

I. Affirmative Action

IN U.S. MEDICAL SCHOOLS

AFFIRMATIVE ACTION is a deliberate race-conscious recruitment goal designed to equalize access within a set time frame to the high-status jobs and professions such as medicine, from which Blacks have been unfairly excluded for many generations. The concept is based on the premise that relief from illegal racial discrimination is not enough to remove the burden of second-class citizenship from Blacks and other underrepresented minority groups in the United States. In the case of Blacks, for example, slavery and later the imposition of compulsory racial segregation and inferior public and private services were protected government actions. Affirmative action, aided by the same government, is therefore both justified and required to fulfill the objective of equal access. Meaningful equality can only be measured by equal results; otherwise equal opportunity lacks essential meaning, since the social system given a tendency to repeat past history will automatically militate against the equal treatment of minority groups.¹

Therefore, if the student body, faculty, and administration in a professional school reveal a pattern of minority underrepresentation, despite the presence of a qualified minority applicant pool from which more selections could have been made, it can be assumed that they are being denied essentially equal access or opportunity. Such an institution would be ineligible to receive federal funds and would be required by federal law to draw up a corrective affirmative action plan. This plan is updated annually and establishes the means and methods for recruiting a more equal proportion of minority individuals into the higher levels of the institution's status hierarchy. Affirmative action efforts are subject to federal review, which determines whether they have been carried out in good faith, are adequately documented, and have satisfactory results. The regulations cannot be satisfied by merely going through the motions and completing a set of forms. Affirmative action plans are not explicitly required for admission of students to graduate or professional schools, although they are

required for hiring faculty and staff and probably also postgraduate trainees, who are both students and employees simultaneously. Proponents of affirmative action argue that student admissions are covered implicitly, inasmuch as entry to professional school is an absolute determinant of one's future access to professional employment as a faculty member, researcher, or medical practitioner (Institute for the Study of Educational Policy 1976; Fleming, Gill, and Swinton, 1978; C. J. Smith 1978).

The U.S. Commission on Civil Rights concurs that the same constitutional guarantees that protect equal minority access to employment also cover access to admission to professional schools because they are the gateway to professional employment (U.S. Commission on Civil Rights 1977, 1978). All preadmission tests must have a valid and demonstrable relationship to the applicant's ability to perform defined job-related tasks and cannot be used as a device to discriminate racially. The Carnegie Council on Policy Studies in Higher Education (1977, 2–18) concluded that the public policy gains from affirmative race-conscious admissions programs could be achieved without sacrificing essential academic standards, as long as only qualified minority applicants are accepted. This chapter focuses on medical school admissions past and present, and how admissions practices particularly have been changed by affirmative action policy since 1968. The study here provides a close-up view of the impact of affirmative action on the field of medicine.

Holzer and Neumark (2000) have given the most up-to-date critical review and assessment of affirmative action not only in college admissions but also in employment and job promotion and in awarding government contracts. Careful research, in their opinion, does not fully support those who either favor or oppose this hotly contested policy (483). The weight of evidence, however, “supports the view that the significant gains made in recent decades by minorities and women have been achieved with relatively small efficiency consequences” (559). Moreover, they conclude that past as well as current discrimination against these groups might well be worsened by a color-blind approach such as use of income level as a selection factor since low-income Whites outnumber Blacks by a wide margin (561).

HOW AFFIRMATIVE ACTION WORKS

The following scenarios depict the kinds of concrete situations that regularly confront medical school admissions committees.

Scenario 1. Suppose it is late in the admissions season. Two applicants are being considered at a medical school, but there is room to admit only one. One applicant, who is Black, is thought by a majority of the mem-

bers of the admissions committee to be unqualified, and the rest consider him to be a borderline candidate at best. The other applicant is White and is considered by all members of the committee to be far from outstanding but definitely qualified.

In this case the White applicant would be accepted even if no Black students were enrolled at that medical school. Affirmative action does not require that unqualified minority applicants be admitted, and very likely the Black applicant would not be able to perform satisfactorily as a medical student nor subsequently as a competent member of the profession. It would not be good academic or public policy to favor his admission.

Some individuals persist in their beliefs that affirmative action means that unqualified applicants have to be accepted. It has even been suggested that some schools have knowingly admitted unqualified applicants in order to discredit minority admissions programs and give them short lives in their institutions. In 1969 one medical school in the New York area admitted 14 minority students, of whom only four performed satisfactorily in the first year; in the same year another school admitted eight, of whom five repeated the year and required extensive tutoring, creating serious faculty resistance (Curtis 1971, 123–24). Ten years later both schools had admitted only four to six students in subsequent years judging from enrollment data on minority students enrolled and graduating (AAMC 1982–83). Frequently, however, opinions differ on which of two applicants is more qualified, as well as on the operational definitions of such terms as *qualified*, *borderline qualified*, *unqualified*, or *highly qualified*. These judgments are influenced by the presence or absence of racial bias, as well as a host of other considerations. The complexity of this issue will be more fully explored later in this chapter, and more will be revealed about the way admissions committees struggle with these matters.

Scenario 2. Again two applicants are being considered, and only one can be offered acceptance. In the opinion of almost all members of the admissions committee one applicant, who is Black, is more highly qualified than the other applicant, who is White. The Black applicant seems best on the basis of grades and scores, letters of recommendation, admissions interview, extracurricular and community activities, and other indications of strong motivation and the likelihood that she will contribute to the medical profession as a leader. In this case the Black applicant should be accepted, and most persons correctly would not consider this to be an example of affirmative action. This Black applicant should be accepted even if Blacks are not underrepresented at that medical school. Affirmative action is intended to provide a minimally acceptable proportion

of qualified members of minority populations; it establishes a floor, not a ceiling, to assure a minimally acceptable inclusion of members of an excluded group, not the exclusion of any group members after these equitable conditions are met.

Scenario 3. In this situation both the Black and the White applicant are qualified, although neither is exceptional as far as can be determined. This situation occurs far more commonly than either of the two preceding scenarios.

If only one candidate can be offered a place, it is in such an instance that the Black applicant should be accepted, provided that Blacks are significantly underrepresented in the student body of that medical school. This is affirmative action, when qualified members of underrepresented minority groups are admitted until there is a minimally equitable level of representation from the underrepresented group. Swain (2000) states that survey questions can be phrased in such a way, within various contexts, as to obtain contradictory findings on the controversial issue of affirmative action. She states, however, that in a scenario in which both a Black and a White applicant are equally qualified and only one can be accepted, 78 percent of Whites and 72 percent of Blacks believe that race should not be a factor in the admission decision. Some other basis should be found, such as adverse life circumstance versus a background of family comfort and privilege, to determine the admission decision.

The minority population and the size of the applicant pool at local, state, and national levels are useful in determining minimally acceptable and fair levels of representation. The rationale for such action rests not only on the laudable purpose of equalizing the civil and legal rights of all Americans, but also on the grounds that an ethnically diverse student body will, by its very composition, obtain a sounder medical education and as physicians be more responsive to the medical needs of the diverse American public.

WHY AFFIRMATIVE ACTION WAS NECESSARY

Medical education was generally not available to Blacks until 1868, when Howard University Medical School in Washington, D.C., opened its doors. Meharry Medical College in Nashville began operating in 1876. For all practical purposes, these two schools were set aside for Blacks, at a time when all the other medical schools did not accept, or admitted only token numbers of, Blacks (Johnson 1967; Curtis 1971, 34).

The founding of Howard University in 1866 is an example of affirmative action in the period immediately following the Civil War. The

NAACP Legal Defense Fund's amicus brief in the case of the *Regents of the University of California v. Bakke* pointed out that Congress, in framing the Fourteenth Amendment, demonstrated a belief that race-specific remedies are both necessary and permissible and adopted a series of measures that established special educational and medical programs solely for Blacks (NAACP 1976, 12–48). Indeed the Freedman's Bureau Act of 1866, under whose authority Howard and a number of other well-known Black colleges in the South were founded, was enacted over two vetoes by President Andrew Johnson, who opposed special aid for Blacks. A major purpose of the Fourteenth Amendment and its equal protection clause was to assure the constitutionality of the Freedman's Bureau Act. In an era when public education was open to only a few privileged Whites, it is not surprising that many Americans were opposed even to segregated elementary or high schools for Blacks, not to mention Black colleges or professional schools.

Blacks were for the most part excluded from the tremendously increased higher education opportunities that opened up for other Americans during the rapid and extreme expansion of the college and university system following the Civil War through the end of World War II, including the federally funded land grant colleges for Whites (Drake 1971). Had the segregated Black colleges not existed, as a kind of affirmative action program that was better than nothing, Blacks today would suffer a much more grave educational inequality than they do. Following the 1896 *Plessy v. Ferguson* decision of the Supreme Court, racially "separate but equal" facilities became the pattern in public institutions and accommodations, including schools. It was transparently inevitable that separate and inferior Black schools and colleges would permanently assure the systematic undereducation and subordination of Blacks to Whites. Therefore, Black colleges have served two different purposes, depending on the strength, wisdom, and motivations of their leadership. These colleges can promote an affirmative action mission by educating Blacks who otherwise would not be educated, or they can foster a lower standard of education for Blacks. White leaders more than Black have used these colleges for the latter purpose. Perhaps the best example of this is Meharry Medical College, one of the predominantly Black medical schools, which was founded in 1876. The Southern Regional Education Board consisted of representatives from 15 southern and border states to guide their higher educational policies, this policy for Blacks being "separate but equal." As recently as 1968 a majority of Meharry's first year class was set aside for Black students from those states whose education was partly financed to keep them from attending White medical schools in their states of origin (Cogan 1968, 5, 25–26, 59).

BLACK ENROLLMENT IN MEDICAL SCHOOLS

Table 1 shows Black enrollment in U.S. medical schools from 1938 through 1997. In 1938, Blacks were approximately 10 percent of the population but only 1.6 percent of all enrolled medical students. More than 87 percent of them were matriculated at Howard or Meharry. A decade later Black enrollment had increased to 2.6 percent, and just over 84 percent still were enrolled at one of the two predominantly Black medical schools.

In the late 1930s there began a decade of major legal challenges to the constitutionality of racially segregated education (Kluger 1976, 155–238). The NAACP launched a major attack on the separate and unequal graduate and professional schools of the southern states, at first demanding only equal educational treatment. It was thought to be strategically wise first to win a number of cases on the basis of the demonstrable inequality or absence of postgraduate and professional school facilities provided to Blacks, rather than to tackle the fundamental doctrine enthroned under the *Plessy* case, the pretense that racially separate schooling could be equal.

In 1935, Charles Houston, former dean of Howard University Law School and a graduate of Amherst College and Harvard Law School, and one of his extremely able former students, Thurgood Marshall, brought suit against the University of Maryland to admit Donald Murray, a recent Black graduate of Amherst, to its law school. Murray was accepted in 1938, following three years of litigation.

Another student, Lloyd Gaines, was admitted to the University of Missouri Law School after a legal contest also decided by the Supreme Court in 1938. As commonly was done in those days, Missouri had offered to pay

TABLE 1. Enrollment of Blacks in U.S. Medical Schools, 1938–97

	Year	Total Enrollment	Total Black Enrollment	Percentage in Predominantly White Schools	Percentage of All Enrolled Medical Students
Pre–civil rights	1938	21,302	350	12.9	1.6
	1947	22,739	588	15.8	2.6
Desegregation era	1955	28,639	761	31.0	2.7
	1968	35,833	783	37.3	2.2
Affirmative action	1969	37,690	1,042	52.4	2.8
	1977	60,039	3,587	80.0	6.0
	1997	66,900	5,303	86.6	7.9

Sources: Dietrich C. Reitzes, *Negroes and Medicine*, Harvard University Press, 1958; Charles E. Odegaard, *Minorities in Medicine*, The Josiah Macy, Jr. Foundation, 1977; AAMC enrollment data for 1977; AAMC enrollment data for 1997.

tuition for Gaines to attend a law school in any other state in order to keep the state university all White. When he did not agree, the state offered a defense that there were too few Blacks applying to law school in Missouri to warrant the expense of establishing a law school for Blacks only. Chief Justice Charles Evans Hughes ruled that “the State was bound to furnish . . . within its borders facilities for legal education substantially equal to those which the State there afforded for persons of the White race.”

Other admissions suits against law schools in Oklahoma and Texas in 1946 were decided similarly in 1948 and 1950. Even though the Court avoided a ruling on the “separate but equal” doctrine, it had already made it clear that a state could not provide an equal professional education for Blacks by setting up a small pretense of a school, which lacked comparable student-faculty-alumni supportive networks, comparable libraries, or comparable reputations for excellence. Writing for a unanimous Supreme Court on June 5, 1950, Chief Justice Vinson stated that in both Oklahoma and Texas “we cannot find substantial equality in the educational opportunities offered White and Negro law students by the state” (Kluger 1976, 282). A 1942 U.S. Office of Education survey of higher educational opportunity for Blacks in the seventeen southern and border states revealed that segregated schools were mandatory in all of them either by state constitution or statute, that professional and graduate educational offerings were not equal anywhere, and that, for example, in sixteen states a law curriculum was offered for Whites but was available in only two states for Blacks. In 1940 about 80 percent of all Blacks lived in those states; 70 percent still lived there in the 1950s. Medical education was offered to Whites in thirteen of the seventeen states and the District of Columbia, but was offered to Blacks only in the two states where Howard and Meharry were located.

When I was admitted to the University of Michigan in 1943 I was the only Black student in a class originally of 175 and of whom 145 graduated. Probably I was the only Black student that year as a consequence of military service. Already accepted into the Medical School I was drafted and as a result of my test scores was made a member of the Army Specialist Training Corps for Blacks, since the military was at that time segregated. I was slated to study engineering, but because I had already been accepted for the Michigan Medical School, Albion College and the University of Michigan requested that I go to Medical School. On arriving I noticed that each class had two Black students, and in the course of my years there each year they admitted two or three Black students. All enrolled students were members of the Army Specialist Training Corps (ASTP) or the Navy V12 program except for the small number of six or so women in each class.

Men lived in the Victor Vaughn Medical Dormitory for men except for those preferring to live in their White fraternity house. That was the first year Blacks lived in the dormitory for men because dormitories at Michigan then were segregated. When I was in my junior year and the war ended, I completed school as a civilian and was required to rent quarters off campus. During those medical school years I made many friends of different races since all of my earlier schooling had been in racially integrated schools where I was the only or one of only a few Blacks in a class. In my graduating class of 145 I finished twenty-eighth.

LEGAL DESEGREGATION

The Supreme Court's 1954 decision in *Brown v. Board of Education* ended the *Plessy* doctrine of "separate but equal." Chief Justice Earl Warren found that to segregate children racially in public schools in and of itself deprived minority children of an equal education guaranteed them by the equal protection clause of the Fourteenth Amendment. Public schools in the lower levels were inherently unequal simply by virtue of their being racially segregated.

Some of the southern states refused to recognize that *Brown* applied to graduate and professional schools as well as elementary and high schools. North Carolina, Alabama, Tennessee, Georgia, Louisiana, Mississippi, and Florida all brought legal tests of the issue. In *Frazier v. the Board of Trustees of the University of North Carolina* the Supreme Court stood firm in its 1956 decision that the reasoning in *Brown* applied with equal force to colleges: "Indeed it is fair to say that they apply with greater force to students of mature age in the concluding years of their formal education as they are about to engage in the serious business of adult life" (Amicus brief in *California v. Bakke*, National Fund for Minority Engineering Students 1976).

The legal struggle to maintain segregated higher education dwindled in the mid-1960s. However, in 1968, fourteen years after Blacks had won a major constitutional law victory, only twenty-two more Black students were enrolled in the nation's medical schools than were registered when the Supreme Court pronounced the verdict in *Brown*. At this time, though, the entire nation developed a mood of willingness to begin to correct the social injustices long inflicted on Blacks. Reasons for this change included the nonviolent civil rights movement led by Martin Luther King Jr.; the student protest against the Vietnam War and social injustice generally; the urban riots by Blacks, especially following King's assassination; and the development of increasing Black militance (Grimshaw 1969; Ludmerer 1999, 250–53). Between 1968 and 1969, Black enrollment in U.S.

medical schools increased from 783 to 1,042. Even more dramatic for that one-year period was the percentage enrolled in predominantly White schools, an increase from 37.3 percent to 52.4 percent. By 1977, Black enrollment had increased to 3,587, or 6 percent of the total medical school enrollment, with 80 percent of the students enrolled in predominantly White schools. Although this figure did not approach the 11 percent total proportion of Black individuals in the population, it represented a significant improvement over any previous era. Progress continued up to 1997, when Black enrollment was 7.9 percent but still below target.

Wellington and Montero (1978) surveyed the affirmative action programs for minority students in the 112 U.S. medical schools and rated the effectiveness of the various components in their equal education efforts. By far the most significant effort was the modification of traditional admission criteria in order to recruit and admit more minority students. Invariably this was done more successfully when minority group individuals sat on admissions committees. In addition, considerable effort went into providing additional student aid in the form of counseling, tutoring, and financial aid support for minority students. By their own rating, medical schools had been significantly less successful in their recruitment of minority faculty and administrators between 1968 and 1972, and indeed there continued to be very little change in that picture up to 1976 and even until 1996 when the percentage of Black faculty was only 2.6 (AAMC 1998). (Descriptions of the development and course of minority medical school enrollment can be found in Curtis 1971, which covers the years up to 1970; Odegaard 1977, which covers the period from 1966 to 1976; Shea and Fullilove 1985; Watson 1999, 19–43; and Ludmerer 1999, 251–56.)

THE *BAKKE* CONFRONTATION

Arguments for and against affirmative action were presented in the more than sixty legal briefs presented to the Supreme Court in the case of *Regents of the University of California v. Bakke*. The Association of American Medical Colleges (AAMC) submitted a brief supporting the preferential admissions program of the University of California (Davis) Medical College (AAMC 1976). Allan Bakke, an engineer who at age thirty-three decided to apply to medical schools, was turned down for two years by all schools to which he applied. His second application to the University of California (Davis) was thought to be unsuccessful because he made a poor interview impression, and from my experience on an admission committee I would surmise also that his age and his second choice of medicine were factors against him. He claimed that because UC Davis set

aside 16 of its 100 places in the entering class for minority students that he had suffered illegal racial discrimination since his grade point average and scores were higher than those of minority students admitted under a quota plan.

The AAMC had an important stake in the outcome of this dispute because in 1968 it had urged all medical schools to voluntarily admit increased numbers of students from geographic areas, economic backgrounds, and ethnic groups that were inadequately represented (AAMC 1968). Specific emphasis on the importance of the race-consciousness in this affirmative action program was further underscored by the 1970 national task force report (AAMC 1970) on ways to expand educational opportunities in medicine for Blacks and other underrepresented minorities (specifically also Hispanics and Native Americans). A specific affirmative action goal was set to raise enrollment from a level of just over 2 percent to 12 percent by 1975. Other medical organizations, including the American Hospital Association, the American Medical Association, and the National Medical Association, had joined the AAMC in endorsing this affirmative action effort. It is worth noting that the NMA was formed in 1895 because the AMA refused to accept Blacks as members. Indeed it was not until 1968 that the AMA prohibited racial bars to membership in all of its state and local branches. In the spirit of the late 1960s, therefore, even the conservative medical establishment supported the need for special programs to bring about more equal medical educational opportunities for Blacks and other excluded minority groups. Although the goal of 12 percent was not attained in 1975, it reached 10 percent by that year. It was disquieting to note that from 1975 on, first-year minority enrollment slumped to 9 percent and then to just under 8 percent by 1978, an indication that affirmative action efforts did not rest on secure ground.

In its *Statement on Affirmative Action* (1977), the U.S. Commission on Civil Rights called attention to some of the shortcomings in the University of California defense of its affirmative action program; their criticism applied with equal force to the legal brief submitted by the AAMC (1976). Medical schools were less than candid about their intended or unintended prior exclusion of minorities, and their case would have been strengthened had they been more forthright in such a statement. Most professional schools, and this was especially the case with the state university system in California, were reluctant to go on record with an acknowledgment of their own previous record of racial discrimination in admission or hiring of minorities. Furthermore, public universities usually are reluctant to cite other

public agencies, such as public schools and college systems in their own state that, in effect, deny equal educational opportunity, and thereby equal minority student access to graduate or professional school admission. The professional schools often are not on public record concerning the limitations of admissions tests or grade point averages in forecasting future student or professional success; nor are they on record in stating that an important mission of their school is to provide physicians to serve all of the people in their state (U.S. Commission on Civil Rights 1977).

The defense of affirmative action programs in *Bakke* rested on the following points: (1) the low representation of minorities in professional schools and in the profession, (2) the benefits to students, especially non-minority students, of receiving an education as part of an ethnically diverse student body, (3) the need to train minority professionals to serve as role models and sources of inspiration and hope to aspiring minority youngsters, (4) the need to train increased numbers of minority professionals, who would improve services to the underserved minority communities, (5) the need to improve the ability and willingness of future nonminority physicians to serve more effectively in minority communities, (6) and the need to evaluate more closely personal attributes and life experience of minority applicants to assure that their potential abilities are not underestimated (Brief for Petitioner 1976).

In June 1978 the Supreme Court decided that medical schools could use race as one factor in affirmative action admissions as long as other factors, such as special qualities an individual applicant might bring to his or her class, also were allowed. However, a medical school could not set up an arbitrary quota or reserve seats only for members of any specific racial group. The University of California at Davis was the only public medical school in the nation that operated under a stated quota system and with a separate admissions committee for minority applicants. The university also tacitly confessed that Allan Bakke was more qualified than some minority students who were admitted and that he would have been admitted had there not been a minority quota.

Some civil rights proponents believed that the University of California had deliberately put its worst foot forward and should drop the case, pointing out that a member of its admissions committee had advised Bakke to bring suit. In addition the university did not establish a need for its minority program in pretrial arguments (Dreyfuss and Lawrence 1979; Tollett 1978; Burke 1977). Most regrettable was the fact that the Supreme Court justices were unable to come to a unanimous opinion.

THE MEDICAL SCHOOL ADMISSIONS
 PROCESS EXAMINED

DEFINING THE QUALIFIED APPLICANT

Medical schools throughout the country annually face the task of selecting those applicants who will become the most able, willing, and successful medical students and, even more, who will best serve the need for future physicians as practitioners, researchers, teachers, and administrators. As the AAMC pointed out in their amicus brief in the *Bakke* case, during the 1960s the competition to get into medical school became increasingly intense, the number of applicants having approximately tripled while the number of first-year places only doubled. This doubling occurred in response to increasing public pressure for better health care delivery. The large increase in the number of applicants was largely a response to reduced opportunity in graduate-level Ph.D. and engineering programs, and it created an especially difficult political problem. Indeed Bakke's decision to switch fields to medicine, coupled with his age, probably accounted for the fact that over a two-year period he was rejected by a dozen medical schools. Affirmative action admissions programs for qualified minority students would have been difficult in normal times, given the fact that their traditional educational racial handicap left them with test scores attained two decades or so earlier by Whites.

Table 2 shows that the number of applicants increased from 1967 to 1975, as did the percentage of those accepted who had A averages. Subtest scores on the Medical College Admissions Test (MCAT) also increased. The average admission test scores for Black students accepted into medical schools during the period from 1967 to 1975 were a hundred points lower than those of nonminority students. As the AAMC brief points out, although the scores of Blacks were the same as those earned by Whites twenty years ear-

TABLE 2. Mean MCAT Scores and GPAs for Accepted Medical Students, 1967-75

Year	Number of Applicants	Percentage Accepted	Mean Subtest Scores		GPA	
			Quantitative	Science	A (3.6-4.0)	B (2.6-3.5)
1967	18,724	51.8	596	565	14.1%	76.8%
1972	36,135	38.1	614	575	28.9%	60.1%
1975	42,303	36.3	620	615	44.2%	47.4%

Source: Carnegie Council on Policy Studies in Higher Education 1977, appendixes D-1, D-8.

lier and were high enough to reflect adequate academic qualification and merit, this fact was generally not understood by the public.

Since Blacks and other minority students have to perform the same academic work as all other medical students, it would be reasonable to expect that minority students would encounter more than an average amount of academic difficulty. Indeed retention rates for Blacks at the end of their first year were only 95 percent and 91 percent in 1970 and 1971, compared with 98 percent and 97 percent for White students. More Black students were dropped, but the demand for maintenance of standards in the face of unequal preparation would necessarily have led to that result. I believe this could also be taken as a sign of reasonable academic responsibility and risk taking, that medical school faculties were accepting the difficult social challenge of democratizing the future physician manpower of the nation.

On the other hand, critics of affirmative action programs have persistently maintained that MCAT scores and grade point averages are fixed measures of meritorious achievement and qualification, without consideration of the different learning backgrounds in which these scores and grades are obtained. The AAMC countered these arguments (Petersdorf et al. 1990, esp. 665–66) by pointing out that although grades and admissions test scores have some predictive power for the first two years of basic science medical school course work, this power is limited for all students for the last two years of clinical work or for future medical career success. For these reasons medical school admissions committees always place considerable emphasis on letters of recommendation from the premedical advisors and other faculty members, review of the applicant's autobiographical statement, even though others may have helped to write it, and breadth of extracurricular and community interests. Of even greater importance are the interviews with members of the admissions committee to determine an applicant's maturity, stability, motivation for a career in medicine, depth of interest in the field, and ability to relate to and communicate with others. An estimate of these subjective factors before the interview plays a large role in deciding which applicants will be invited for interviews.

DECISIONS ON MAKING UP THE CLASS

The easy decisions regarding admissions involve only a fraction of those who are interviewed. Most medical schools usually are left with several hundred or several thousand of qualified but not exceptional applicants, while places can be offered only to about a hundred. Why should an applicant's

race be a relevant factor favoring him or her over another applicant with essentially similar qualifications?

When he was president of the Ford Foundation, McGeorge Bundy (1977) pointed out that in 1975–76, there were just under 35,000 White applicants to medical schools, of whom 22,000 were not accepted. In that same year, the total number of minority applicants accepted and enrolled was 1,400. If not a single minority applicant had been accepted, there would still have been more than 20,600 disappointed White applicants. In other words, the question becomes one of whether or not the nation stands to gain more by reducing White applicant disappointment by a mere 7 percent, or by making a major and sizable improvement in broadening the medical representation of minority groups (almost a sevenfold numerical increase over traditional minority enrollment levels).

Most people who have had no experience with admissions decisions are unaware that a mixture of aims must be satisfied in the selection of an entering class. From experience on a medical school admissions committee in the 1970s, I only gradually came to appreciate the complexity of the admissions process. Even if it were possible to assess all of an applicant's cognitive and noncognitive assets and liabilities, it is impossible to judge how that applicant would have looked coming from a different background, or will look four years later in a new environment. Admissions committees do not have a high batting average in selecting students who, four years later, will prove to have been as outstanding, excellent, or extraordinary as was predicted in the admissions year. About 10 percent of a class is usually predicted to be in the highest category of excellence. At best only a third of them perform up to expectation in their subsequent school work, and a substantial proportion of those predicted to be average have been found to be very much better or worse than anticipated.

While I was on the medical school admissions committee in the 1970s, the Cornell University Medical College committee interviewed approximately 1,000 of its 6,000 or so applicants; of those, perhaps 800 were considered acceptable. Acceptable applicants were then rated into one of five degrees of acceptability. Usually only people in the two top categories were offered admission. In order to constitute a class of 101 students, about 180 acceptances were offered. But two minority students had to be accepted to obtain one enrollment, since the "best" minority students are fewer in number. Students who were accepted at Cornell ordinarily had been accepted by most of the other medical schools to which they applied. Medical schools therefore compete for the "best" applicants, making admissions decisions a two-way process involving both the applicant and the school.

Some factors have little direct relationship to personal attributes of an applicant but great bearing on whether he or she will be chosen as a member of that class. These include whether or not the applicant is a resident of the state in which the school is located, since all medical schools in most states suffer financial penalties of reduced state support unless they enroll a majority of state residents. This was surely the case in New York. The Health Professions Educational Assistance Act of 1976 and subsequent amendments denied federal funding to medical schools unless (1) 50 percent or more of its graduates selected primary care residency training programs, (2) capitation awards were made to students who agreed in writing that they would practice for a year in an underserved area, and (3) that a quota of Americans who completed the first two years of their medical education abroad would be admitted as third-year students to American Medical schools (Ludmerer 1999, chap. 19).

Attention also was given to whether or not the first-year applicant came from one's own undergraduate college campus. Ordinarily about one-sixth to one-fifth of the entering class came from Cornell, although the entire class usually could have been filled with acceptable Cornell graduates. Special preference also was given to children of faculty members, and lesser but some attention was given to children of alumni and the spouses of enrolled students.

In order to obtain geographic and social diversity, an effort was made to admit a few students from schools in different parts of the country, and to admit some students from public as well as from private schools, although a definite preference went to applicants from prestigious institutions, whether public or private. Admissions committees have enough flexibility to bend their admissions to serve a number of purposes, as long as the accepted student does not carry too great a percentage of academic risk. However, this is only the beginning.

Suppose it had been observed that a significant proportion (4 percent to 6 percent) of students traditionally had come from prestige university A, but for some reason very few students from that school had applied in a given year. Further, of those who did apply fewer elected to enroll. An informal investigation usually would reveal that another medical school, one or several of Cornell's peers, had developed a new and special competitive advantage over Cornell. An effort would then be mounted to restore Cornell's former position. This may have involved accepting more than the usual number of students from that school, actively recruiting more applicants, possibly even accepting a few students who previously would not have been accepted, and attempting especially

to counteract any negative rumor that might have been circulated concerning Cornell.

Conversely, if too many students from a particular university were found to be highly acceptable, some might not be offered places simply because they would represent an unusually large proportion of the whole CUMC class. In other words, the decision to admit a student from a particular college or university is inextricably involved in the status struggle between medical schools, each school being constrained to maintain or improve its competitive position and prestige image within the system. Premed advisors at the various colleges are also compelled to build up the image of their schools, and for this reason they influence the numbers of applicants who apply to this or that medical school, so that their applicants do not cancel out each other's chances of being accepted.

Medical schools must compete to attract the most able applicants from the high-prestige colleges and universities, and such applicants never lack schools they can choose or reject. In fact by listening to the many able applicants to a medical school each year, one learns how the outside world is perceiving one's school and is compelled to ponder problems that require correction. It is healthy for a medical school, like any other institution in a responsible society, to hear the contribution it is making to the healthy development and growth of that society, and to be held accountable for its efforts. Ultimately neither strong students, faculty, nor administration will choose to be part of a school that does not merit their continuing respect. Thus, as I described in my previous book (Curtis 1971), a group of medical students and faculty at Cornell in 1968 were concerned that their school was not following the lead of schools like Harvard, Stanford, or Columbia in admitting qualified minority students. They pressured the entire faculty and administration to make a formal commitment to enroll a class with 10 percent Black students and to recruit qualified Black faculty leadership to develop an effective program. After I was appointed to the faculty and dean's staff, I was prominently involved in interviewing both minority and nonminority applicants in order to send the message that Cornell wanted to change its image as an all-White medical school. One cannot overestimate the influence of peer institutional pressure in exacting socially acceptable and responsible behavior from medical schools.

CHANGES IN COMPOSITION OF THE MEDICAL STUDENT BODY OVER THE YEARS

Between 1968 and 1978 the number of medical schools in the United States increased from 99 to 124 (35.3 percent increase), and the total num-

ber of enrolled students rose from 35,833 to 62,242 (67.6 percent increase). During the same period, there was a major shift in gender of enrolled students, with females increasing from 8.8 percent to 24.3 percent. Enrollment of underrepresented minorities increased from 2.4 percent to 7.9 percent. The corresponding increase for U.S. Blacks was from 2.2 percent to 5.7 percent. The steady increase in enrollment of women, which, except during World War II, had been restricted to approximately 5 to 6 percent, was a direct response to affirmative action efforts, which were strengthened by the 1972 education amendments prohibiting discrimination against women in admissions or in other aspects of student programs and services. This achievement was accomplished with very little in the way of public notice, acclaim, or controversy.

In the late 1960s many schools automatically returned applications submitted by persons over the age of twenty-six, but today nearly all schools annually enroll students in their thirties and older, some of whom are married and have children. Those older students bring with them greater maturity and important experiences from other careers. Similarly there are more physically handicapped persons, again in response to affirmative action efforts either mandated or voluntarily undertaken.

FOREIGN MEDICAL SCHOOLS

The absolute number of applicants to U.S. medical schools declined 15 percent from its peak in 1974–75 to 1979–80, and first-year places expanded by 13.7 percent in the same period. However, there still were 19,127 unsuccessful applicants to U.S. medical schools for the 1979–80 year (“Annual Report” 1980). Those 19,000 rejected applicants exceeded the total of all applicants to U.S. schools in most years prior to 1968, an expression of the tremendous upsurge of the desire of young Americans to become physicians during the 1970s.

In 1980 it was estimated that as many as 11,000 or more U.S. students might be studying medicine abroad, most of them enrolled in half a dozen proprietary schools located in Mexico or the Caribbean. The political influence of the parents of those students, a large fraction of whom were New Yorkers, was believed to be responsible for an unprecedented action by the New York State Board of Regents, which proposed setting up guidelines by means of which the state could approve these foreign schools, whose students would then be eligible to transfer into the third-year classes of medical schools located in New York. This proposed action was at first not supported by the AAMC or the AMA (“New York’s Policy” 1980), which jointly operate the medical school accreditation agency,

the Liaison Committee on Medical Education. Despite opposition, the medical schools in New York state began admitting these students to their third-year classes—after the AAMC gave official support to this program in 1970 (Ludmerer 1999, 272–75). In the case of Cornell, ten new students from these foreign medical schools were admitted to the third-year class after 1976.

HOW MANY PHYSICIANS DO WE NEED?

By 1980 a consensus had developed that the nation soon would experience a physician surplus. We were graduating students from U.S. medical schools at a rate that had doubled from 1960 to 1980 to almost sixteen thousand graduates a year. By 1985 an estimated total of eleven thousand U.S. citizens were studying medicine abroad, often in substandard medical schools, and there were an equal number of foreign medical school graduates in our residency training programs. It was estimated by an expert panel, the Graduate Medical Education National Advisory Committee (GMENAC), that by 1996 we would have an excess of seventy thousand physicians over the “need.” Furthermore, the surplus might be greater still if we made better use of physician’s assistants, nurse-practitioners, and other paraprofessional workers. The problem of physician supply was not one of a low absolute number of physicians but rather that many geographical areas, such as rural counties and inner city ghetto neighborhoods, had relatively few doctors and that American physicians were overspecialized in surgical and medical subspecialties with too few giving primary and basic general medical care. GMENAC suggested that U.S. medical school enrollment could be reduced by 17 percent relative to the 1980–81 entering class and that in the future restrictions should be placed on the entry of U.S. citizens and foreign nationals from medical schools abroad. There was a reaffirmed need to improve the diversity of medical school student bodies with regard to “socioeconomic status, sex, and race by providing loans and scholarships to achieve these goals and by emphasizing as role models, women and under-represented minority faculty members.” Medical schools did not reduce their admissions, maintaining annual enrollments at approximately sixteen thousand up to the present time. (A summary of the six-volume GMENAC report, with commentary, appeared in the *Chronicle of Higher Education*, October 6, 1980. See HHS 1980 for information on the complete report.)

A comparison of the production of premedical students in the states of New York and California underscores important similarities and differences in their production of premedical students. In 1970 California had

the largest population of any state, with about 20 million, or 9.8 percent of the resident civilian population; New York was second, with approximately 18 million, or 9.0 percent. Looking at all applicants to U.S. medical schools in 1975–76, New York was in first place and provided 12.3 percent of all applicants, who generated 22.1 percent of first-year places. Medical schools located in New York enrolled 10.6 percent of all first-year U.S. medical students that year (Gordon and Johnson 1977). However, New Yorkers also were first in percentage of rejected applicants, contributing 12.2 percent of all unsuccessful applicants. In that sense New York was simultaneously the biggest winner and the biggest loser, by the sheer weight of its proportion of the applicant pool.

California ranked second in each of the categories mentioned above: with 9.6 percent of all applicants, who generated 14.5 percent of all applications, and received 8.0 percent of all enrollments, and 10.5 percent of all unsuccessful applicants. Medical schools in California enrolled only 6.4 percent of all first-year U.S. medical students, demonstrating a smaller contribution compared to New York. Both states, however, exported more first-year students to other states than they accommodated in total enrollment capacity. Both states also demonstrate the tremendous desire to become a premedical student, and how difficult it will be to control these aspirations.

CONTROLLING POSTGRADUATE TRAINING AND PRACTICE LOCATION

Thoughtful observers like Alexander Leaf (1978) have pointed out that our maldistribution of medical manpower is unlikely to be improved until physicians give up some of their highly valued independence and self-determination. “We must choose whether medicine is to be a privileged franchise to be practiced for personal advantages or whether our role will be to provide for a public need.” Meanwhile there would be continuing governmental efforts to influence physician behavior by changing the method of financial support, education, and training, and changing regulatory and reimbursement formulas for individual and institutional health care providers. Completely free choice of behavior by physicians created problems even for states that were apparently well supplied.

Of the 323,200 active physicians in the United States in 1970, New York contained the highest percentage, 13.3 compared to 12.0 for California, which was second. Both states exceeded the national average of 154 physicians per 100,000 population, New York with 263 and California with 194. Our national physician manpower consisted of 81.0 percent who were educated in the United States, 1.9 percent who were educated in Canadian

schools, which are accredited similarly, and 17.1 percent who are educated in foreign schools many of which are operated on very different standards. New York accommodated 27.9 percent of all foreign medical graduates (FMGs); attracted 10.3 percent of U.S. graduates and 17.2 percent of Canadian graduates. California relied only on 5.2 percent of the nation's FMGs; contained 13.9 percent of U.S. and 18.2 percent of Canadian medical school graduates.

As early as 1953, New York state repealed its educational requirements for internships in order to fill positions especially in underserved areas (Maynard 1978, 193–99). Not until 1960 did the Educational Committee for Foreign Medical Graduates require passing its certifying exam as a precondition for serving on any hospital house staff in the country. As soon as immigration restrictions were loosened, many FMGs entered residency training programs in New York state and subsequently became medical staff members at a number of hospitals located in minority group and low-income areas. Because they were willing to accept employment at salary levels unacceptable to U.S. graduates, many also began to fill postgraduate and staff positions in the state psychiatric hospitals and institutions for the developmentally disabled.

In 1974, New York offered 9,549 residency training positions, a number amounting to 16.7 percent of all residency positions offered in the United States. While 96 percent of these were filled, only 49 percent were taken by U.S. and Canadian graduates. That same year California offered only 5,593 residency positions, and filled 93 percent. However, 95 percent of the California residents were U.S. or Canadian graduates and only 5 percent were FMGs (“Medical Education in the United States” 1976). In other words, New York and California succeed equally in attracting absolute numbers of U.S. medical school graduates. During the years when immigration restrictions on FMGs were loosened, New York became heavily dependent on these physicians in a pattern unlike that of any other state.

CONTROLLING THE CONTINUUM OF PHYSICIAN MANPOWER PRODUCTION

Realigning the system in a state requires attention to the pool of premedical students, undergraduate medical students, postgraduate trainees in needed fields, and financial and other incentives to encourage physicians to locate in certain areas. Merely establishing a new medical school in an area that is no longer attractive to practicing physicians is not a solution to a shortage. For example, the State University of New York (Downstate Medical Center) was started when the state took over the former Long Is-

land College of Medicine in 1950. According to one of the loudly stated political arguments, that medical school, located in Brooklyn, was set up to train physicians who would remain in the New York metropolitan area. The number of practicing physicians in Brooklyn had fallen from 6,000 in 1960 to 3,600 by 1975, although the population remained at about 2.8 million. There had been a major demographic shift in population, with many middle-income Whites moving to the suburbs and being replaced by low-income Blacks and Puerto Ricans (Fernandes and Imperato 1980).

In a 1981 poll of second-year medical students at SUNY Downstate, Fernandes and Imperato found that only 2.5 percent planned to do their postgraduate training in Brooklyn, and only 3.3 percent were planning to practice there. The authors attributed the students' negative responses and reactions to the unattractive surroundings and quality of life of the inner city neighborhood in which the medical school is located. While this is undoubtedly correct, it is important to note that only 6 (2.7 percent) of the 223 students were minority group members (5 Blacks and 1 Puerto Rican). Large nationwide studies and AAMC annual surveys of graduating students show that a large proportion of minority students plan to pursue future training in inner city hospitals like Kings County, are doing so currently, and plan to practice in the inner city (DHEW 1978b; Petersdorf et al. 1990).

This is an important phenomenon, and it demands further elaboration. In chapter 7 I present data that illustrate the degree to which physicians from underrepresented minority groups who graduated from medical schools in the five-year period from 1969 to 1974, and who were in practice in the 1990s, were providing extensive medical care to members of their minority group in comparison to nonminority peers who finished medical school in the same time period. We found that not only do minority group physicians establish practices where their subpopulations live but that White physicians tend to practice in the more middle income areas where they grew up and reside. For minority group physicians the income of their families of origin did not predict future practice locations.

Because our nation is still racially segregated, and particularly since we have experienced increasingly segregated Black neighborhoods both in cities and suburbs within the past thirty years, members of minority groups will have more immediate access to physicians who belong to their group. Managed care companies state that the preferred doctor-to-patient ratio should be 218 doctors for every 100,000 potential patients. Many patients, by choice or by neighborhood location, are seen by members of their ethnic group. It is therefore relevant to note that there are 241 White

physicians per 100,000 White Americans, 875 Asian American physicians for every 100,000 Asian Americans, 69 Black physicians for every 100,000 Black Americans, and 45 Native American physicians for every 100,000 Native Americans. Libby, Zhou, and Kindig (1997) raise the important matter that these facts should influence medical school admissions.

Affirmative action admissions programs may represent the best available social policy to achieve a greater share of fairness and justice within a racially segregated society. These programs also provide the best means of educating future physicians to care for patients without regard to ethnicity. This is the ultimate color-blind goal we hope some day to achieve (Ludmerer 1999, 250). The rest of this book is devoted to exploring this and other arguments in favor of actively achieving this goal.

NOTE

1. President Lyndon Johnson's Executive Order 11246 established affirmative action requiring equal employment opportunity, relegating to the Department of Labor's Federal Contract Compliance activities to monitor hiring, retention, and promotion of women and minorities. These powers were expanded under the Nixon administration to require federal contractors receiving more than \$50,000 annually to submit annual plans stipulating goals and timetables to reach them in hiring, training, and promoting minorities according to their availability in the pool of qualified potential applicants. Later the Equal Employment Opportunity Commission (EEOC) called for affirmative action by governments, and the Office of Education called for affirmative action by colleges (Welch and Grubel 1998, 12–14; Crosby and VanDeVeer 2000, 3–23). Medical school affirmative action was begun voluntarily in 1970, led by the AAMC in collaboration with the American Medical Association, the American Hospital Association, and the National Medical Association (Odegaard 1977, 23). This was done to remedy underrepresentation of minorities brought about by their exclusion, which required compensation with a goal to enroll 12 percent by 1975. Following the Bakke decision in 1978 affirmative action was also for the purpose of achieving diversity in the student body to enhance education for all students.