a subsidized premium program, the amount of benefit actually conferred by the program must be clearly documented and it must be more than a token sum.⁶⁸ The ultimate sanction for failure to provide a sufficient level of community benefit is loss of tax-exempt status.

There is no analogous tax guidance that addresses specific community benefit obligations of educational institutions beyond the general requirement that they operate in ways that are beneficial to the community as a whole. Nevertheless, the kind of analysis that resulted in the imposition of community benefit obligations on health care institutions arguably is applicable to educational institutions. A critical factor in that analysis was the role health care institutions play in the well being of their communities. Because they sheltered and cured the sick, they both prevented the spread of disease and restored health so that individuals could once again be productive members of society. In performing those vital functions they were providing benefits not just to people who actually required hospitalization, but also to the entire community. And if hospitals didn't provide a substantial portion of those services, then government might have to step into the breach.⁶⁹ Reliance on government expenditures would mean that hospitals would have to compete for limited funds with all of the other functions government traditionally performed. Undoubtedly that would have resulted in fewer beds, and perhaps even poorer quality care. Thus private support was deemed preferable.

These same principles arguably apply to non-profit educational institutions. The role of education in American society cannot be overstated. Educational attainment is generally believed to be the most fundamental determinant of life chances. An overwhelming majority of Americans believe that a college education is the ticket to the middle class.⁷⁰ Moreover, educational institutions arguably protect us from the dangers of ignorance and stimulate productivity. While this country has a

long tradition of publicly funded educational institutions, government clearly does not have the resources to satisfy the demand for higher education. Therefore it is just as critical for private educational institutions to fill this gap as it is for private hospitals to provide important health services that might not otherwise be available.

Despite its tax policy origins, the community benefit concept has gained much broader currency in the face of profound changes in our health care delivery system. Hospitals that have always demonstrated a commitment to the concept because of their missions are struggling to cope with the realities of a competitive health care market.⁷¹ States and local communities that are strapped for cash have begun to scrutinize hospital expenditures and service delivery decisions to determine whether state and local tax exemption continues to be justified. Some states have followed the federal government's example and imposed explicit community benefit obligations on health care institutions. In general, the obligations are linked to tax exempt status, although the Massachusetts Attorney General has implemented voluntary guidelines that apply to non-profit *and* for-profit HMOs in addition to non-profit hospitals. The types of benefits that institutions are required to provide and document vary from state to state. In some jurisdictions they are not specified at all. Despite the variable nature of this regulation, a common theme does emerge. That theme is that the institution should undertake an assessment of the needs and preferences of its community, and it should collaborate with the community in developing a plan to address those needs.

The case for imposing a community benefit obligation on medical schools may be stronger than it is for other types of educational institutions. Medical schools are unique in that they are so closely tied to non-profit teaching hospitals which have unambiguous community benefit obligations. In some cases, the medical school actually owns the teaching hospital. Moreover, medical schools are the beneficiaries of what may be the ultimate public contribution—the community provides the patients on whom medical students learn their clinical skills.

A challenge to conceptualizing the application of community benefit principles to medical education institutions is arriving at a definition of “community.” Initial institutional reaction has been that unlike hospitals, which generally serve a distinct community, medical schools attract students from across the country—or even the world—and then send them off again to practice in distant locations. There is no reason, however, for traditional notions of community to be controlling in this dialogue. Individuals and groups who have been successful in getting health care institutions to acknowledge a community benefit obligation have noted that the definition of community is something that can—and perhaps should—be negotiated with the institution. After all, in addition to receiving local state and federal public support, medical schools have unique strengths and expertise. These unique attributes would be a factor in any negotiation.

Another recurring issue has been whether increasing diversity within the medical profession constitutes a community benefit. Given the role of medical training institutions and the country's shifting demographics, increasing physician diversity is something that both medical schools and teaching hospitals should be committed to regardless of any community benefit obligation. Nevertheless, these institutions appear to be stuck, and the issue is one of how to prod them to action. Given the effectiveness of community benefit campaigns in so many communities, it may make sense to approach the issue using the community benefits framework.

One of the individuals interviewed for this paper who has written extensively on community benefits believes that it will not be long before academic institutions will be asked to demonstrate how they directly benefit local communities. He believes institutional claims that "local communities indirectly benefit from academic research and token representation in student populations" will not be sufficient to satisfy communities in the years to come.⁷² If a satisfactory case is made that medical schools are subject to community benefit obligations, then there must be a consideration of what kinds of activities constitute true community benefits.

Finally, a lesson from other community benefit efforts is instructive here. The principal value of a community benefit approach to medical schools on the diversity issue—or any other issue, for that matter—does not necessarily lie in challenging an institution's tax status, or in presenting a list of non-negotiable demands. Those should be tools of last resort when an institution persists in ignoring community concerns or refuses to meet with the community at all. Rather, the true value may lie in the establishment of a dialogue between the institution and its community. This provides an opportunity for each side to identify issues of importance and concern, and a mechanism for the groups to work together toward solutions that are mutually beneficial.

Government "Purse Strings" Approaches

Tax-exempt status is just one example of the broad public support provided to medical schools and teaching hospitals. Those institutions are also the beneficiaries of substantial amounts of public dollars from a number of state and federal government sources. Federal Medicare dollars finance the bulk of graduate medical education. Federal research dollars underwrite the work of large numbers of medical school and teaching hospital faculty. Federal grants finance medical workforce development and other important programs. State budget allocations provide critical financial support for state medical schools and for teaching hospitals that serve Medicaid recipients. This broad support is viewed by many as creating a social contract that, among other things, obligates medical training institutions to be responsive to societal priorities—such as preparing students to have the skills, abilities and values to care for people and to provide leadership to improve the public's health—rather than focusing narrowly on institutional priorities.⁷³

What follows is a description of the major sources of public financial support for medical education generally, and for medical education institutions in particular.

Medicare

The Medicare program is the principal source of funding for graduate medical education. The program is administered through the Centers for Medicare and Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Medicare funding for graduate medical education (GME) programs falls into two categories: “direct medical education” (DME) costs, and “indirect medical education” (IME) costs. DME costs include stipends paid to residents for the services they provide and other related program expenses such as salaries of supervising faculty. IME funds reimburse teaching hospitals for the costs associated with attracting a sicker, more heterogeneous mix of patients than non-teaching hospitals. Both kinds of payments are substantial. In 1999, DME payments to academic medical centers totaled about \$2.2 billion, and IME payments totaled about \$3.7 billion.⁷⁴

Medicare GME funding can and has been used to influence the composition and size of the physician workforce. For example, the Balanced Budget Act of 1997 (BBA) instituted several changes to address the oversupply of physicians. Those changes included: capping the number of residents funded by Medicare⁷⁵ and instituting a voluntary residency reduction program which provides financial incentives for teaching facilities to train fewer residents. The BBA also provided payment, for the first time, for the DME expenses of non-hospital providers, such as federally qualified health centers and rural health clinics, that train residents in primary care. It also provided IME payments to teaching hospitals for time their residents spend training at non-hospital ambulatory care sites. These latter two provisions are intended to function as incentives for training more primary care physicians.

Given the reliance of medical teaching institutions on these funds, can Medicare be used to influence physician workforce diversity? While the answer is that it may be theoretically possible, it would also have to be politically feasible. Medicare GME funding is really a collateral aspect of a program that was created for a very different purpose. The Medicare program was enacted to provide the elderly and disabled with a measure of protection against the catastrophic costs of illness. In order to secure support from the hospital industry and the medical profession, Congress had to make certain commitments. It had to agree to fund GME, and it had to ensure the broadest possible provider participation. This latter provision was operationalized by ensuring that restrictions on provider participation essentially are limited to situations where financial fraud or abuse has occurred, or where serious and persistent quality issues have been documented.⁷⁶ If the government threatened to withhold federal funds in the absence of progress toward diversifying the medical profession, that would probably be viewed as a violation of the broad participation guarantee. It might

also raise constitutional issues. An approach that might be more politically palatable would be to create an incentive for teaching hospitals to do more to ensure cultural competency in patient care, particularly within their residency programs. While such an approach does not face the issue of diversity head on, many key informants view cultural competency programming as a good starting point in a diversity effort.

In summary, the Medicare interest group environment is a dense one, and the medical lobbies are very powerful. Moreover, to the extent that consumer concerns have driven program changes over the years, the issues generally have related to coverage and benefits, not diversity. For these reasons it would seem that any attempt to address physician workforce diversity through Medicare funding would have to be carefully crafted.

Medicaid

Hospitals also receive reimbursement from the Medicaid program. Medicaid functions somewhat differently from Medicare in that its funds represent both federal and state dollars. The federal government establishes broad program parameters, and it then matches state funds that are budgeted to support the program. CMS is the agency that administers the federal aspects of the program.

In most states Medicaid dollars are less explicitly designated for graduate medical education than Medicare dollars are, but physician training is nevertheless a factor in the calculation of reimbursement rates. A few states actually link Medicaid GME payments to state policy goals, but to date most of the goals have related to the training of more primary care physicians and a better geographic distribution of physicians.⁷⁷ New York, which still has a regulated hospital payment system, has been more expansive in this regard. It includes a discrete GME component in the Medicaid reimbursement rate structure, and it conditions payment of some of those funds on facilities putting resources into certain types of initiatives, including increasing diversity among health professionals. It is not clear what the effect of those incentives has been, but the concept may be worth exploring for replication elsewhere.

National Institutes of Health

The National Institutes of Health (NIH) are another constituent agency of the U.S. Department of Health and Human Services. The fy2001 appropriation for the agency gives the NIH oversight of a \$20 billion research budget. Funding is distributed to NIH staff as well as to non-government research institutions across the country.⁷⁸ Programs that are eligible for NIH funding must meet certain minimal equal opportunity and non-discrimination standards that are enumerated in the NIH Grants Policy Statement.⁷⁹ These standards are derived from Title VI of the Civil Rights Act and the Age Discrimination Act of 1975.⁸⁰ Several key informants observed that NIH could—and should—do more with regard to diversity in its role

as the principal funder of medical research. They suggested such things as:

- Increasing the diversity reporting requirements for organizations receiving federal funds,
- Providing training and technical assistance for involvement with communities,
- Developing guidelines and criteria for community-based research and interaction,
- Explicitly stating expectations for increasing diversity in grant contracts and program reviews, and
- Publicizing to communities the intent of research funding and the requirements attached to it.

NIH itself has a history of developing and supporting a range of programs that are designed to encourage and promote the development of minority researchers at the physician and doctoral degree level. Those programs include the Minority Access to Research Careers program, the Bridges to the Doctoral Degree program, the Pre-Doctoral Fellowships for Nursing Research program, and the Minority Clinical Associate Physician Award. The programs all provide financial support to research institutions for the purpose of exposing students to, and promoting their involvement in, research. NIH also provides direct financial support and other resources to students who are at various stages of the medical education pipeline.

Health Resources and Services Administration

The federal Health Resources and Services Administration (HRSA) is another critical agency in the effort to expand physician diversity. Situated within the U.S. Department of Health and Human Services, HRSA's mission is to "[I]mprove the nation's health by assuring equal access to comprehensive, culturally competent quality health care for all."⁸¹ In FY2001 alone, HRSA had a budget of \$6.23 billion. Of that, \$352 million was dedicated to health professions training and quality assurance. The workforce diversity allocation, including nursing programs, was over \$147 million.⁸² Much of this targeted funding was provided to non-government programs in the form of grants. HRSA grants subject recipients to the same non-discrimination requirements applicable to NIH grantees. Further, HRSA is very clear in its expectation that any funding it provides to institutions is to *enhance*—not supplant—a medical institution's own efforts to increase physician diversity.

The Division of Health Professions Diversity, a unit within HRSA's Bureau of Health Professions, administers a number of important diversity-related programs. The goal of these programs is to provide disadvantaged and under-represented minority students and faculty with opportunities to enhance their academic skills and obtain the support needed to graduate from health professions schools or to complete faculty

development programs. The Bureau of Health Professions also funds “Area Health Education Centers.” These grants are cooperative agreements with individual or consortia of medical and nursing schools. Primary goals of the agreements are to form linkages between health care delivery systems and educational resources in underserved communities, and to increase the number of individuals from minority and underserved communities who enter health careers.

Several of those interviewed for this paper identified some of the HRSA-sponsored initiatives as incorporating what they considered to be pipeline program “best practices.” In particular they cited the Health Careers Opportunity Program (HCOP) and the Area Health Education Centers (AHEC). Rather than channeling all funds through a medical school or teaching hospital, HRSA allows the community organizations that partner with medical institutions in these programs to receive funds directly. Individuals familiar with these programs felt this was a critical strategy for empowering communities. They observed that the school or hospital usually has the most resources and is the most organized of the partners, and that if they could, they would have even more leverage. HRSA chooses instead to give the community partners a measure of control over the allocated funds.

National Science Foundation

The National Science Foundation (NSF), an independent government agency, is another significant source of medical research funds. Its total budget in FY 2001 was \$4.5 billion, of which a significant percentage was allocated for grants to non-government agencies. A substantial portion of the money was also dedicated to human resources development, which, according to agency materials, includes an emphasis on “enhancing the participation of groups currently underrepresented in the science and engineering workforce.” It does so in the belief that enhancing such participation “will further scientific progress by promoting diversity of intellectual thought.”⁸³

The NSF incorporates the same non-discrimination requirements in its grant making activities that NIH and HRSA do. It also has developed and implemented a number of programs intended to increase workforce diversity in the sciences. Those we spoke with suggest that the NSF should consider adopting the same types of measures recommended for NIH here with respect to what it requires of its grantees in connection with its diversity goals.

Department of Veterans Affairs

Finally, it is important to note that more than half of the nation’s physicians receive some part of their medical training in facilities operated by the United States Department of Veterans Affairs. The Department has clinical rotation affiliations with 107 of the medical schools in the United States, and it has more than 8,700 medical

residency training positions.⁸⁴ The Department has in place both non-discrimination and affirmative action policies, and it also has initiated a number of diversity efforts, although the extent to which these are targeted to the physician workforce is not clear. Because of its central role in physician training, the Department is well positioned to use its resources to address the issue of increasing physician diversity.

State Appropriations for Higher Education

State legislatures theoretically can require the public colleges and universities they fund to undertake all sorts of initiatives. Information was sought from the National Conference of State Legislatures as to how legislatures negotiate annual budget appropriations with state universities, and whether diversity—or diversity goals—are ever explicitly discussed. No information was available. It may well exist within individual states, but state legislatures may be reluctant to share it out of fear of a legal challenge similar to the one in the *Hopwood* case referenced previously.

A number of state medical schools were created expressly to train primary care physicians who would practice within the state.⁸⁵ Thus approaching the issue of diversity from a physician supply angle may be useful. First, legislators would need to be educated about the links between diversity and quality of care. Then data could be produced comparing state demographics—including the geographic distribution of the minority population—with the public medical school output. Such a strategy is arguably less threatening and controversial than one that is characterized as an affirmative action policy. One student noted that the public medical school he attends is required to produce annual physician supply and demand data. He wasn't sure that the legislature actually uses that data, but the fact that it exists in the public domain means it could be used to initiate a public dialogue about the physician diversity issue.

Public “Permitting” Approaches

Other potential tools for encouraging or increasing diversity within the medical profession may lie in the state and local public approval processes institutions must submit to when they want to do things like construct new buildings or purchase expensive medical technology.

When an institution wants to undertake some activity that requires city or state approval, certain conditions can sometimes be attached. As a matter of public policy, the regulating body could encourage—or require, depending on relevant law—the institution to take community needs into account as a condition of approval. For example, a medical school expansion into an urban neighborhood could drive up housing costs for community residents. The city might require, as a condition of issuing building permits or zoning variances, that the medical school build or support the development of low-income housing in the neighborhood. There is no reason why a community group couldn't seek other kinds of benefits, including those that

might have an impact on physician diversity. A community group might consider asking the medical school to agree to do several things that might increase minority student enrollment, including funding pipeline programs, requiring community representation on the admissions committee, or providing scholarship assistance and preferential admission to low-income residents of that community.

The certificate of need process that exists in some states could also be used to encourage teaching hospitals to increase physician diversity. The certificate of need (CON) concept grew out of government efforts in the 1970s and 1980s to constrain health care costs, in part through preventing unnecessary duplication of health resources. A related goal was to ensure an equitable distribution of health care resources within a jurisdiction.⁸⁶ A CON essentially is a permit that hospitals must obtain before undertaking certain major expenditures such as purchasing new equipment, constructing new facilities, or adding new services. The appropriate regulatory agency evaluates the institution's request in light of factors and criteria contained in the CON statute and regulations. Often the agency will attach conditions to an approval.⁸⁷ Conditions are appropriate particularly where the CON legislation sets forth broad program objectives, such as promoting health access and high quality of care. Regulators could, for example, make the connection between physician diversity and health care access and quality. They might condition issuance of a CON on developing minority staff outreach programs or providing stipends for minority researchers in areas related to health care access and quality. Or the institution could be required to develop and support programs that hire minority youth from the community and expose them to the health professions.⁸⁸

A similar source of potential leverage in many communities is the availability of tax-exempt bond financing to non-profit health care and educational institutions. Some bonding agencies—which generally are independent public authorities—actually impose community benefit-type requirements on institutions as a condition for approving bond issuances.

In summary, there is potential at both the state and local level through various permitting and approval processes to apply pressure to medical education institutions to increase physician diversity. While such efforts could be controversial, the pressure that institutions are feeling to improve their competitive positions through expansion of one sort or another might well increase their receptivity to such conditions.

Private “Licensing” Approaches

Another subject of inquiry was whether the Liaison Committee on Medical Education (LCME) accreditation process might be used to increase medical school diversity. It would appear that it *could* be used to accomplish that if committed students and faculty are actively engaged in it.

As described in an earlier section, LCME accreditation standards address

medical school structure, function, and performance. They cover a broad range of areas including admissions, curriculum, faculty, finances, facilities; and, as described earlier, the physical, psychological and academic well being of medical students. Prior to an accreditation site visit, the medical school must undertake an in-depth self-study and put together a medical education database. There is ample opportunity for student involvement in site visit preparation. LCME procedures state that the dean is expected to include student representation on the site visit committee. If students have concerns about student services, admissions policies, or student treatment generally, they can raise them during the self-study. Students can develop and submit supplemental information to the LCME along with the self-study report and the database.

When the site visit occurs, the survey team expects to meet with student representatives. Those representatives “are expected to be well informed about major issues and concerns of the student body.”⁸⁹ When follow-up reporting or return visits are necessary, students are expected to participate in those as well.

If even a small group of students are unhappy with minority student retention efforts, minority student recruitment efforts, or the classroom environment, the accreditation process provides an opportunity to be heard. The burden, however, is on the students themselves to raise these issues, because there is no process for input from outside the medical school community. Moreover, because full accreditation extends for seven years and several classes might matriculate and graduate without ever having gone through the cycle, it is particularly important for students to be engaged in the process. One student interviewed believes that the accreditation process can yield positive results with regard to increasing student body diversity. His medical school historically had done a poor job of recruiting and retaining minority students. This apparently came to light in the course of the LCME survey, and over the last several years there has been a dramatic turnaround. The student considers the school to be minority-friendly in most respects now, and he attributes it in large part to the accreditation process.

The potential for using hospital accreditation requirements to increase physician diversity is not as promising. Accreditation of hospitals is required for participation in the Medicare and Medicaid programs. The hospital accrediting body recognized by these programs is the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). The JCAHO currently lacks standards that explicitly address workforce diversity. There are requirements for cultural sensitivity in patient education, and a provision that the facility’s human resources function must address recruitment, retention, and allocation of the right number of competent staff to meet the needs of patients. It is not clear, however, how compliance is measured.

The JCAHO accredits more than 19,000 entities, including hospitals, long-term care facilities, and mental health and substance abuse treatment facilities. Medicare and Medicaid reimbursement are essential to the financial survival of most

JCAHO-accredited institutions. Because of that, and because of the long tradition of supporting the broadest possible provider participation in the Medicare and Medicaid programs, the JCAHO standards arguably represent the lowest common denominator for quality. The ultimate sanction—loss of accreditation—is rarely imposed, and it is doubtful that it would be used for a deficiency in the area of diversity. Nevertheless, it might be useful to explore with JCAHO the link between quality of care and a diverse physician workforce. If nothing else, some standard might be crafted that could, at a minimum, serve an educational purpose.

Philanthropy Approaches

As evidenced by the various pipeline and partnership grants funded over the years, medical schools are very responsive to the interests of private foundations. One strategy suggested by several of those interviewed is to organize several of the largest health-oriented foundations, such as W.K. Kellogg, Robert Wood Johnson, and the Kaiser Family Foundation, in a coordinated effort to make improvements in promoting physician diversity a requirement for future funding. Utilizing grant-making criteria that require demonstrating organizational progress in this regard would send a powerful message to the medical establishment.

Marketplace Approaches

A marketplace approach is predicated on the theory that in a competitive environment, purchasers can exert pressure on suppliers to change their behavior. This approach is relatively new in the area of health services purchasing. Over the last 20 years, a number of employers have become very engaged in efforts to maximize the cost efficiency and quality of the health plans they offer their employees. The impetus for the formation of purchaser organizations like the Washington and Pacific Business Groups on Health was the steep increase in health insurance premiums in the 1980s. Purchasers soon realized, however, that high quality health care also could contribute to workplace productivity. Purchaser group initiatives have challenged health plans to cover more health screenings, and hospitals to reduce the number of medical errors. These groups have indicated that they will reward plans and facilities that are successful by directing their business to them.

If they chose to do so, employer groups could use their purchasing power to increase physician workforce diversity. They would need to be convinced, however, that taking such action would ultimately benefit them. Many employers have already demonstrated an interest in ensuring that their employees receive high quality care. Their own workforces have begun to reflect greater racial and ethnic diversity because they realize that the globalization of markets and the shift in U.S. demographics have made diversity a business imperative.⁹⁰ If their employees want culturally sensitive care or the option to choose a physician of the same racial or

ethnic background, the employers may wish to accommodate them. Not only do they have an interest in keeping their employees satisfied, but they also want them to be healthy and productive.

If the business case can be made that a more diverse physician workforce would, in fact, increase health care access and quality and reduce racial disparities, then purchaser groups and other businesses might well be enlisted. They could, for example, develop purchasing specifications that require health plans or providers to make more diverse physicians available. The effect would be to create downstream pressure on the “producers” of physicians.

Potential Actors

One of the goals of this project was to identify constituencies that might be willing to participate in new initiatives to increase physician diversity. A first step was to identify the numerous stakeholders. Not surprisingly, the list is a long one. A survey of medical leaders conducted five years ago yielded a list of 27 core stakeholders including medical school faculty, hospital medical staff, patients, and medical students; federal, state and local governments, philanthropic groups, and local residents.⁹¹ The authors observed that while some stakeholders clearly play an active role, others might have no knowledge of the schools’ purposes or functions. They may not realize that they have contributed to the support of medical schools, and they “may not even know they are considered stakeholders, or that they have legitimate interests in and influence on the organization.”⁹²

In that same survey, there was significant disagreement among, and even within, medical school leadership as to which of the stakeholders were the most important. Nevertheless, a small group emerged. They were: affiliated clinical enterprises, such as teaching hospitals and other clinical training sites, medical school faculty, other health professionals, other medical schools, patients served, medical students, and the university affiliated with the medical school.⁹³ The composition of this group foreshadows the difficulties of advocating for change in academic medicine because it reflects a significant inward focus and a pursuit of what the study’s authors characterize as “internally generated goals and objectives.” It also suggests that efforts to effect change will need to come from the outside as well as from within academic medicine.

The strategies identified here suggest a range of potential actors. They include civil rights organizations, community benefit advocates, foundations, federal grant-making agencies, accrediting organizations, the business community, and federal, state and local legislators. Additional actors who might be particularly effective include community groups, minority students, and minority physician organizations. Their

potential interest and contributions are described briefly here.

Community Groups

We contacted community groups that have engaged in health access advocacy and that have a local medical school or teaching hospital. A number of these groups have worked on initiatives to enforce the community benefit obligations of their local non-profit hospitals. We surveyed the groups to determine whether physician diversity was an issue for their members or for their community. (*Appendix E*) The feedback was mixed. While most of them felt the issue was important to their communities, they were not very optimistic about engaging their constituents on it or influencing their local medical schools and teaching hospitals. They felt there were other issues that were more compelling to their communities, such as lack of insurance coverage and a shortage of neighborhood-based medical providers. Moreover, to the extent that the groups had had interactions with local medical schools, most of those experiences had been negative. Also, their constituencies were not at all familiar with the medical education process. One of the New York-based groups that was contacted had participated in earlier efforts to increase physician diversity, primarily through community councils attached to local medical schools and teaching hospitals. These efforts, which had been funded with state moneys, ended when the funding stopped.

Despite all of these reservations, the groups did see the need for—and importance of—a diverse and culturally competent medical workforce, particularly if it was viewed as an effective strategy for eliminating health disparities. They indicated they would be willing to explore the organizing implications further if they could obtain the necessary funding and technical assistance. Those who had prior experience on this issue saw less potential for influencing private medical institutions and would prefer to focus instead on public institutions, ideally with the assistance of local and state government officials.

Minority Medical Students

Minority medical students are a natural constituency for this issue. Indeed, they have been actively engaged in it for some time. Groups like the Student National Medical Association, the American Medical Student Association, and the Chicano Latino Medical Student Association have a uniformly clear idea of the barriers to medical education for underrepresented minorities. They also devote considerable time and energy to community service—organizing and participating in health fairs and screenings, and tutoring and mentoring minority youth. Moreover, many of them report experiencing first-hand, within the medical education setting, the kind of racially insensitive or overtly hostile treatment that functions as a disincentive to entering the profession. Conversations with organization

members suggest that they have—and will continue to—challenge inappropriate practices and behavior at their medical schools, even though those efforts are not always successful. Despite their energy and commitment, these groups cannot undertake an effort of such magnitude in isolation. To become actively involved in a broad-based initiative to expand physician diversity, they will need resources and technical assistance, just as community groups do.

One of those interviewed, a noted civil rights authority, said that change is more likely when those who are subject to barriers are ready to press for it. In his view, current students are the best source of energy and effort for reforms in educational settings. Thus they should be encouraged and supported to play a leadership role in any initiative.

Minority Physician Organizations

Organizations like the National Medical Association (NMA) and the National Hispanic Medical Association are committed to increasing physician diversity, and they have been actively engaged in those efforts for years. Both the NMA and NHMA leadership see their organizations as having a significant obligation to work on this issue in general, and to support minority medical students in particular. Indeed, one of the individuals interviewed described an incident in which a local NMA chapter actually intervened with a medical school and was successful in getting the school to create a minority student support function. Minority physician organizations also raise scholarship funds for minority students, and many of the physicians in those groups volunteer to provide student support and mentoring. Members of those organizations often are in a unique position to intervene with local institutions and medical schools because they are community leaders. Organized minority physicians may be influential in medical school alumni affairs or on hospital staffs as well. It will be critical to involve such groups in any undertaking.

Recommendations

While we undertook this project with an interest in examining the potential for using community benefit approaches to increase physician diversity, we have come to understand that community benefit approaches cannot be the sole focus. Our general conclusion is that there is no “magic bullet.” The community benefit concept can be helpful, but primarily as part of a broader reform effort. The real key, however, to changing the current situation is to challenge and transform the norms of the medical education community with regard to what makes a good doctor and what makes a good medical educator. Our recommendation for creating that kind of change is to develop a broad-based, multi-faceted *campaign* that employs a variety of approaches and that brings pressure to bear from both inside and outside the medical education community.

Philanthropy has a central role to play in launching such a campaign since internal efforts to change the academic medical culture to date have been diffuse. Foundations can utilize their unique role to connect and support the internal and external components of a campaign. Academic medical institutions are autonomous, so although a number of programs discussed in this paper have had a positive impact, internal efforts to increase diversity at individual medical schools have been highly variable and largely dependent on small numbers of faculty, staff, and students. Efforts *external* to the academic environment have been minimal. While many people outside of the medical education universe care deeply about this issue, they face significant barriers to promoting change. Those barriers include: lack of familiarity with the medical education process and its players, difficulty in identifying clear strategies for change, concern over ongoing challenges to affirmative action, a preoccupation with other important social issues such as access to basic health care, and a lack of resources and institutional capacity. The result is that the academic medical community remains largely unchallenged in both defining the profession and in dictating the terms of access to it.

Another critical role for philanthropy will be to increase the visibility of this issue as a growing national crisis. Defining the urgency and relevance of this issue at the national level is critical to leveraging the additional support necessary for building a broad-based campaign that is focused on diversifying the entire medical workforce. Like all national campaigns, it will require strong leadership, a coalition of interested parties, a strategic communications component, and substantial resources. The campaign leaders will need to develop strategies and a program that include a variety of activities and tactical approaches calculated to challenge the current structure and lead to progress toward the goal. It is not clear that such a campaign is possible at this time. Developing a strategic agenda for change that coordinates action at the national

and local levels will require dedicated leadership and resources. Our recommendations provide a roadmap for that process.

Recommendation 1:

Assemble the potential leadership to work on the issue of diversity in medical education

The leadership for any campaign to increase physician diversity must be drawn from many different areas that collectively will be able to mount pressure at national, state, and local levels. A core leadership group will need to be identified and organized. The plan would be to look for individuals and organizations within the medical community who have demonstrated commitment to this issue, *and* to look for individuals and organizations from outside the medical community for whom this issue will resonate.

With regard to the “inside” component, the starting point in the assessment process would be to work with the organizations and individuals who have shown leadership on this issue to date, provide them with additional support to strengthen their efforts, and see if they are willing and able to help lead a broader campaign. These organizations and individuals, which would include medical school faculty and administrators, medical students, and physician groups, would bring both an understanding of the dynamics of the medical education process and a significant degree of credibility. Also, their assessment of the feasibility of a campaign to create a more diverse physician workforce would be critical.

Because the diversity leadership from inside the medical community is unlikely, by itself, to have the internal political clout necessary to make changes to the system, outside pressure is also required. Creating a more diverse physician workforce is not a current priority for any organization we could identify. There are, however, candidates who might be willing to address the issue. They include:

- Civil rights activist organizations
- Advocacy groups concerned with racial disparities in health and health care
- Community benefit advocates
- Consumer health organizations

Parties from both inside and outside the medical community face substantial barriers. The national political climate is not very positive. Also, these groups and individuals have many other issues on their agendas. No organization is likely to have the internal resources to carry out a campaign on its own. And the “outside” individuals and organizations may lack knowledge about the medical education process. Deciding whether organizing for physician diversity is realistic will require explicit consideration

of these issues.

Assuming a core leadership group could be formed, it would need to deploy a staff and raise the resources necessary to conduct the campaign. Simultaneously, it would have to determine whether a broader base of support exists and then develop a political strategy, including a clear program and a comprehensive communications plan that makes the issue compelling to this base.

This leadership group would require support, both initially and on an ongoing basis, so that it could function in a stable and sustainable manner. Initial support would include making sure all group members have at least a base level of knowledge about the medical education process and physician diversity. The group would also need assistance in developing an effective agenda and outreach strategy.

Recommendation 2:

Adopt a Strategic Reform Agenda for Increasing Physician Workforce Diversity

The campaign must adopt a broad reform agenda that identifies the most promising approaches for addressing current barriers to change. Based on our research, the following serves as the basis for a potential reform agenda. There undoubtedly are other approaches that could be effective, but we propose starting with the following:

- 1. Evaluate how the substantial reliance of medical schools and teaching hospitals on public financial support in the form of tax exemptions, subsidies, and direct appropriations creates broad community benefit obligations.*** As already outlined in our report, this public support should create a special obligation to ensure that the services of medical schools and teaching hospitals—whether with respect to physician training, the provision of care, the conduct of research, or any other activity—are equally available to *and* equally benefit all segments of the public. New York State, which enjoys both a high concentration of residency programs and explicit state funding of medical education, may provide an important focus for establishing principles and practices of accountability. The strong public system in California could make this state a focus as well. Massachusetts could also be a candidate because of its extensive levels of community benefit activity. Developing an assessment tool for measuring the performance of medical schools and teaching hospitals relative to diversity would be a useful place to start. (*Appendix F*)
- 2. Strategically fund community groups to test approaches for engaging medical institutions.*** Because the community groups contacted in the course of this

project expressed concerns about their limited capacity to promote physician diversity, a community empowerment strategy must be supported. Such an approach would overcome the current barriers and test the potential roles of communities in impacting this issue and stimulating public debate. This would address the most common concern among community groups we contacted—their lack of resources to focus on this issue. While such an initiative would be experimental, resources for making it successful do exist. For example, community groups could use the materials Community Catalyst has developed and collected to analyze different situations and generate action on community benefits, health care access, and quality of care issues. Once they create a place for themselves at the table, community groups could begin to generate answers to questions such as:

- What does it take for communities and public officials to care about and begin to address the issue of physician diversity?
- What alliances can be developed to support community group efforts to engage medical education institutions?
- What effective collaborations between medical schools and their local communities can be developed?
- How do hospitals evaluate their physician staff and how do the criteria differ from those attributes valued during the medical school and residency selection processes?
- How would teaching hospitals rationalize the current autonomy of residency programs within their organization if challenged from community benefit and quality of care perspectives?

3. *Require residency programs to track and publicly disseminate the racial and ethnic composition of their participants.* The data compiled on residency programs should conform to standardized requirements. It is generally acknowledged that residency programs do not have their racial or ethnic composition evaluated or even scrutinized by any organization or administrative body. This lack of accountability is exacerbated by a matching process that, at best, is viewed as being opaque; and, at worst, as being subject to manipulation. Any efforts to diversify residency programs generally are attributable to the commitment of individual program directors rather than to broader institutional commitment.

4. *Strengthen educational pipeline programs.* Pipeline programs are essential to increasing the talent pool. They address one of the most critical barriers to a more diverse physician workforce—the poor quality of public elementary and

secondary education in many areas with high concentrations of minorities. They must be strengthened and expanded.

Individuals with experience and expertise in pipeline programs recommend three steps. First, develop and implement a systematic evaluation process. It is important to know what kinds of programs and which program attributes are most successful in preparing students for medical careers. Second, expand the number of pipeline programs currently operating. There already is enough of a knowledge base among program participants, instructors, and educators to support program expansion in the short term. When evaluation data becomes available, programs can be altered to incorporate identified best practices. Third, require institutions that sponsor pipeline programs to enter into genuine partnerships with community and constituency groups such as minority medical student and physician associations, since medical schools and teaching hospitals already rely on these groups for community outreach.

Further, it may be strategic to establish a consortium of institutional and community sponsors of pipeline programs. The consortium could develop a tool for systematic program evaluation that all member institutions would adopt. It also could provide a forum for recognizing and sharing best practices.

5. Eliminate the MCAT as a medical school admissions requirement and require meaningful racial and ethnic diversity and community representation on admissions committees. Underrepresented minorities are often disadvantaged by the MCAT. While a certain baseline level of knowledge and ability is essential to performing well as a physician, it is not clear that tools like the MCAT are the best predictors of physician performance. In contrast, some non-cognitive skills may have strong predictive value with respect to what makes a good doctor, although identifying them is a much more labor-intensive process for an admissions committee. Admissions criteria, and admissions committee practices and resources, should allow for comprehensive examination of applicants' non-cognitive skills. Ensuring meaningful minority faculty and student representation on admissions committees could have a critical impact on the admissions process.

6. Require that medical schools have adequate social and academic support and retention systems in place for underrepresented minority students. Minorities may have unique needs related to the residual effects of educational inequality and the social isolation inherent in a non-diverse academic environment. These should be acknowledged and addressed. Minority medical students, faculty and administrators are probably best equipped to guide the

development of support and retention programs, and they should be supported in this role. One message heard repeatedly was that program leadership must have sufficient authority within the medical school's administrative structure to ensure that the support students receive is meaningful and not merely window dressing.

7. Recognize and reward medical schools that encourage and actively support the advancement of minorities to senior faculty level positions. Substantial change in racial and ethnic demographics in the medical profession is not likely to occur without a highly visible critical mass of minority faculty who can become leaders, pushing for change from within and serving as role models for minority students. Creating this critical mass will require change at all levels of the academic hierarchy, which currently rewards research and publication credentials most often obtained by completing an elite residency program and having the “right” sponsors or mentors. Some elite institutions have made an effective commitment to diversity among faculty and students, actively recruiting minorities and rethinking their selection processes. But many more remain focused on preserving their status by relying on traditional criteria for selection and advancement. Programs and resources should be targeted to minority students, residents, and junior faculty. Institutions should provide networking opportunities, research funding, subsidies to help defray living expenses, and reliable information on the realities and expectations of academic medicine.

8. Initiate and support research that (1) expands public understanding of the link between medical workforce diversity and improved access to and quality of health care, and (2) explores the impact of a more diverse medical workforce on racial and ethnic disparities in health and health care. Research to date—and previously cited in this paper—has demonstrated the following:

- Minority physicians are more likely to practice in traditionally underserved communities.
- Minority physicians are more likely to specialize in primary care than non-minority physicians.
- Minority physicians are much more likely to serve poor, sick patients and a higher proportion of Medicaid recipients than non-minority physicians.
- Given the choice, many minorities will choose a physician who is a member of the same minority group

If additional research can strengthen these findings and further demonstrate that increasing physician diversity would help eliminate health disparities, then the case for action would be especially compelling. New constituencies such as communities and industry could be drawn more easily to the issue. They, in turn, might be moved to exert pressure that results in positive change.

Research is also important because affirmative action in higher education is still under attack. The case must be made now that there are legitimate and compelling reasons for ensuring diversity in medical schools. Courts have found affirmative action programs to meet constitutional muster only where they further legitimate educational interests—not where they are used to remedy past discrimination. It will be much easier for educational institutions to preserve and strengthen affirmative action programs if they have strong evidence that a diverse student body not only enriches the medical education process but also helps reduce health disparities.

9. *Develop a communications strategy.* A successful effort of the type described would require reaching a range of audiences, including the general public, medical education leaders, community and advocacy groups, minority leaders, policymakers, and the media. The first step in mobilizing people is getting them to care about an issue, which often requires demonstrating why it should matter to them. With regard to physician diversity, the education task would include the following:

- Opening up the “black box” of the medical education process, including the education continuum, the entry requirements, and the financing sources
- Expanding the equal opportunity argument, which could mean comparing census data with medical student and physician demographics, and presenting MCAT data and research,
- Synthesizing and communicating the research that ties greater diversity in the medical profession to both improved access to care and improved quality of care
- Making the link between medical workforce diversity and reduced disparities in health and health care.

The leadership group would oversee development of the message, the educational materials, and the dissemination strategy so that the communication would support the overall effort.

Conclusion

As the nation becomes more diverse, the composition of the medical education workforce will gain importance as an issue. Yet, as this report suggests, changing the current system will be difficult without a concerted effort on a number of different fronts. We believe that the interest is there—or it can be fostered—from among a wide range of sources. Our recommendations build on that interest. Much of what currently is being done to increase physician workforce diversity will need to continue. But at the same time, fundamental change will require a leadership strategy that strengthens the hands of those who have been leading the efforts to date, brings in new allies, and takes advantage of new organizing opportunities.

Endnotes

- ¹ “Minority Graduates of U.S. Medical Schools: Trends, 1950-1998,” Association of American Medical Colleges, Washington, DC (September 2000).
- ² “Underrepresented minority” is a term that was adopted by the Association of American Medical Colleges (AAMC) in 1970 to denote those racial and ethnic groups whose percentage representation among physicians was lower than their representation in the population at large. It includes African Americans, Native Americans, Mexican Americans, and mainland Puerto Ricans. These groups were also singled out because their indices of well being over time, such as income, educational attainment, and health status, had not improved substantially. See “Questions and Answers on Affirmative Action in Medical Education,” Association of American Medical Colleges, April 1998. AAMC is currently reviewing its definition in light of current demographics and recent legal precedents.
- ³ Komaromy, M., Grumbach, K., Drake, M., Vranizan, K., Lurie, N., Keane, D., Bindman, A. (1996). The Role of Black and Hispanic Physicians in Providing Health Care for Underserved Populations. *N Engl J Med* 334: 1305-1310.
- ⁴ Rabinowitz, H.K., “The Role of Admissions Policies in Medical Education,” *Reform in Medical Education and Medical Education in the Ambulatory Setting*, Council on Graduate Medical Education, September 1991. It is important to note that *primary care* is a key concept here. Even though the under-representation of minorities in the physician workforce cuts across primary care and medical specialties, the critical need is for a more racially and ethnically diverse primary care physician population.
- ⁵ Bureau of the Census, Statistical Abstract of the U.S., 1997.
- ⁶ Council on Graduate Medical Education, “Minorities in Medicine,” Twelfth Report, May 1998.
- ⁷ Saha, et al., (2000). Do Patients Choose Physicians of Their Own Race? *Health Affairs Vol. 19, No. 4:* 76-83.
- ⁸ Revising medical training curriculums to prepare *all* students to work with diverse patient populations is also of critical importance, but cultural competency would not be the focus of the work we are proposing.
- ⁹ See e.g. “Planning a Pre-Med Program,” at <http://www.emory.edu/CAREER/Premed/Planning.html>.
- ¹⁰ The AAMC is a non-profit association that represents the interests of all the accredited medical schools in the U.S. and Canada, 400 major teaching hospitals and health systems, and 90 academic and professional societies. Its mission is “to improve the health of the public by enhancing the effectiveness of academic medicine.” www.AAMC.org.
- ¹¹ The application form for the “Fee Assistance Program” is two pages long. The student must provide financial information about him/herself and parents regardless of whether they have supported the student for years. In addition, applicants must submit documentation for all sources of individual or parental income, including tax returns, Social Security payment statements, welfare payment statements, financial aid award statements, etc. Applicants who are approved are also entitled to apply to up to ten medical schools using the AMCAS without a fee.
- ¹² Beginning with the 2001 test administration, the MCAT permits applicants to make multiple designations with respect to racial and ethnic background. As a result, the data is not yet publicly available, and when it is it may be difficult to compare it to prior year results. It should, however, be possible to tell whether the gap has been narrowed.
- ¹³ Silver, B, Hodgson, CS., (1997) “Evaluating GPAs and MCAT Scores as Predictors of NBMEI and Clerkship Performances Based on Students’ Data from One Undergraduate Institution,” *Academic Medicine*, 72, 394-396.
- ¹⁴ Id.
- ¹⁵ “Contemporary Issues in Medical Education,” Association of American Medical Colleges, April 2000, 3:2.
- ¹⁶ Applicants are required to provide both an overall GPA and a “science” GPA which is the GPA for all science courses taken.
- ¹⁷ On October 24, 2000, the LCME adopted a revised slightly revised standard as follows: “In the admissions process and throughout medical school, there must be no discrimination on the basis of gender, sexual orientation, age, race, creed, or national origin.”
- ¹⁸ Mitchell, K., Haynes R., Koenig, J. (1994) Assessing the validity of the updated Medical College Admission Test. *Academic Medicine*, 69:394-401.
- ¹⁹ The factors are referenced in the admissions materials of University of Massachusetts Medical School,

Dartmouth Medical School, University of Texas system, University of California at Los Angeles, Medical College of Wisconsin, and Harvard Medical School.

²⁰ Blue, AV, et al., (2000) Does Institutional Selectivity Aid in the Prediction of Medical School Performance? *Academic Medicine* 75:S31-S33.

²¹ Davidson, R, et al., Affirmative Action and Other Special Consideration Admissions at the University of California, Davis, School of Medicine, *Journal of the American Medical Association*, October 8, 1997.

²² Information obtained from the Association of American Medical Colleges website:

<http://www.aamc.org/meded/minority/ema.htm>

²³ "Functions and Structure of a Medical School," Liaison Committee on Medical Education (2000),

<http://www.lcme.org>.

²⁴ "U.S. Medical Schools Tuition and Student Fees" Association of American Medical Colleges, 1999:

<http://www.aamc.org>.

²⁵ 2001 Medical School Graduation Questionnaire," Association of American Medical Colleges,

<http://www.aamc.org>.

²⁶ Board certification denotes completion of training in a particular medical specialty and passage of a certification examination in that specialty.

²⁷ The ACGME is a voluntary association of the Association of American Medical Colleges (AAMC), the American Board of Medical Specialties (ABMS), the American Medical Association (AMA), the American Hospital Association (AHA), and the Council of Medical Specialty Societies (CMSS).

²⁸ Requirements differ for program applicants who graduated outside of the United States and Canada. They must either have obtained a valid certification from the Educational Commission for Foreign Medical Graduates or have a full unrestricted license to practice medicine in a U.S. licensing jurisdiction. This process is described in more depth in the section of the paper entitled "Foreign Medical Graduates."

²⁹ Information regarding the National Residency Matching Program was obtained through its official website:

www.nrmp.aamc.org

³⁰ *Boston Medical Center*, 330 NLRB No. 30 (1999).

³¹ Fang et al., (2000) Racial and Ethnic Disparities in Faculty Promotion in Academic Medicine, *Journal of the American Medical Association*, September 6, 2000.

³² Martin, Edward, "Physician pay remains stagnant," *ACP-ASIM Observer*, November 1998. According to data collected by the AMA, 1996 median income for employed physicians was \$142,000, whereas private practice physicians' median income was \$198,000.

³³ Rabinowitz, H.K., *supra* at fn. 3.

³⁴ Although the term "IMG" includes both U.S. citizens who attended medical school in another country and foreign-born, non-U.S. citizens who attended medical school in another country, the focus of this section is on the latter.

³⁵ See, e.g. "Eleventh Report: International Medical Graduates, the Physician Workforce, and GME Payment Reform," Council on Graduate Medical Education (1998) www.cogme.gov.

³⁶ See, e.g. AAMC Response to Pew Health Professions Commission Report: "Critical Challenges: Revitalizing the Health Professions for the 21st Century," December 1999, www.aamc.org.

³⁷ Iglehart, J.K., (1996) The Quandary over Graduates of Foreign Medical Schools in the United States, *New England Journal of Medicine*, 334:25.

³⁸ The one exception is applicable to U.S. citizens who go to an accredited foreign medical school. In what would be their fourth year, they can apply to a so-called "Fifth Pathway" program at a U.S. medical school that is essentially a year of clinical clerkships similar to the usual fourth year program. Upon successful completion, these students can enter a residency program through the NRMP process.

³⁹ "Issue Brief: H-1B Visas," Association of American Medical Colleges, May 2000.

⁴⁰ Iglehart, J.K., *supra* at fn. 42.

⁴¹ Baer, LD, Konrad, TR, Miller, JS, The Need of Community Health Centers for International Medical Graduates, *American Journal of Public Health*, October 1999.

⁴² Website of the Association of American Medical Colleges, <http://www.aamc.org/about/start/htm>.

⁴³ As described earlier in this paper, the requirements for licensure of IMGs are different.

⁴⁴ Website of the Accreditation Council for Graduate Medical Education, "Role of the ACGME,"

<http://www.acgme.org>.

⁴⁵ Website of the Association of American Medical Colleges, <http://www.aamc.org/about/coth/start.htm>.

- ⁴⁶ *Regents of the University of California v. Bakke*, 438 U.S. 265 (1978).
- ⁴⁷ *Hopwood, et al. v. State of Texas*, 78 F.3d 932 (5th Cir. 1996).
- ⁴⁸ Some states such as California and Washington have passed laws that prohibit race-conscious affirmative action in the public sector.
- ⁴⁹ *Smith v. University of Washington*, 233 F.3d. 1188 (9th Cir. 2000). Cert Denied, ___S.Ct.__(2001); *Gratz, et al. v. Bollinger, et al.*, No. 97-75231 (E.D. Mich.) (2000); *Grutter, et al. v. Bollinger, et al.*, No 97-75928 (E.D. Mich.) pending.
- ⁵⁰ That finding was essentially negated by the passage of a state initiative in 1998 that bans race conscious affirmative action in the public sector. Thus while the Ninth Circuit's decision constitutes a victory for affirmative action, it has no practical effect in the state of Washington.
- ⁵¹ See *Boston Medical Center*, 330 NLRB No. 30 (1999).
- ⁵² See *Alexander v. Rush North Shore Medical Center*, 101 F.3d 487 (7th Cir. 1996); *Baker v. McNeil Island Corrections Center*, 589 F.2d 124 (9th Cir. 1988).
- ⁵³ See *Herron v. Allegheny General Hospital*, 1996 U.S. dist.LEXIS 19847 at *16 (W.D. PA 1996).
- ⁵⁴ See *Thomas v. Kodak, Inc.* 183 F.3d 38,48 (1st Cir.1999).
- ⁵⁵ See *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971).
- ⁵⁶ One of the few exceptions to this are Medicare Part B payments to physicians.
- ⁵⁷ 45 CFR §80.1 et seq.
- ⁵⁸ See *Alexander v. Sandoval*, U.S. Supreme Court, No. 991908 (April 24, 2001).
- ⁵⁹ See 26 U.S.C. §501(c)(3).
- ⁶⁰ *Bob Jones University v. United States*, 461 U.S. 574, 586 (1983).
- ⁶¹ Restatement of the Law, Second, Trusts, Section 368 (1959).
- ⁶² 26 U.S.C. §170.
- ⁶³ See, e.g. *Geisinger Health Plan*, 985 F.2d. at 1219; *Sound Health*, 71 T.C. at 178; Revenue Ruling 69-545.
- ⁶⁴ Internal Revenue Service Ruling 56-185 (1956).
- ⁶⁵ Internal Revenue Service Ruling 69-545 (1969).
- ⁶⁶ *Redlands Surgical Services*, 113 T.C. at 92.
- ⁶⁷ See Internal Revenue Service National Office Field Service Advice, "Exempt Hospitals' Compliance with Treasury Regulation Section 1.501(c)(3)-1" (February 5, 2001).
- ⁶⁸ *Geisinger Health Plan*, 985 F.2d. at 1219-1220.
- ⁶⁹ Barnett, K., "The Future of Community Benefit Programming," Public Health Institute, Berkeley, CA (June 1997).
- ⁷⁰ Pew Charitable Trusts, "The Price of Admission: The Growing Importance of Higher Education," 1993.
- ⁷¹ Both the Voluntary Hospital Association and the Catholic Hospital Association have done pioneering work in the development of community benefit standards and processes.
- ⁷² "Non-Profit Health Care Organizations and the Public Trust: Lessons from Community Benefit for Health Professions Education," Kevin Barnett, Public Health Institute, University of California, Berkeley, CA.
- ⁷³ McCurdy, L, Good, LD, Inui, TS, Daugherty, RM, Wilson, DE, Wallace, AG, Weinstein, BM, Copeland, EM, (1997), Fulfilling the Social Contract between Medical Schools and the Public, *Academic Medicine*, 72:12, 1063.
- ⁷⁴ Medicare Payment Advisory Commission (MedPAC). 1999a. *Report to Congress: Medicare Payment Policy*, Washington, DC.
- ⁷⁵ The provision included exceptions for new programs established in rural and underserved areas until they have had three years to fill their resident cohorts, and to hospitals that had no residency programs prior to January 1, 1995.
- ⁷⁶ These policies were essential to obtain medical community "buy-in" to the very notion of Medicare in the early 1960s.
- ⁷⁷ "Graduate Medical Education and Public Policy: A Primer," U.S. Department of Health and Human Services, Health Resources and Services Administration, December 2000.
- ⁷⁸ Website of the National Institutes of Health, NIH Budget, <http://www.nih.gov/>
- ⁷⁹ Website of the National Institutes of Health, <http://grants.nih.gov/grants/policy>
- ⁸⁰ Website of the National Science Foundation, General Grant Conditions, <http://www.nsf.gov>.
- ⁸¹ Website of the Health Resources and Services Administration, <http://www.hrsa.gov/about.htm>
- ⁸² Website of the Health Resources and Services Administration, FY 2001 Budget, <http://www.hrsa.gov/>

⁸³ Website of the National Science Foundation, Summary of FY 2001 Budget Request, <http://www.nsf.gov>.

⁸⁴ Website of the Association of American Medical Colleges, Friends of Veteran Affairs, <http://www.aamc.org/advocacy/friends> of va/fy2001proposal.htm

⁸⁵ For example, the Massachusetts legislature requires every student at the University of Massachusetts Medical School to sign a “learning contract” as a condition of matriculation that obligates the student work in Massachusetts for at least four years after completion of training either providing primary care or practicing in an underserved area.

⁸⁶ In 1974 Congress passed the National Health Planning and Resources Development Act which required every state to enact a certificate of need law as a prerequisite for receiving federal funding for health planning. Although that law was subsequently repealed in 1986, approximately 36 states have retained their CON laws.

⁸⁷ In Georgia, for example, the CON program has obtained commitments from provider applicants to provide charity and indigent care amounting to \$155 million per year.

⁸⁸ An advantage to the institution would be that in addition to receiving a CON, it could count the programs against any community benefit it has.

⁸⁹ “The Role of Students in the Accreditation of U.S. Medical Education Programs,” Liaison Committee on Medical Education, www.lcme.org.

⁹⁰ In the two lawsuits challenging the University of Michigan’s use of racial preferences in admissions, General Motors and other large business have filed briefs in support of the University, acknowledging the critical importance of diversity among the U.S. workforce. See the University of Michigan website at www.umich.edu, which includes copies of these briefs.

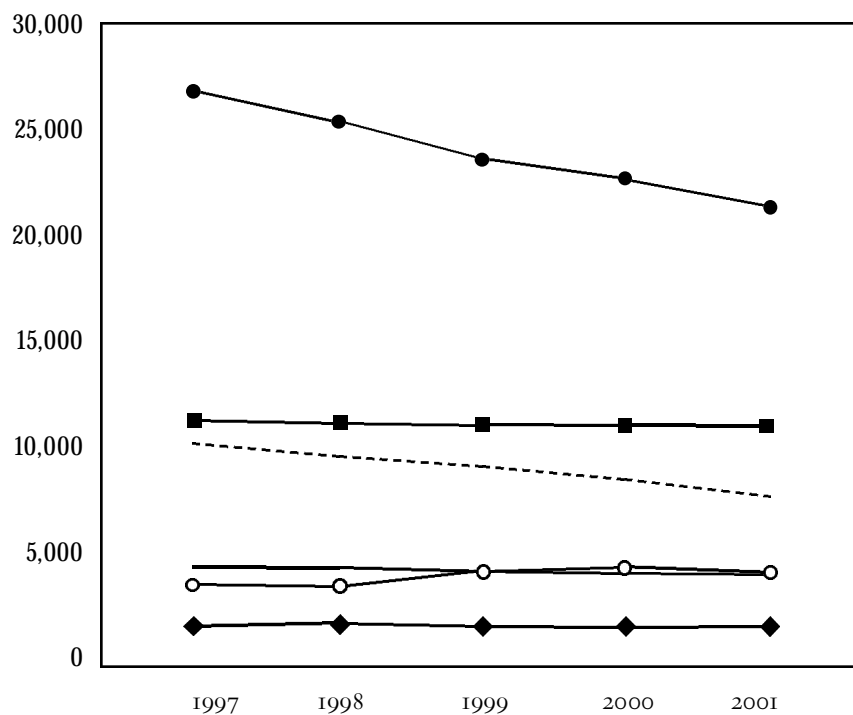
⁹¹ McCurdy, et al., *supra*. at fn. 77.

⁹² *Id.* at 1066.

⁹³ *Id.* at 1064.

Appendix A

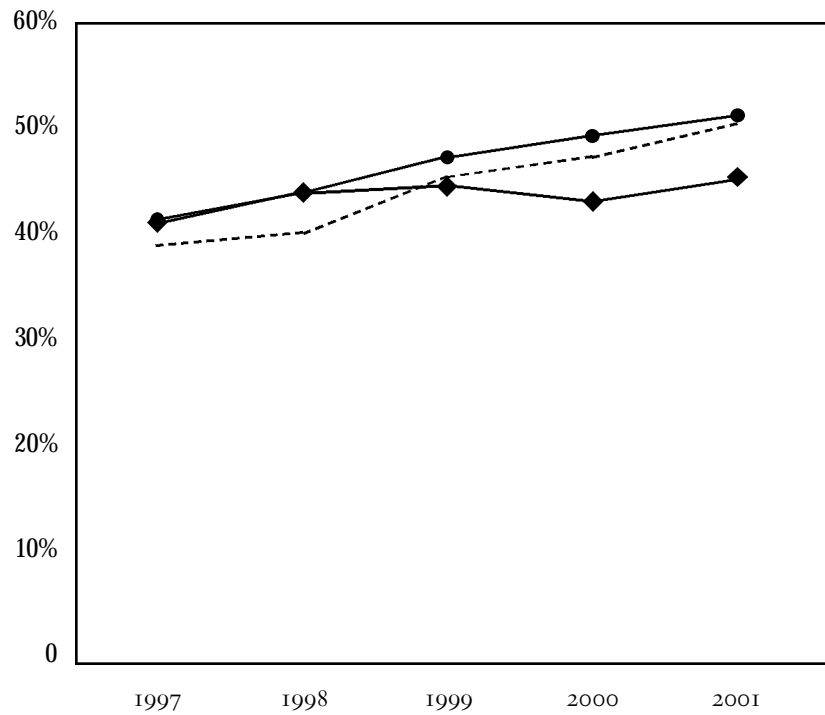
Medical School Applications and Acceptances



● White Applicants	26,847	25,357	23,750	22,805	21,412
■ White Accepted	11,221	11,160	11,126	11,219	11,062
○ URM Applicants	4,563	4,503	4,198	4,284	4,091
◆ URM Accepted	1,888	1,982	1,856	1,851	1,881
--- Other Minority Applicants	10,223	9,764	9,100	8,690	7,997
— Other Minority Accepted	3,960	3,916	4,126	4,070	4,015

Appendix B

Percentage of Medical School Applications Accepted

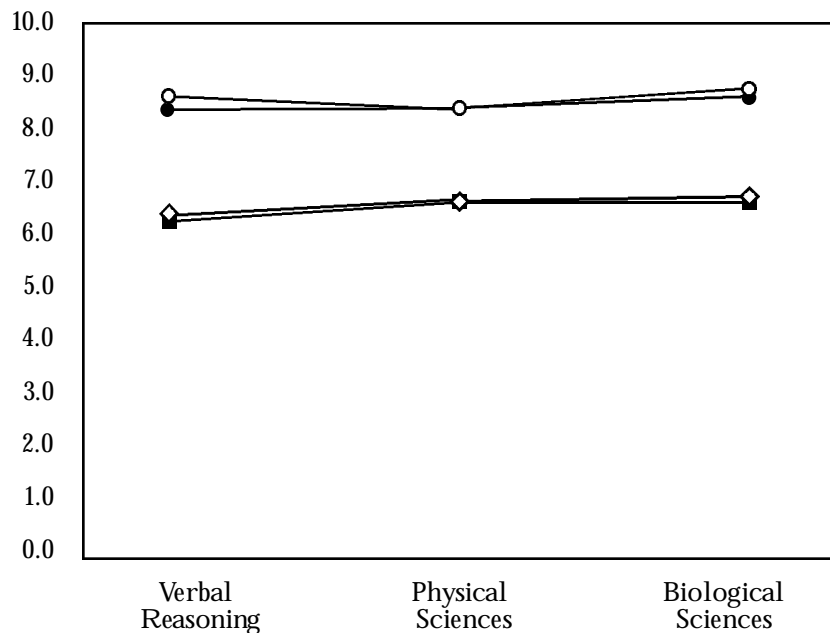


—●— % White	41.80%	44.01%	46.85%	49.20%	51/66%
—◆— % URM	41.38%	44.02%	44.21%	43.21%	45.98%
--- % Other Minority	38.74%	40.11%	45.34%	46.84%	50.21%

Appendix C

Average MCAT Scores for 2000 and 2001

(April and August Tests)



	Verbal Reasoning	Physical Sciences	Biological Sciences
● White 2000 (N=31,495)	8.3	8.4	8.6
○ White 2001 (N=30,661)	8.5	8.4	8.7
■ URM 2000 (N=7,169)	6.2	6.5	6.5
◇ URM 2001 (N=6,950)	6.3	6.5	6.6

Appendix D

Table: Selected MCAT results from 2000 and 2001
(Includes April and August tests)

		All Test Takers*	White	Total URM	Black	Mexican American	Puerto Rican Chicano	American Indian Mainland	Native Hawaiian
Total Test Takers (N)	2000	54,808	31,495	7,169	5,116	1,222	447	330	41
	2001	54,503	30,661	6,950	5,054	990	401	221	20
Verbal Reasoning	2000	7.8	8.3	6.2	6.0	6.9	6.1	7.3	7.1
	2001	7.9	8.5	6.3	6.1	6.9	6.2	7.4	7.2
Physical Sciences	2000	8.2	8.4	6.5	6.3	7.1	6.6	6.9	7.7
	2001	8.3	8.4	6.5	6.4	7.0	6.4	6.8	6.9
Biological Sciences	2000	8.3	8.6	6.5	6.3	7.3	6.6	7.2	8.0
	2001	8.4	8.7	6.6	6.4	7.3	6.6	7.0	7.6
Writing Sample	2000	O	O	N	N	O	M	O	N
	2001	O	O	N	N	N	M	N	P

*Includes all of the following categories plus individuals who identified themselves as “Puerto Rico—Commonwealth,” “Asian,” “Other Hispanic” and “Native Alaskan.”

Appendix E

Kellogg Project: Increasing Physician Workforce Diversity

Survey of Community Organizations/Partners

1. Describe your organization. What is your mission or focus? Who are your members? Do you work with any racially or ethnically diverse groups or communities?
2. Is your organization involved in community benefits activity? If yes, can you describe the involvement and the type of activity?
3. Is workforce diversity an issue for your organization? For the community you work with? Have you ever done any work around the issue of workforce diversity?
4. Is the racial and ethnic makeup of the healthcare workforce—and doctors in particular—of concern to your organization or its members? If yes, could you describe the nature of the concern?
5. Do you know anything about the selection process for medical schools? Residency programs? Medical school and teaching hospital faculty? If you do, do you feel there is any way of influencing the process to increase the number of racially and ethnically diverse doctors? How?
6. How would you describe your organization's (community's) relationship to medical schools? To teaching hospitals? Medical students and hospital residents are often the first line of treatment for people who are admitted to the hospital or receive care at hospital outpatient clinics. Have your members or constituents mentioned this or express concern about it?
7. Have your members or constituents ever complained about the treatment or care they receive at local teaching hospitals? If yes, what kinds of complaints (e.g. disrespectful treatment, poor quality care)?
8. Would your organization (community) be willing to focus on the local medical school(s) or teaching hospitals as a way to improve physician diversity? Can you think of potential allies in such a campaign? Do you have any sense of what types of tactics would work in your community, e.g. cooperative or confrontational approaches?
9. What would it take for your organization to organize around this issue—
 - Support from a national organization?
 - Collaboration with other organizations, both locally and in other sites?
 - Money?
 - Information about specific institutional processes and institutions?

Appendix F

Principles for Evaluating the Community Benefit Efforts of Academic Medical Institutions

(Adapted from suggestions by Bob DeVries, formerly of the W.K. Kellogg Foundation)

1. Does the institution follow a strategic plan for admitting, recruiting and retaining minority students and faculty?
2. Do the medical school and affiliated teaching hospital(s) maintain written commitments from residency program leaders to increase faculty and student diversity?
3. Has the academic medical institution developed a selection of clinical sites that serve poorer/minority neighborhoods (uninsured/underinsured)?
4. Does the institution actively document or evaluate the particular health needs of their surrounding communities? Within those efforts, how are the needs of vulnerable populations emphasized?
5. What steps have been followed to strengthen curriculum components that are especially needed by vulnerable populations (maternal and child health, emergency services, primary care, violence prevention, public health measures, etc.)? How are these curriculum revisions evaluated?
6. How has the institution strengthened community-faculty-provider dialogue and decision making for more effective community-based social health at clinical sites for the primary service areas of the training programs?
7. How are students encouraged to participate in volunteer service opportunities that can enhance their ability to relate to vulnerable populations? (Students might have field experiences or assignments that include the availability of free care, food, shelter and clothing to the homeless.)
8. How are the non-traditional community stewardship activities such as mentoring, volunteering and outreach to vulnerable communities by faculty staff and students recognized by the institution?
9. How has the institution incorporated multi-professional training—a team approach that might engage a variety of health professionals, public policy, health administration, legal and social services students to work together in solving problems—into its activities?