aamc association of american medical colleges

SIZING UP THE FUTURE OF MEDICAL EDUCATION

BACKGROUND BOOK

CAS SPRING MEETING
THURSDAY, MARCH 19, 1987
8:30 A.M. - 1:00 P.M.

SPANISH REPUBLIC ROOM
THE WOODLANDS INN
THE WOODLANDS, TEXAS

One Dupont Circle, N.W./Washington, D.C. 20036 / (202) 828-0400

Council of Academic Societies
1987 Spring Meeting

"SIZING UP THE FUTURE OF MEDICAL EDUCATION"

March 18-20, 1987
The Woodlands Inn
The Woodlands, Texas

Wednesday, March 18 — Registration 4:00 - 6:00 p.m.

KEYNOTE ADDRESS

Edward N. Brandt, Jr., M.D. Ph.D.
Chancellor, University of Maryland
Member, AMA Task Force on Physician Manpower

Reception and Dinner to follow

Thursday, March 19 — Council Forum 8:30 - 1:00 p.m.

"SIZING UP THE FUTURE OF MEDICAL EDUCATION"

Modulating physician supply: critical issues

Frank G. Moody, M.D.
CAS Chairman

Reducing the supply of physicians: what impact for our academic missions?

	MISSION	DISCUSSION LEADER
9:00 - 10:15	Education	Jack M. Colwill, M.D. Chairman, Family & Community Medicine University of Missouri - Columbia
10:30 - 11:45	Research	David H. Cohen, Ph.D. Vice President for Research/ Dean, Graduate School Northwestern University
11:45 - 1:00	Patient Care	Gerald S. Levey, M.D. Chairman, Task Force on Internal Medicine Manpower, APM Chairman, Dept. of Medicine University of Pittsburgh

KEYNOTE ADDRESS 6:00 p.m.

Robert G. Petersdorf, M.D.
President, AAMC

Reception and Dinner to follow

Friday, March 20

CAS Business Meeting 8:30 a.m. - 12:00 noon

COUNCIL OF ACADEMIC SOCIETIES
1987 SPRING MEETING
BACKGROUND BOOK

PROBABLE MAJOR FIELD OF STUDY
FOR ENTERING COLLEGE FRESHMEN
(By percentage of all entering freshmen)

	1976	1978	1980	1982	1984	1986
Biological Sciences						
4-year colleges	7.4	4.8	4.0	4.0	4.3	3.9
universities	9.0	6.9	5.2	5.0	5.6	5.5
Predent, Premed, Prevet						
4-year colleges	n/a	3.5	3.7	3.0	3.1	2.8
universities	n/a	6.2	6.0	5.8	5.6	5.4
Physical Sciences						
4-year colleges	3.2	4.0	3.0	2.8	3.0	2.6
universities	3.8	4.9	3.7	3.4	3.5	3.5
Engineering						
4-year colleges	6.2	8.9	9.4	10.2	8.9	7.4
universities	11.9	12.0	14.7	15.0	14.4	14.6
Social Sciences						
4-year colleges	7.8	9.8	8.9	7.4	8.7	9.7
universities	5.3	8.7	7.4	7.0	8.4	9.3
Business						
4-year colleges	17.0	21.2	21.5	22.5	26.0	26.5
universities	15.7	19.3	20.5	21.2	22.2	23.3
Computer Science						
4-year colleges	n/a	1.4	2.7	5.3	3.8	2.1
universities	n/a	1.6	2.3	4.2	2.9	1.6

Source: The American Freshman (annual)
Cooperative Institutional Research Program
American Council on Education/UCLA

PERCENTAGE OF ENTERING COLLEGE FRESHMEN
PLANNING ON OBTAINING AN M.D., D.O., D.D.S., or D.V.M.

	1976	1978	1980	1982	1984	1986
All 4-Year Colleges						
Men	9.7	7.8	7.9	6.6	6.7	5.8
Women	5.7	5.4	6.3	5.6	5.9	5.7
TOTAL	7.7	6.5	7.0	6.1	6.3	5.7
All Universities						
Men	14.4	13.3	11.8	11.8	11.0	9.6
Women	9.4	9.7	9.6	10.1	10.4	9.9
TOTAL	12.0	11.6	10.8	11.0	10.7	9.7

Source: The American Freshman (annual)
Cooperative Institutional Research Program
American Council on Education/UCLA

PERCENTAGE OF ENTERING COLLEGE FRESHMEN PLANNING A CAREER AS A PHYSICIAN

	1978	1980	1982	1984	1986
All 4-Year Colleges					
Men	4.9	4.9	4.4	4.6	4.0
Women	2.9	3.7	3.4	3.6	3.6
TOTAL	3.8	4.3	3.9	4.1	3.8
All Universities					
Men	8.4	7.4	8.2	8.5	7.4
Women	5.5	5.4	6.3	6.9	6.6
TOTAL	7.0	6.4	7.3	7.7	7.0

Source: The American Freshman (annual)
Cooperative Institutional Research Program
American Council on Education/UCLA

Survey of Students Taking the MCAT Who Did Not Apply to Medical School

Summary

In response to concerns expressed by the Council of Deans and others concerned with recent declines in the number of applicants to U.S. medical schools, AAMC mailed surveys in early May to 1549 persons who took the MCAT in 1985 but did not apply to medical school for entry in 1986. To date 596 usable responses have been returned by potential medical school applicants. Three-quarters of these persons stated that they intended to apply to medical school at some future time, and about a quarter said that they had changed their plans and no longer intended to apply. However, about a third of the respondents did not include going to medical school as part of their plans for post-baccalaureate education. The survey asked these people why they had decided against a career in medicine. More than half of the persons who did not intend to go to medical school answered that their interests in science could be better satisfied by a career in another discipline. Substantial numbers also said that the cost was too great, doctors had less independence, that they had been discouraged by MD's, and that the program was too long. Many persons provided additional comments. These most frequently described the appeal of another career choice, dislike of the practice of medicine, dislike of medical education, the desire to do other things, and the conflict between medical practice and family life.

Background

Many individuals involved in medical education are concerned about the declining applicant pool, which has dropped twenty-three percent since its peak in 1974. In 1985, the decline was 8.5 percent, and a futher decline of six to seven percent appears certain for 1986. At the spring meeting of the Council of Deans, staff were urged to find ways to assess the reasons for this decline in interest in medical careers. A number of possible approaches are being explored which may be implemented in the 1986-87 academic year, but one group of students was identified who could be reached more quickly: college seniors who took the MCAT in 1985 but did not promptly apply to medical school. A one page survey was constructed to ask these individuals why they had apparently changed their minds about medical education. The survey was distributed in early May, and the results are presented below. A copy of the survey questionnaire is appended to the report.

The Sample and Response Rate

The surveys were mailed to 1549 persons who met the following criteria.

- Took MCAT Series 17 or 18
- Obtained an average score of 9 or better on the test
- Had advanced far enough in school that they could enter medical school in 1986
- Had not identified a program leading to another degree as their "Primary Professional Degree Program"

-Were not found in AMCAS-86

-Had addresses in the U.S.

By June 9 the Post Office had returned 34 surveys as undeliverable, and another 623 forms had been returned by persons in the sample. Responses were obtained from 41 percent of the original forms that had not been returned as undeliverable. Of the 623 returned forms seven had the mailing labels removed, 39 were from students in six year programs, and another 38 were medical students who typically had taken series 17 either at the request of the medical school or in case they needed to apply again. The following analysis describes the answers of the 539 remaining respondents.

What People Said

Since the survey was not sent to persons who had plans to obtain other than an MD degree, it is not surprising that 95 percent answered that their purpose for registering for the MCAT was to apply to an allopathic U.S. medical school. Some persons had more than one purpose, and 7 percent of the respondents identified application to an osteopathic medical school as their purpose. Other responses, in order of their frequency, were the volunteered explanation of "curiosity", application to another health professional school, and application to a foreign medical school.

When asked why they did not apply for the 1986 entering class 396 or 74 percent said that they planned to apply in a later year. Smaller numbers of people said that they planned to retake the MCAT, 37 persons or 7 percent, or that their scores were too low, 13 persons or 2 percent. Another eighteen stated that they had in fact applied for entry in 1986 and that we were incorrect about their not being applicants. In most cases this was probably due to an incorrect SSN on the MCAT Score Tape. One person even pointed out that we must have sent the survey to him by mistake as a result of the bad SSN on his MCAT. In at least two other cases it appeared that the respondent had applied to osteopathic rather than allopathic medical schools. In one other case the respondent proclaimed that he had only applied to Johns Hopkins, a school that had reported only a small fraction of its applicants at the time of the survey. These responses to question two are presented in detail by Table 1. Since the persons answering the questionnaire could give more than one answer, the percentages add to more than 100.

A substantial number of persons, 128 or 24 percent, said that they had changed their career plans. These people, together with the six who said they never intended to apply to medical school constitute a group that not only did not applied for 1986 but do not intend to ever apply. However, when asked about their plans for post baccalaureate education, a larger number appeared to have decided against going to medical school. Although all but nine persons gave an answer to question four, only 362 persons, or 68 percent, said that they planned to go to medical school. The rest of the respondents, as well as some of the persons who said they planned to eventually apply to medical school, gave plans that did not include medical school. Overall, 177 of the responents, or 33 percent, did not plan to go to medical school. These people were at one time all potential applicants and given their MCAT scores would have good chances of being admitted. The subsequent analysis in this report will concentrate on the answers given by these lost applicants. The educational plans of those persons not planning to go to medical school are given in Table 2.

The most common plan for future education among persons who are not going to medical school was graduate school. When asked for the discipline of their graduate studies, fields in the biological sciences were identified by 65 percent and disciplines in the physical sciences were identified by another another 23 percent. Few of the respondents chose fields outside of the traditional natural sciences. The disciplinary areas identified by the repondents are presented in Table 3.

When asked why they had decided against a career in medicine in the next question, 132 of those who did not plan to go gave at least one answer. Of those responding more than half said that their interests in science could be better satisfied by a career in another discipline. Table 4 presents the answers to question four and also shows that 37 percent identified the high cost and debt associated with medical education, 34 percent cited the decline in the independence of doctors, 29 percent said that they had been discouraged by M.D.'s, and 26 percent said that the program was too long. One person who checked that he had been discouraged by doctors added:

> *Most doctors I talked to were extremely negative about their experiences in the field and said things like, "If you can think of anything else you'd like to do, do it."*

Another person who is still planning to go to medical school said, "The vast majority of physicians I have spoken with discourage medicine." Less than nine percent said that either the decline in respect for doctors or discouragement by their family were factors.

Seventy-five of the persons who do not plan to go to medical school also gave written comments explaining their decision. Table 5 gives a summary of the types of comments given. The most common reason described the appeal or advantages of another career path. The following comments are examples of this type of response.

> *I always planned on going into research and found that pursuing a Ph.D. in biological chemistry met my needs better than pursuing an M.D. degree, although my MCAT scores were quite good.*
>
> *I prefer a strong background in nutrition and prefer to approach health problems from this perspective.*
>
> *I have chosen to pursue a dental career. I feel it will allow me more freedom educationally and as a career and better suits my needs as a profession.*
>
> *I found that although I was doing well in the pre-med curriculum, I really didn't enjoy it. At the same time, I really enjoyed my finance courses. I plan to pursue a masters in finance after two years.*
>
> *I am currently a newspaper reporter--a job I love. I feel that despite my education, I had little idea what it would really be like to be a doctor. I have decided to pursue what I know I like. If for some reason I decide to change my profession, I will seriously consider becoming a doctor.*

Other persons descibed things that they disliked about medical practice, medical education, or both. Examples of this type of response are as follows:

> *I feel that the field has become too competitive and specialized, and excluded the type of caring and supportive people I think the field of medicine should be made of. I decided I could not spend 7+ years in the middle of negative competition like that.*

> *Right now my only motivation toward medicine is in serving God in a field missionary capacity. My impression of the American medical system is that it is too much driven by the almighty dollar. Medical care has been good for the last thirty years, and yet three-quarters of the worlds population receives 100 year old (technology ?) because they can't afford it.*

> *My major reasons for not going into medicine is because I don't want the lifestyle that a doctor is required to have. The length of training and cost involved are not worth it to me.*

> *All of the the above (choices for question 4) are often heard; additionally many problems exist within the context of the medical school curriculum--many students, in face of extreme competition for placement, have lost sight of the real and humanitarian aspects of medicine; the work load also appears to be quite tremendous and not conducive to personal development.*

Several persons described a conflict between a career in medicine and family life. All but one of the persons giving the following comments have decided against a career in medicine.

> *I feel the time demands would be too ardous and my time with my family would suffer.*

> *Medicine would require my giving up too much of myself to my job--at least for me to be satisfied I was doing my best--and I don't want to. My first obligation is to God and next to my family. I cannot put my job in front of my family and still feel confident that I would be bringing up my children as I want to.*

> *I feel attracted to other disciplines; if I were to attend medical school, I would be committed to being a physician. I'm not sure I can say without doubt that it's what I want to do, although I'm still intrigued with the option. Another question is the FAMILY dilemma. I'd like to provide for my children the same stable environment I received as a child, and know that it would take over a decade to establish some sort of personal stability in medicine. I worry about the implications of that instability for both my future spouse and for our children... I want to be MORE SURE, before I take the responsibilities of a young doctor, that this career commitment would weigh*

favorably against the effort entailed in keeping the rest of my life whole.

My husband filed for divorce when he learned I planned to carry through with my plans to attend medical school when my youngest child started kindergarten. I still intend to apply to U.S. schools. However, the divorce action will delay plans one or two years.

Other persons said that they just needed to do some other things first.

Due to circumstances which I have little control over, I must begin a tour of active duty with the Army next fall. After that tour (4 years) I will reconsider medical school application.

I am joining the Peace Corps this fall. When I return I will choose between applying to medical school or a graduate program in ecology.

Finally some persons provided comments that did not fit into the above categories. The two comments presented below are examples.

I was never very serious about medical school, but it was very difficult to get my parents to understand that. I only gained the courage to tell them after I had taken the MCAT. I am very happy to say that I had underestimated my folks.

When I took the test I intended to apply to both allopathic and osteopathic schools. Previously my scores had been low, (40 both times) that my only hope was to raise it enough to go to an osteopathic school and I'd apply to allopathic schools if my scores are good enough. By the time I received my score (55) the deadline had past for MD schools and since then Texas College of Osteopathic Medicine has accepted me. I'll start there in August.

Conclusion

The majority of the persons responding to the survey stated that they still planned to go to medical school, even though they had not applied for entry in 1986, but a third no longer intended to go. Within this second group, the most common plan for further education involved graduate study in one of the natural sciences. When asked for their reasons for deciding against a career in medicine, the appeal of another field seemed to be the most important reason. Other reasons emphasized problems in the practice of medicine and the expense of medical education.

TABLE 1

Reason Respondent did not Apply for 1986
(Question 2)

	CODE	COUNT	PCT OF RESPONSES	PCT OF CASES
Have Applied for 86	1	18	3.0	3.4
Plan to Apply in a Later Year	2	396	66.2	74.2
MCAT Scores were too low	3	13	2.2	2.4
Never Intended to Apply	4	6	1.0	1.1
Changed Career Plans	5	128	21.4	24.0
Plan to Retake MCAT	6	37	6.2	6.9
	TOTAL RESPONSES	598	100.0	112.0

5 MISSING CASES 534 VALID CASES

TABLE 2

Post-Baccalaureate Plans of Persons
Who do not Plan to go to Medical School
(Question 3)

	CODE	COUNT	PCT OF RESPONSES	PCT OF CASES
Foreign Medical School	2	4	2.3	2.4
Other Health Prof School	3	26	14.8	15.5
Law School	4	2	1.1	1.2
Graduate School	5	94	53.4	56.0
Business School	6	11	6.3	6.5
Other Educational Programs	7	13	7.4	7.7
No Further Education	8	18	10.2	10.7
No Idea	9	8	4.5	4.8
	TOTAL RESPONSES	176	100.0	104.8

8 MISSING CASES 168 VALID CASES

TABLE 3

Choice of Discipline for Graduate Studies
for Persons Who do Not Plan to Go to Medical School
(Question 3, Answer 5)

	CODE	ABSOLUTE FREQ	FREQ (PCT)
Biological Sciences/Tech.	1.	61	64.9
Physical Sciences/Tech.	2.	22	23.4
Social Sciences	3.	1	1.1
Arts/Humanities	4.	6	6.4
Religion/Divinity School	5.	2	2.1
Other	6.	1	1.1
Unknown	9.	1	1.1
	TOTAL	94	100.0

TABLE 4

Reasons for Deciding Against a Career in Medicine
(Question 4)

	CODE	COUNT	PCT OF RESPONSES	PCT OF CASES
Program Too Long	1	34	12.3	25.8
High Cost and Debt	2	49	17.8	37.1
Physicians have Less Independence	3	45	16.3	34.1
Physicians are Less Respected	4	11	4.0	8.3
Discouraged by M.D.'s	5	38	13.8	28.8
Family has Discouraged Me	6	10	3.6	7.6
Scientific Interests-Another Discipline	7	68	24.6	51.5
None of Above	8	21	7.6	15.9
	TOTAL RESPONSES	276	100.0	209.1

45 MISSING CASES 132 VALID CASES

TABLE 5

Comments Made by Persons Who have Decided Against a Career in Medicine

Comment Mentioned:	CODE	COUNT	PCT OF RESPONSES	PCT OF CASES
Appeal of Another Field	1	26	29.2	34.7
Dislike Practice of Medicine	2	15	16.9	20.0
Dislike Medical Education	3	12	13.5	16.0
Conflict with Family Life	4	10	11.2	13.3
Time Off/Other Things to do	5	10	11.2	13.3
Curious about MCAT	6	3	3.4	4.0
Foreigner in US	7	4	4.5	5.3
Other Comment	8	9	10.1	12.0
	TOTAL RESPONSES	89	100.0	118.7

102 MISSING CASES 75 VALID CASES

association of american medical colleges

May 5, 1986

MEMORANDUM

TO: Students Taking MCAT Examination in 1985 Who Have Not Applied to Medical School

FROM: The Association of American Medical Colleges

According to AAMC records, you registered for and took the MCAT Examination, Series 17 or 18, but did not actually apply to a United States medical school. The Association would like to learn why some students choose not to apply, and we would appreciate your assistance. Please take a minute of your time to complete the one-page questionnaire on the back of this memorandum.

The information we receive from you will be treated as confidential; we will not release identified individual information to anyone. A postage-paid return envelope is also enclosed.

Thank you for your assistance.

One Dupont Circle, N.W./Washington, D.C. 20036 / (202) 828-0400

Questionnaire For MCAT Examines Who Did Not Apply To Medical School For Entry in 1986

1. When you registered for the MCAT, what was your purpose? (check all that apply).

_____(1) application to an allopathic U.S. medical school
_____(2) application to an osteopathic medical school
_____(3) application to a foreign medical school
_____(4) application to another health profession school
_____(5) other (please specify) _____

2. According to AAMC records, you have not yet applied to a U.S. medical school for entry in 1986. (check all that apply).

_____(1) I have applied to _____ (number) U.S. medical schools for the class beginning _____ (year). Please check your records.
_____(2) I intend to apply in a later year.
_____(3) My scores were so low that I felt I would not qualify.
_____(4) I never intended to apply to a U.S. medical school.
_____(5) I have changed my career plans.
_____(6) I plan to retake the MCAT.

3. What are your current plans for post-baccalaureate education?

_____(1) U.S. medical school
_____(2) foreign medical school
_____(3) other health profession school
_____(4) law school
_____(5) graduate school in _____ (discipline)
_____(6) business school
_____(7) other educational program (specify). _____
_____(8) no further education

4. I have decided against a career in medicine for the following reasons: (check all that apply).

_____(a) The educational program is too long.
_____(b) The cost and the debt I would have to incur are too great.
_____(c) Changes in the health care system are impairing doctors' independence.
_____(d) Doctors are no longer as respected as they once were.
_____(e) Doctors I have talked with have not been encouraging about the future of medicine.
_____(f) My family has discouraged me.
_____(g) My interests in science can be better satisfied by a career in another discipline.
_____(h) None of the above. (please explain)

Comments: _____

_____

_____

AAMC # 0588

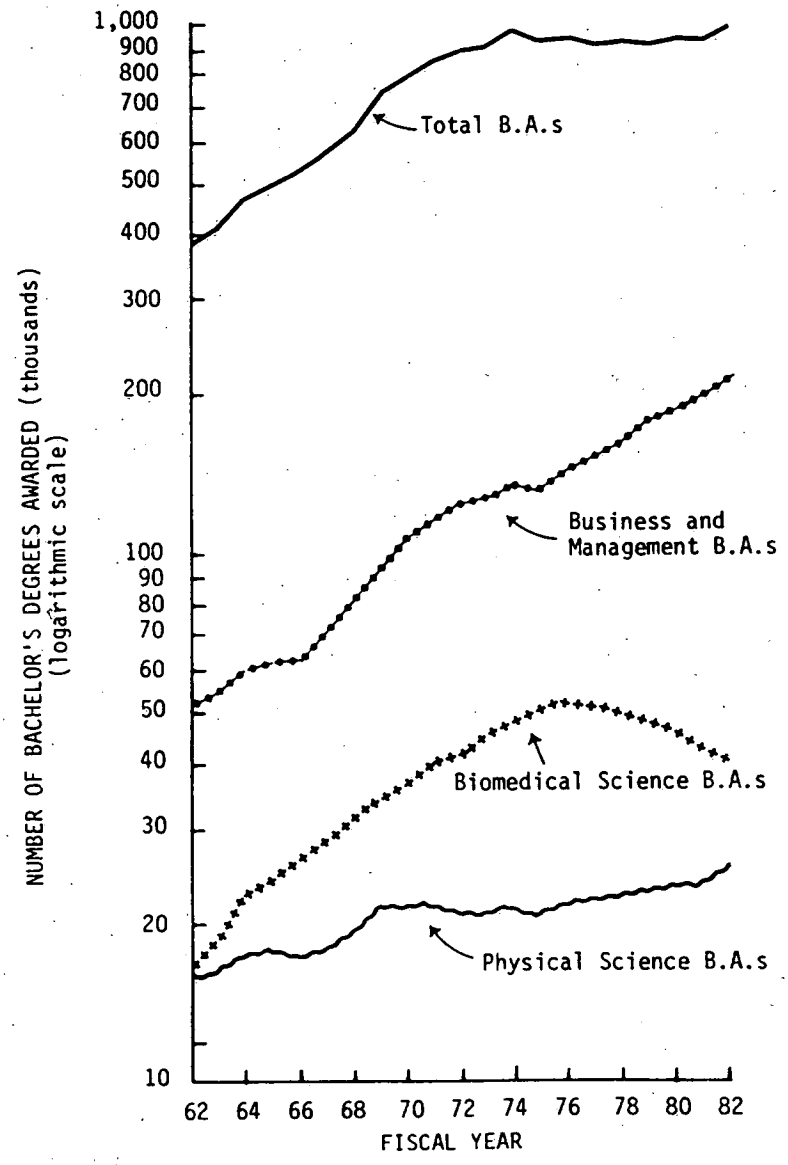
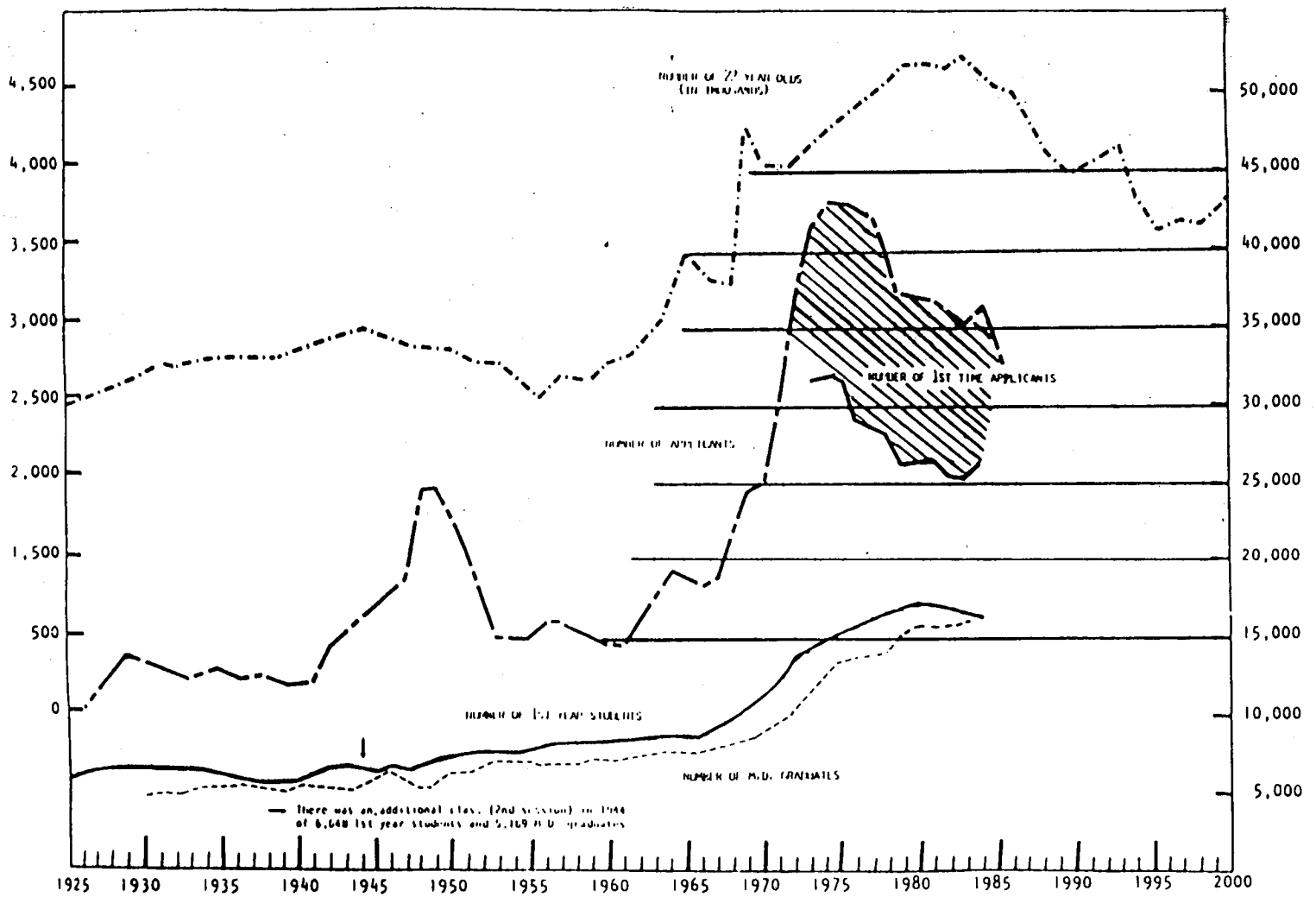


FIGURE 3.2 Bachelor's degrees awarded in biomedical science fields compared to other fields, 1962-82. See Appendix Tables B3 and B4. Business and management and physical sciences degrees are from the U.S. Department of Education (1948-84).

FIGURE 1

TRENDS IN NUMBER OF 22-YEAR-OLDS,
MEDICAL SCHOOL APPLICANTS, STUDENTS AND GRADUATES



SOURCE: AAMC:DAA Spring Meeting Book Council of Deans 1986

SOURCE: AAMC: DAA Spring Meeting Book, Council of Deans 1986

TABLE 4

FIRST-TIME COLLEGE FRESHMEN, PERCENTAGES EXPRESSING A CAREER INTEREST IN MEDICINE, AND MEDICAL SCHOOL APPLICANTS FOUR YEARS LATER - MEN, WOMEN, TOTAL - 1977-1985

	A Number of First-Time College Freshmen* (in millions)	B Percentage Expressing Career Interest in Medicine+	C Col. A x Col. B	D Number of Medical School Applicants Four Years Later
Men				
1977	1.156	3.9	45,084	25,054
1978	1.142	4.3	49,106	24,045
1979	1.180	4.0	47,200	23,239
1980	1.219	4.1	49,979	23,468
1981	1.218	4.0	48,720	21,331
1982	1.199	4.1	49,159	-
1983	1.159	4.5	52,155	-
1984	1.112	4.5	50,040	-
1985	NA	4.1	-	-
Women				
1977	1.238	2.5	30,950	11,673
1978	1.248	2.8	34,944	11,685
1979	1.323	2.9	38,367	11,961
1980	1.369	2.9	39,701	12,476
1981	1.378	2.9	39,962	11,562
1982	1.306	3.1	40,486	-
1983	1.285	3.4	43,690	-
1984	1.244	3.5	42,296	-
1985	NA	3.4	-	-

TABLE 4 (Continued)

	A	B	C	D
Total				
1977	2.394	3.2	76,608	36,727
1978	2.390	3.5	83,650	35,730
1979	2.503	3.4	85,102	35,200
1980	2.588	3.5	90,580	35,944
1981	2.595	3.4	88,230	32,893
1982	2.505	3.6	90,180	-
1983	2.449	3.9	95,511	-
1984	2.357	4.0	89,566	-
1985	NA	3.8	-	-

* Source: Fall Enrollment in Colleges and Universities, 1983, National Center for Education Statistics, Washington, D.C.

\+ Source: The American Freshman: National Norms, Higher Education Research Institute, UCLA, Los Angeles, California.

MEDICAL SCHOOL APPLICANTS, ENROLLMENT, AND GRADUATES

Class Year	Applicants	First Time Applicants	Accepted Applicants	Applicants/ Acceptance Ratio	First-Yr. New Entrants	First-Year Enrollment*	Total Enrollment	Graduates
1924-25	--	--	--	--	--	5,492	--	--
1925-26	--	--	--	--	--	5,753	--	--
1926-27	10,250	--	6,420	1.6	--	6,099	--	--
1927-28	11,287	--	6,496	1.7	--	6,199	--	4,262
1928-29	12,420	--	6,794	1.8	--	6,277	--	4,446
1929-30	13,655	--	7,035	1.9	--	6,457	--	4,565
1930-31	--	--	--	--	--	6,456	21,982	4,735
1931-32	--	--	--	--	--	6,260+	22,135	4,936
1932-33	12,280	--	7,357	1.6	--	6,426+	22,466	4,895
1933-34	12,128	--	7,578	1.6	--	6,457++	22,799	5,035
1934-35	12,779	--	7,419	1.7	--	6,356++	22,886	5,101
1935-36	12,740	--	6,900	1.8	--	6,605	22,564	5,183
1936-37	12,192	--	6,465	1.8	--	5,910+	22,095	5,377
1937-38	12,207	--	6,410	1.9	--	5,791+	21,587	5,194
1938-39	12,131	--	6,223	1.9	--	5,764	21,302	5,089
1939-40	11,800	--	6,211	1.8	--	5,794+	21,271	5,097
1940-41	11,854	--	6,328	1.8	--	5,837	21,379	5,275
1941-42	11,940	--	6,822	1.7	--	6,218	22,031	5,163
1942-43	14,043	--	6,835	2.0	--	6,425	22,631	5,223
1943-44	--	--	--	--	--	6,561	23,529	5,134
1944-45	(2nd session)##	--	--	--	--	6,648	24,666	5,169
1944-45	--	--	--	--	--	6,523	24,028	5,136
1945-46	--	--	--	--	--	6,060	23,216	5,826
1946-47	--	--	--	--	--	6,564	23,900	6,389@
1947-48	18,829	--	6,512	2.9	--	6,487	22,739	5,543
1948-49	24,242	--	6,973	3.5	--	6,688	23,670	5,094
1949-50	24,434++	--	7,150++	3.4	--	7,042	25,103	5,553
1950-51	22,279++	--	7,254++	3.1	--	7,177	26,186	6,135
1951-52	19,920++	--	7,663++	2.6	--	7,436	27,076	6,080
1952-53	16,763++	--	7,778++	2.2	--	7,425	27,688	6,668
1953-54	14,678++	--	7,756++	1.9	--	7,449	28,227	6,861
1954-55	14,538++	--	7,878++	1.8	--	7,576	28,583	6,977
1955-56	14,937	--	7,969	1.9	--	7,686	28,639	6,845
1956-57	15,917	--	8,263	1.9	--	8,014	29,130	6,796
1957-58	15,791	--	8,302	1.9	--	8,030	29,473	6,861
1958-59	15,170	--	8,366	1.8	--	8,128	29,614	6,860
1959-60	14,992	--	8,512	1.8	--	8,173	30,084	7,081
1960-61	14,397	--	8,560	1.7	7,845	8,298	30,288	6,994
1961-62	14,331	--	8,682	1.7	7,941	8,483	31,076	7,168
1962-63	15,847	--	8,959	1.8	7,993	8,642	31,491	7,265
1963-64	17,668	--	9,063	1.9	8,107	8,772	31,981	7,336
1964-65	19,168	--	9,043	2.1	8,288	8,856	32,428	7,409
1965-66	18,703	--	9,012	2.1	8,554	8,759	32,835	7,574
1966-67	18,250	--	9,123	2.0	8,775	8,964	33,423	7,743
1967-68	18,724	--	9,702	1.9	9,314	9,479	34,538	7,973
1968-69	21,118	--	10,092	2.1	9,740	9,863	35,833	8,059
1969-70	24,465	--	10,514	2.3	10,269	10,401	37,669	8,367
1970-71	24,987	--	11,500	2.2	11,169	11,348	40,487	8,974
1971-72	29,172	--	12,335	2.4	12,088	12,361	43,650	9,558
1972-73	36,135	--	13,757	2.6	13,570	13,677	47,366	10,396
1973-74	40,506	--	14,335	2.8	13,876	14,185	50,751	11,365
1974-75	42,624	--	15,066	2.8	14,579	14,963	53,554	12,716
1975-76	42,303+++	--	15,365***	2.8	14,910	15,351	55,818	13,634
1976-77	42,155	--	15,774	2.7	15,282	15,613	57,765	13,614
1977-78	40,569	--	15,977	2.5	15,493	16,136	60,039	14,391
1978-79	36,636	--	16,527	2.2	16,054	16,530	62,213	14,966
1979-80	36,141	--	16,886	2.1	16,444	16,930	63,800@@@	15,135
1980-81	36,100	--	17,146	2.1	16,590	17,205**	65,189~	15,673
1981-82	36,727	26,621	17,286	2.1	16,660	17,268	66,298	15,985
1982-83	35,730	25,597	17,294	2.1	16,567	17,254*	66,748	15,802
1983-84	35,200	25,317	17,209	2.0	16,480	17,150*	67,327	16,343
1984-85	35,944	26,059	17,194	2.1	16,395	16,997	67,016	16,319
1985-86	32,893	23,517	17,228	1.9	16,268	16,963*	66,585	16,117
1986-87	31,323	23,141	17,092	1.8	16,103	16,819	66,125	

*Includes repeating and re-entering students.

**Ponce did not report. This figure includes Ponce's 1979-80 data.

+No figures for the two medical schools of the University of Chicago (Rush Medical College and University of Chicago School of Medicine).

++No figures for the two schools of the University of Chicago (Rush and U. of Chicago) and Duke.

+++University of Puerto Rico not included.

@During the war accelerated programs altered reporting periods. During the period June 1, 1946 to June 30, 1947, ten schools graduated two classes, adding 40 graduates to the total (this figure included in total graduates).

@@Under accelerated program, an extra class graduated in September 1944.

***107 applicants did not respond.

+++213 applicants did not respond.

@@@Total includes 22 students from whom data were not available.

~Total includes 55 students from whom data were not available.

Sources--Prior to 1947-48 from Potthoff, E.F., Journal of Medical Education 35 (1960), p. 223. Applicants and accepted students: Applicant studies of AAMC 1930-31 through 1978-79, published annually in Journal of Medical Education. Since 1978-79 from AAMC Division of Student Services (Final Admission Action Summary Reports).

Enrollment data: 1930-31 through 1967-68 from JAMA Education Numbers; Since 1968-69 from AAMC Division of Student Services (Fall Enrollment Questionnaire).

Graduate data: 1930-31 through 1967-68 from JAMA Education Numbers; 1967-68 to 1981-82 from LCME Part II; since 1982-83 from AAMC Division of Student Services (Student Records System).

Because there are several independent sources of enrollment data, small discrepancies among the various tables may exist. See note at beginning of this section.

MEDICAL SCHOOL APPLICANT AND MATRICULANT DATA

Number of medical school applicants and matriculants, 1960 to 1986

Sex, age, and ethnicity of applicants and matriculants, 1978 and 1986

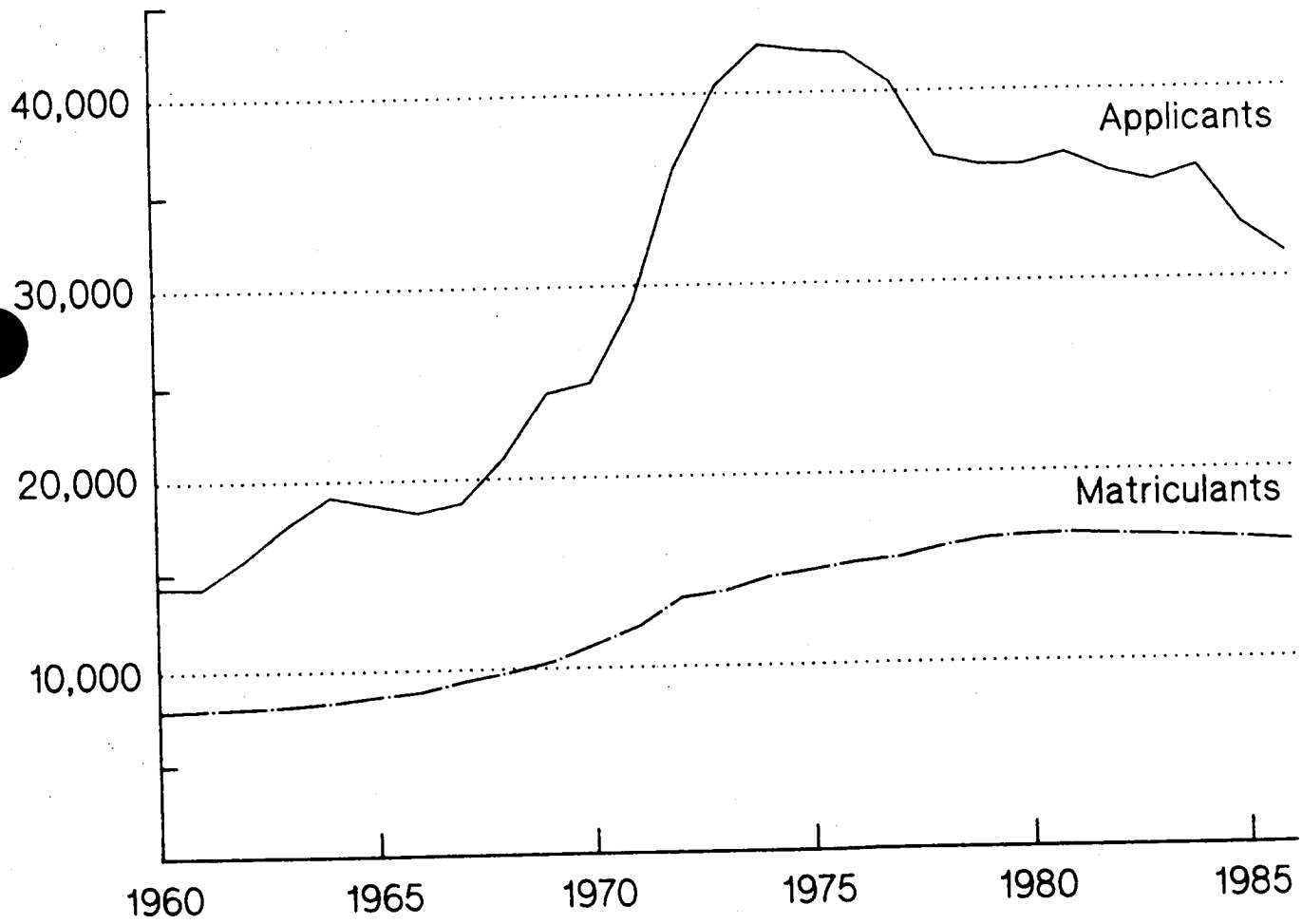
Grade Point Average of applicants and matriculants, 1978 and 1986

MCAT scores for applicants and matriculants, 1978 and 1986

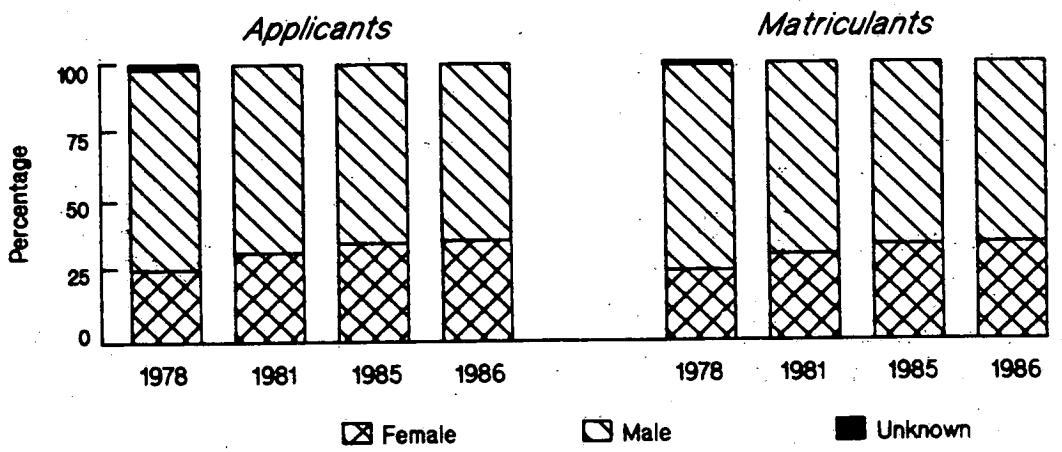
States having a 25 percent decline or more in applicants between 1981 and 1986

Reapplicants to U. S. Medical Schools 1983-1986

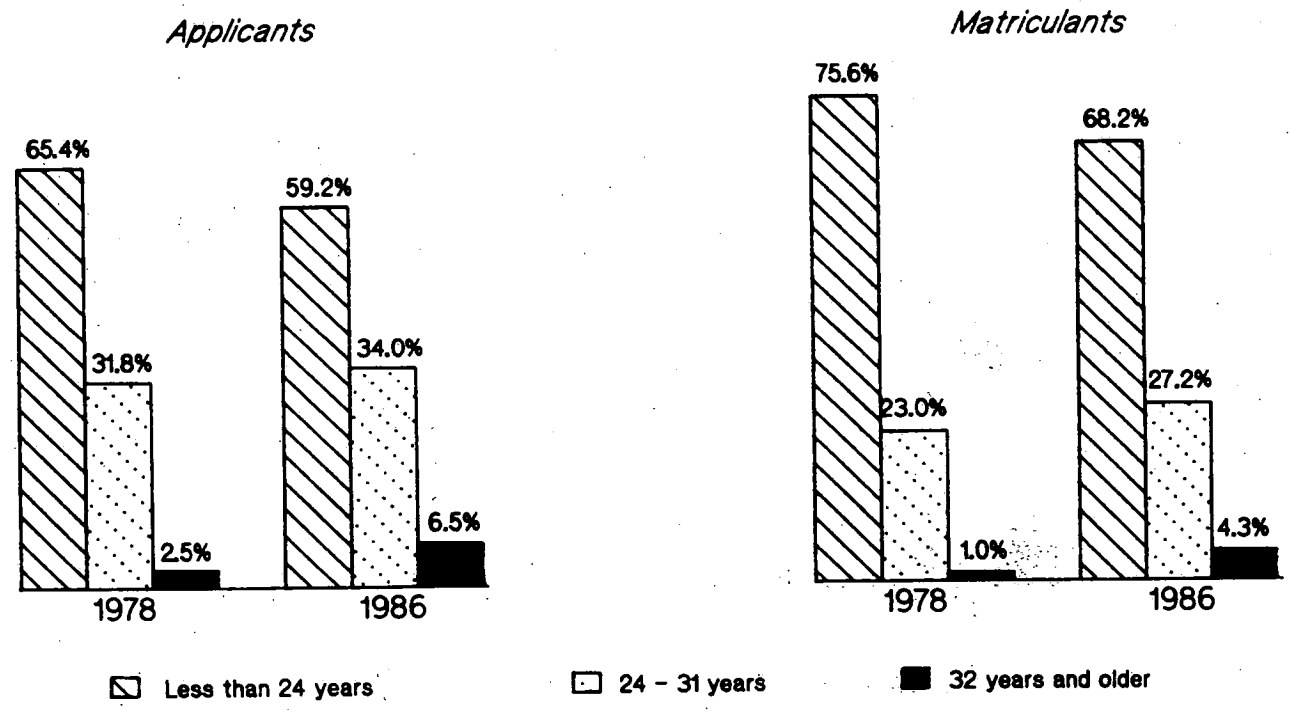
Number of Medical School Applicants and Matriculants 1960 to 1986



Sex of Applicants and Matriculants 1978–1986



Age of Applicants and Matriculants 1978 and 1986



Proportion and Number of Applicants and Matriculants for Selected Years by Demographic Variables

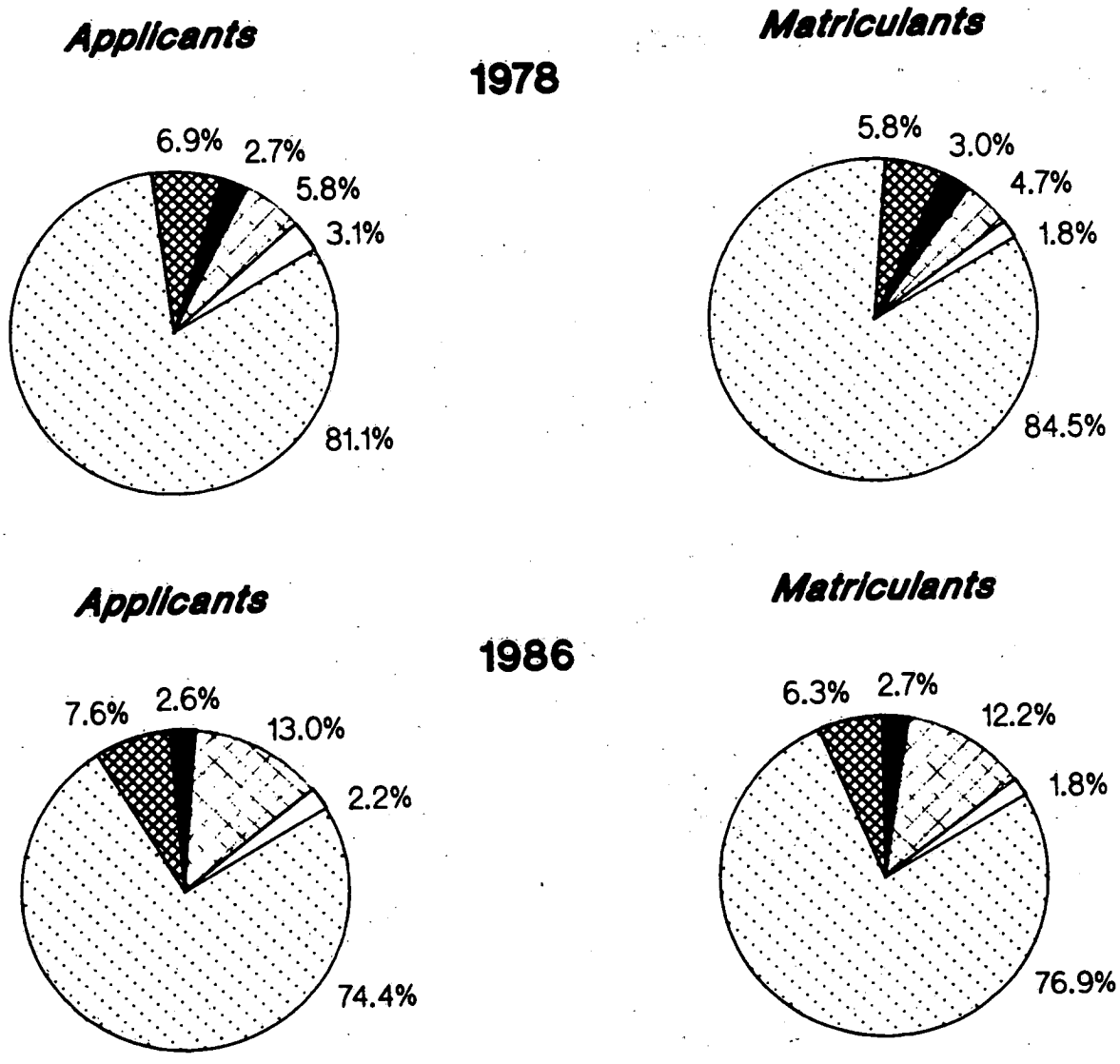
Sex

		1978		1981		1985		1986	
		%	(n)	%	(n)	%	(n)	%	(n)
Male	Applicants	72.8	(26,657)	68.2	(25,054)	64.8	(21,331)	64.0	(20,056)
	Matriculants	74.3	(11,930)	69.3	(11,547)	66.1	(10,748)	65.4	(10,529)
Female	Applicants	25.7	(9,429)	31.8	(11,673)	35.2	(11,562)	36.0	(11,267)
	Matriculants	24.9	(3,995)	30.7	(5,113)	33.9	(5,520)	34.6	(5,574)
Unknown	Applicants	1.5	(550)	0.0	(0)	0.0	(0)	0.0	(0)
	Matriculants	0.8	(129)	0.0	(0)	0.0	(0)	0.0	(0)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)

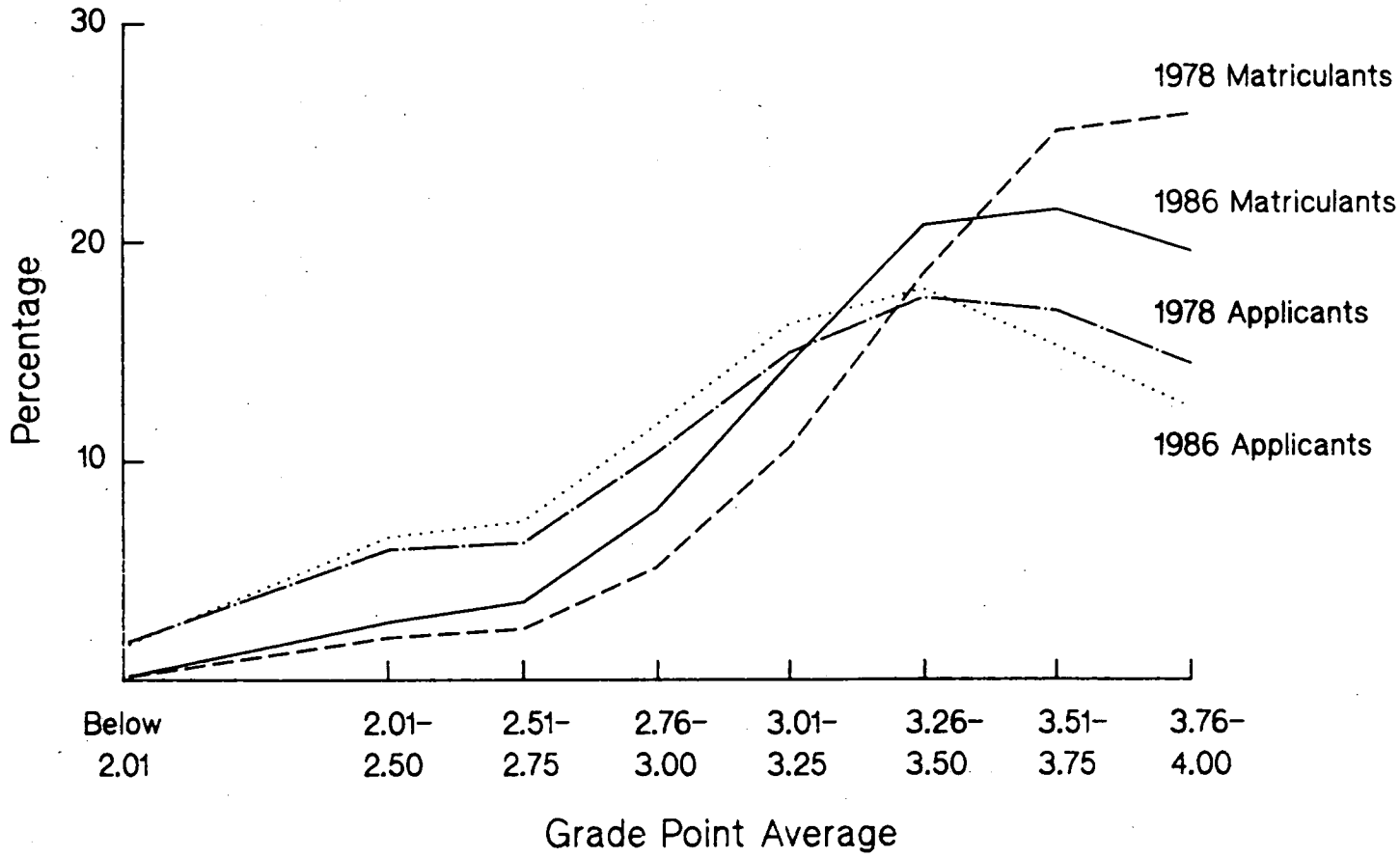
Age

		1978		1981		1985		1986	
		%	(n)	%	(n)	%	(n)	%	(n)
Under 21	Applicants	3.8	(1,393)	2.9	(1,059)	2.5	(825)	2.6	(799)
	Matriculants	5.6	(893)	4.4	(739)	3.7	(610)	3.8	(608)
21 - 23	Applicants	61.6	(22,575)	55.9	(20,518)	55.8	(18,358)	56.7	(17,770)
	Matriculants	70.2	(11,266)	65.6	(10,936)	64.3	(10,453)	64.5	(10,388)
24 - 27	Applicants	24.5	(8,994)	26.9	(9,882)	25.4	(8,340)	24.5	(7,685)
	Matriculants	18.5	(2,969)	20.6	(3,433)	20.9	(3,399)	20.3	(3,273)
28 - 31	Applicants	7.4	(2,696)	9.8	(3,616)	10.2	(3,368)	9.6	(2,998)
	Matriculants	4.7	(749)	6.7	(1,112)	7.3	(1,191)	7.0	(1,125)
32 - 37	Applicants	2.2	(804)	3.8	(1,412)	5.0	(1,651)	5.3	(1,674)
	Matriculants	1.0	(157)	2.4	(405)	3.3	(541)	3.7	(600)
Over 37	Applicants	0.5	(174)	0.7	(240)	1.1	(351)	1.3	(397)
	Matriculants	0.1	(20)	0.2	(35)	0.5	(74)	0.7	(109)
Unknown	Applicants	0.0	(0)	0.0	(0)	0.0	(0)	0.0	(0)
	Matriculants	0.0	(0)	0.0	(0)	0.0	(0)	0.0	(0)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants	23.54		24.09		24.31		24.32	
	Matriculants	22.84		23.32		23.57		23.63	
Standard Deviation	Applicants	3.11		3.45		3.77		3.86	
	Matriculants	2.45		2.91		3.21		3.37	

Ethnicity of Applicants and Matriculants 1978 and 1986



Science Grade Point Average of Applicants and Matriculants 1978 and 1986

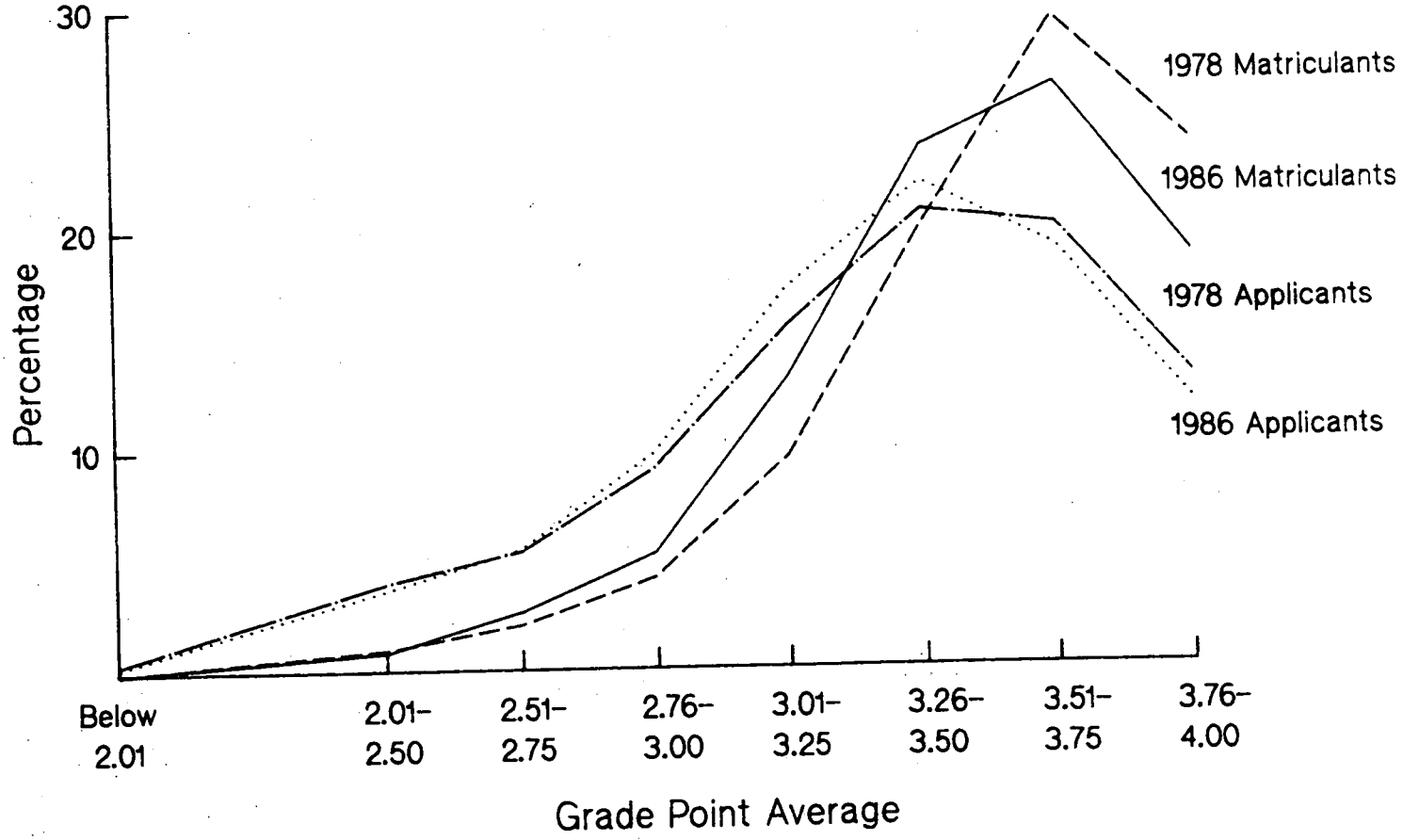


Proportion and Number of Applicants and Matriculants for Selected Years by Grade Point Average

Science Grade Point Average

		1978		1981		1985		1986	
		%	(n)	%	(n)	%	(n)	%	(n)
Below 2.01	Applicants	1.9	(695)	1.8	(656)	1.8	(596)	1.8	(555)
	Matriculants	0.3	(41)	0.2	(33)	0.3	(55)	0.3	(44)
2.01 - 2.50	Applicants	6.1	(2,218)	6.6	(2,419)	6.6	(2,177)	6.6	(2,080)
	Matriculants	2.1	(336)	2.6	(436)	2.4	(385)	2.8	(448)
2.51 - 2.75	Applicants	6.4	(2,342)	6.8	(2,514)	7.2	(2,357)	7.3	(2,296)
	Matriculants	2.5	(400)	2.9	(488)	3.4	(545)	3.7	(594)
2.76 - 3.00	Applicants	10.4	(3,823)	11.0	(4,049)	11.9	(3,926)	11.8	(3,690)
	Matriculants	5.2	(839)	5.7	(955)	7.5	(1,220)	7.8	(1,257)
3.01 - 3.25	Applicants	15.1	(5,520)	16.0	(5,875)	16.2	(5,343)	16.4	(5,135)
	Matriculants	10.7	(1,722)	12.6	(2,093)	14.3	(2,328)	14.5	(2,342)
3.26 - 3.50	Applicants	17.5	(6,419)	18.4	(6,763)	18.5	(6,069)	17.9	(5,616)
	Matriculants	18.6	(2,993)	20.7	(3,444)	21.3	(3,468)	20.8	(3,353)
3.51 - 3.75	Applicants	17.0	(6,210)	16.7	(6,126)	15.2	(5,013)	15.3	(4,796)
	Matriculants	25.2	(4,042)	24.2	(4,029)	21.6	(3,514)	21.6	(3,478)
3.76 - 4.00	Applicants	14.5	(5,314)	13.9	(5,120)	12.9	(4,241)	12.6	(3,944)
	Matriculants	26.0	(4,169)	24.4	(4,069)	21.1	(3,429)	19.7	(3,172)
Unknown	Applicants	11.2	(4,095)	8.7	(3,205)	9.6	(3,171)	10.2	(3,209)
	Matriculants	9.4	(1,512)	6.7	(1,113)	8.1	(1,324)	8.8	(1,415)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants		3.25		3.24		3.21		3.21
	Matriculants		3.49		3.46		3.42		3.40
Standard Deviation	Applicants		0.51		0.50		0.50		0.50
	Matriculants		0.39		0.40		0.40		0.41

Overall Grade Point Average of Applicants and Matriculants 1978 and 1986

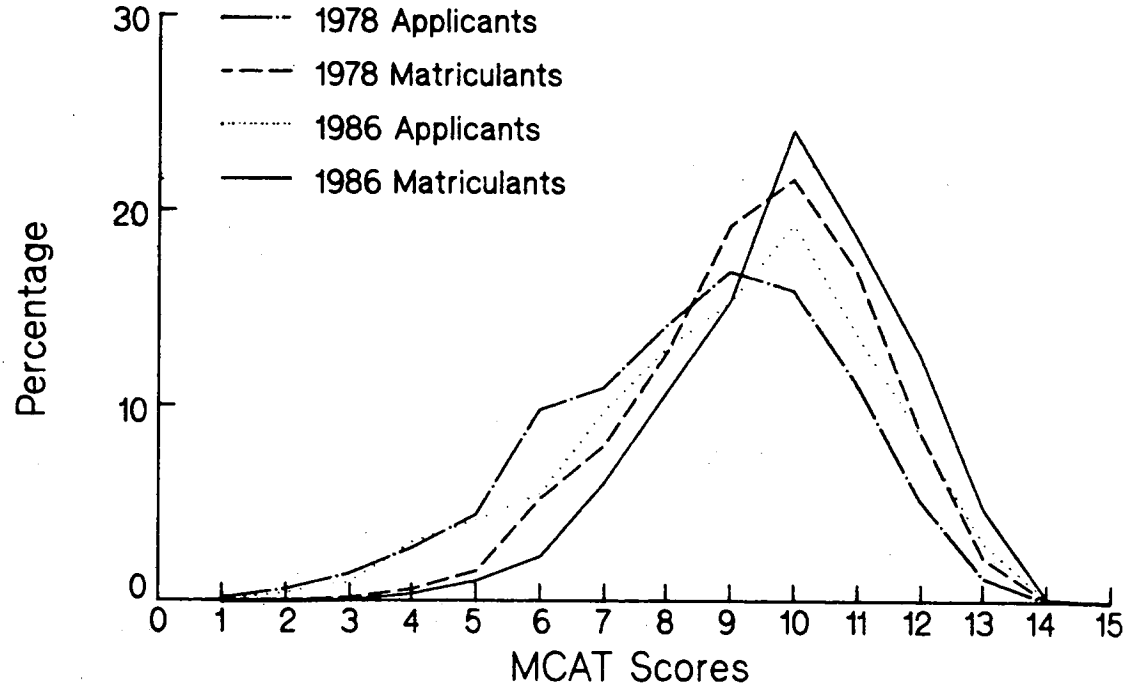


Proportion and Number of Applicants and Matriculants for Selected Years by Grade Point Average

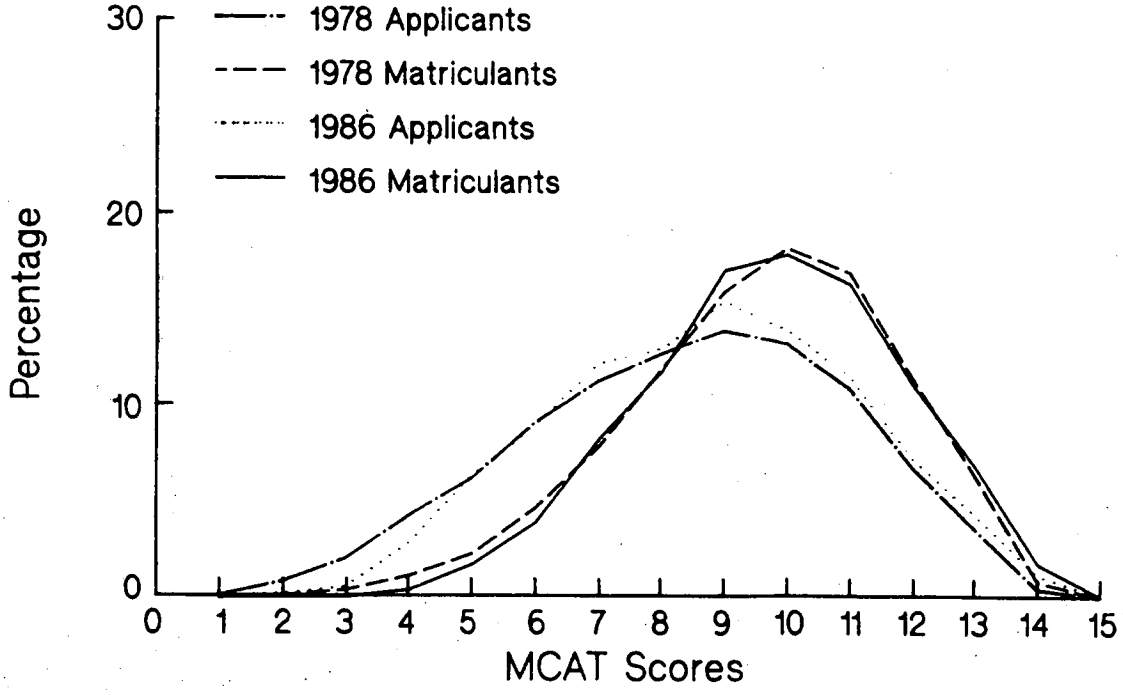
Overall Grade Point Average

		1978		1981		1985		1986	
		%	(n)	%	(n)	%	(n)	%	(n)
Below 2.01	Applicants	0.4	(158)	0.4	(136)	0.4	(129)	0.4	(112)
	Matriculants	0.0	(4)	0.0	(8)	0.0	(5)	0.0	(5)
2.01 - 2.50	Applicants	4.1	(1,499)	4.1	(1,522)	3.7	(1,209)	3.7	(1,160)
	Matriculants	1.1	(171)	1.2	(203)	1.1	(173)	1.0	(158)
2.51 - 2.75	Applicants	5.5	(2,001)	5.4	(1,976)	5.3	(1,739)	5.5	(1,734)
	Matriculants	2.1	(341)	2.2	(363)	2.2	(353)	2.7	(436)
2.76 - 3.00	Applicants	9.1	(3,346)	9.8	(3,596)	10.1	(3,336)	9.9	(3,091)
	Matriculants	4.3	(687)	4.7	(780)	5.4	(872)	5.3	(857)
3.01 - 3.25	Applicants	15.7	(5,750)	16.3	(6,000)	17.1	(5,634)	17.3	(5,410)
	Matriculants	9.7	(1,555)	10.8	(1,800)	12.6	(2,055)	13.3	(2,136)
3.26 - 3.50	Applicants	20.8	(7,602)	22.1	(8,106)	22.1	(7,265)	22.0	(6,892)
	Matriculants	20.1	(3,224)	22.0	(3,658)	23.2	(3,767)	23.7	(3,809)
3.51 - 3.75	Applicants	20.0	(7,328)	20.1	(7,370)	19.5	(6,404)	19.1	(5,969)
	Matriculants	29.4	(4,727)	29.2	(4,863)	27.4	(4,451)	26.5	(4,264)
3.76 - 4.00	Applicants	13.3	(4,872)	13.2	(4,834)	12.2	(4,023)	12.0	(3,760)
	Matriculants	23.9	(3,835)	23.3	(3,878)	20.1	(3,275)	18.8	(3,026)
Unknown	Applicants	11.1	(4,080)	8.7	(3,187)	9.6	(3,154)	10.2	(3,195)
	Matriculants	9.4	(1,510)	6.6	(1,107)	8.1	(1,317)	8.8	(1,412)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants		3.32		3.31		3.31		3.30
	Matriculants		3.52		3.50		3.47		3.46
Standard Deviation	Applicants		0.43		0.42		0.41		0.41
	Matriculants		0.34		0.34		0.34		0.34

MCAT Biology Scores for Applicants and Matriculants 1978 and 1986



MCAT Chemistry Scores for Applicants and Matriculants 1978 and 1986



Proportion and Number of Applicants and Matriculants for Selected Years by MCAT Areas of Assessment

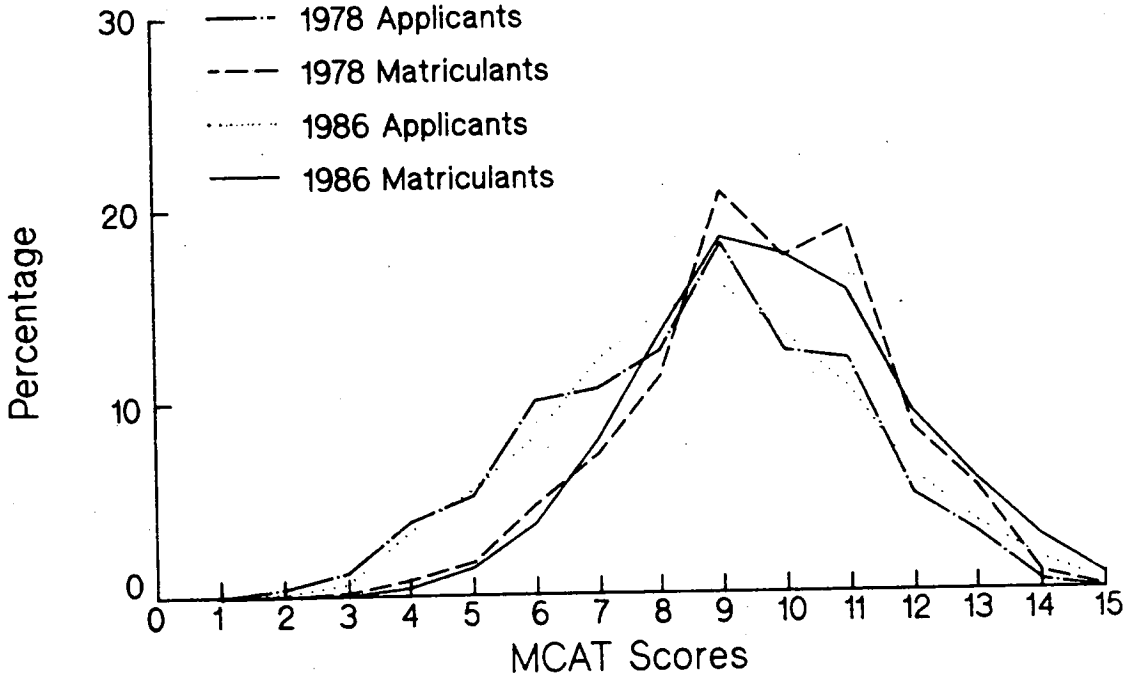
Biology

Scaled Score		1978 %	1978 (n)	1981 %	1981 (n)	1985 %	1985 (n)	1986 %	1986 (n)
1 - 6	Applicants	19.5	(7,135)	17.5	(6,439)	12.5	(4,125)	14.2	(4,454)
	Matriculants	7.9	(1,276)	5.9	(980)	3.6	(591)	4.1	(655)
7 - 8	Applicants	25.1	(9,207)	24.9	(9,135)	20.8	(6,848)	22.7	(7,120)
	Matriculants	20.8	(3,344)	19.6	(3,258)	13.6	(2,215)	16.9	(2,726)
9 - 11	Applicants	44.2	(16,182)	45.4	(16,677)	50.7	(16,692)	48.2	(15,111)
	Matriculants	58.0	(9,312)	56.6	(9,422)	59.7	(9,718)	56.4	(9,401)
12 - 15	Applicants	6.7	(2,445)	9.1	(3,330)	13.3	(4,377)	11.6	(3,647)
	Matriculants	11.3	(1,809)	15.4	(2,561)	20.5	(3,338)	17.7	(2,851)
Unknown	Applicants	4.6	(1,667)	3.1	(1,146)	2.6	(851)	3.2	(991)
	Matriculants	1.9	(313)	2.6	(439)	2.5	(406)	2.9	(470)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants		8.45		8.65		9.13		8.94
	Matriculants		9.36		9.66		10.04		9.85
Standard Deviation	Applicants		2.27		2.36		2.26		2.29
	Matriculants		1.88		1.91		1.77		1.80

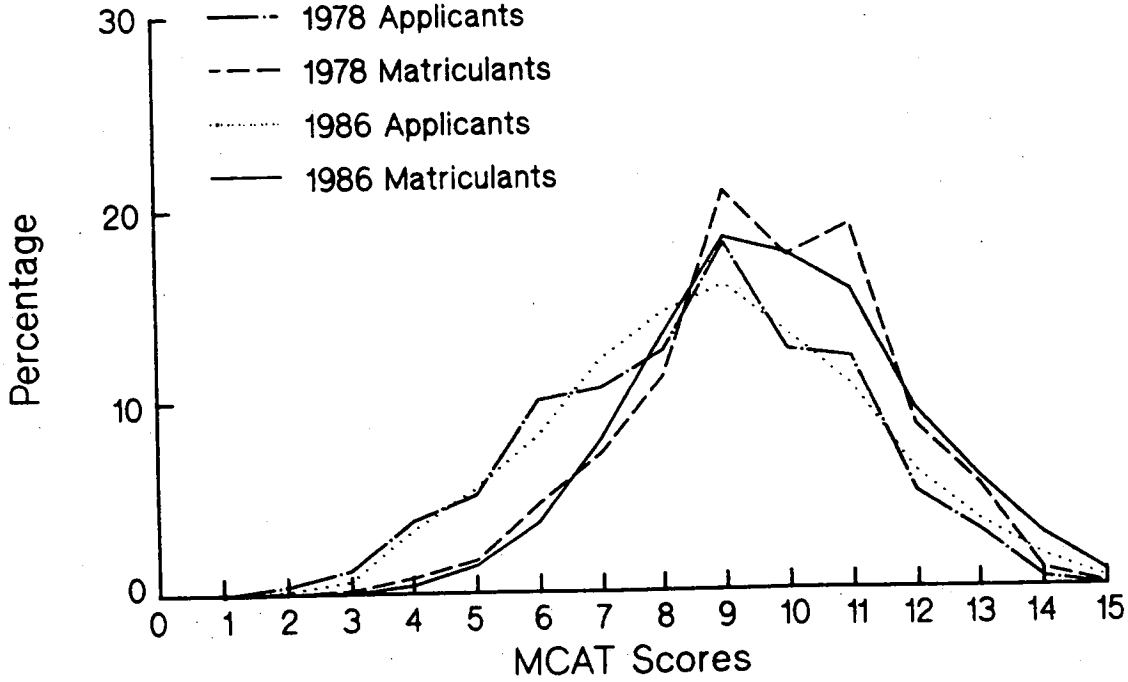
Chemistry

Scaled Score		1978 %	1978 (n)	1981 %	1981 (n)	1985 %	1985 (n)	1986 %	1986 (n)
1 - 6	Applicants	22.6	(8,269)	20.2	(7,436)	19.3	(6,353)	18.6	(5,836)
	Matriculants	8.5	(1,368)	6.5	(1,083)	6.4	(1,048)	6.0	(970)
7 - 8	Applicants	24.0	(8,795)	25.9	(9,527)	24.5	(8,051)	25.0	(7,844)
	Matriculants	19.8	(3,179)	20.0	(3,333)	18.3	(2,983)	20.0	(3,227)
9 - 11	Applicants	38.1	(13,943)	39.8	(14,634)	40.8	(13,405)	40.7	(12,746)
	Matriculants	51.2	(8,216)	52.0	(8,668)	52.2	(8,496)	51.4	(8,272)
12 - 15	Applicants	10.8	(3,962)	10.8	(3,984)	12.9	(4,233)	12.5	(3,906)
	Matriculants	18.5	(2,978)	18.8	(3,137)	20.5	(3,335)	19.6	(3,164)
Unknown	Applicants	4.6	(1,667)	3.1	(1,146)	2.6	(851)	3.2	(991)
	Matriculants	1.9	(313)	2.6	(439)	2.5	(406)	2.9	(470)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants		8.42		8.57		8.74		8.73
	Matriculants		9.58		9.69		9.79		9.73
Standard Deviation	Applicants		2.55		2.37		2.39		2.38
	Matriculants		2.13		2.04		2.03		2.04

MCAT Physics Scores for Applicants and Matriculants 1978 and 1986



MCAT Science Problems Scores for Applicants and Matriculants 1978 and 1986



Proportion and Number of Applicants and Matriculants for Selected Years by MCAT Areas of Assessment

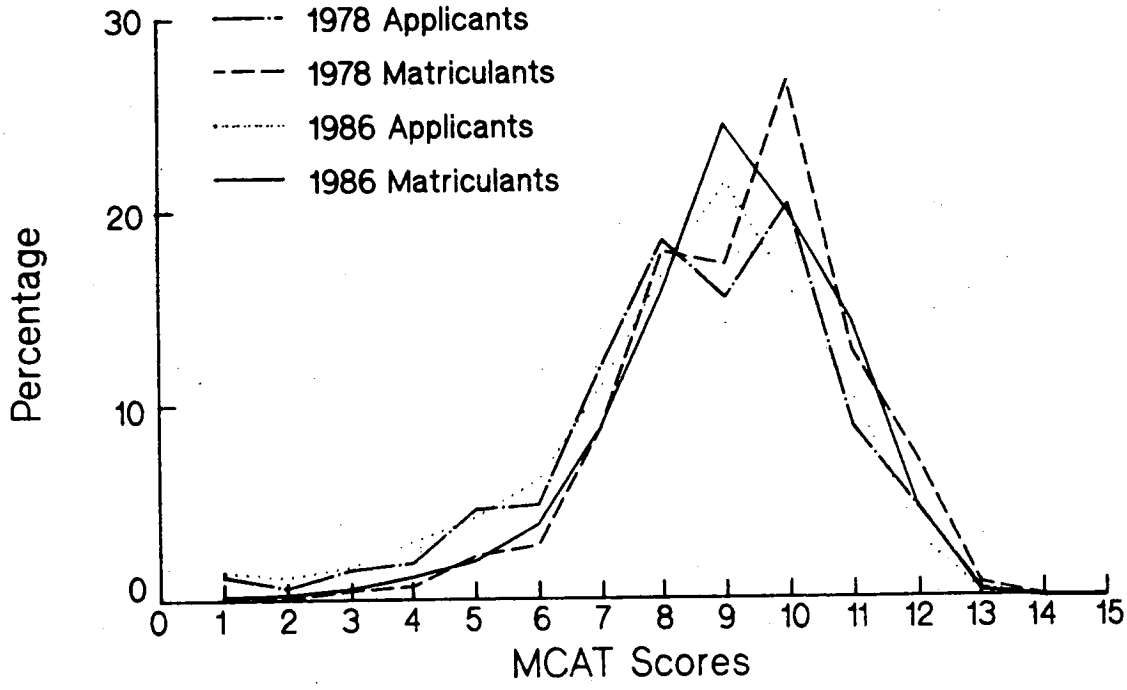
Physics

Scaled Score		1978 %	1978 (n)	1981 %	1981 (n)	1985 %	1985 (n)	1986 %	1986 (n)
1 - 6	Applicants	20.9	(7,674)	21.6	(7,923)	18.0	(5,905)	17.8	(5,571)
	Matriculants	9.0	(1,437)	8.6	(1,436)	6.2	(1,010)	6.6	(1,057)
7 - 8	Applicants	26.8	(9,810)	26.7	(9,812)	26.0	(8,558)	27.7	(8,673)
	Matriculants	22.8	(3,655)	21.3	(3,546)	19.9	(3,240)	22.2	(3,582)
9 - 11	Applicants	37.2	(13,625)	37.0	(13,592)	38.6	(12,685)	37.3	(11,698)
	Matriculants	48.8	(7,834)	47.7	(7,951)	48.0	(7,806)	47.0	(7,566)
12 - 15	Applicants	10.5	(3,860)	11.6	(4,254)	14.9	(4,894)	14.0	(4,390)
	Matriculants	17.5	(2,815)	19.7	(3,288)	23.4	(3,806)	21.3	(3,428)
Unknown	Applicants	4.6	(1,667)	3.1	(1,146)	2.6	(851)	3.2	(991)
	Matriculants	1.9	(313)	2.6	(439)	2.5	(406)	2.9	(470)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants	8.45		8.55		8.87		8.78	
	Matriculants	9.44		9.65		9.92		9.76	
Standard Deviation	Applicants	2.43		2.48		2.52		2.52	
	Matriculants	2.23		2.24		2.21		2.22	

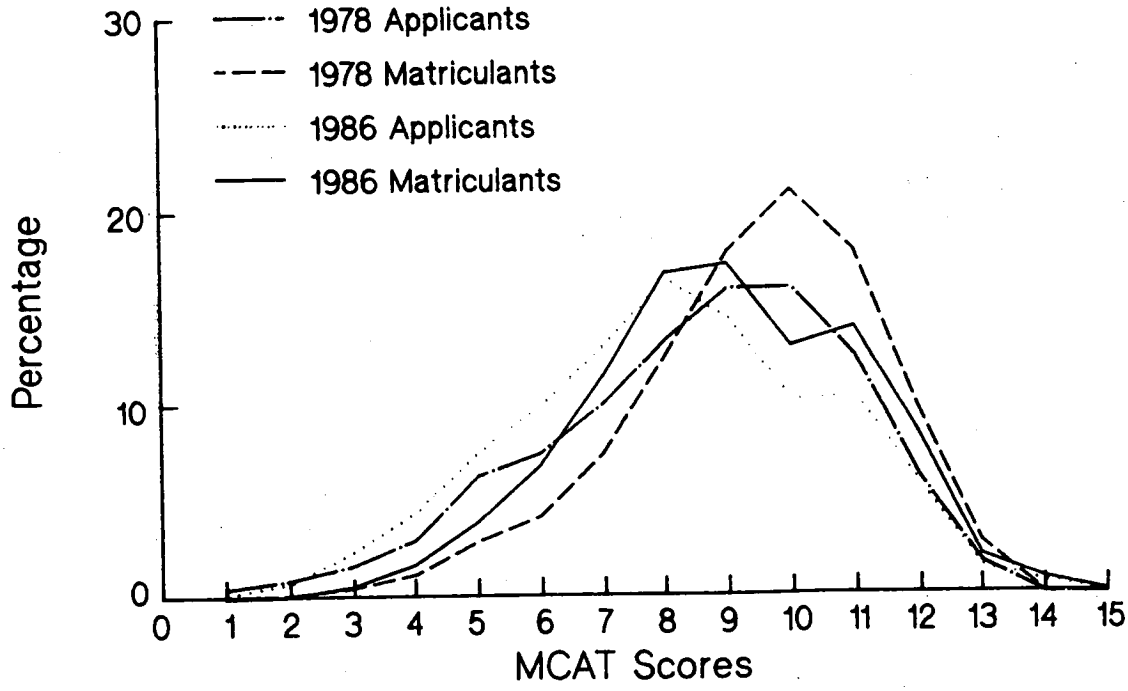
Science Problems

Scaled Score		1978 %	1978 (n)	1981 %	1981 (n)	1985 %	1985 (n)	1986 %	1986 (n)
1 - 6	Applicants	20.9	(7,644)	20.7	(7,605)	17.4	(5,725)	18.1	(5,679)
	Matriculants	7.5	(1,211)	7.0	(1,171)	5.2	(851)	5.7	(912)
7 - 8	Applicants	23.2	(8,509)	26.0	(9,566)	25.2	(8,301)	26.8	(8,385)
	Matriculants	18.5	(2,963)	20.3	(3,383)	18.2	(2,964)	21.3	(3,432)
9 - 11	Applicants	42.7	(15,651)	40.7	(14,939)	42.4	(13,947)	40.1	(12,558)
	Matriculants	57.2	(9,182)	53.5	(8,910)	54.2	(8,812)	51.5	(8,295)
12 - 15	Applicants	8.6	(3,165)	9.5	(3,471)	12.4	(4,069)	11.8	(3,710)
	Matriculants	14.9	(2,385)	16.5	(2,757)	19.9	(3,235)	18.6	(2,994)
Unknown	Applicants	4.6	(1,667)	3.1	(1,146)	2.6	(851)	3.2	(991)
	Matriculants	1.9	(313)	2.6	(439)	2.5	(406)	2.9	(470)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants	8.49		8.50		8.80		8.69	
	Matriculants	9.56		9.61		9.85		9.71	
Standard Deviation	Applicants	2.38		2.39		2.38		2.42	
	Matriculants	2.00		2.08		2.02		2.08	

MCAT Reading Scores for Applicants and Matriculants 1978 and 1986



MCAT Quantitative Scores for Applicants and Matriculants 1978 and 1986



Proportion and Number of Applicants and Matriculants for Selected Years by MCAT Areas of Assessment

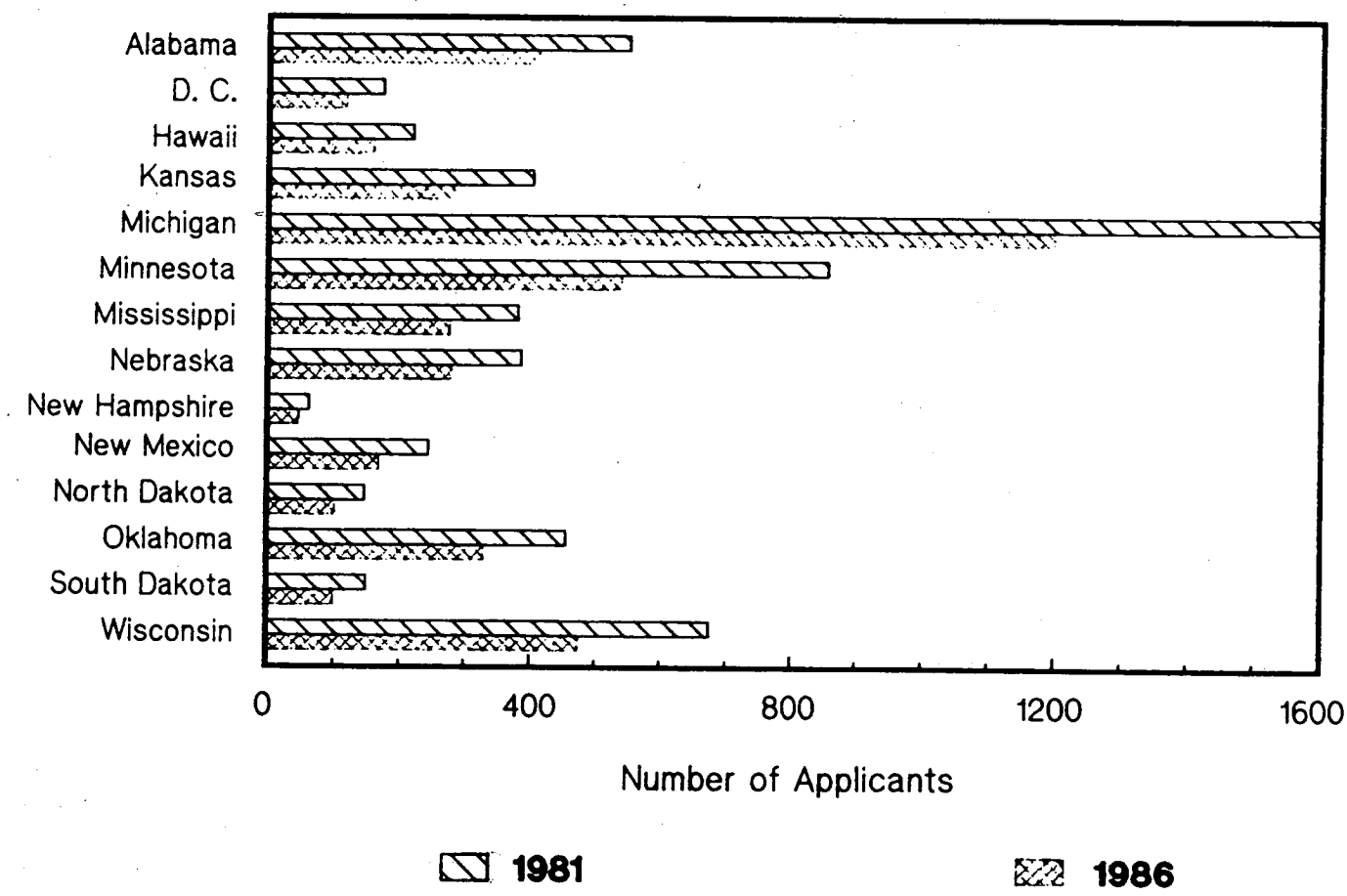
Skills Analysis: Reading

Scaled Score		1978 %	1978 (n)	1981 %	1981 (n)	1985 %	1985 (n)	1986 %	1986 (n)
1 - 6	Applicants	15.1	(5,533)	19.4	(7,111)	18.3	(6,015)	17.9	(5,616)
	Matriculants	6.7	(1,072)	9.8	(1,641)	9.0	(1,468)	8.4	(1,360)
7 - 8	Applicants	30.4	(11,149)	25.4	(9,322)	27.1	(8,903)	27.8	(8,706)
	Matriculants	26.7	(4,282)	22.5	(3,743)	23.7	(3,855)	24.7	(3,981)
9 - 11	Applicants	44.8	(16,401)	48.5	(17,830)	48.7	(16,022)	47.7	(14,955)
	Matriculants	56.7	(9,098)	59.5	(9,905)	59.8	(9,736)	58.7	(9,458)
12 - 15	Applicants	5.1	(1,886)	3.6	(1,318)	3.4	(1,102)	3.4	(1,055)
	Matriculants	8.0	(1,289)	5.6	(932)	4.9	(803)	5.2	(834)
Unknown	Applicants	4.6	(1,667)	3.1	(1,146)	2.6	(851)	3.2	(991)
	Matriculants	1.9	(313)	2.6	(439)	2.5	(406)	2.9	(470)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants		8.41		8.22		8.27		8.24
	Matriculants		9.15		8.94		8.98		8.96
Standard Deviation	Applicants		2.24		2.30		2.30		2.30
	Matriculants		1.82		1.87		1.88		1.85

Skills Analysis: Quantitative

Scaled Score		1978 %	1978 (n)	1981 %	1981 (n)	1985 %	1985 (n)	1986 %	1986 (n)
1 - 6	Applicants	19.8	(7,257)	25.2	(9,258)	24.3	(7,988)	25.0	(7,825)
	Matriculants	9.0	(1,438)	12.7	(2,111)	12.4	(2,014)	13.2	(2,123)
7 - 8	Applicants	23.3	(8,551)	28.9	(10,608)	29.9	(9,832)	29.5	(9,225)
	Matriculants	19.9	(3,195)	26.3	(4,378)	27.8	(4,530)	28.3	(4,550)
9 - 11	Applicants	44.5	(16,305)	35.8	(13,133)	36.2	(11,916)	34.7	(10,873)
	Matriculants	56.8	(9,125)	47.0	(7,822)	46.8	(7,606)	44.3	(7,131)
12 - 15	Applicants	7.8	(2,856)	7.0	(2,582)	7.0	(2,306)	7.7	(2,409)
	Matriculants	12.4	(1,983)	11.5	(1,910)	10.5	(1,712)	11.4	(1,829)
Unknown	Applicants	4.6	(1,667)	3.1	(1,146)	2.6	(851)	3.2	(991)
	Matriculants	1.9	(313)	2.6	(439)	2.5	(406)	2.9	(470)
Total	Applicants	--	(36,636)	--	(36,727)	--	(32,893)	--	(31,323)
	Matriculants	--	(16,054)	--	(16,660)	--	(16,268)	--	(16,103)
Mean	Applicants		8.48		8.10		8.15		8.09
	Matriculants		9.36		9.02		8.99		8.90
Standard Deviation	Applicants		2.41		2.42		2.41		2.44
	Matriculants		2.00		2.16		2.14		2.17

States Having a 25 Percent Decline or More in Applicants between 1981 and 1986



DATAGRAM

Reapplicants to U.S. Medical Schools, 1983 Through 1986

Although most applicants to medical school in a given year are applying for the first time, a substantial number are reapplying after an unsuccessful attempt in a previous year. Since these reapplicants are in general less successful than first-time applicants in gaining admission, the overall statistics covering both kinds of applicants that are published in the annual editions of *Medical School Admission Requirements* (1) and the annual education issues of the *Journal of the American Medical Association* (2) may portray a bleaker picture of the difficulty of gaining entry to medical school than is warranted.

Repeat applicants are important to the applications process, because they represent a reservoir of prospective students who augment the pool of individuals making the normal progression from baccalaureate programs. As the number of applicants declines, the percentages of both first-time applicants and reapplicants who are accepted increase.

Until recently, good statistical information on reapplicants was difficult to derive because it required combining information collected in several application years. However, since the completion of the Student and Applicant Information Management System of the Association of American Medical Colleges (AAMC) in 1973, collated data on all applicants to U.S. medical schools have been available. The report presented here includes information on applicants for the entering classes of 1983 through 1986 but takes into account previous applications since 1980. A previous datagram presented data on reapplicants 1981–1984 (3), and less complete information on reapplicants for earlier years was included in prior AAMC publications (4, 5).

Method

For each application year, a previously unsuccessful applicant was defined as an individual who had also applied in one or more of the preceding three years. Although this approach may have resulted in identifying as a first-time applicant the rare individual who may have applied again after a hiatus of more than three years, it allowed consistent treatment of each of the four application years in the study. Thus, for example, for 1983 a previously unsuccessful applicant was one who had applied at least once in the years 1980 through 1982 and again in 1983; and for 1986 a previously unsuccessful applicant was one who had applied at least once in 1983 through 1985 and again in 1986.

The previously unsuccessful applicants were further subdivided into those who applied in only one prior year and those with several prior applications. The group of those who had applied in one prior year was further subdivided into those applying in the previous year only and those applying in an earlier single year.

Previously matriculated applicants were the small number of applicants each year who had attended medical school during the previous three years but had dropped out or had been dismissed. Previously accepted applicants were those who had received an acceptance in one of the previous three years but had not matriculated.

The remainder of the students, that is, those who had no record of an application within three years, were considered first-time applicants. All of the categories are mutually exclusive; thus, the sum of the numbers of applicants, accepted students, or matriculants in all the categories is equal to the number of all applicants, all accepted students, or all matriculants, respectively. The percentage accepted in each category is the number of applicants who were accepted divided by the number of applicants, and the percentage matriculated is the number who matriculated divided by the number of applicants.

Results and Discussion

As shown in Table 1, the aggregate number of applicants declined appreciably, and the aggregate number of accepted students and ma-

triculants declined very slightly over the three-year period ending in 1986. The number of applicants declined by 8.6 percent, the number accepted by 1.0 percent, and the number matriculated by 2.5 percent. The overall probability of being accepted ranged between 47.8 and 54.6 percent during 1983–1986.

First-time applicants were 73.9 percent of all applicants in 1986 but were 78.0 percent of matriculants. The proportion of first-time applicants accepted in 1986 was 57.5 percent, which was substantially higher than for any of the groups of previously unsuccessful applicants.

In 1986, 47.0 percent of the individuals who applied for the second consecutive year were accepted, while only 40.3 percent of those who applied for the second time after a hiatus were accepted.

More than 1,700 of the applicants who applied in 1986 were doing so for at least the third time. These individuals had a considerably lower chance of success than first-time applicants, but more than one-third of them were eventually accepted and matriculated.

The previously accepted group had an acceptance rate in 1984 of 89.8 percent, which is higher than that of any of the other groups reported. However, many of these individuals had been granted deferred matriculation by the school that originally accepted them. The author has not analyzed the data to separate those previously accepted at the same school from those previously accepted at another school or to separate those already accepted in the previous year from those accepted in an earlier year. This group of previously accepted applicants is small but definitely growing, rising from 434 in 1983 to 590 in 1986. Of the individuals accepted from this group in 1986, 17.5 percent did not matriculate; in contrast less than 6 percent of accepted first-time applicants that year failed to matriculate.

The previously matriculated applicants were unlikely to gain a second chance at medical education. Only 15.0 percent were accepted in 1986, and only 7.9 percent matriculated.

The percentage accepted and percentage matriculated have increased appreciably over the three-year period for all groups except the previously accepted applicants, where the percentages were already very high. Changes observed for the period 1983–1986 are greater than changes found in the prior analysis for the period 1981–1984 (3).

To summarize, almost three quarters of all applicants in any given year are first-time applicants. Reapplicants have a smaller but still good chance of acceptance. The probability of acceptance is increasing as the numbers of applicants of almost all types decline.

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TABLE 1

Numbers and Percentages of Applicants to U.S. Medical Schools, by Application Status, 1983 Through 1986

Applicants' Status	1983		1984		1985		1986	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
First-time applicants								
Applied	25,317	100.0	26,059	100.0	23,517	100.0	23,141	100.0
Accepted	13,444	53.1	13,520	51.9	13,298	56.5	13,310	57.5
Matriculated	12,878	50.9	12,927	49.6	12,567	53.4	12,558	54.3
Previously unsuccessful applicants								
One prior application								
In year prior								
Applied	5,178	100.0	5,341	100.0	5,172	100.0	4,025	100.0
Accepted	2,065	39.9	2,082	39.0	2,273	43.9	1,891	47.0
Matriculated	1,999	38.6	1,997	37.4	2,168	41.9	1,817	45.1
In other year								
Applied	1,678	100.0	1,593	100.0	1,474	100.0	1,583	100.0
Accepted	516	30.7	460	28.9	489	33.2	638	40.3
Matriculated	493	29.4	441	27.7	463	31.4	611	38.6
Two or three prior applications								
Applied	2,284	100.0	2,199	100.0	2,005	100.0	1,704	100.0
Accepted	765	33.5	716	32.6	726	36.2	681	40.0
Matriculated	742	32.5	686	31.2	699	34.9	658	38.6
Previously accepted applicants								
Applied	434	100.0	446	100.0	484	100.0	590	100.0
Accepted	388	89.4	388	87.0	410	84.7	530	89.8
Matriculated	351	80.9	328	73.5	345	71.3	437	74.1
Previously matriculated applicants								
Applied	309	100.0	306	100.0	267	100.0	280	100.0
Accepted	31	10.0	28	9.1	32	12.0	42	15.0
Matriculated	17	5.5	16	5.2	26	9.7	22	7.9
All applicants								
Applied	35,200	100.0	35,944	100.0	32,893	100.0	31,323	100.0
Accepted	17,209	48.9	17,194	47.8	17,228	52.4	17,092	54.6
Matriculated	16,480	46.8	16,395	45.6	16,268	49.5	16,103	51.4

Doctorate Recipients by field, 1975-85

	Year of Doctorate										
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Life Sciences	5026	5026	4920	5040	5223	5461	5611	5706	5545	5747	5748
Biological Sciences	3497	3573	3484	3516	3646	3803	3804	3890	3734	3872	3766
Biochemistry	620	617	609	607	603	673	645	649	646	606	579
Biophysics	112	123	141	110	133	108	99	91	88	90	69
Bacteriology	-	-	-	-	-	-	-	-	10	12	17
Plant Genetics	-	-	-	-	-	-	-	-	19	20	31
Plant Pathology	-	-	-	-	-	-	-	-	29	30	38
Plant Physiology	67	62	43	43	57	52	68	56	67	70	58
Botany, Other	155	182	158	148	141	144	147	146	116	126	120
Anatomy	119	133	116	144	151	147	156	163	104	102	133
Biometrics & Biostatistics	37	46	52	45	44	42	48	59	45	49	40
Cell Biology	41	46	37	33	39	44	47	41	118	123	100
Ecology	142	140	163	170	173	169	198	173	183	202	200
Hydrobiology	8	13	14	3	10	-	-	-	-	-	-
Embryology	27	13	19	15	14	18	20	10	13	15	15
Endocrinology	-	-	-	-	-	-	-	-	28	30	17
Entomology	170	145	153	146	162	161	143	170	141	156	173
Immunology	71	93	101	94	134	125	148	151	154	133	121
Molecular Biology	156	148	131	172	140	183	187	224	225	275	277
Microbiology & Bacteriology	363	362	312	349	349	365	355	324	-	-	-
Microbiology	-	-	-	-	-	-	-	-	309	344	287
Neurosciences	-	-	-	-	-	-	-	117	134	145	156
Nutritional Sciences	-	85	82	90	107	90	99	120	111	109	113
Parasitology	18	19	17	13	21	22	18	14	9	30	21
Toxicology	-	-	-	-	-	-	-	-	60	97	98
Human & Animal Genetics	-	-	-	-	-	-	-	-	95	82	105
Genetics	156	143	141	126	141	157	157	176	-	-	-
Human & Animal Pathology	67	94	99	90	85	108	106	97	96	87	108
Human & Animal Pharmacology	166	205	196	216	220	257	280	276	217	237	229
Human & Animal Physiology	332	285	321	315	314	340	327	309	245	237	239
Zoology, Other	271	258	254	231	249	226	198	199	192	158	147
Biological Sciences, General	185	190	178	191	187	209	204	196	174	190	191
Biological Sciences, Other	214	171	147	165	172	163	154	129	106	117	84
Health Sciences	462	503	511	512	568	586	657	686	639	720	724
Audiology & Speech Pathology	121	145	146	143	139	123	140	129	113	104	99
Environmental Health	20	28	25	31	40	40	44	39	38	40	31
Public Health	-	-	-	1	-	1	4	3	54	53	102
Public Health & Epidemiology	110	116	109	98	121	127	157	159	-	-	-
Epidemiology	-	-	-	-	-	-	-	-	76	103	76
Hospital Administration	6	2	8	-	-	-	-	-	-	-	-
Medicine and Surgery	7	8	-	-	-	-	-	-	-	-	-
Nursing	-	-	32	32	53	77	89	112	126	161	177
Pharmacy	69	63	49	72	69	70	69	81	81	102	106
Veterinary Medicine	25	37	24	27	41	41	41	41	45	46	51
Health Sciences, General	18	14	18	15	19	15	24	16	20	14	14
Health Sciences, Other	86	90	100	93	86	92	89	106	86	97	68
Agricultural Sciences	1067	950	925	1012	1009	1072	1150	1130	1172	1155	1258

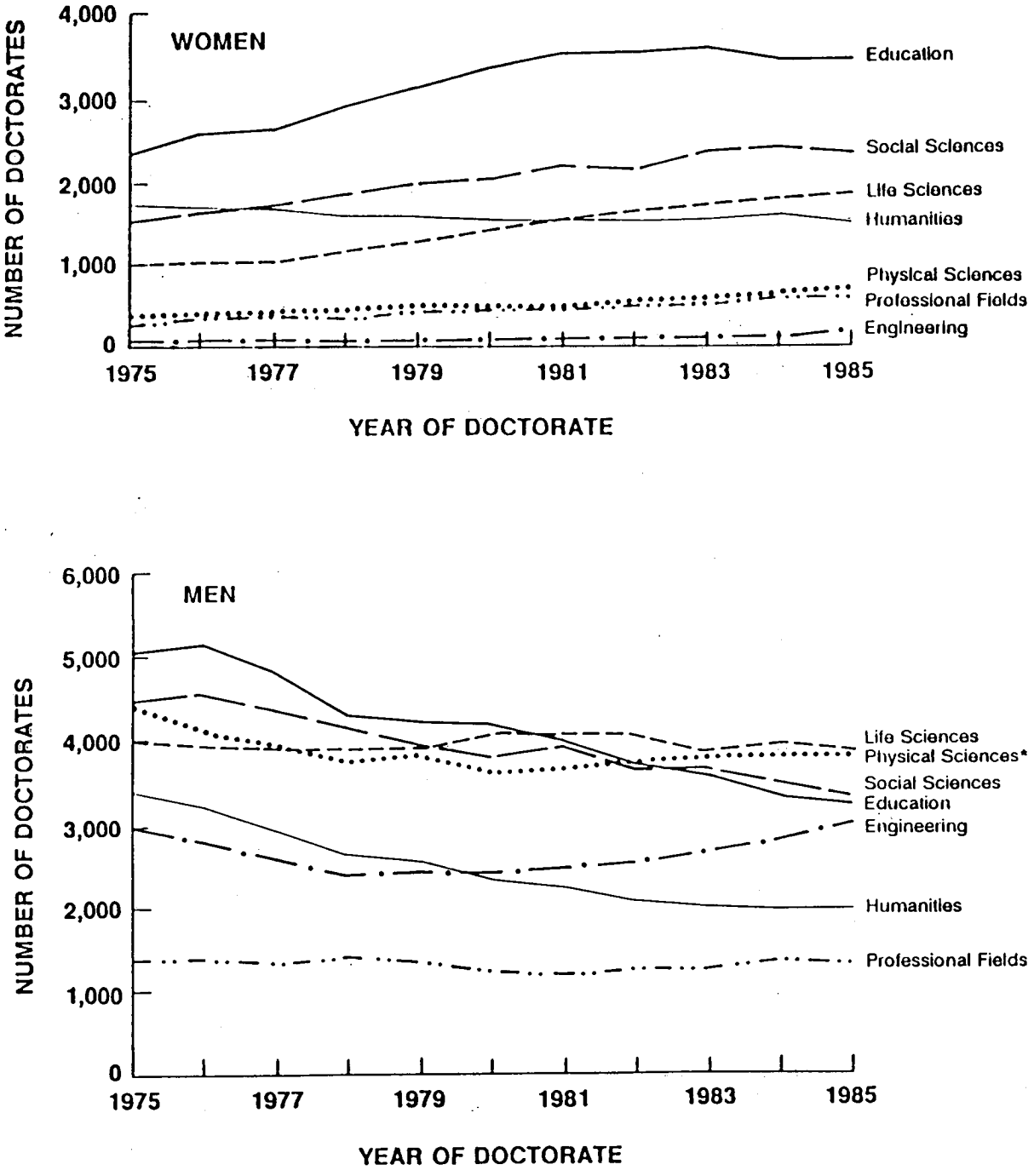
Source: Summary Report 1985
Doctorate Recipients from United States Universities

Office of Scientific and Engineering Personnel
National Research Council

TABLE B Doctorates Awarded by U.S. Universities, by Broad Field and Sex, 1976-1985

Field	Year of Doctorate									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total All Fields										
Men	25262	23858	22553	22300	21610	21461	21006	20718	20599	20502
Women	7684	7858	8322	8937	9407	9892	10091	10498	10678	10699
Physical Sciences*										
Men	4089	3949	3754	3803	3609	3667	3715	3809	3795	3817
Women	420	430	439	496	502	503	576	617	657	714
Engineering										
Men	2780	2569	2370	2428	2389	2429	2522	2657	2762	2967
Women	54	74	53	62	90	99	124	124	151	198
Life Sciences										
Men	4013	3892	3881	3952	4047	4076	4071	3827	3957	3893
Women	1013	1028	1159	1271	1414	1535	1635	1718	1790	1855
Social Sciences										
Men	4580	4348	4178	3969	3811	3945	3679	3676	3490	3368
Women	1634	1725	1861	1992	2045	2197	2157	2382	2413	2352
Humanities										
Men	3208	2903	2635	2547	2335	2200	2049	1965	1942	1939
Women	1673	1659	1596	1592	1532	1548	1509	1531	1590	1489
Education										
Men	5185	4870	4339	4277	4204	3957	3712	3552	3330	3237
Women	2540	2585	2855	3108	3383	3540	3540	3611	3463	3480
Professional Fields										
Men	1374	1311	1389	1309	1201	1160	1238	1219	1313	1261
Women	336	349	352	408	433	462	546	506	604	595

*Includes mathematics and computer sciences.



*Includes mathematics and computer sciences.

Figure 2 Doctorates awarded by U.S. universities, by broad field and sex, 1975-1985

TABLE F Postgraduation Employment Commitments, by Employment Sector and Sex, 1976-1985 (U.S. Citizens and Non-U.S. Citizens with Permanent Visas)

Employment Sector	Year of Doctorate									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Academe	60.4	58.8	56.5	54.5	52.0	51.0	49.7	49.8	48.3	48.4
Men	57.4	55.5	53.2	51.3	48.4	47.9	46.1	47.1	45.1	45.5
Women	70.4	68.8	65.6	62.3	59.8	57.4	56.4	54.6	53.6	52.9
Industry	11.7	12.8	15.0	16.7	17.5	18.4	20.7	19.5	19.1	20.3
Men	13.7	15.3	17.8	20.2	20.7	22.4	25.2	23.7	22.9	24.9
Women	4.9	5.5	7.2	8.3	10.4	10.3	12.1	12.2	12.8	12.7
Government	12.5	13.0	12.4	13.0	12.5	12.8	11.2	11.0	12.1	11.7
Men	13.8	14.5	13.7	13.9	14.1	13.7	11.9	12.3	13.5	12.0
Women	8.0	8.5	8.7	10.9	8.9	10.9	9.9	8.7	9.7	11.1
Other	15.4	15.4	16.2	15.8	18.1	17.8	18.4	19.7	20.5	19.8
Men	15.1	14.8	15.3	14.7	16.8	16.0	16.8	17.0	18.5	17.6
Women	16.6	17.2	18.5	18.5	20.8	21.4	21.6	24.5	23.9	23.3

Figure 3 Definite employment commitments of new doctorate recipients, by sex, 1976 and 1985

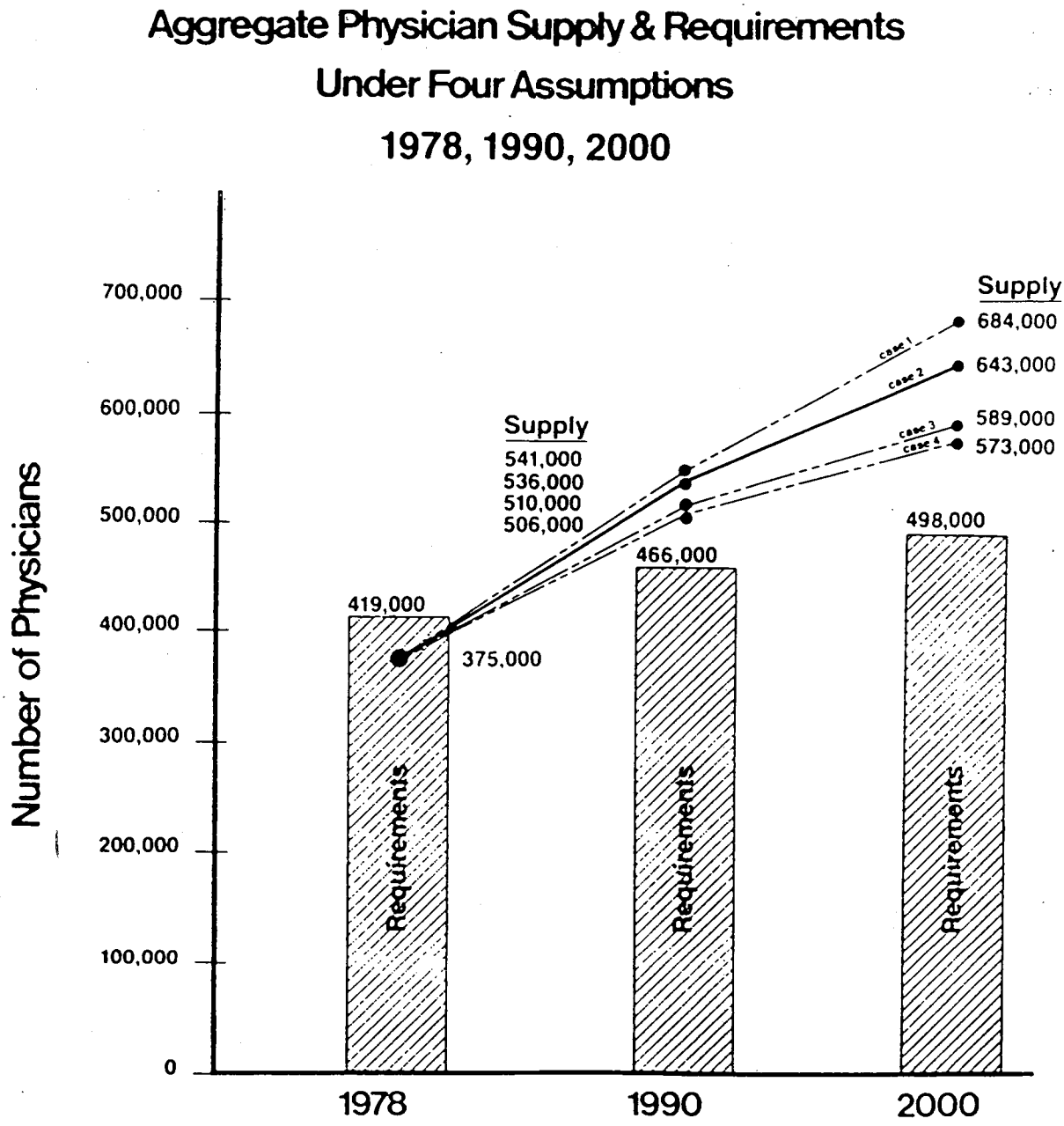
TABLE Q Postgraduation Employment Commitments, by Field of Ph.D., 1975 and 1985 (U.S. Citizens)

	Academe		Industry		Government		Other	
	1975	1985	1975	1985	1975	1985	1975	1985
Physical Sciences	41.4*	32.5	38.2	53.9	17.4	11.5	2.9	2.1
Engineering	27.1	27.3	45.3	53.6	25.1	16.8	2.5	2.3
Life Sciences	59.0	54.2	15.3	25.5	18.7	14.4	7.0	5.9
Social Sciences	65.9	45.4	5.8	16.6	16.5	16.7	11.7	21.3
Humanities	85.6	76.3	2.3	6.4	3.4	3.3	8.6	14.0
Education	55.7	40.6	2.5	7.6	11.1	12.3	30.7	39.5
Professional Flds	78.2	70.9	6.4	9.5	5.5	7.1	9.8	12.5

* Proportion of those with definite employment commitments.

Source: NRC

Figure 5



Source: Summary Report of GMENAC, 1980

NEW PROJECTIONS ON SUPPLY OF HEALTH PERSONNEL
by Paul Jolly, Ph.D.

Every two years the Bureau of Health Professions produces a report on the status of health personnel in the United States, which includes the latest projections of supply and requirements for all kinds of health personnel, including physicians. The most recent report was published March 1986. Its title is "Fifth Report to the President and Congress on the Status of Health Personnel in the United States."

The report is an inch thick and is very comprehensive. It includes in one place many tables describing supply, distribution and requirements for health personnel, together with references to the sources for these data. Most of the data on physicians were obtained from AMA and AAMC publications.

The Bureau's projected number of physicians is 587,700 in 1990 and 696,600 in 2000, including D.O.s. They are projecting a surplus of 46,700 physicians in 1990 and 77,800 in 2000.

Physician to population ratios will increase from 218.2 per 100,000 in 1985 to 235.4 per 100,000 in 1990 and 259.9 per 100,000 in the year 2000. Massachusetts is projected to have 463 physicians per 100,000 at the turn of the century, while Maryland will have 445. In what appears to be an unlikely outcome, Florida's ratio is projected to decline from 182 per 100,000 to 144 per 100,000. The methodology for projection assumes that new physicians will continue to distribute themselves as recent graduates have done; in reality they will react to any imbalances which develop.

By 2000, women will be 21% of the physician supply.

The report includes comments on the difficulty of projecting physician requirements in view of the rapidly changing health care delivery system. The effects of prepaid delivery systems and prospective payment in reducing the demand for physician services might substantially increase the surplus of physicians.

Tables 2-8 and 2-9 from the report give projections for the other major categories of health professionals.

Dr. Jolly is Director, Division of Operational Studies, AAMC.

Table 2–8. Active Supply of Selected Health Personnel, Estimated 1984 and Projected 1990–2000

Health Occupation	Active Supply				Percent Change		
	1984	1990	1995	2000	1984–1990	1984–1995	1984–2000
Physicians	501,200[1]	587,700	645,500	696,600	17.3	28.8	39.0
Allopathic (MD)	481,500[1]	559,500	611,100	656,100	16.2	26.9	36.3
Osteopathic (DO)	19,700[1]	28,200	34,400	40,400	43.1	74.6	105.1
Podiatrists	9,700[1]	12,700	15,000	17,100	30.9	54.6	76.3
Dentists	137,950	150,800	156,800	161,200	9.3	13.7	16.9
Optometrists	23,600	25,500	27,500	29,700	8.1	16.5	25.8
Pharmacists	157,000	170,800	181,200	188,200	8.8	15.4	19.9
Veterinarians	42,600	50,400	56,800	62,700	18.3	33.3	47.2
Registered Nurses	1,453,900	1,739,100	1,932,100	2,079,400	19.6	32.9	43.0
	Practitioners Per 100,000 Population						
Physicians	202.4[1]	235.4	248.7	259.9	16.3	22.9	28.4
Allopathic (MD)	194.6[1]	224.1	235.5	244.9	15.2	21.0	25.8
Osteopathic (DO)	7.8[1]	11.3	13.3	15.3	44.9	70.5	96.2
Podiatrists	4.2[1]	5.1	5.8	6.4	21.4	38.1	52.4
Dentists	58.0	60.1	60.2	60.0	3.6	3.8	3.4
Optometrists	9.9	10.2	10.6	11.1	3.0	7.1	12.1
Pharmacists	66.0	68.1	69.6	70.0	3.2	5.5	6.1
Veterinarians	18.0	20.1	21.9	23.3	11.7	21.7	29.4
Registered Nurses	613	695	743	775	13.4	21.2	26.4

[1]1983 Data

SOURCE: For source, see the appropriate table within the individual chapters for the respective occupations.

Table 2–9. Supply and Requirements for Selected Health Occupations 1984 Supply and Projections to 1990 and 2000

	1984	1990		2000		Percent Increase 1984–2000	
	Supply	Supply	Requirements	Supply	Requirements	Supply	Requirements
Medicine	501,200[1]	587,700	541,000	696,600	618,800	39.0	23.5
Optometry	23,600	25,500	26,000	29,700	30,400	25.8	28.8
Pharmacy[2]	151,300	162,800	162,000	176,800	176,000	16.9	16.3
Veterinary Medicine	42,600	50,400	48,000	62,700	59,500	47.2	39.7
Nursing[2]							
RN	1,215,400	1,454,000		1,750,000		44.0	
Historical Trend	—	—	1,414,000	—	1,683,000	—	38.5
Criteria Based	—	—	1,733,000	—	2,328,000	—	91.5
LPN/LVN	490,300	608,000		756,000		54.2	
Historical Trend	—	—	527,000	—	720,000	—	46.8
Criteria Based	—	—	321,000	—	423,000	—	−13.7

[1]1983 Data

[2]Full-time equivalents

— Not Applicable

SOURCE: For source of data see the individual chapters for the respective occupations.

DataWatch

Each quarter Health Affairs *reports the significant trends in four sectors of the health care sphere: health personnel in Winter; health status and health care utilization in Spring; health care innovation in Summer; and national health care spending in Fall. Also in this issue, S.E. Berki of the University of Michigan reports the findings from his study of financially catastrophic illnesses, and David A. Kindig and Santiago Lastiri of the University of Wisconsin present new data on physicians involved in administrative medicine.*

Trends In Health Personnel

by John K. Iglehart

Growing pressures to reduce federal spending, new health care delivery organizations that utilize hospital services in a more parsimonious fashion, and rising concern within the medical profession that a physician surplus looms ever larger are focusing more attention on the question of how many medical students the United States should be training. The most recent reflection of this rising level of concern is a policy shift in the thinking of the American Medical Association (AMA), away from its previous position that the marketplace would serve as a self-adjusting mechanism for determining physician supply, toward a closer monitoring of manpower trends. New leadership at the Association of American Medical Colleges (AAMC) also has said for the first time that "it is an accepted fact that we are training too many physicians."

The subject of human resources and their multiple uses within the health sphere has evolved from an enterprise once dominated by solo fee-for-service practitioners and hospital-based nurses to a burgeoning new configuration of group medical practices, alternative delivery schemes, and vertically integrated corporations. For example, the number of group practices has increased by 82.5 percent from 8,483 in 1975 to 15,485 in 1984. The data presented here illustrate how selected health professionals are affected by and are adjusting to this changing environment.

Physician supply. The Bureau of Health Professions of the Department of Health and Human Services's Health Resources and Services Administration (HRSA) monitors on a continuing basis physician supply and requirements for 1990 and 2000. The bureau's model projects requirements of 541,000 physicians in 1990 and of 618,800 physicians in

2000, a 19 percent increase over the period 1985-2000. In both 1990 and 2000, the supply of physicians is projected by the bureau's basic series of estimates to be greater than requirements (Exhibit 1). The excesses represent about 8 and 11 percent of the supply in those respective years.

Exhibit 1
Comparison Of Supply And Requirements For Physicians (MDs And DOs) (In Thousands)

1981	1990		2000		Percent increase 1981-2000	
Supply	Supply	Requirements	Supply	Requirements	Supply	Requirements
467.0	587.7	541.0	696.6	618.8	49	33

Source: Health Resources and Services Administration, Bureau of Health Professions. Supply forecasts are from the BHPr Supply Model basic series of estimates, requirements estimates are from the BHPr General Requirements Model.

A different approach to projecting supply and requirements was undertaken by the Graduate Medical Education National Advisory Committee (GMENAC). When the committee, chaired by Alvin R. Tarlov, originally reported its findings in 1980, it projected that there would be 70,000 more physicians by the year 1990 than society would require. Recently revised supply projections for 1990, based upon the GMENAC approach and incorporating the latest data available, produced slightly lower supply estimates—55,000 more physicians than required.

The change in AMA policy was adopted at its 1986 annual meeting by the association's House of Delegates. The House approved the final report of the AMA Task Force on Physician Manpower that recommended "extensive, ongoing analyses of physician manpower issues," including an annual technical report and efforts to better inform medical students, state legislators, and the public about the changing needs for health professionals. The willingness of the AMA to move more aggressively into the legally and politically sensitive realm of influencing the number of practicing physicians is a solid reflection of the intense pressures its leadership is experiencing from individual doctors who, because they are feeling the effects of competition, believe the association must strive to moderate the production of new physicians.

Medical education. There is no centralized control over medical education. As a consequence, there is no decision-making body which, having determined that there is excess capacity, can direct a reduction in the number of physicians educated, the AAMC noted in a recently published background paper entitled "Medical Education: Institutions, Characteristics and Programs." The association, which has been reluctant even to discuss publicly the notion that medical schools should consider shrinking their capacity, is moving more aggressively in that

direction, largely because its new president, Robert G. Petersdorf, believes that it must.

Unlike his predecessor, John A. D. Cooper, who was reluctant to antagonize the AAMC's constituency of medical schools over the question of their class sizes, Petersdorf feels no such constraint. Addressing the association's 1986 annual meeting on October 27, Petersdorf said: "It is an accepted fact that we are training too many physicians, and that far too many of those we train go into the medical, surgical, and support specialties, rather than primary care."

Petersdorf went on to challenge the AMA's longstanding policy of dependence on the market ("I do not believe in the shop-worn dictum that 'the marketplace will control physician manpower' "), called for the phasing out of residency training opportunities for foreign medical graduates, and urged the federal government to award "decapitation grants" to medical schools to help them withstand the loss of tuition or state support as they downsize their enrollment. "Perhaps most important in adjusting to changes in manpower requirements is the need of the accrediting bodies—the LCME (Liaison Committee on Medical Education) and the ACGME (Accrediting Committee on Graduate Medical Education) with its constituent residency review committees, to introduce and adhere to the highest possible standards in accrediting both medical schools and training programs," Petersdorf said.

Medical education includes the four years of training, following receipt of an undergraduate degree, that lead up to the medical degree. Graduate medical education includes the years beyond in which students develop a medical specialty in residency training programs. Medical education has been a growth industry over the last two decades, and it remains largely untouched by the mounting pressures to reduce the U.S. capacity to train new physicians (Exhibit 2). The growth over this period

Exhibit 2
Reductions In Size Of 1986 Entering Medical School Classes (Medical Schools With Largest Decreases)

School	Reduction in class size	School	Reduction class size
University of Cincinnati	−42	Indiana University	−10
Universidad Centro del Caribe (Puerto Rico)	−40	University of Mississippi	−10
Kansas University	−25	Wright State University	−10
University of Tennessee	−24	Northwestern University	− 7
University of Chicago	−16	University of Wisconsin (Madison)	− 6
Howard University	−12	Hahnemann University	− 5
University of Minnesota (Mpls.)	−11	Louisiana State University (Shreveport)	− 5
University of Colorado	−10		

Source: Association of American Medical Colleges, 1986.

came largely as a consequence of increases in federal and state government support. The number of U.S. medical schools accredited by the LCME grew from eighty-six in 1960 to 127 in 1986. Forty-four states, the District of Columbia, and Puerto Rico each have at least one medical school.

Currently, fifty-two medical schools are private institutions. However, thirty-five of these schools received appropriated financial assistance in 1984-85 from the governments of states in which they are located. The number of students graduating from medical schools more than doubled over the past twenty years from 7,409 in 1965 to 16,117 in 1986. However, recent medical school applicant and enrollment experience suggests that the United States is moving into a period of stabilization and some reduction of the numbers of students educated. For the academic year 1985-86, there were 32,893 applicants to U.S. medical schools, 3,000 less than the previous year (Exhibit 3). There were a total of 307,427 applications, or 9.3 applications per person. The ratio of applicants to accepted applicants was 1.9 to one. The number of medical school applicants reached a historic peak in 1974 when 42,624 students (2.8 applicants per position) sought admission.

Exhibit 3
Applications To U.S. Medical Schools Over Twenty Years

Year	Applicants	Total no. of applications	Applications per person	Accepted applicants	Applicants-acceptance ratio	First-year enrollment
1965-1966	18,703	87,111	4.7	9,012	2.1	8,759
1970-1971	24,987	148,797	6.0	11,500	2.2	11,348
1975-1976	42,303	366,040	8.7	15,365	2.8	15,351
1980-1981*	36,100	330,888	9.2	17,146	2.1	17,204
1981-1982	36,727	339,975	9.3	17,286	2.1	17,320
1982-1983	35,730	334,897	9.4	17,294	2.1	17,230
1983-1984	35,200	319,340	9.1	17,209	2.0	17,175
1984-1985	35,944	331,937	9.2	17,194	2.1	16,992
1985-1986	32,893	307,427	9.3	17,228	1.9	16,929

Source: Association of American Medical Colleges, *Medical School Admission Requirements*, 1986.
* Ponce, Puerto Rico, and South Dakota did not provide first-year enrollment; 1979-1980 figures were used for these schools.

Women and minorities. The ranks of women in medicine continue to grow, both in their representation among physicians and their increasing numbers in medical training. More than 34 percent of entering medical students in 1985-86 were women. Of the 16,191 expected medical school graduates, 30.7 percent were women (Exhibit 4).

The number of minority students enrolled in medical schools increased 39 percent from 7,596 in 1978-79 to 10,964 in 1985-1986 (Exhibit 5). Compared with the general rise in the number of medical students,

Exhibit 4
Women In U.S. Medical Schools

Academic year	Women applicants, no. (%)	Women in entering class, no. (%)	Total women enrolled, no. (%)	Graduates, no. (%)
1965-1966	1,676 (9.0)	731 (8.3)	2,589 (7.9)	524 (6.9)
1970-1971	2,734 (10.9)	1,256 (11.1)	3,894 (9.6)	827 (9.2)
1975-1976	9,575 (22.6)	3,656 (23.8)	11,527 (20.5)	2,200 (16.2)
1980-1981[a]	10,644 (29.5)	4,970 (28.9)	17,373 (26.5)	3,892 (24.8)
1981-1982	11,673 (31.8)	5,343 (30.8)	18,555 (27.9)	3,991 (25.0)
1982-1983	11,685 (32.7)	5,445 (31.6)	19,627 (29.3)	4,229 (26.7)
1983-1984	11,961 (33.9)	5,659 (32.9)	20,685 (30.7)	4,617 (28.3)
1984-1985	12,476 (34.7)	5,705 (33.6)	21,287 (31.7)	4,898 (30.0)
1985-1986	11,562 (35.1)	5,788 (34.2)	21,624 (32.5)	4,968 (30.7)

Source: Association of American Medical Colleges, *Medical School Admission Requirements*, 1986.
[a] Ponce, Puerto Rico, and South Dakota did not provide information; 1979-1980 enrollment figures were used for these schools.

Exhibit 5
Minority Enrollment Of U.S. Citizens In U.S. Medical Schools, 1985-1986

	Number	Percent
First-year enrollment[a]:		
Black (not of Hispanic origin)	854	5.2
American Indian or Alaskan Native	53	0.3
Mexican-American	267	1.6
Puerto Rican	368	2.2
Other Hispanic	234	1.4
Asian or Pacific Islander	1,139	7.0
Total	2,915	17.8[b]
Graduates:		
Black (not of Hispanic origin)	782	4.8
American Indian or Alaskan Native	44	0.3
Mexican-American	221	1.4
Puerto Rican	292	1.8
Other Hispanic	247	1.5
Asian or Pacific Islander	800	4.9
Total	2,386	14.7
Total enrollment:		
Black (not of Hispanic origin)	3,556	5.3
American Indian or Alaskan Native	230	0.3
Mexican-American	1,045	1.6
Puerto Rican	1,338	2.0
Other Hispanic	961	1.4
Asian or Pacific Islander	3,834	5.8
Total	10,964	16.5[b]

Source: Anne E. Crowley et al., "Undergraduate Medical Education," *Journal of the American Medical Association* 256 (26 September 1986): 1562.
[a] First-year enrollment data exclude repeaters from count.
[b] Totals do not add due to rounding.

there has been little change in the proportion of medical students who are members of minority groups, although the AAMC has sought to increase their number. The rising cost of medical education, the difficulties minority students encounter in obtaining scholarships and loans, and reductions in class size all have worked against the AAMC's stated goal.

A new report published by HRSA, "Estimates and Projections of Black and Hispanic Physicians, Dentists, and Pharmacists to 2010," shows sizable increases in the number of black and Hispanic physicians, dentists, and pharmacists. Despite the increases, though, black and Hispanic physicians, dentists, and pharmacists will still be represented well below half their percentages in the U.S. population in the future.

Foreign medical graduates. Despite federal policy changes that have sought to reduce the flow of foreign medical graduates (FMGs) into the United States, they remain an important influence in American medical care. Indeed, since 1980 there has been a greater percentage increase of FMGs (21.6 percent) than U.S. medical school graduates (17.1 percent), according to the AMA's 1986 edition of *Physician Characteristics and Distribution in the U.S.*

While amendments to the Immigration and Nationality Act (Public Law 94-484 in 1976 and Public Law 95-93 in 1977) made it more difficult for alien graduates of foreign medical schools to practice here, they did nothing to impede Americans from going abroad to receive medical training. As a consequence, U.S. FMGs now outnumber alien FMGs as participants in graduate medical education programs (Exhibit 6). In 1985, 16.8 percent of all medical residents were FMGs, a reduction of 1.1 percent from the previous year. Seven states (New Jersey, New York, Illinois, Connecticut, Michigan, Maryland, and Florida) and the Commonwealth of Puerto Rico showed a percentage of FMGs higher than the national percentage.

During the twelve-year period between 1971 and 1983, the total FMG population increased by 80 percent or by nearly 50,000 physicians to a total of 112,005 doctors, according to the AMA's useful new book,

Exhibit 6
Foreign Medical Graduates (FMGs) In Residency Positions

	1979	1982	1984	1985
Total FMGs	12,070	13,123	13,525	12,477
Percentage of total residents	18.7	19.0	18.0	16.8
U.S. citizen FMGs	4,229	6,388	7,386	6,868
U.S. citizen FMGs as a percentage of all FMGs	35.0	48.6	54.6	55.0

Source: Anne E. Crowley, "Foreign Medical Graduates in U.S. Graduate Medical Education," *Journal of the American Medical Association* 256 (26 September 1986): 1551-1554.

Foreign Medical Graduates, 1986 edition. By 1983, 82 percent of active FMGs were engaged in patient care activities. Of total FMGs in patient care in 1971, the highest percentages were indicated for the disciplines of internal medicine (15.4 percent), general practice/family practice (12.8 percent), general surgery (11.1 percent), psychiatry (9.1 percent), and pediatrics (6.9 percent), for a cumulative representation of 55.3 percent; these percentages have remained quite stable in the subsequent years.

Medical school finances. The expansion of every major aspect of medical education in the past twenty-five years is clearly illustrated by the growth in medical school expenditures from $319 million in 1958-59 to $9.8 billion in 1984-85. This reflects a 50 percent increase in the number of schools, a more than doubling of the number of students, a threefold increase in graduate students, and a fivefold increase in full-time faculty (Exhibit 7).

Reporting in the eighty-sixth annual report on medical education in the *Journal of the American Medical Association* (JAMA), Paul Jolly, Leon Taksel, and David Baime said the mix of medical school revenues appears to be stabilizing, with approximately one-third coming from medical service income, one-fourth from the federal government, one-fifth from state and local governments, and the remainder from other sources. They noted in their analysis that despite the decline in some forms of federal support to medical schools in recent years, federal

Exhibit 7
Comparison Of Medical School Expenditures, 1958-1985

	1958-1959	1979-1980	1984-1985
Number of schools:			
Fully accredited	85	119	125
Provisionally accredited	—	7	2
Number of students:			
Medical students	29,614	64,195	67,090
Graduate students in basic science	4,122	13,201	15,494
Postdoctoral students in basic science	168	3,503	3,943
Residents	15,417	44,646	52,976
Number of full-time faculty	10,350	48,829	58,767
Total expenditures, $ millions[a]	$319	$5,592	$9,837
General operations	175	3,206	6,229
Sponsored/restricted	144	2,386	3,608
Research	114	1,256	1,939
Federal	74	1,008	1,465
Teaching and training	25	532	595
Federal	21	261	186
Health and community service	5	597	1,074

Source: Paul Jolly, Leon Taksel, and David Baime, "U.S. Medical School Finances," *Journal of the American Medical Association* (26 September 1986).
[a] Dollar figures are for fully accredited schools only.

expenditures to these institutions through 1983-84 did keep pace with inflation, as measured by the Biomedical Research and Development Index. Total federal support to medical schools kept pace with inflation because of continuing real increases in federal research dollars.

Student scholarships and loans. Total financial assistance awarded to medical students increased in 1984-85 by $20.7 million, or 4.3 percent, over the previous year. This increase was principally attributable to continued growth in medical student reliance on the Health Education Assistance Loan (HEAL), and Auxiliary Loans to Assist Students or Parental Loans for Undergraduate Students (ALAS/PLUS) programs. In contrast, medical student participation in the National Health Service Corps scholarship program continued to fall to negligible levels as a program of student assistance. The program provided $4 million to medical students—less than 1 percent of all the aid received by such students.

Increasingly, medical students are depending on commercial market-rate loans to finance their educations. In 1984-85, loan funds accounted for 75.1 percent of all medical student financial assistance, up from 65.7 percent of such aid in 1980-81. If the service-related scholarships offered by the National Health Service Corps and the Armed Forces (used by 5 percent of all medical students) are excluded from the total of financial aid, loans comprised 85.5 percent of all medical student assistance.

JAMA's annual medical education issue reported that students are incurring substantially higher levels of debt as a consequence of their increased reliance on loans. Data from the LCME indicated that 87 percent of 1985 medical school graduates were in debt. The average burden was $30,256, an increase of 12.5 percent over the previous year. Graduating medical students who responded to the AAMC's 1986 questionnaire (10,739 or 66.6 percent of all graduates) reported a mean indebtedness of $33,499 (Exhibit 8).

Dentists. No health profession has experienced as rapid and steep a decline in its number of applicants as dentistry. In one decade, dental schools have gone from enrolling 37 percent of their applicants to 78 percent. In a speech November 3 to the nation's dental school deans, David N. Sundwall, administrator of the Health Resources and Services Administration, said: "The implications of such a dramatic shift in the applicant pool are profound, not only from the standpoint of competition between dental schools for top students but also in the capacity of the pool to contain an adequate supply of well-qualified individuals representing the various aspects of society."

The number of active dentists is projected to grow to 161,180 by the year 2000, according to the *Fifth Report to the President & Congress on the Status of Health Personnel in the United States* (Exhibit 9), representing a net increase of approximately 23,000 dentists over the 1984 figure. The growth in dentist supply relative to population is expected to continue

types of programs preparing graduates for licensure as RNs—diploma programs, associate degree programs, and baccalaureate programs; there were 1,466 state board-approved nursing programs of all types in the United States in 1983.

An important dimension of the nursing educational system is that segment which provides for master's and doctoral degrees. The leadership of American nursing has placed particular emphasis on nurses obtaining advanced degrees as an important way to promote the standing of the entire profession in society. In 1980, of an employed RN work force of 1.3 million, 50.7 percent of nurses had degrees from diploma schools, 23.3 percent had baccalaureate degrees, 20.1 percent had associate degrees, 5.1 percent had master's degrees, and 0.2 percent had doctoral degrees. Reflecting the increasing emphasis placed on advanced degrees, between 1970 and 1983 enrollments in master's programs increased fourfold, from 4,765 to 18,112. However, most of the increase in this period came from students attending these programs on a part-time basis.

The health care delivery system is undergoing rapid change, and nurses, perhaps no less than physicians, will be affected. For example, the abundance of physicians is likely to challenge nurses' efforts to function in more expanded roles. On the other hand, as hospitals have sought to constrain their expenses as a consequence of the more tight-fisted payment policies of Medicare and other third-party payers, employment of RNs was relatively stable between 1983-84 while hospital hiring of licensed practical nurses and ancillary nursing personnel declined sharply in 1984, according to a new publication, *Trends in Hospital Personnel 1982-1984*, published by the Department of Health and Human Services. Employment of hospital administrators, social workers, medical record personnel, medical technologists, and pharmacy personnel increased between 1981-84, while the hiring of both dietitians and dietetic technicians declined.

Looking to the future, the Bureau of Health Professions developed a model that sought to project the number of trained nurses that would be available for duty by the year 2000. For a variety of reasons, detailed in the department's new health personnel report to Congress, the bureau projected that by 1989-90 there would be 75,300 graduates of programs preparing individuals to become RNs and for 1999-2000, 66,400 graduates. Based on a variety of assumptions, the bureau estimated that the supply of RNs employed or available for employment by the end of 1990 would be 1.73 million. This would include 1.14 million associate degree and diploma nurses, 0.48 million baccalaureate degree nurses, and 0.12 master's and doctoral degree nurses, or 695 RNs per 100,000 people. In full-time equivalents, the number of RNs in 1990 is projected to be 581 per 100,000 people. By 2000, the total number of nurses is projected to be 2.1 million.

Ratio % of Projected Supply to Estimated Requirements-1990

		Ratio%	Requirements	Surplus (shortage)
Shortages	Child Psychiatry	45%	9,000	(4,900)
	Emergency Medicine	70%	13,500	(4,250)
	Preventive Medicine	75%	7,300	(1,750)
	General Psychiatry	80%	38,500	(8,000)
Near Balance	Hematology/Oncology-Internal Medicine	90%	9,000	(700)
	Dermatology	105%	6,950	400
	Gastroenterology-Internal Medicine	105%	6,500	400
	Osteopathic General Practice	105%	22,000	1,150
	Family Practice	105%	61,300	3,100
	General Internal Medicine	105%	70,250	3,550
	Otolaryngology	105%	8,000	500
	General Pediatrics and Subspecialties	115%	36,400	4,950
Surpluses	Urology	120%	7,700	1,650
	Orthopedic Surgery	135%	15,100	5,000
	Ophthalmology	140%	11,600	4,700
	Thoracic Surgery	140%	2,050	850
	Infectious Diseases-Internal Medicine	145%	2,250	1,000
	Obstetrics/Gynecology	145%	24,000	10,450
	Plastic Surgery	145%	2,700	1,200
	Allergy/Immunology-Internal Medicine	150%	2,050	1,000
	General Surgery	150%	23,500	11,800
	Nephrology-Internal Medicine	175%	2,750	2,100
	Rheumatology-Internal Medicine	175%	1,700	1,300
	Cardiology-Internal Medicine	190%	7,750	7,150
	Endocrinology-Internal Medicine	190%	2,050	1,800
	Neurosurgery	190%	2,650	2,450
	Pulmonary-Internal Medicine	195%	3,600	3,350
	*Physical Medicine and Rehabilitation	75%	3,200	(800)
	*Anesthesiology	95%	21,000	(1550)
	*Nuclear Medicine	N/A	4,000	N/A
	*Pathology	125%	13,500	3,350
	*Radiology	155%	18,000	9,800
	*Neurology	160%	5,500	3,150

*The requirements in these six specialties were estimated crudely after a review of the literature. They should be considered as very rough approximations, and tentative. The full GMENAC modeling methodology will be applied to them in 1980-81.

The assumptions used to project 1990 supply numbers are stated in case 2, in Notes to Figure 2, and in footnote a, Table 1.

Supply numbers for nuclear medicine are not available.

Source: Summary Report of GMENAC, 1980

Table 8.—Number of Residents on Duty September 1, by Specialty*

Specialty	1983	1984	1985
Allergy and Immunology	273	258	276
Anesthesiology	3,588	3,894	4,025
Colon and Rectal Surgery	46	43	45
Dermatology	757	782	745
Dermatopathology	34	23	27
Emergency Medicine	1,021	1,108	1,122
Family Practice	7,236	7,588	7,276
Internal Medicine	17,610	18,326	17,832
Neurological Surgery	666	688	704
Neurology	1,323	1,408	1,386
Nuclear Medicine	198	210	191
Obstetrics/Gynecology	4,631	4,621	4,630
Ophthalmology	1,572	1,569	1,561
Orthopedic Surgery	2,714	2,854	2,817
Otolaryngology	1,051	1,047	1,094
Pathology	2,472	2,470	2,358
Blood Banking	29	34	32
Forensic Pathology	33	35	49
Hematology	. . .	. . .	8
Neuropathology	47	47	41
Pediatrics	6,140	6,091	6,088
Pediatric Cardiology	125	138	140
Neonatal-Perinatal Medicine	. . .	231	325
Physical Medicine and Rehabilitation	686	727	763
Plastic Surgery	407	430	405
Preventive Medicine, General	195	198	196
Aerospace Medicine	41	54	62
Occupational Medicine	86	87	106
Public Health	27	25	26
Combined General Preventive Medicine/Public Health	. . .	58	58
Psychiatry	4,456	4,643	4,809
Child Psychiatry	533	537	580
Radiology, Diagnostic	3,231	3,202	3,132
Radiology, Diagnostic (Nuclear)	97	88	74
Radiology, Therapeutic	437	522	524
Surgery	7,882	8,207	8,070
Pediatric Surgery	32	27	24
Vascular Surgery	. . .	34	51
Thoracic Surgery	301	291	285
Urology	1,043	1,050	1,057
Transitional Year	1,377	1,480	1,520
Total	**72,397**	**75,125**	**74,514**

Source: 1986-87 Directory of Residency Programs

NUMBER OF FULL-TIME, PART-TIME, AND VOLUNTEER FACULTY IN MEDICAL SCHOOLS

	1960-61	1965-66	1970-71	1975-76	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
PRECLINICAL SCIENCE										
Full-time	4,023	5,671	8,283	10,653	12,816	13,223	13,587	13,488	13,783	14,204
Part-time	NA	NA	822	816	993	1,043	971	915	885	977
Volunteer	NA	NA	3,198	4,429	5,094	5,509	5,756	5,940	6,089	6,226
Total Preclinical Science	--	--	12,303	15,898	18,903	19,775	20,314	20,343	20,757	21,407
CLINICAL SCIENCE										
Full-time	7,201	11,447	19,256	28,198	37,716	40,148	41,261	43,023	44,996	47,193
Part-time	NA	NA	6,972	6,910	8,481	9,404	7,965	8,864	9,256	9,518
Volunteer	NA	NA	46,776	65,226	84,103	87,577	99,808	97,949	106,703	107,112
Total Clinical Science	--	--	73,004	100,334	130,300	137,129	149,034	149,836	160,955	163,823
TOTAL (Full-Time)	11,224	17,118	27,539	38,851	50,532	53,371	54,848	56,511	58,779	61,397
TOTAL (All Categories)	--	--	85,307	116,232	149,203	156,904	169,348	170,179	181,712	185,230
NUMBER OF SCHOOLS REPORTING	85	88	110	114	125**	126	127	127	127	127

*The University of Virginia did not provide data on numbers of faculty and is excluded from the 1976-77 data.

**Ponce School of Medicine did not provide data on faculty for 1980-81.

SOURCE: LCME Annual Questionnaire, Part II

Update: 10/86

Projected Growth in Medical School Clinical Faculty, 1987-1994, Based on Projections of Medical School Enrollment and Total Revenue per School.

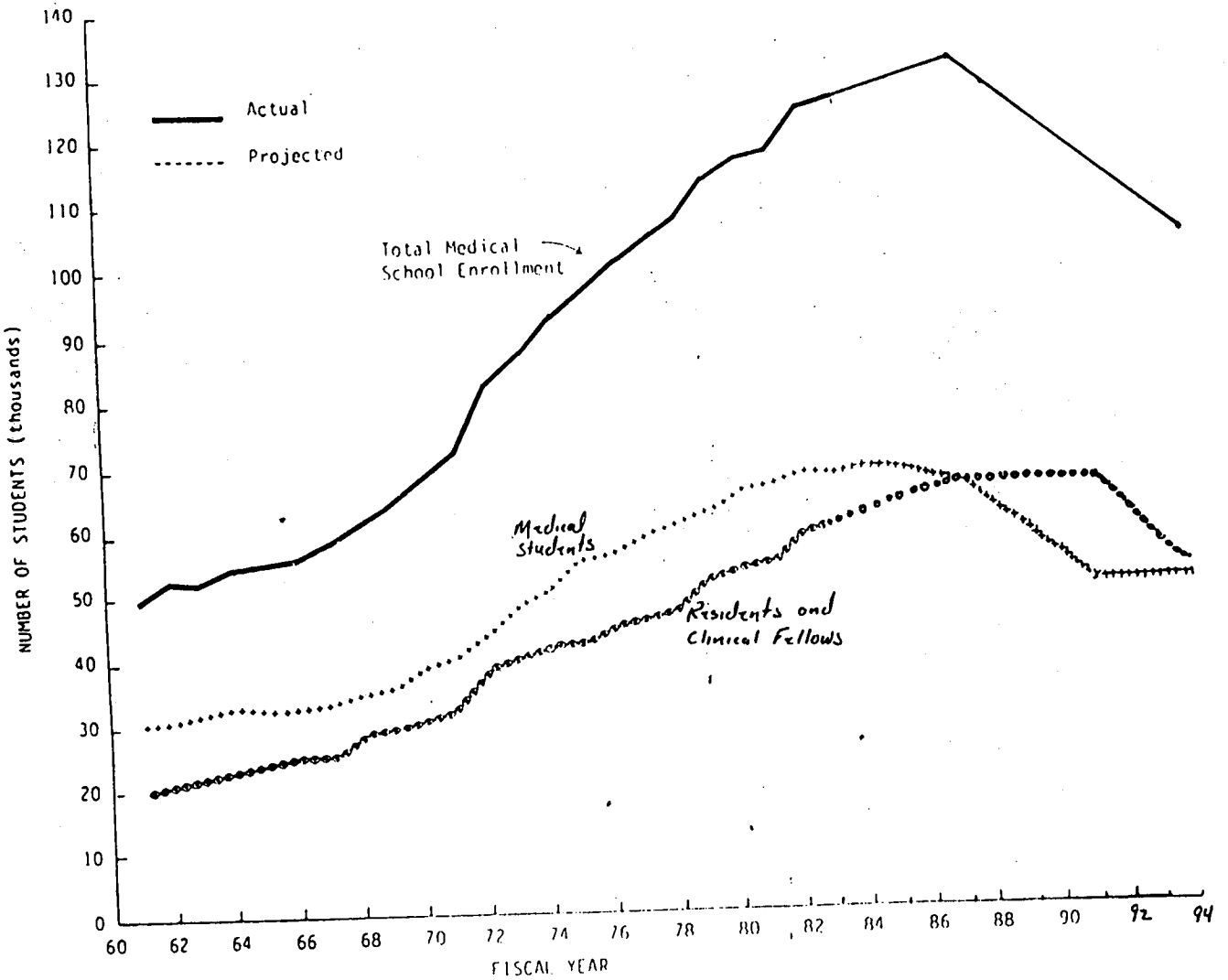
Assumptions:

1) Medical school enrollment (medical students, residents, and clinical fellows) will decrease approximately 3.5 percent per year from an estimated 131,000 in 1987 to a projected 103,000 in 1994 as a result of a 25 percent reduction in medical class size beginning in 1987-88.

2) Total revenue per school will increase approximately 4 percent per year from an estimated $34.8 million per school in 1985 to a projected $50.3 million in fiscal 1994. (Figures in 1972 constant dollars.)

Growth Rate:

The expected size of the full-time clinical faculty in 1994 is 53,200, compared to approximately 47,000 in 1986. This is an annual growth rate of 1.6 percent per year.



Medical students, residents, and clinical fellows, 1961-1986, with projections to 1994, assuming a 25 percent decrease in class size beginning in 1987-88.

Table 4 -- Trends in U.S. Medical School Revenues

(millions of current dollars)

Revenue Source	1970-71 Amount	1970-71 Percent	1975-76 Amount	1975-76 Percent	1980-81 Amount	1980-81 Percent	1982-83 Amount	1982-83 Percent	1983-84 Amount	1983-84 Percent	1984-85 Amount	1984-85 Percent
Federal Research	$ 438	25.6	823	24.3	$1,446	22.5	$1,655	20.2	$1,820	20.2	$ 2,067	20.5
Other Federal	322	18.8	398	11.7	396	6.2	415	5.1	390	4.3	403	4.0
State and Local Gov't	323	18.9	808	23.8	1,452	22.6	1,784	21.8	1,896	21.0	2,089	20.7
Tuition and Fees	63	3.7	156	4.6	346	5.4	482	5.9	545	6.0	582	5.8
Medical Service	209	12.2	609	18.0	1,850	28.8	2,626	32.1	2,980	33.1	3,315	32.9
Other Income	358	20.9	595	17.6	935	14.6	1,216	14.9	1,378	15.3	1,622	16.1
Total	1,713	100.0	3,389	100.0	6,425	100.0	8,179	100.0	9,010	100.0	10,078	100.0

(millions of constant* dollars)

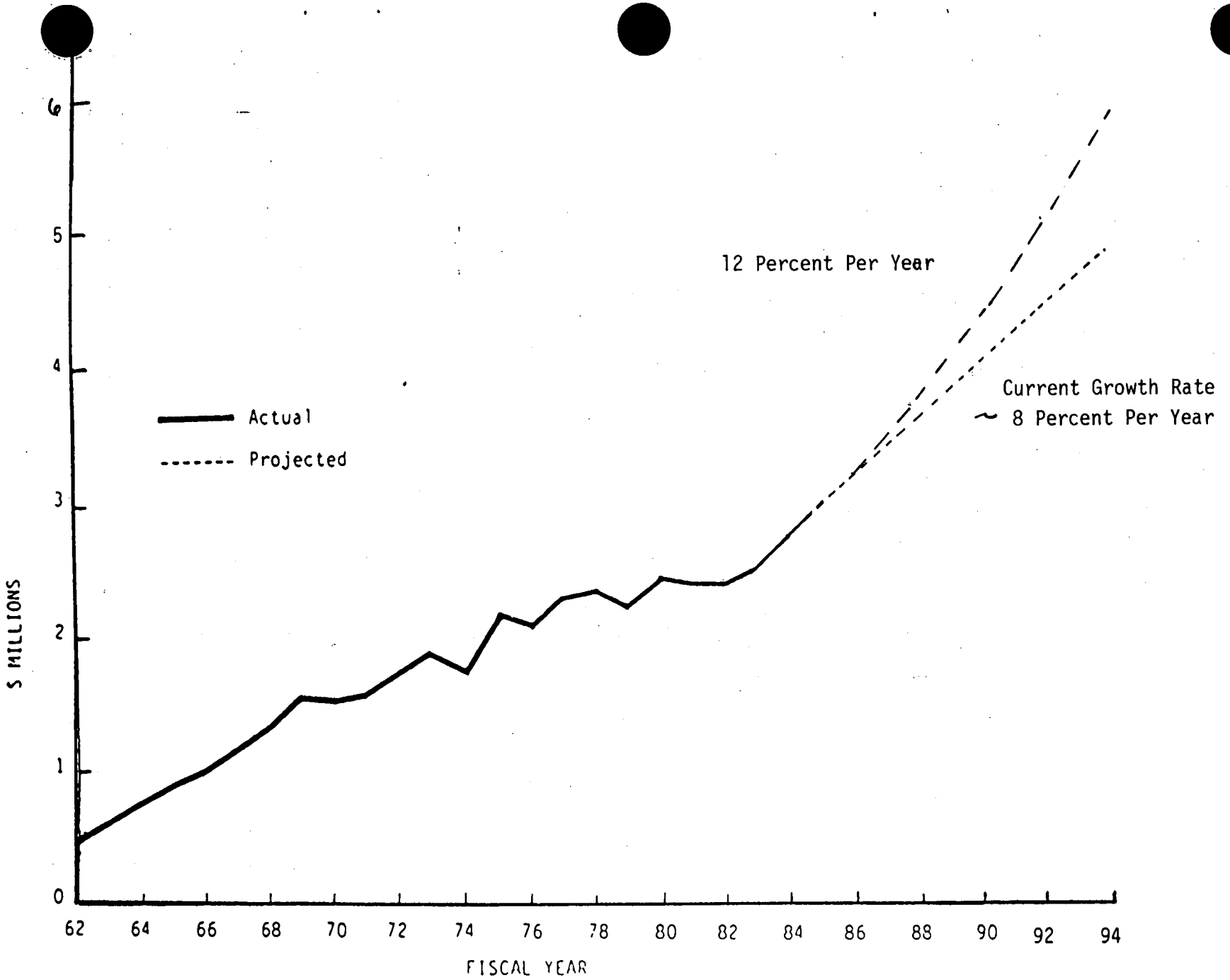
1984=100

Revenue Source	1970-71 Amount	1970-71 Percent	1975-76 Amount	1975-76 Percent	1980-81 Amount	1980-81 Percent	1982-83 Amount	1982-83 Percent	1983-84 Amount	1983-84 Percent	1984-85 Amount	1984-85 Percent
Federal Research	$1,139	25.6	$1,561	24.3	$1,863	22.5	$1,803	20.2	$1,888	20.2	$2,067	20.5
Other Federal	837	18.8	755	11.7	510	6.2	452	5.1	405	4.3	403	4.0
State and Local Gov't	840	18.9	1,533	23.8	1,871	22.6	1,943	21.8	1,967	21.0	2,089	20.7
Tuition and Fees	164	3.7	296	4.6	446	5.4	525	5.9	565	6.0	582	5.8
Medical Service	543	12.2	1,155	18.0	2,384	28.8	2,860	32.1	3,092	33.1	3,315	32.9
Other Income	931	20.9	1,129	17.6	1,204	14.6	1,325	14.9	1,430	15.3	1,622	16.1
Total	4,453	100.0	6,429	100.0	8,280	100.0	8,910	100.0	9,348	100.0	10,078	100.0

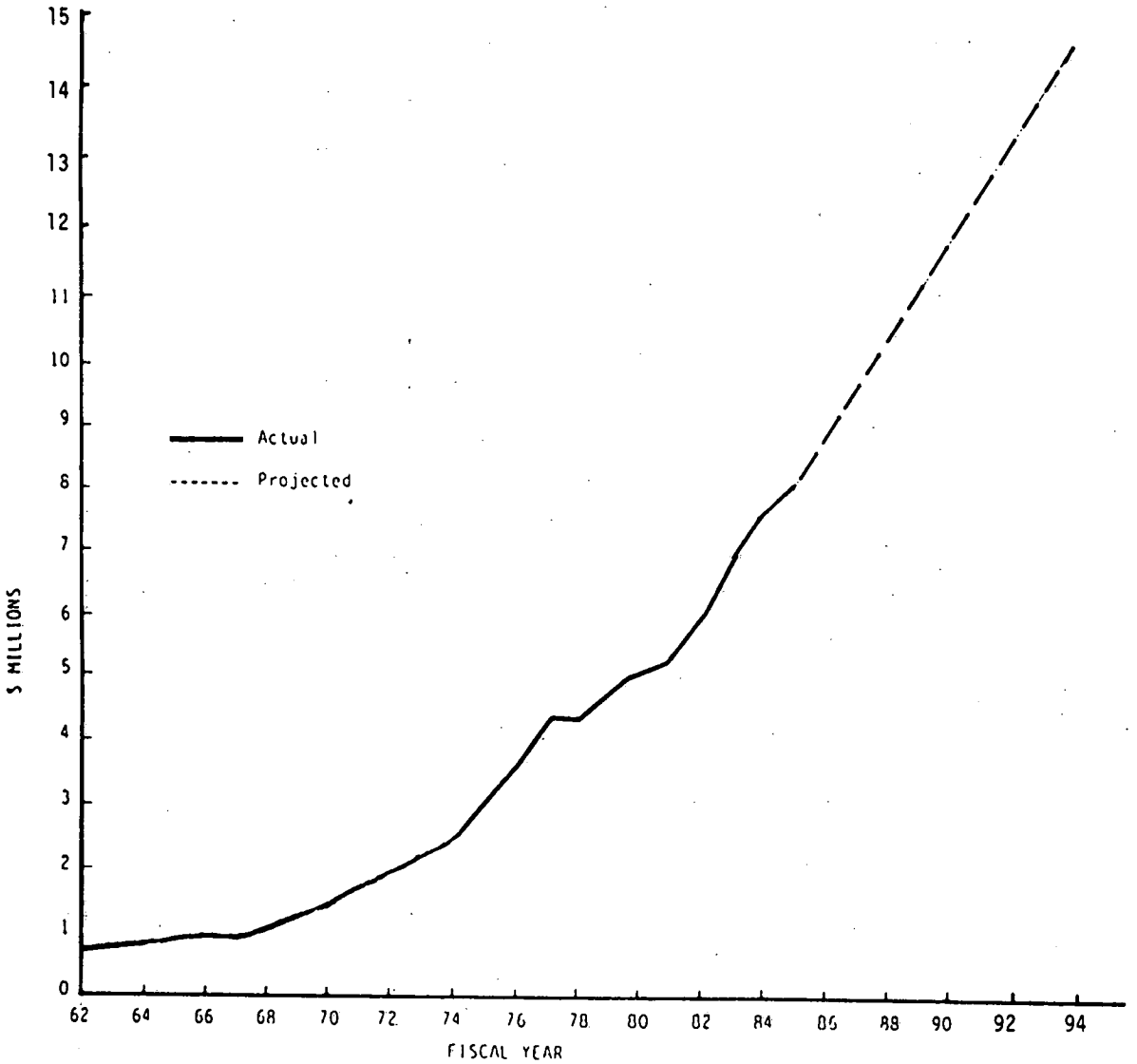
NOTE: Totals may not add due to rounding.

* Constant dollar amounts were derived using the BioMedical Research and Development Price Index.

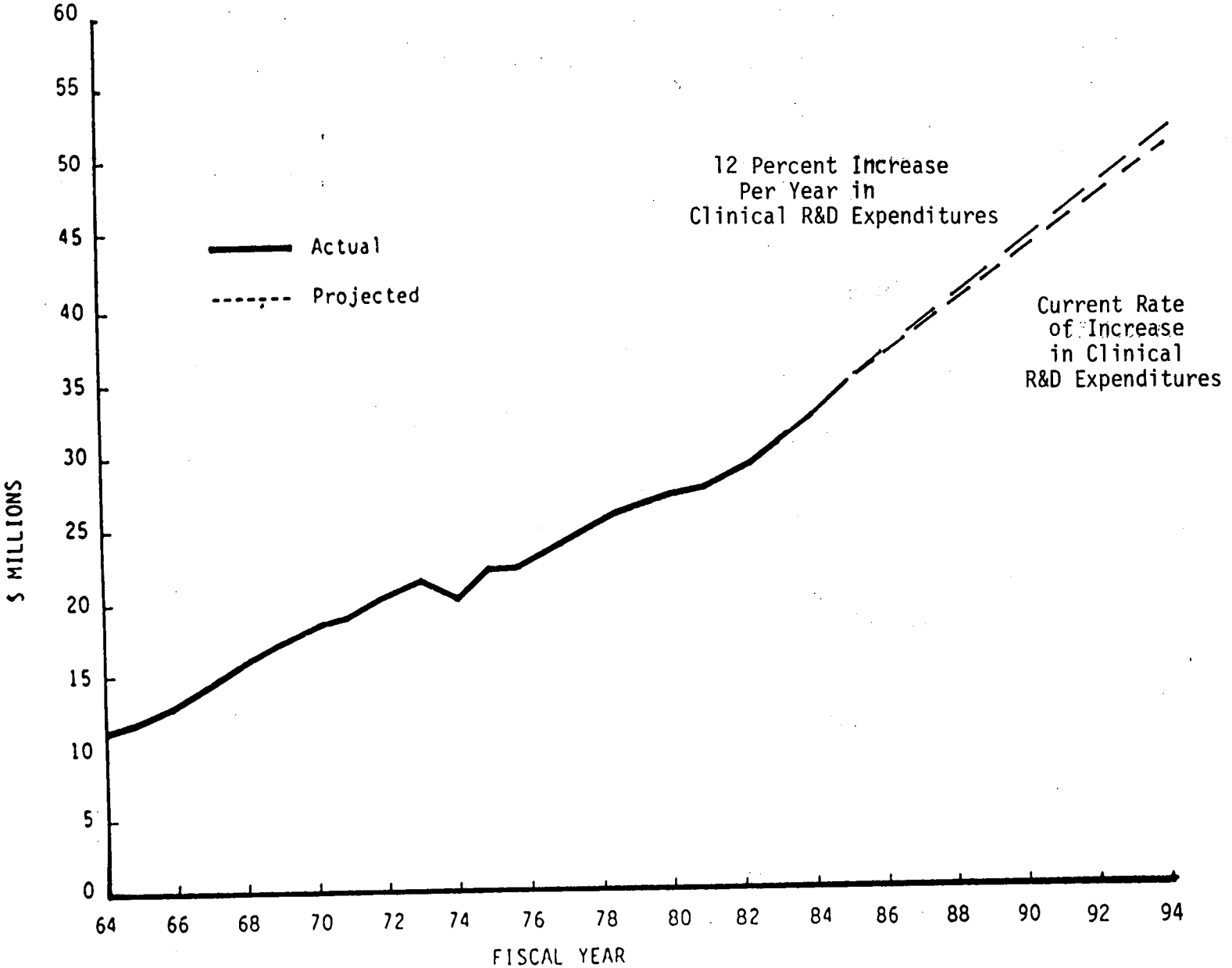
SOURCE: AAMC Division of Operational Studies



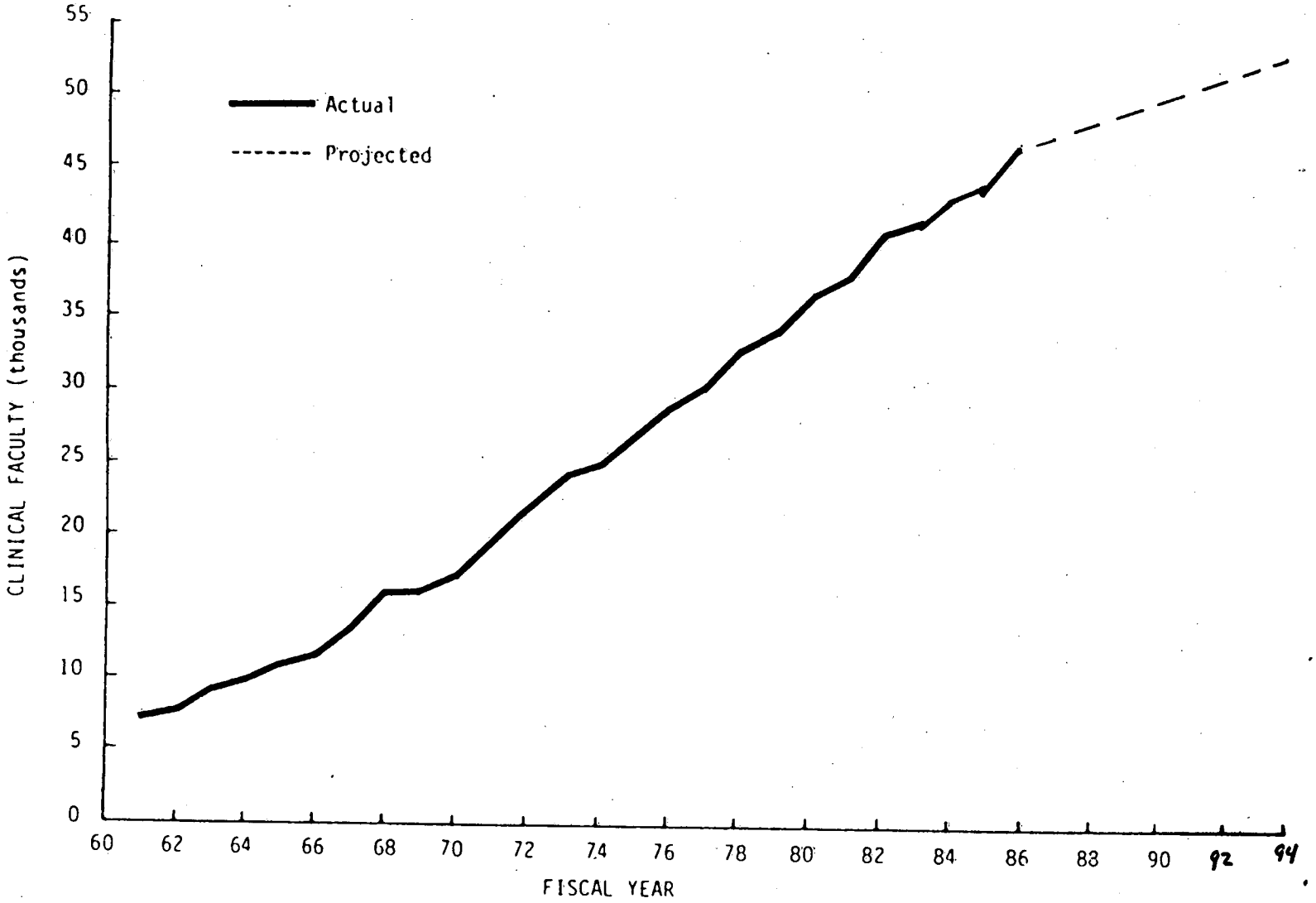
Clinical R & D Expenditures, per U.S. Medical School, 1962-85, with projections to 1994.
(In millions of 1972 constant dollars.)



Professional Service Income, per U.S. Medical School, 1962-85, with projections to 1994. (In millions Of 1972 constant dollars.)



Total Revenue per Medical School, 1964-85, with projections to 1994.
(In millions of 1972 constant dollars.)



Clinical faculty in U.S. medical schools, 1961-86, with projection to 1994 based on a 25 percent decrease in class size beginning in 1987-88.

Projected Growth in Biomedical Science Ph.D. Faculty, 1986-1994, based on projections of enrollment and R and D expenditures.

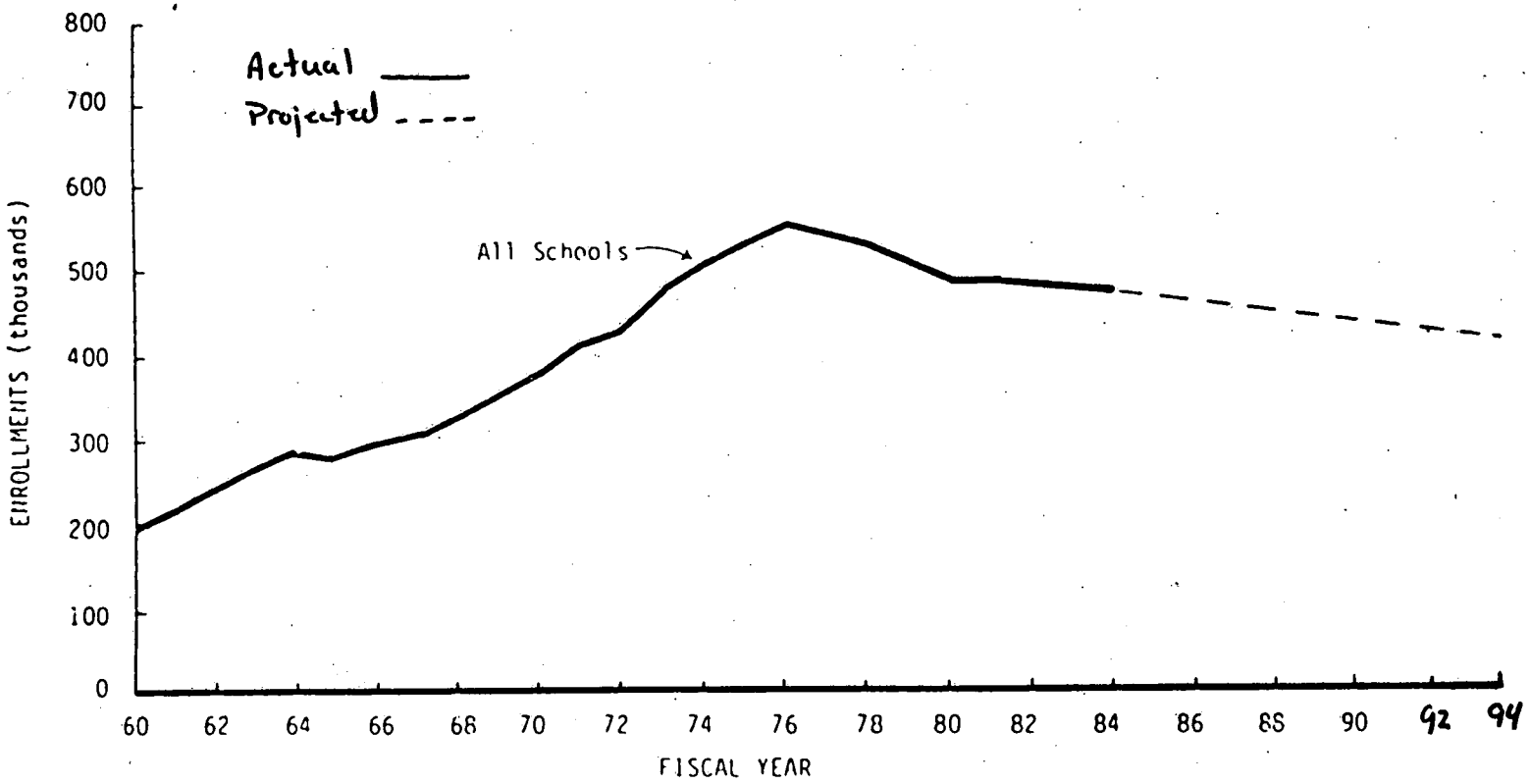
Assumptions:

1) Graduate and undergraduate enrollments in the biomedical sciences and medical and dental schools (estimated at 476,000 in 1985) will decrease approximately 1 percent per year to an estimated 426,000 in 1994. This estimate is based on an average decrease of 3.5 percent per year in total medical school enrollment (which would result from a 25 percent decrease in class size beginning in 1987-88), and a 1 percent decrease per year in undergraduate bioscience enrollment and 0.5 percent average decrease in graduate bioscience enrollment. This does not assume any increase in Ph.D. training programs.

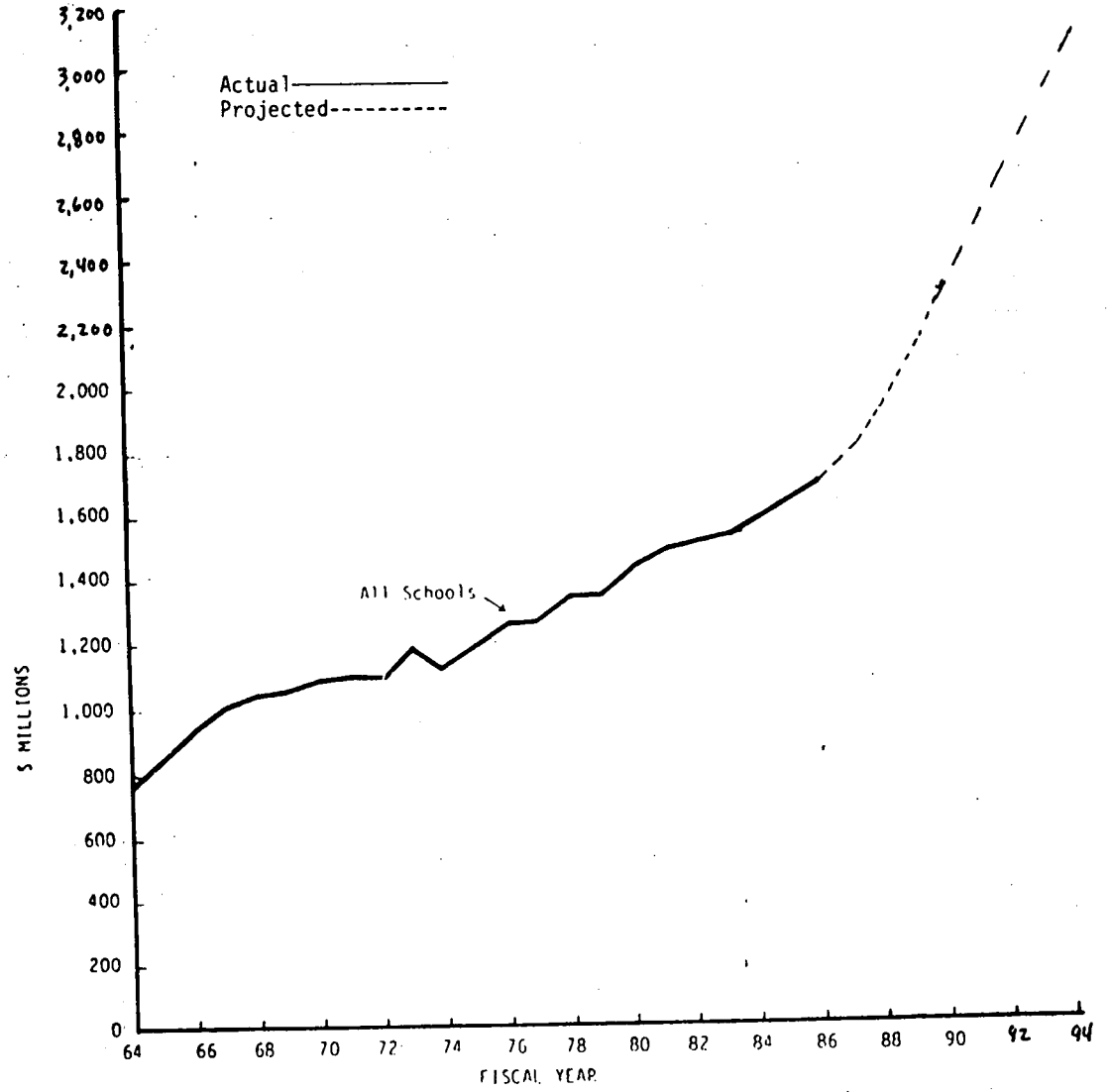
2) Biomedical science R & D expenditures at U.S. colleges and universities (estimated at $1.59 billion (1972 dollars) in 1985) will increase approximately 8 percent per year to an estimated $3.07 billion in 1994. This assumes an increase of 12 percent per year in expenditures in current dollars and an increase of 3.6 percent per year in inflation.

Growth:

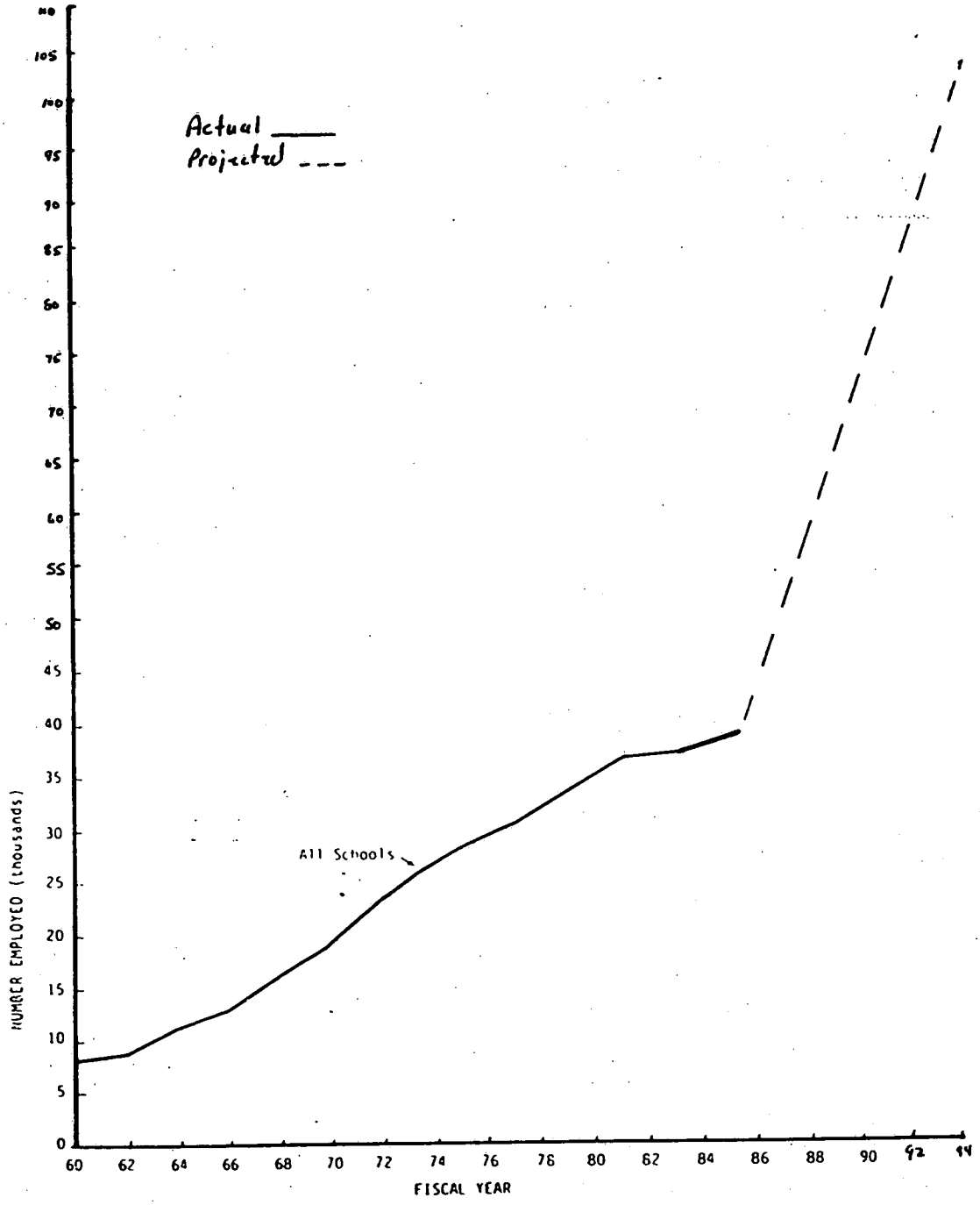
The expected size of the biomedical Ph.D. faculty in 1994 is 103,900, compared with an estimated 37,500 in 1985. This would mean an average annual growth rate of 12 percent for the biomedical Ph.D. faculty.



Total biomedical science undergraduate and graduate enrollments in colleges and universities 1960-1984, with projection to 1994



Biomedical science R & D expenditures in colleges and universities, 1964-1986, with projection to 1994 based on 12 percent annual increase in current spending (in 1972 dollars)



Ph.D.s employed in the biomedical sciences at colleges and universities, 1960-1985, with projection to 1994.

REPORT OF THE BOARD OF TRUSTEES

Report: I
(A-86)

Subject: Final Report of the AMA Task Force on Physician Manpower

Presented by: William S. Hotchkiss, M.D., Chairman

Referred to: Reference Committee C
(DeLore Williams, M.D., Chairman)

At the 1985 Annual Meeting, the House of Delegates adopted Substitute Resolution 47, which called for the creation of a task force to:

- study the supply and distribution of physicians in the United States;
- evaluate the effects of physician supply and distribution on the quality and costs of medical care in the U.S.; and
- investigate the possible dysfunctioning of market forces in the health care delivery system.

Following the Annual Meeting, the Board of Trustees appointed an 11-member Task Force on Physician Manpower. Board of Trustees Report CC, a progress report on the work of the Task Force, was filed by the House of Delegates at the 1985 Interim Meeting.

The membership of the AMA Task Force on Physician Manpower, chaired by Charles N. Aswad, M.D., from the Medical Society of the State of New York, was drawn from representatives of the relevant AMA Councils, Sections, and state medical societies. Included on the Task Force were the following:

Council on Legislation	P. John Seward, M.D.
Council on Long Range Planning and Development	Richard F. Corlin, M.D.
Council on Medical Education	William E. Jacott, M.D.
Council on Medical Service	Ronald E. Henderson, M.D.

Past House Action: I-85:239; A-85:264-5; I-84:68-72

Section on Medical Schools	Edward N. Brandt, Jr., M.D., Ph.D.
Resident Physicians Section	David Whitehouse, M.D.
Medical Student Section	Douglas D. Lind
Hospital Medical Staff Section	Thomas R. Reardon, M.D.
California Medical Association	Philipp M. Lippe, M.D.
Wyoming Medical Society	William A. Fogarty, M.D.

After a thorough review of the AMA's position on physician manpower, the Task Force concluded that current AMA policies do not adequately address many problems associated with a rapidly expanding physician supply. The Task Force believes that the AMA's manpower policies should be redirected, and it has made a number of recommendations which would allow the AMA to take an expanded role in this area.

The work of the Task Force is described in the first three sections of this report. Section I contains an overview of different methods used to measure the adequacy of physician supply. Section II discusses three broad categories of manpower policies considered by the Task Force. Section III presents the conclusions of the Task Force. Section IV presents the Board of Trustees recommendations for changes in the AMA's manpower policies. These recommendations are based on a set of Task Force proposals designed to help alleviate undesirable effects of a growing physician supply.

I. MEASURING THE ADEQUACY OF PHYSICIAN SUPPLY

The Task Force focused much of its attention on the question of whether the supply of physicians in the U.S. is adequate to meet the country's need for physician services. The Task Force found "need for physician services" and "adequacy of physician supply" to be extremely complex concepts that are not easily measured. A thorough review of the literature showed that a variety of methodologies are used to analyze this issue.

The Task Force reviewed the various methodologies used to measure the adequacy of physician supply and evaluated the advantages and disadvantages of each. These methodologies can be grouped into five broad categories. In order of their complexity, they are:

- physician-to-population ratios;
- measures of physician accessibility;
- professional and community satisfaction;
- econometric analyses; and
- professional standards.

None of these methodologies provides a completely satisfactory standard by which to measure the adequacy of physician supply. Furthermore, the various methodologies do not always produce a consistent picture about whether there are too many or too few physicians to meet the country's needs. However, in spite of their shortcomings, the methodologies play a necessary role in the formulation of physician manpower policy. They represent the different sources of information upon which policy makers base their beliefs and judgments about the adequacy of physician supply. Consequently, it is important to develop a thorough understanding of the different methodologies and to be fully aware of their relative strengths and weaknesses.

Physician-to-Population Ratios

The physician-to-population ratio is the most commonly used indicator of the adequacy of physician supply. This ratio, usually expressed as the number of active physicians per 100,000 population, is a useful index in analyzing the availability of physician services across geographic areas or between different points in time.

The chief advantages of physician-to-population ratios are that they are easy to compute and have broad intuitive appeal. Also, these ratios have been adapted for many different types of studies. For example, physician-to-population ratios can be calculated for individual specialties or for the population of a specific age-group. These types of analyses are often used to locate shortage (or surplus) areas for physicians of a given specialty. When the ratios are used in this context, care must be given to address the level of services appropriate to the locale.

Analyses of physician-to-population ratios are complicated by the fact that not all physicians have the same level of productivity and not all segments of the population have the same demand for physician services. Physician productivity is influenced by a wide variety of factors, including physician sex, age, and modality of practice. Similarly, the demand for physician services is influenced by the age and sex distributions

of the general population. To some extent, the variation in productivity and demand can be incorporated into the study of physician-to-population ratios by analyzing full-time-equivalent (FTE) physicians and by making adjustments for the effects of population composition. Comparisons of the ratios may be misleading if these factors are not taken into consideration.

Simple analyses of projected trends in the physician-to-population ratio do not take into consideration that the aging of the U.S. population may cause the demand for physician services to increase faster than the growth rate of the general population. Also, such analyses do not take into account the wide variety of factors influencing physician productivity, such as the changing modes of health care delivery, and the impact of future technological innovations.

Perhaps the most significant shortcoming in the use of physician-to-population ratios is that they do not provide normative standards for determining the adequacy of physician supply. That is, they do not by themselves indicate whether the supply of physicians is inadequate for, in parity with, or in surplus of the population's needs for physician services.

Since the early 1960s, the growth of the physician population has far outpaced that of the general population. The cumulative effect of this sustained growth has been enormous. Between 1965 and 1984, the size of the physician population increased from 292,000 to 537,000, a growth of 84%. During this time period, the number of physicians per 100,000 population rose from 148 to 223, an increase of 51%. However, this increase did not occur equally across all specialties. During the same period, the combined number of general practitioners and family practitioners per 100,000 population decreased by about 25%. The ratios also show that the physician population is distributed very unevenly with respect to the general population. In 1983, the number of nonfederal physicians per 100,000 civilian population ranged from a high of 315 in Massachusetts to a low of 122 in Alabama.[1]

The rapid rate of growth in physician supply has shown no signs of diminishing. Between 1980 and 1984, the physician population continued to grow at a rate of 3.5% per year. Even though the number of students in U.S. medical schools appears to have leveled off in recent years, the graduating classes of these medical schools are large enough to assure an expanding physician supply well into the next century. According to a recent projection by the Bureau of Health Professions,[2] the U.S. physician population will increase 32% between 1985 and 2000, and the physician-to-population ratio is expected to increase 17%. The rise in this ratio indicates that, other things being equal, a

more plentiful supply of services is available to the general population.

Measures of Accessibility

The adequacy of physician supply is often related to the public's accessibility to physician services. This accessibility depends not only on physician supply, but also on the geographic and specialty distributions of the physician population and the availability of physicians to the public — i.e., whether patients can see physicians when and where they wish. Accessibility to physician services depends on many factors, including:

- whether local physicians accept new patients;
- distance between the patient's home and the physician's office;
- lead time required for an appointment;
- waiting time in the physician's office before an appointment;
- convenience of office hours; and
- the amount of time physicians spend with patients.

Accessibility to physicians' services is an important concept in influencing the public's perceptions about the adequacy of physician supply. Nevertheless, the relationship between physician supply and accessibility is very complex, partly because the geographic distribution of physicians is much different from that of the general population.

In some rural areas, physicians are still in short supply. Patients often do not have adequate accessibility to physician services because of the long distances between their homes and physician offices. However, several studies have shown that the maldistribution of physicians has eased in recent years. A recent analysis by Newhouse, et al.,[3] shows that the expanding physician supply has led many physicians to move to small towns and cities where no physician of their specialty had practiced previously. Thus, the analysis indicates that recent growth in the physician population has improved the geographic accessibility of physicians in rural areas. However, it is not realistic to expect that continued growth in physician supply will correct completely this problem.

Physician accessibility is also determined by the availability of physicians to their patients in terms of the lead time needed for an appointment, the average amount of waiting time in a physician's office, and the amount of time physicians spend with patients during an average patient visit. Data from the AMA's Socioeconomic Monitoring System (SMS)[4,5] show that between 1982 and 1984 the average lead time needed for an appointment decreased from 6.9 to 6.2 days. However, little change is seen either in the SMS data for the amount of waiting time at the physician's office or in data from the National Ambulatory Medical Care Survey[6] on the duration of office visits. While these data on physician availability are interesting in their own right, the Task Force does not believe that they should be used by themselves for the purposes of analyzing physician supply.

Professional and Community Satisfaction

Researchers and policy makers often base their beliefs about the adequacy of physician supply on whether the general public (and/or physician population) perceives the supply of physicians to be adequate. In these studies, attitudinal surveys are used to measure a population's degree of satisfaction with existing physician supply. If both the general public and physician population are satisfied, one would conclude that the supply of physicians is adequate.

The main advantage of working with this type of data is that it provides the most direct information possible about the public's perceptions about the adequacy of physician supply. However, there are several disadvantages. Most of the public is not well-informed about the supply of physicians, and certain segments of the population may have unreasonable expectations about how many physicians can be supported in a given community.

It is difficult to interpret disagreements among different segments of the general public or between the general public and the physician population. Also, decisions have to be made about what level of satisfaction is necessary for the physician population to be considered adequate. Consequently, it is difficult to develop a normative standard on the adequacy of physician supply with this sort of attitudinal data.

Data from recent AMA attitudinal surveys[7] show that in 1984 the majority of the general public (59%) believed there was about the right number of doctors in their community; 12% thought there were too many doctors, and 26% thought there were too few. In general, the perceptions of physicians about the adequacy of physician supply were less sanguine than those of the general public. Nearly half (43%) believed there were too many physicians

in their community, and 74% believed there was a current or impending surplus of physicians in certain specialty areas in their community. These views were also reflected in analyses of individual specialties. For instance, in a 1982 study[8] of orthopedic surgeons, 42% said there were too many members of their specialty in their community and the same proportion said their surgical practices were operating below capacity.

The Task Force is also concerned about the attitudes expressed by some physicians toward the current professional environment. The Task Force believes that physicians' professional satisfaction is determined, in part, by their ability to effectively utilize the skills they have developed. The increasingly competitive environment has caused some physicians to shift from their specialty of choice and consequently has limited their professional satisfaction.

Econometric Analyses

The methodologies described above do not take into account how market forces affect the demand for medical services and influence beliefs about whether the supply of physicians is adequate. However, several recent studies have drawn inferences about the adequacy of physician supply by analyzing the relationship between physician supply and physician income. These studies can be divided into two groups.

- Analyses of "relative income" compare the average annual income of physicians to the incomes of other professions. One infers that the supply of physicians is increasing relative to demand whenever the incomes of physicians decrease relative to the salaries of individuals in comparable professions.

- Analyses of the "rate of return to medical education" consider medical education as an investment in human capital, and physician income is considered to be a return on that investment. According to these analyses, an increase in the supply of physicians relative to demand is associated with a decrease in physician income relative to the cost of a medical education.

The most recent economic analysis of physician supply, a study by Burstein and Cromwell,[9] analyzed both the relative income of physicians and the rate of return to their medical education. Unfortunately, there is little consensus among studies of this type about whether there is currently a surplus of physicians.

A general criticism of the economic approach to analyzing physician supply is that it focuses on the "demand" for physician services rather than a concept of "need." However, it is essential that "need" and "demand" be measured if a complete analysis of physician supply is to be obtained.

Professional Standards

Of the five different approaches to measuring the adequacy of physician supply, only the professional standards approach is truly normative, providing an estimate of the number of physicians required to satisfy a population's "need" for health care. The methodology for this approach, developed by Lee and Jones[10] in 1933, requires the following four pieces of information:

- estimates of how frequently each type of illness occurs in a given population;
- perceptions of a panel of experts regarding the amount and type of health services required to treat each type of illness;
- the panel's perceptions on the amount of time required to provide each type of service; and
- their perceptions of the average amount of time different types of providers spend in patient care.

The professional standards methodology was further adapted in the Graduate Medical Educational National Advisory Committee (GMENAC) study[11] to project future requirements for physicians. The GMENAC study used an "adjusted needs" based model to estimate these requirements. Panels of experts analyzed data on the prevalence of disease to estimate future need for health care services. These estimates were adjusted to take into account societal barriers and constraints preventing the delivery of these services, and then the "adjusted needs" for health services were allotted among physicians and other health professionals. Data on the content and productivity of physician practices were used to calculate future requirements for physicians in each specialty, and these projected requirements were then compared with the projected supply of physicians.

The large amount of complex information required by the professional standards approach is a major disadvantage of this type of analysis. In the process of developing estimates and setting standards, it is necessary to resolve many issues in a fairly arbitrary fashion. Decisions must be made on a wide variety of issues, including sometimes tacit assumptions about how

the quality of care varies (or is the same) among different providers. Furthermore, when the professional standards approach is used to project the need for physicians at some future date, the analyses require arbitrary assumptions about future trends in the prevalence of disease and treatment regimes. These arbitrary decisions are ultimately reflected in the projections of need.

Another difficulty with the professional standards approach is that it has traditionally been built around the concept of the epidemiological "need" for health care without proper consideration of economically determined "demand."[12] Estimates of physician requirements based on "need" will be overstated if society will not finance the physician services deemed necessary to meet those needs.

The findings of the GMENAC study give strong support to the perception of a physician surplus. Its analysis estimated that there would be a surplus of 70,000 physicians by 1990 and a surplus of 145,000 physicians in 2000. The study found that in 1990 most specialties would have an oversupply. Several specialties would be in near balance, including the primary care specialties of family practice, general internal medicine, and general pediatrics. Shortages were projected for psychiatry, physical medicine and rehabilitation, preventive medicine, and emergency medicine.

On the basis of these findings, GMENAC made 40 recommendations, including:

- a 17% decrease in medical school enrollment;
- further restrictions on the entry of foreign medical graduates into the U.S.; and
- no further increases in the number of allied health professionals being trained.

The GMENAC findings proved to be very controversial. The methodology of the study was criticized for a wide variety of reasons,[13] including: the inadequacies of the data utilized; the arbitrary assumptions embodied in models used to estimate "need" for health care; and problems in the organization of the expert panels used to estimate the requirements of services. In spite of these criticisms, the GMENAC study has proved to be the most important projection of physician requirements in recent years, setting a standard to which other such projections are compared.

Complexities In Measuring the Adequacy of Physician Supply

The application of these methodologies to the U.S. health care system produces little consensus about the adequacy of physicians supply. This lack of consensus is largely because "need for physician services" and "physician productivity" are nebulous concepts, and there is little agreement on how they should be defined or measured.

The "need for physician services" is influenced by a wide variety of factors, including:

- amount and distribution of illness;
- the sociodemographic characteristics of the general population;
- the method of health care financing; and
- population lifestyles.

Changes in these factors make it difficult to estimate future need for physician services. On the one hand, the aging of the general population will increase the need for many types of physician services. However, owing to other developments, this increase in need is not likely to be satisfied. In recent years, there has been increasing pressure to reduce benefits offered by Medicaid and Medicare due to the growing fiscal conservatism of the federal government together with increases in national expenditures for health care. Further cuts in the Medicare program may reduce the impact of the aging population on demand for physician services. In addition, healthier lifestyles of the general population and the greater use of preventive health care are also likely to reduce future demand for physician services.

The adequacy of physician supply is also determined by factors affecting physician productivity, such as the:

- number of patient visits per week;
- number of hours per week worked by physicians;
- mode of health care delivery; and
- technical innovations.

Some SMS data[5] support the notion that physician productivity has decreased in recent years. These data indicate that among physicians active in patient care, the average number of patient visits decreased 9.4% between 1982 and 1984. (The average number of hours per week in patient care activities remained almost constant during this time period.)

It is difficult to interpret the change in patient visits per week, partly because it is a very inaccurate measure of physician productivity. For example, the decline in patient visits per week may be partially compensated for by increased number of services provided during the average patient visit. Also, there are several factors to which the smaller number of patient visits may be attributed. On the one hand, the decrease in patient visits may be due to the higher level of competition that has accompanied recent increases in physician supply. Alternatively, the decrease in patient visits might be due to a change in practice style independent of competitive pressures. In this case, a lower level of productivity would absorb a part of the growth projected for the physician population.

Physician productivity is also influenced by the mode of health care delivery. The ratio of physicians to patients in health maintenance organizations (HMOs) is considerably lower than the general physician-to-population ratio for the entire U.S. Consequently, the growing prevalence of these types of payment systems will increase effective physician supply. A recent study by Steinwachs, et al.,[14] compared staffing patterns of primary care physicians in three HMOs with the national requirements for physicians projected for 1990 by GMENAC. The analysis showed that when the data from HMO staffing requirements were incorporated into the GMENAC methodology, the projected physician requirements would be reduced 20% for pediatricians and 50% for primary care physicians treating adults. These findings indicate that there would be a significant reduction in the number of required physicians in the U.S. if the entire U.S. population were to be enrolled in HMOs and if HMOs maintain their relatively low physician-patient staffing ratios.

The relationship between physician supply and productivity may also be affected by the growing proportion of women physicians, which is projected[2] to increase from 14% to 20% of the total physician population between 1985 and 2000. Women physicians have traditionally worked fewer hours and have had fewer patient visits per week than male physicians. However, recent studies indicate that differences in the productivity of male and female physicians have decreased in recent years.[15]

Technological innovations in medical care are also likely to have a strong impact on the effectiveness of physician supply, although it is difficult to predict what the net effect of these innovations will be. In some cases, the development of new procedures or treatment regimes will increase overall patient demand for physician services, thereby absorbing part of the projected physician surplus. In other cases, a newly developed procedure or treatment will replace several less efficient ones, thereby increasing the effectiveness of physician supply and aggravating the impending physician surplus.

A major concern of the Task Force is that a surplus of physicians could lower the quality and raise the costs of physician services. There are several reasons for this concern. First, it is possible that as competition among health care providers becomes more intense and as the volume of physician practices shrink, physicians may not perform certain procedures frequently enough to maintain a high level of skill. As of yet, no study has analyzed the relationship between the size of a physician's practice and the quality of care. However, in related research,[16,17] it was found that better outcomes for surgical patients were more likely in high-volume hospitals.

A second area of concern is the large amount of primary care in the U.S. that is actually provided by physicians trained in nonprimary care specialties. As competition in the health care delivery system increases, a growing proportion of specialists may start providing primary care in order to compensate for the lower demand for specialty services. Since specialists tend to charge more than generalists for comparable services, and have a more technology-intensive approach to treatment, the cost of primary care would increase without necessarily improving quality.[18]

Third, at least part of the increase in the nation's health care expenditures has been related to increases in supply. Recent studies have shown that the larger supply of physicians has resulted in higher expenditures for health care. Sloan and Schwartz[19] estimated that 22% of the increase in real annual expenditures for physician services between 1970 and 1979 was related to an increase in the physician-to-population ratio.

Finally, a significant part of the recent growth in physician supply has been due to physicians trained in foreign medical schools. The Task Force joins in the concern expressed by most observers about the quality of training provided by some foreign medical schools. Allowing physicians who do not have adequate medical training to practice in the U.S. is bound to have a negative impact on the quality of health care.

II. OVERVIEW OF PHYSICIAN MANPOWER POLICIES

A wide variety of policies has affected the supply of physicians during the last two decades. This section provides an overview of these policies. The first part describes three broad categories of physician manpower policies, and the second part describes how these policies have affected the supply of physicians since the late 1960s.

The Task Force reviewed a wide variety of physician manpower policies. These policies can be grouped into the following three broad categories based on the locus of decision-making:

- market-oriented policies, which favor decentralized decision-making by physicians and patients;
- public initiatives, in which the authority to make decisions is centralized in state and federal governments; and
- private initiatives, in which policy decisions are made by nongovernmental bodies, including health care organizations such as the AMA.

In practice, manpower policies are combinations of each of these three categories which are described in more detail below.

Market-oriented policies. Market-oriented policies rely on the discretion of individual physicians and patients to make the decisions that are best for their personal needs. Patients are free to choose their providers and the amount of care they are willing to purchase. Physicians are free to choose the mode and location of their practices and to determine the fees for the services they provide. The market also controls the number of physicians, which is permitted to increase or decrease with the attractiveness of medicine relative to comparable professions.

In the past, the AMA has advocated market-oriented policies because they offer maximum autonomy to physicians and other health providers, and they allow patients to choose their providers and the amount of care they wish to receive on the basis of their own personal preferences. Furthermore, market-oriented policies tend to be self-regulating. However, the self-regulating aspects of the marketplace work most efficiently in an environment free of external regulations, and there has not been a regulation-free medical care market in recent years.

Thus, since the 1960s, market-oriented policies have generally not limited the size of the physician population. Entry into the profession is largely controlled by policies set in the public sector (e.g., determination of class size of universities, and

immigration policies). Many of these policies artificially encourage the production of physicians, and interfere with the self-regulating aspects of market-oriented policies.

Public initiatives. Government policies influence the supply of physician manpower in a number of ways — through state and federal government subsidies for medical education, through immigration laws which determine the number of foreign-born physicians, through the licensing of physicians, and, indirectly, through government programs that have increased the demand for physician services.

While the AMA recognizes the legitimate role of state and federal governments in the health care system, it has strongly opposed government regulations which restrict the professional autonomy of physicians. Such regulations often exacerbate problems instead of eliminating them.

Private initiatives. The AMA, along with other health organizations, is involved in many different aspects of physician manpower policy. The various aspects of the AMA's manpower policy are based on the AMA's primary goal to provide quality medical care to the American people. The following three types of policies are consistent with this desire:

- working with other organizations, including state and federal governments, to develop policies that are consistent with quality health care;
- analyzing and disseminating information about trends in the health care delivery system; and
- creating programs to help individual physicians provide better care by increasing the efficiency of their practices.

In practice, the three types of policies described above have played an important part in influencing physician supply and each type of policy will continue to influence the supply and distribution of physicians in the future. The Task Force believes that efforts must be made to coordinate all three levels of decision-making so that the best aspects of each type of policy is implemented. It is therefore important that the AMA cooperate with state and federal governments and with other organizations in the private sector in their policy-making activities. It is especially important to coordinate changes in the policies affecting the medical education system.

Physician Manpower Policies Since the 1960s

During the 1960s and early 1970s, there was a consensus in both the government and the private sector that the U.S. physician population should be increased.[20] This perception was based, in part, on a series of reports indicating a serious shortage of physicians in the U.S.[21-24] and on the Medicare-Medicaid legislation of 1965-66 which was expected to greatly increase the public's demand for health care services. In response, federal legislation was passed and administrative regulations were developed to encourage the growth of the physician population. These actions included:

- the Health Professions Educational Assistance Act of 1963, which provided construction funds to expand the size and number of medical schools;

- the Health Manpower Act of 1968, which provided loans and scholarships to medical students and additional funds for construction of medical school facilities and operation costs; and

- a statement by the Department of Labor in 1965 that there was a physician shortage, thus giving preferred status to alien physicians wishing to immigrate to the U.S.

These actions were extremely effective. Between 1965 and 1975, the number of U.S. medical schools rose from 88 to 114 and the number of first-year medical students rose from 8,759 to 15,351.

In the middle 1970s, the general perception of a physician shortage began to fade. In 1976, Congress passed P.L. 94-484, which severely restricted the flow of alien foreign medical graduates into the U.S. Already at that time, many people were concerned about the possibility that the U.S. was training more physicians than needed. The GMENAC committee was formed to determine how many physicians were required to bring supply into balance with the nation's needs for physician services. During the late 1970s, the federal government stopped providing capitation payments to medical schools, thereby eliminating incentives to maintain large enrollments. In 1980, the GMENAC committee completed its Final Report, which projected a surplus of 70,000 physicians by 1990, and in the early 1980s further restrictions were placed on the entry of alien foreign medical graduates into residency programs.

The general perception of a physician shortage during the 1960s was the basis of manpower legislation which created programs

to increase physician supply. The Task Force believes that this legislation, a reaction to the problem then at hand, became the vehicle by which more physicians have been and are now being trained than can be efficiently or effectively accommodated by the U.S. health care system. Thus, the Task Force believes that the impending physician surplus is a result of the past overreaction to a physician shortage.

It is imperative that current policy-makers heed the lessons of the past. Physician manpower policies which are incorrectly formulated will be a major source of problems in the health care system 20 years hence. Care must be taken to develop policies that will not inadvertently limit the chances of certain groups from entering the physician population. The Task Force is especially sensitive to the situation of blacks and other minorities who are still underrepresented in U.S. medical schools.[24] The high cost of medical education and the growing competition in the health care system may further reduce the entry of these groups into the medical education system.

Obviously the task of reformulating manpower policies must be approached very cautiously. Nevertheless, the Task Force believes that it is necessary for the AMA to take a more active stance in the area of physician manpower.

III. CONCLUSIONS OF THE TASK FORCE

After an extensive review of the data and literature on recent trends in the supply and distribution of the physician population, the AMA Task Force on Physician Manpower reached the following six conclusions:

1. There is a surplus of physicians (regardless of specialty) in many areas of the U.S.

2. There is a surplus of physicians in some specialties in most areas of the U.S.

3. In most areas of the U.S., there is an impending surplus of physicians in most specialties.

4. The impending surplus of physicians is likely to have negative consequences on the quality and cost of patient care.

5. Given the historical developments and the current regulatory environment, market forces cannot be relied upon by themselves to assure cost-effective medical care and should be only one of many factors involved in considering manpower policies.

6. The inevitability of an increasing supply of physicians only underscores the necessity for an immediate change in AMA policies.

These conclusions were made after the Task Force reviewed a wide variety of analyses on the growth of the physician population and the effects of an expanding physician supply. As the first section of this report illustrates, there is no generally accepted single standard by which to measure the adequacy of physician supply. In the absence of such a standard, physician manpower policies must be based on the perceptions and professional judgment of policy makers together with the best available data and research on this complex issue. The analyses by GMENAC[11] and a recent report by the Bureau of Health Professions[26] indicate that the projected supply of physicians will exceed requirements in 1990.

The conclusion that the impending surplus of physicians may have a negative effect on the quality of patient care is based on the research reviewed above. These analyses indicate that the quality of care may be adversely affected by an oversupply of physicians due to the inability ofphysicians to perform procedures frequently enough to maintain their professional skills. Also, the growing physician supply will increase the nation's expenditures for health care, in part because there will be a greater tendency for specialists to provide primary care (at a higher cost than that provided by generalists).

The fifth and sixth conclusions are based on the recent history of the U.S. health care system. Market forces have not curbed the growth rate of the U.S. physician population because the U.S. health care system does not operate in a free market. According to recent projections, the physician population is expected to continue its rapid rate of growth past year 2000. The Task Force believes that the negative consequences of a physician oversupply will be magnified as the surplus of physicians increases. While the short-term growth of the physician population is unavoidable (due to the large number of medical students and residents already in the medical education pipeline), the Task Force is convinced that the negative consequences of long-term growth must be minimized.

These conclusions indicate that the the AMA should play a more active role in the area of physician manpower. The Task Force believes that the AMA should:

- intensify its efforts to analyze physician manpower issues on a continuing basis;
- encourage the U.S. medical education system to review current data and analyses and to establish appropriately total medical school enrollment;

- publicize its belief that the country's future needs will be more than satisfied through the U.S. medical education system.

- ensure that all foreign medical graduates have had sufficient preparatory education before entering into the graduate medical education system; and

- expand and strengthen AMA programs to help alleviate the undesirable effects associated with a physician surplus.

IV. RECOMMENDATIONS

Based on these conclusions, the Task Force presented several proposals for action to the Board of Trustees. The Board believes that these proposals, which are consistent with the AMA's primary goal of providing quality health care to the U.S. population, would ease the negative effects of the impending physician surplus.

The Board of Trustees makes the following recommendations based on the Task Force proposals:

Recommendation 1:

That the AMA carry out extensive, ongoing analyses on physician manpower issues. The appropriate AMA unit(s) would:

- model long-term trends and projections in the supply of physicians and their geographic and specialty distributions;

- analyze the probable impact of alternate manpower policy scenarios on the physician population;

- analyze how the need for physicians is affected by changes in the health care system, including technological innovations, demographic changes of the general population, and the changing modalities of health care delivery; and

- become the resource center and clearinghouse for physician manpower data and analyses.

The unit(s) would prepare for the Board of Trustees an annual technical report analyzing trends in the various aspects of the supply of and need for physician manpower. Each year the Board would transmit this

technical report, along with recommendations concerning AMA physician manpower policy, to the House of Delegates and all appropriate Councils and Sections.

Recommendation 2:

Existing analyses reviewed by the Task Force indicate that the physician population in the U.S. will continue to grow well into the future. The Task Force believes that the country's future needs for additional physicians will be more than satisfied through the U.S. medical education system. Further, the Task Force believes that graduate medical education for foreign-trained physicians should be limited to those who have clearly demonstrated adequate preparation in schools meeting appropriate standards. Consequently, the following four proposals were developed to reach these goals. The Board of Trustees believes that these four proposals, as a group, will provide new guidance to decision makers.

Recommendation 2a:

That the AMA encourage the U.S. medical education system to review data and analyses regarding physician supply and its impact on the quality and cost of care so that educators can appropriately establish the size of total enrollment. This could be accomplished by the following actions:

- Participation of all sectors of the U.S. medical education system in the planning and decision-making that will determine the size of the physician manpower pool in the future.

- Careful review by U.S. medical schools of the size of their current first-year enrollment. Decreases in student enrollments should not lead to decreased funding, if the quality of medical education programs is to be maintained.

If reductions in educational and training capacity are to be imposed on the medical education system, these reductions should begin with the first-year of medical school. Reductions in graduate medical education should not be made until the output of U.S. medical schools is reduced. Otherwise, U.S. medical school graduates may be unable to find funded residency slots to complete their medical training.

The Task Force believes that the current level of funding for medical education should be maintained despite potential decreases in student enrollments if the current quality of medical education programs is to be maintained. At the present time, many medical schools are not adequately funded. If future levels of funding are dependent on class size, many

medical schools would be forced to maintain existing enrollments in order to remain financially sound. Furthermore, a reduction in funding could jeopardize the research activities of medical schools.

Recommendation 2b:

That the Council on Medical Education continue to monitor closely the relationship between the size of medical school enrollments and the quality of educational programs.

The rapid changes currently taking place in the delivery and financing of medical and health care services in the United States will have a large impact on the complement of resources available to U.S. medical schools. In light of these changes, the Council on Medical Education should continue to monitor closely the relationship between the size of medical school enrollments and the quality of educational programs. Clearly, the size of medical school enrollments plays a major role in determining the quality of medical education programs and thus the accreditation status of medical schools.

Recommendation 2c:

That the AMA support repeal of federal legislation and regulations that mandate maintaining specified enrollment in U.S. medical schools, and that the AMA encourage the repeal of any state laws mandating maintenance of specified enrollments at state-supported medical schools.

Under Title 42, Sections 293 - 293f of the United States Code, the federal government provided grants and guaranteed loans to hospitals and not-for-profit institutions in order to construct and modernize facilities for the training of physicians and other health professionals. Receipt of these funds was contingent upon increases in the number of students enrolled in the educational facilities. The legislation includes provisions for the payback of funds if the increased enrollments were not maintained for 20 years following the construction or modernization. However, according to an amendment to this legislation, the Secretary of Health and Human Services has the authority to waive the payback requirements if the increases in class size are not maintained.

The Task Force recommends that the AMA support repeal of these provisions and applicable regulations. The Task Force also encourages the repeal of any state laws mandating maintenance of specified enrollments by state-supported medical schools. These actions would provide a clear expression of public policy that a medical school should not be penalized financially if a determination was made that it should reduce enrollment in order to ensure an appropriate level of quality in its educational program.

Recommendation 2d:

That the AMA continue to actively support policies that maintain appropriate quality standards and criteria for the practice of medicine. Accreditation criteria must always be based soley on reasonable quality standards and may not be used for any other purposes. Where concerns about quality are documented, accrediting bodies have an obligation to take corrective action, regardless of the secondary effects. Thus, the AMA should:

- consider the accreditation of foreign medical schools by the LCME or some other body in the private sector;
- encourage residency program directors to thoroughly screen the credentials of all applicants for residency positions to ensure that they have had sufficient preparatory education; and
- advocate the continued development of more effective state licensing and disciplinary criteria.

A recent report from the General Accounting Office[27] has expressed concern about the adequacy of the training provided in some foreign medical schools. The Task Force is especially concerned that foreign medical graduates be able to demonstrate that they have adequate preparatory training and communication skills before entering residency programs. This issue is especially important because it has a direct impact on the quality of health care in the U.S. While residents are in training, they are actively involved in patient care. Also, in most states physicians are eligible for licensure after a single year of residency training. These issues gain added importance in light of the potential reductions in the class size of U.S. medical schools. As U.S. medical school enrollments decrease, the excess capacity in the graduate medical education system should not be filled by graduates of foreign medical schools who do not have training of comparable quality to U.S. medical school graduates.

Recommendation 3:

That the AMA more actively disseminate to the general public information about the changing characteristics of medical practice and the medical community. This information would include:

- current trends in the size, distribution, and mix of the physician population;
- factors influencing the organization and management of physician practices;

- decisions facing new physicians when establishing their practices; and

- negative consequences of the impending physician surplus on quality and cost of care.

The Task Force believes that much of the general public is not well informed about many issues concerning health manpower. Many people are not aware that physician supply is growing much faster than the general population, and they do not have a good understanding of the factors influencing the size and distribution of the physician population.

These activities would provide the general public with more and better information about the medical profession. Applicants to medical schools would be able to make their educational decisions based on the best, most current information possible.

Recommendation 4:

That the AMA coordinate efforts with the state medical societies to provide state legislators and administrators with information that will allow them to determine which health manpower policies are best suited for their states. This information will be developed as a result of Recommendation 1.

As one possibility, the AMA, together with other national organizations (such as the Federation of State Medical Boards), could sponsor an annual conference for state officials to disseminate information on the physician population and to discuss policy alternatives available to state governments. By making this information more accessible, state governments would be able to choose their level of support to medical education based on the most recent data.

Recommendation 5:

That the AMA work toward a more favorable geographic distribution of physicians by making efforts to provide physicians with more extensive information with which to make their location decisions. Included in these efforts would be:

- working with state medical societies to pinpoint areas which have too few or too many physicians to meet the demands of the population; and

- strengthening current efforts to provide physicians with market area profiles of potential sites and sponsoring the Physician Placement Service.

Recommendation 6:

That medical students be provided with appropriate information so that they can best make their choice of specialty training. The AMA would facilitate this process by:

- analyzing data on trends in the specialty distribution of physicians;
- working with the national specialty societies in developing and disseminating projections of supply and need for the various physician specialties; and
- distributing information on specialty trends to medical students and residents.

Recommendation 7:

That the AMA institute programs which would assist physicians seeking a transition from a full-time practice.

The decline in the professional rewards of a medical practice for some physicians, together with the high cost of operating a practice, may cause many physicians to seek career alternatives to full-time patient care. Such physicians might decide to pursue career changes, to combine a practice with other nonpatient care activities, or to seek early retirement. The substantial fixed costs of patient care, such as the cost of professional liability insurance, can be a significant barrier to these changes.

Fiscal Note: Estimated cost for implementing these recommendations is $110,000 for the remainder of 1986, with continuing annual expenses of $198,000.

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[26]Bureau of Health Professions: Fifth Report to the President and Congress on the Status of Health Personnel in the United States, March 1986

[27]U.S. General Accounting Office: Federal, State, and Private Activities Pertaining to the U.S. Graduates of Foreign Medical Schools. September 1985.

Background Book prepared by the Division of Biomedical Research
Elizabeth M. Short, M.D., Director
David B. Moore, Staff Associate

March 10, 1987

aamc association of american medical colleges

AGENDA

FOR

COUNCIL OF ACADEMIC SOCIETIES

BUSINESS MEETING

FRIDAY, MARCH 20, 1987
8:30 A.M. - 12:00 NOON

SPANISH REPUBLIC ROOM
THE WOODLANDS INN
THE WOODLANDS, TEXAS

One Dupont Circle, N.W./Washington, D.C. 20036 / (202) 828-0400

COUNCIL OF ACADEMIC SOCIETIES

1987 SPRING MEETING

"Sizing Up The Future of Medical Education"

March 18-20, 1987
The Woodlands Inn
The Woodlands, Texas

Wednesday, March 18

4:00 - 6:00 p.m.	Registration	outside the Crockett Room
6:00 p.m.	Keynote Address	Crockett Room
7:00 - 8:00 p.m.	Reception	Rio Grande Ballroom
8:00 p.m.	Dinner	Rio Grande Ballroom

Thursday, March 19

Breakfast is available from 6:30 until 10:50 a.m. in the Woodlands Room.

8:30 a.m. - 1:00 p.m.	Council Forum	Spanish Republic Room

Lunch is available from 11:10 a.m. until 3:30 p.m. in the Woodlands Room. If you would like to have lunch in The Glass Menagerie Restaurant instead, it can be charged directly to you.

6:00 p.m.	Keynote Address	Crockett Room
7:00 - 8:00 p.m.	Reception	Terrace Room
8:00 p.m.	Dinner	Terrace Room

Friday, March 20

Breakfast is available from 6:30 until 10:50 a.m. in the Woodlands Room.

7:00 - 8:30 a.m.	CAS Administrative Board Breakfast Meeting	Travis Room
8:30 a.m. - 12:00 noon	CAS Business Meeting	Spanish Republic Room

COUNCIL OF ACADEMIC SOCIETIES
BUSINESS MEETING

Friday, March 20, 1987
8:30 a.m. - 12:00 noon
Spanish Republic Room
The Woodlands Inn
Woodlands, Texas

MEMORANDUM

TO: CAS MEMBER SOCIETY PRESIDENTS AND SECRETARIES

FROM: Frank G. Moody, M.D., Chairman, Council of Academic Societies

SUBJECT: 1987 AAMC Annual Meeting

The 1987 Annual Meeting of the Association of American Medical Colleges will be held November 6-12 in Washington, D.C. On behalf of the Council of Academic Societies, I would like to invite each of the chairmen's groups in the CAS to meet in Washington in conjunction with the AAMC and CAS annual meetings.

As you can see from the attached schedule, the format for the AAMC meeting has been changed to allow more substantive discussion of policy issues, as took place last October during the Special General Session on the Transition from Medical School to Residency. I think you will agree with me that the theme of this year's meeting -- "The Supply of Physicians: Toward a National Policy" -- is a particularly critical issue for our medical schools and academic medical centers and for their faculty.

The Association is making additional time and hotel space available for CAS member societies to hold their annual meeting, an interim session, or a board meeting in Washington during the AAMC meeting. Meeting rooms will be available on Friday, Saturday, and Sunday -- November 6, 7, and 8 -- for societies. Individual members of CAS member societies are urged to stay to participate in the AAMC activities, which will begin with a Sunday afternoon plenary and a Monday morning discussion of manpower policy.

I urge your society to take advantage of this opportunity to participate with the AAMC. I believe that such interactions will strengthen our efforts -- both individually through our constituent societies and collectively through the AAMC -- as we move forward to meet the challenges that confront academic medicine. Reservations for meeting times and rooms should be made on the enclosed forms and sent to Ms. Rosemary Choate (202) 828-0463. Additional information on the programs for the AAMC and CAS annual meetings is available from Dr. Elizabeth M. Short (202) 828-0480.

Attachment

One Dupont Circle, N.W./Washington, D.C. 20036 / (202) 828-0400

MINUTES

1986 ANNUAL MEETING
OF THE
COUNCIL OF ACADEMIC SOCIETIES

October 27, 1986
New Orleans Hilton
New Orleans, Louisiana

I. CALL TO ORDER

The 1986 Annual Business Meeting of the Council of Academic Societies was called to order at 1:35 p.m. David H. Cohen, chairman of the CAS, presided. A total of 68 individuals, representing 54 of the 82 member societies, were present. A list of member societies represented at the meeting is attached (Attachment A).

II. CAS CHAIRMAN'S REPORT

Dr. Cohen announced that beginning in fiscal 1987, Medicare will pay for its share of graduate medical education costs incurred in ambulatory care settings. He said that this was achieved without a reduction in the total length of residency training for which Medicare will pay its full share of training costs, as originally was proposed. He also noted that both ADAMHA and NIH received notable funding increases for fiscal 1987, but cautioned that Council members will need to sustain their efforts, individually through their disciplinary societies and collectively through the Ad Hoc Group for Medical Research Funding, to ensure continued adequate funding for biomedical and behavioral research.

Dr. Cohen explained that the Association has completed a survey of clinician-educator faculty tracks in medical schools. Of the 112 schools that have tenure track faculty, 61 (54.5 percent) have introduced a non-tenure track for M.D. faculty engaged primarily in patient care and teaching, and another 16 schools are considering this option.

The AAMC is initiating two projects to address the challenges of educating students in ambulatory care settings. The Association is sponsoring an invitational symposium in December to identify generic problems and solutions in adapting clinical education to ambulatory care sites. During 1987, the AAMC will conduct a study, funded by the Health Resources and Services Administration, to examine the specifics of actual transitions to ambulatory teaching in five specialties at nine different medical centers.

Dr. Cohen said that the CAS Administrative Board continues to monitor the numbers of medical and graduate school applicants. The decline in applicants continues, and the Board believes that this trend raises serious concerns about the "attractiveness" of medical and biomedical science careers, as well as the appropriate number of medical and graduate bioscience students and the

number of faculty. Dr. Cohen said that the declining applicant pool will be one of the major themes for the 1987 CAS Spring Meeting.

III. CAS SPRING MEETING PLANS

Frank Moody, chairman-elect of the CAS, described the plans for the 1987 Spring Meeting of the CAS. He said that the meeting will be held at The Woodlands, outside of Houston, March 18-20, 1987. Dr. Moody explained that the meeting format is being expanded to allow for more discussion time, and he urged all CAS representatives to attend.

IV. SELECTION OF CAS DELEGATES TO THE AAMC ASSEMBLY

Dr. Cohen described the traditional process used by the CAS to select its delegates to the AAMC Assembly, the Association's highest governing body. The CAS is entitled to 63 delegates to the Assembly. In practice, the CAS Administrative Board has routinely appointed all member societies represented at the CAS Business Meeting as delegates because there have never been more than 63 societies present.

Dr. Cohen noted that the CAS has 82 members. He explained that the Board wished to clarify the selection process and gain the Council's formal approval of it to avoid confusion when the time comes that more than 63 societies send a representative to the meeting. The Board proposed that, in the future, the Board will designate the first 63 societies that enroll for the Council meeting as the voting CAS delegates to the Assembly. The remaining societies may still attend the Assembly meeting as alternates and participate in discussions. Enrolling for the Council meeting occurs when the representative signs the roll call book prior to the Council meeting. If an Assembly meeting were ever held separately from a Council meeting, then the first 63 societies that indicate they can send a representative will be designated as delegates.

ACTION: The Council of Academic Societies unanimously adopted the following resolution from the CAS Administrative Board: "The Council of Academic Societies formally approves the process of Assembly delegate appointment whereby the first 63 societies to enroll for the Council will be designated as the voting delegates for the Assembly. The remaining societies will serve as alternates."

Dr. Cohen announced that the 54 societies represented at the Council Meeting would serve as the CAS delegates to the AAMC Assembly on October 28, 1986.

V. APPROVAL OF THE MINUTES

The minutes of the March 26-27, 1986 Spring Meeting of the Council of Academic Societies were approved as submitted.

VI. REPORT OF CAS NOMINATING COMMITTEE AND ELECTION OF OFFICERS AND ADMINISTRATIVE BOARD

Dr. Moody, chairman of the CAS Nominating Committee, announced the following slate, which the Committee prepared on June 2, 1986.

CHAIRMAN-ELECT
Douglas E. Kelly, Ph.D.
American Association of Anatomists
Association of Anatomy Chairmen
University of Southern California

BASIC SCIENCES REPRESENTATIVES
(3 year term)
Lewis Aronow, Ph.D.
American Society for Pharmacology and Experimental Therapeutics
Uniformed Services University of the Health Sciences

(2 year term)
William F. Ganong, M.D.
Association of Chairmen of Departments of Physiology
University of California, San Francisco

CLINICAL SCIENCES REPRESENTATIVES
(3 year term)
Herbert Pardes, M.D.
American Psychiatric Association
Columbia University College of Physicians and Surgeons

(1 year term)
S. Craighead Alexander, M.D.
Society of Academic Anesthesia Chairmen
University of Wisconsin

ACTION: The Council of Academic Societies unanimously approved the five individuals listed above to serve on the CAS Administrative Board.

VII. ELECTION OF NEW ACADEMIC SOCIETY MEMBERS

In accordance with the CAS Rules and Regulations, the Administrative Board submitted the following societies to the Council for membership in the Association of American Medical Colleges:

Ambulatory Pediatric Association
American Association of Pathologists
Association for Surgical Education

ACTION: The Council of Academic Societies unanimously approved the nomination of the societies listed above for membership in the AAMC.

NOTE: On October 28, 1986, by unanimous consent of the AAMC Assembly, these societies were granted membership in the Association, increasing the number of member societies in the CAS to 85.

VIII. REVISION OF CAS RULES AND REGULATIONS

On September 11, 1986, the CAS Administrative Board approved the following revision of the CAS Rules and Regulations:

Section II. Representatives

1. The Council of Academic Societies shall consist of no more than two representatives from each member Academic Society of the Association of American Medical Colleges. These representatives shall be designated by each member Society. ~~[for a term of two years; provided, however, no representatives shall serve more than four (4) consecutive terms.]~~ The length of term for each representative shall be left to the discretion of each member Society. Member Societies are encouraged to appoint at least one representative to a term of sufficient length to become acquainted with the issues facing the Council. Terms for representatives shall begin and end at the time of the Association's Annual Meeting. ~~[Each member Society shall be informed one year in advance of the expiration of the term of its representatives, asking for the names of the representatives for the subsequent term.]~~

ACTION: The Council of Academic Societies unanimously approved the revision of the CAS Rules and Regulations described above.

IX. REPORTING OF NBME SCORES

Gordon Kaye, a member of the CAS Administrative Board, reviewed a proposal, initiated by the Organization of Student Representatives, that NBME examination scores be reported solely on a pass-fail basis. Following limited discussion, the proposal was passed with dissenting votes at the June 1986 Executive Council meeting. Subsequently, concerns were expressed that such a position needs the strong backing of the constituency, and that further discussions with the governing councils were desirable.

Dr. Kaye reviewed the current system of reporting NBME scores with both the AAMC proposal and the "comprehensive exam" recommended by the NBME Study Committee for Parts I and II. He noted that the proposed comprehensive exam would still provide overall Part I and Part II scale scores to both students and schools. Individual discipline scale scores would no longer be reported, but current group performance data reports to schools would continue. Under the pass-fail proposal, only the pass-fail status for Parts I and II would be available. He also summarized the available data on the uses of the NBME examinations by U.S. medical schools during the 1985-86 year, and pointed out that over half of the schools consider NBME scores in evaluation of their educational programs.

The proponents of a pass-fail only scoring system maintain that scale scores contribute nothing to the licensure decisions that are the historical purpose of the NBME examination, focus faculty attention on the competencies and skills that are measured by the exam at the expense of other skills of equal or greater value, promote excessive emphasis on memorization and recall of information that has little relationship to the knowledge and skills students should acquire, and encourage faculty to abrogate their evaluation responsibilities to an outside agency. They also contend that scale scores are easily abused by the LCME and state legislatures interested in institutional evaluation.

Opponents of the pass-fail system contend that the NBME examinations can serve other purposes such as student and program evaluation, the medical school faculty and not an external agency writes the questions and makes judgements about the relevance of the material tested, the proper remedy for abuses of the scores is improved education on their appropriate uses, NBME scores are the single quantitative measure of competence and achievement referenced to national norms available to program directors for residency selection, and that each medical school faculty has the prerogative to determine institutional policy regarding the use of NBME scores.

It was the consensus of the Council that the value of the scale scores significantly outweighed their potential problems and that abuses of the system should not be corrected by denying the scores to all faculty; thus, NBME examination scores should not be reported solely on a pass-fail basis.

X. CONCERN WITH DECLINING AUTOPSY RATE

Aubrey Hough, representing the Association of Pathology Chairmen, reviewed some of the major benefits of the autopsy to the family of the deceased, the legal and judicial system, the public welfare, and medical practice and science.

He described the factors that have contributed to the ongoing decline in the number of autopsies being performed. These factors can be grouped in three areas: society, pathology, and medicine. Societal reasons for a declining autopsy rate include the lack of a public policy, the unavailability of fees for autopsies in a fee-for-service medical economy, family and public perceptions as to the nature of the autopsy, religious objections, and complex consent laws and policies. Factors in pathology include the poor quality of autopsy reporting, obsolete and antiquated techniques, a general reliance on "hard" numerical data, a lack of involvement by senior pathology faculty, and ignorance among pathologists of new broad uses of the autopsy. Reasons related to medicine in general include "self-delusion" about the accuracy of diagnosis, emphasis on abnormal function rather than abnormal structure, perceived legal and procedural obstacles, the pace of medical practice, poor rapport with the family of the deceased, the perception among physicians of death as failure, de-emphasis of autopsy in medical school curricula,

and ignorance among medical people of broad new uses of the autopsy.

There are several current initiatives to revitalize the autopsy. Dr. Hough noted that a recent survey of chairmen of medicine and surgery provided their concerns about the strengths and weaknesses of the autopsy services in their hospitals. Respondents to this survey indicated that the data from autopsies are being well used by the departments of medicine and surgery, and that the autopsy rate should be doubled. The survey pointed out that autopsy reporting is usually unpardonably late, and that there is a need for improved communications between the pathology department and medicine and surgery. The survey also revealed that medical students need education about the autopsy.

Dr. Hough reported that the NAS Institute of Medicine empaneled a task force that has called for a study to explore the need for a national autopsy policy. However, lacking a mandate from the public sector or pressure from a group outside of pathology, the IOM has not proceeded.

Dr. Hough also cited a joint task force of the College of American Pathologists, the American Society of Clinical Pathologists, the International Academy of Pathology, the Association of Pathology Chairmen, the American Association of Neuropathology, and the American Medical Association, which is trying to bring the declining autopsy rate to the attention of a wide variety of constituencies who can exert pressure on the appropriate legislative, regulatory, and advisory bodies (such as the IOM).

XI. REPORT OF THE AD HOC COMMITTEE ON GRADUATE MEDICAL EDUCATION AND THE TRANSITION FROM MEDICAL SCHOOL TO RESIDENCY

Dr. Cohen introduced the discussion of the issues raised in the Committee's preliminary report, which was distributed to the Association's constituency in July. He explained that the document contained in the CAS business meeting agenda was the Administrative Board's attempt to annotate the Committee's report, addressing areas of particular concern to faculty. Dr. Cohen emphasized that the Board's purpose in reviewing the report was not to state fixed positions on the specific recommendations made by the Committee, but to identify and highlight the issues underlying these recommendations to help guide the Council's discussion. He noted that the Board had divided the report into six major sections, which he asked the Council to address individually. (NOTE: These minutes summarize the major discussion points. A full CAS commentary on the Transition Report is appended as Attachment B.)

A. Institutional Responsibility

In general, the Council supported the Board's revisions in this section, including a recommendation "that each institution establish a system of academic governance for graduate medical education that will ensure that all programs adhere to national procedures."

Members of the Council agreed that there was confusion with the use of the term "national" procedures. It was pointed out that the specialties are nationally based and that they have "national" guidelines that govern residency programs in their separate disciplines. Members of the Board explained that the desired goal was a coordinated national timetable for residency selection, not the substitution of differing institutional timetables for disciplinary timetables. Council agreed.

The Council agreed with the Board that there is no rationale for a centralized application processing system within the institution.

B. Institutional Accreditation

There was consensus within the Council that there should be some type of mechanism to ensure institutional compliance with the ACGME General Requirements Section of the Essentials of Accredited Residencies, but there was no clear agreement as to the best method to achieve this. Advantages and disadvantages were cited for both the ACGME sponsoring a separate accreditation process and the residency review committees (RRCs) extending their responsibility to the General Requirements section. The relation of these mechanisms to LCME accreditation was unclear.

Concern was expressed with regard to the ACGME's apparent reluctance to undertake a separate accreditation process for the General Requirements.

The Council believes that the report should clearly state that the recommendation for a review of the General Requirements section by a separate ACGME committee was not intended to usurp the authority of the RRCs with respect to the specialty requirements.

The impact of a separate accreditation process on freestanding residency programs in community hospitals was discussed. Some representatives favored the separate review as a method to force independent programs within a discipline to participate in the residency match. Others questioned the need for both the RRC and a second accreditation committee to review a single program within a community hospital.

It was unclear whether discussion of a coordinated ACGME/LCME review implied that responsibility for GME should move to the medical school. If so, how would the residents be paid?

A question arose as to what was meant by the recommendation that "accreditation decisions of the institutional review committee [shall] be communicated to, and [shall] be binding upon, each residency review committee." An

alternative was proposed that states "the approval of the institutional review committee is a necessary but not sufficient condition for approval of the residency program."

C. Quality of Clinical Education

The Council generally agreed with the recommendations in this section that medical schools and faculty fulfill their responsibilities to scrutinize closely the clinical curriculum of their students and take the suggested steps to ensure the quality and education sequence of clerkships and electives. Council's discussion emphasized the need to encourage institutions to develop and strengthen their advisor systems to assist students in selecting electives consistent with their general education and career plans.

Recommendations that students complete the core clerkship sequence before participating in electives at other institutions generated some concern. More flexible wording (e.g., scheduling rather than completion) was suggested to avoid the appearance of advocacy for a single national curriculum and to reduce logistical problems at some institutions.

Some representatives urged a better integration of the core clinical curriculum and specialty teaching. They advocated that specialties participate in multidisciplinary program teaching as part of the general professional education of the students and not be relegated solely to career-related electives.

D. Selection Criteria

Again, the Council concurred with the major thrust of the recommendations in this section. The Council affirmed that written evaluations should be strengthened and should accurately describe the student's characteristics and abilities. It was felt that this should apply to letters from faculty as well as the dean's letters. These letters should be informative enough to permit residency candidates to be evaluated without on-site performance.

The Council felt strongly that all aspects of student performance, including basic science knowledge, are germane to resident selection, and that, when available, standardized, nationally referenced test scores should not be withheld.

Discussion focused on the legitimate purposes of outside elective clerkships versus alleged abuses by both program directors and students. It was recommended that programs "abandon the routine practice of suggesting that candidates take an elective at an institu-

tion for the sole purpose of improving their chances of selection," and that students not take multiple electives or more than one visiting clerkship in a discipline.

E. Procedural Problems

Council's discussion of the procedural problems related to the resident application and selection process identified an underlying issue; i.e., the need to integrate PGY 1 years with programs that begin in PGY 2. The problems of the transition year for the students, the specialty programs that begin with PGY 2, and the disciplines that must provide the transition year (mainly internal medicine and general surgery) are a source of tension at a number of institutions and are seen as a major obstacle in the development of a comprehensive system for resident selection.

The Council agreed that the timing of resident selection is a significant issue. Many representatives favored delaying the match until March. Some concern was expressed that the students who had non-medical partners were severely disadvantaged if results were not available before April 1. Support was also expressed for a two-stage (biphasic) match, which was seen as advantageous to both students and programs, particularly when arrangements for a PGY 1 year must be coordinated after selection to programs that begin in PGY 2. Regardless of when the match takes place, the Council agreed that the time between the submission of rank lists and the announcement of results should be shortened.

Most representatives agreed on the need for all specialties to continue to negotiate toward the goal of developing a comprehensive national system for the selection of residents that serves the needs of students and the various disciplines.

The Council also expressed support for the use of a universal application form for graduate medical education.

F. Implementation

The Council agreed with the Board's recommendation for an ad hoc group to monitor the progress of the issues identified in the report.

XII. REPORT OF THE FACULTY PRACTICE COMMITTEE

Wilton Bunch, a faculty member of the ad hoc Committee on Faculty Practice, reported on the committee's recent activities. He noted that the committee was considering making several recommendations. First, that organizational schemes for faculty practice

plans should foster the priorities of the common academic mission. Second, that practice plans need faculty members to represent faculty concerns. Third, that practice plans devote more attention to the institutional systems for appointments and awards. Finally, the committee believes that the Association should undertake a study of types of practice plans, but should avoid proscriptive recommendations.

XIII. INDIRECT COSTS POLICY

Ernst Jaffe', a member of the CAS Administrative Board, described DHHS' new policy requiring the inclusion of indirect costs rates on grant applications forwarded to study sections for review of scientific and technical merit. The Council agreed that consideration of indirect cost data by study sections is not germane to determining scientific merit and should not occur.

XIV. RECOGNITION OF OUTGOING BOARD MEMBERS

Dr. Cohen recognized the two outgoing members of the Administrative Board -- Jack Kostyo and Gordon Kaye -- and thanked them for their contributions to the Council.

XV. RECOGNITION OF DAVID COHEN

Dr. Moody thanked Dr. Cohen for his leadership as CAS Chairman during the 1985-86 year, and presented him with the traditional speaker's bell in recognition of his service to the Council.

XVI. ADJOURNMENT

The meeting was adjourned at approximately 4:45 p.m.

ATTACHMENT A

aamc association of american medical colleges

CAS ANNUAL MEETING

October 26-27, 1986

Societies represented at the meeting

Society	Representative
Academy of Clinical Laboratory Physicians and Scientists	S. T. Shaw, Jr.
American Academy of Ophthalmology	Joel Sacks
American Academy of Orthopaedic Surgeons	Frank Wilson
American Association for the Surgery of Trauma	Donald S. Gann William Drucker
American Association for Thoracic Surgery	Judson Randolph
American Association of Anatomists	Douglas E. Kelly William P. Jollie
American Association of Chairmen of Departments of Psychiatry	Robert Leon
American Association of Directors of Psychiatric Residency Training	William Sledge Stefan Stein
American College of Physicians	Marvin Turck
American College of Psychiatrists	Robert Williams
American Federation for Clinical Research	David Hathaway Gary Hunninghake
American Neurological Association	Frank Yatsu
American Pediatric Society	Myron Genel
American Physiological Society	George Hedge Jack L. Kostyo
American Psychiatric Association	Daniel X. Freedman Herbert Pardes

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Society	Representative
American Society for Clinical Nutrition	George A. Bray
American Society for Pharmacology and Experimental Therapeutics	Lewis Aronow
American Society of Biological Chemists	William Whelan Robert D. Wells
American Society of Hematology	Ernst R. Jaffe'
American Surgical Association	Judson Randolph
Association for Academic Psychiatry	Louis Rittelmeyer David Preven
Association for Academic Surgery	Caliann Lum
Association for Medical School Pharmacology	James W. Fisher C. Paul Bianchi
Association for the Behavioral Sciences and Medical Education	Beverley D. Rowley
Association of Academic Departments of Otolaryngology	Robert Kohut
Association of Anatomy Chairmen	Gordon Kaye Douglas Kelly
Association of Chairmen of Departments of Physiology	William F. Ganong
Association of Departments of Family Medicine	Harry Mayhew Thornton Bryan
Association of Directors of Medical Student Education in Psychiatry	Chase Patterson Kimball
Association of Medical School Pediatric Department Chairmen	Thomas K. Oliver
Association of Orthopaedic Chairmen	Gerald Laros Wilton Bunch
Association of Pathology Chairmen	Aubrey J. Hough Vivian Pinn-Wiggins
Association of Professors of Dermatology	Peyton Weary
Association of Professors of Medicine	Gerald S. Levey

Society	Representative
Association of Professors of Gynecology and Obstetrics	Robert V. Cummings
Association of Program Directors in Internal Medicine	Richard Rieselbach Eleanor Wallace
Association of University Anesthetists	Milton Alper
Association of University Professors of Neurology	Mark Dyken
Association of University Professors of Ophthalmology	Joel Sacks Claude Cowan
Association of University Radiologists	A. Everette James, Jr. Paul J. Friedman
Endocrine Society	Jo Anne Brasel
Society for Neuroscience	David H. Cohen Joe Dan Coulter
Society for Surgery of the Alimentary Tract	Lawrence Way
Society of Academic Anesthesia Chairmen	S. Craighead Alexander Robert M. Epstein
Society of Chairmen of Academic Radiology Departments	A. Everette James, Jr.
Society of Critical Care Medicine	S. G. Hershey
Society of Surgical Chairmen	Frank Moody
Society of Teachers of Emergency Medicine	Richard M. Nowak Glenn C. Hamilton
Society of Teachers of Family Medicine	Jack Colwill
Society of University Otolaryngologists	Lee Harker
Society of University Surgeons	Dana K. Andersen
Society of University Urologists	William L. Parry
Surgical Infection Society	Roger Yurt
University Association for Emergency Medicine	Thomas Stair Michael Callaham

ATTACHMENT B

COMMENTARY OF THE COUNCIL OF ACADEMIC SOCIETIES ON THE PRELIMINARY REPORT OF THE AD HOC TRANSITION TASK FORCE

Discussion of the preliminary report at the September Administrative Board meeting and October Council business meeting was thorough and thoughtful. Council members benefited in their deliberations from prior discussions within the leadership of a number of the academic disciplines and by the comments offered in the Special General Session at the Annual Meeting. Discussion focused on the Report's recommendations in six broad areas. In some there was consensus, in others, modifications were suggested and finally, several areas were delineated in which the Council desired further discussion by all concerned parties before any final recommendations were made.

1. Institutional Responsibility

The Council agreed that collective responsibility of all participants in GME was desirable and would be beneficial in a wider context than just overseeing compliance with traffic rules or paperwork for resident selection. As GME faces increasing pressures from limited resources and potential manpower constraints, some process of collective governance of GME should evolve. An academic governance mechanism which ensures representation of all disciplines involved in GME as well as institutional representatives could best address such key issues as resource allocation, integration of training sites and quality control as well as adherence to rules for resident selection.

With regard to processes for resident selection, the Council was concerned that as presently phrased, the report appeared to suggest replacement of the current system of disciplinary-based resident selection procedures with a welter of individual institutionally-based procedures still lacking in national coordination. To the extent that a coordinated national selection system could be established which would meet the needs of the individual GME disciplines, schools and students (see Section 5), institutional as well as disciplinary responsibility for collective compliance would be useful. Council members, largely based in academic-intensive institutions with integrated multihospital programs within a discipline and an excess of candidates to resident positions, did not see the virtue of collectively processing large numbers of applications for separate disciplines centrally. The merits of integrated selection of candidates within a discipline across multiple affiliated hospitals, of multispecialty integration of candidate selection for transitional year internships, and of better integration of PGY1 selection with PGY2 or later specialty residency programs were affirmed.

2. Institutional accreditation

The Council felt that institutional adherence to the ACGME General Requirements for Approved Residencies was desirable and supported the notion that an appropriate system for academic governance of GME would enhance institutional compliance with these principles. While enforcement of the General Essentials would improve the quality of the GME program in some institutions, Council members expressed doubt that creating a process

for institutional accreditation of GME was germane to addressing problems in the Transition.

While not intrinsic to solving problems at the Transition, this section deserved separate debate on its own merits. The recommendation of separate ACGME accreditation of each institution was addressed. Some expressed support for an ACGME review separate from RRC program accreditation, but were concerned what relationship this would bear to the responsibilities and prerogatives of the individual RRCs. The notion was advanced that ACGME accreditation, rather than being "binding upon" each RRC, should be a "necessary but not sufficient condition "for approval of a residency." The relationship to LCME accreditation was unclear.Concern was expressed that a separate process would be topheavy in settings with few, small programs. The apparent reluctance of ACGME to assume this burden, as expressed by Dr. Riddick at the Special Session, was noted. Others saw merit in the concept of incorporation of compliance with the General Essentials into each RRC accreditation, while acknowledging that this method did not provide a unified judgment on which to base institutional responsibility for identifying resources to meet accreditation standards. In short, the Council recomended that further exploration and dialogue between all parties to GME was needed before this issue was ripe for specific recommendations.

3. Medical School Problems/Quality of Clinical Education

The Council concurred with the intent of recommendations in this section to make it the responsibility of each medical school and

its faculty to scrutinize closely the clinical curriculum of its medical students and take the suggested steps to insure the quality and educational sequence of clerkships and electives. This section could be strengthened by a recommendation to develop/strengthen the advising system in each school to assist students in elective selection consistent with their general education and career-plans. The recommendation to complete the core clerkship sequence before any away electives generated some concern. The concept was supported, but more flexible wording was recommended to avoid the appearance of establishing a single national curriculum and to avoid logistical problems in some schools. Finally, some members urged a better integration of the core clinical curriculum and specialty teaching; specialties should participate in multi-disciplinary program teaching as part of general professional education and not be relegated only to career-related electives.

4. Selection Criteria Problems

The Council agreed that written evaluations of students should be strengthened and accurately portray the student's characteristics and abilities. It was felt that faculty letters and "Chairman's letters" as well as Dean's letters should follow this practice and that such letters should be informative enough to permit residency candidates to be evaluated without on-site performance. The Council felt strongly that where standardized, nationally referenced test scores were available, they should not be withheld and that all aspects of student performance, including basic

science knowledge, were germane to resident selection. The problem of "audition electives" should be handled by recommending that students not take multiple electives, or no more than one visiting elective in a discipline.

5. Procedural Problems

This section, which deals with the actual procedures for matching medical students to residency positions was the subject of much thoughtful interchange. The Council appreciated the CAS Board commentary on this section and their own comments both at the Special Session and the CAS Business Meeting reflected the sense that an avenue has been opened for a constructive dialogue during which mutual concerns can be shared and from which may eventually come proposals for selection of residents from the medical school senior class which better integrate and meet the needs of all parties.

Council members overwhelmingly agreed that shortening the NRMP match process and moving a condensed application-to-match sequence to a later time in the senior year would be very useful and should be recommended. They felt that this goal could be pursued vigorously even under the present system of separate matches for PGY2 programs. If a truncated NRMP timetable were achieved, the application process for all programs could begin with a later release of medical school letters, and a better evaluation of students. Some concern was expressed that an intern match date of April 1 was so late as to be a burden to the family and career plans of student's partners.

The problem in the current selection processes was clearly identified as that of coordinating PGY2 specialty resident selection with PGY1 assignments. All specialties selecting from graduating students for PGY2 or later residency positions were willing to continue discussions aimed at achieving a better integration of these selection processes. A range of issues was identified which could form the agenda for such discussions:

a) the problems of different programs within a discipline awarding residency positions at different times,

b) the desire of many PGY2 programs to have PGY1 positions in other disciplines at their disposal so as to provide program continuity for their residents,

c) the possibility that a biphasic match best meets the needs of applicants and programs and should be continued with better coordination,

d) the concern that any attempt to match some students before others creates a psychic problem of herd stampede,

e) the concern that specialties now matching through small, separate computer programs were vulnerable to mechanical or personnel failures,

f) the desire to simplify the application and interview process for students and programs with PGY1/PGY2 needs,

g) the value of having all student matching under the aegis of one management for ease of administration and central data collection,

h) the growing belief that an integrated system, whether it required one or more match sequences, could be derived if the needs of programs and students were well understood,

i) the possibility that if an integrated system could be developed, all programs within a discipline could be constrained to participate by making participation part of the General Essentials requirements.

The CAS/AAMC was seen as a possible convener of such deliberations which should take place before any more specific recommendations about the role of NRMP or the use of match(es) were forthcoming.

Lastly, a universal application form was felt to be useful. The form should be periodically reviewed by program directors so that it best meets their needs and minimizes the need for supplementary forms.

6. Implementation

The recommendation to convene a group representing all parties involved in the transition under AAMC auspices was supported. This overview group was seen as different from the working group on the match process suggested under Section 5.

1987 CAS NOMINATING COMMITTEE

Representatives from CAS member societies are reminded that the nomination process for the CAS Administrative Board and the position of chairman-elect of the Council are open. The CAS Nominating Committee will meet via conference call in late May. Individual representatives are encouraged to submit recommendations regarding possible Board members. Representatives can submit the names of potential nominees directly to members of the Nominating Committee or send written nominations to the CAS office prior to the conference call. This year, the Nominating Committee will select a clinical scientist as chairman-elect and will select nominees for three other positions on the Board.

Members of the 1987 CAS Nominating Committee are:

Douglas Kelly, Ph.D., Chairman - *American Association of Anatomists*
Paul Bianchi, Ph.D. - *Association for Medical School Pharmacology*
Paul Friedman, M.D. - *Association of University Radiologists*
Gordon Kaye, Ph.D. - *Association of Anatomy Chairmen*
Jack Kostyo, Ph.D. - *American Physiological Society*
Frank Moody, M.D. - *Society of Surgical Chairmen*
Joel Sacks, M.D. - *American Academy of Ophthalmology*

The Ad Hoc Group For Medical Research Funding

February 20, 1987

MEMORANDUM

TO: Interested Parties

FROM: Steering Committee of the Ad Hoc Group for Medical Research Funding

RE: Summary of FY 1988 Budget Proposal for NIH and ADAMHA

The Ad Hoc Group's FY 1988 booklet will be available the week of March 2. At that time, one copy will be sent to groups that endorsed the proposal last year or have already signified support for the FY 1988 proposal. Additional copies of the brochure can be purchased by contacting Mr. David Baime, Executive Secretary of the Group, at (202) 828-0472.

The Steering Committee is releasing details of its FY 1988 proposal now so that supporters will have an opportunity to influence the deliberations of the House and Senate Budget Committees. Indications are that mark-up in both committees will occur no later than mid-March, making immediate contact with members or their staffs of these two committees essential.

Overview of Proposal

The Group's FY 1988 recommendation embodies the first annual step of a 5-year blueprint to seize upon the scientific opportunities available to NIH and ADAMHA. The Steering Committee believes it has the duty to inform the Congress of what is necessary for the national research institutes to fully exploit opportunities for improving the nation's health. The Steering Committee arrived at its recommendations after detailed consultations with directors of 11 of NIH's institutes as well as with the Administrator of ADAMHA; it believes that its proposal is grounded in sound scientific reality and is on the same scale as the Administration's request, both for FY 1988 and the next five years, for the National Science Foundation.

NIH

FY 1987 Appropriation	FY 1988 Current Services	FY 1988 Ad Hoc Request
$6,181	$6,842	$7,452 without facilities $7,690 with facilities

($ in millions)

The Ad Hoc Group's proposal for NIH is structured to achieve a 50% award rate for research project grants by FY 1992, the last year of the 5-year plan.

One DuPont Circle, N.W., Suite 224, Washington, D.C. 20036 (202) 828-0525

For FY 1988, the proposed budget would permit an award rate of 38%, sufficient to fully fund about 7,000 research project grants. The numerous downward negotiations that have occurred in recent years would be avoided.

With the few exceptions noted below, funds for other NIH mechanisms would be increased by the same relative amounts in FY 1988 as would research project grants. This would ensure necessary expansion in a number of key areas -- research centers, general clinical research centers, research training, biomedical research support grants -- and would allow for the maintenance of the current program balance, which a proponderance of institute directors believe is appropriate. This maintenance of current program balance translates into a 20% increase for most NIH mechanisms. The Ad Hoc Group is also proposing funding increases above the 20% level where they are especially needed. These amounts are stated in dollar terms below:

- o research training ($21 million) -- this increase is crucial because it will allow NIH to support the training of investigators necessary for an expanded research program. It will also provide growth in highly regarded clinical training programs, research career awards, and N.R.S.A. stipends.

- o instrumentation ($16 million) -- this area of great documented need received specific attention from Congress in FY 1987; the Group is requesting that a new infusion of funds be provided in FY 1988.

- o research facilities ($238 million total) -- the Ad Hoc Group believes that the problem of deteriorating research facilities must be addressed. It proposes a "down-payment" of $200 million in this area, an amount critically needed to renovate existing facilities, not to expand the existing inventory of research space. The Ad Hoc Group is also requesting a large increase in funding for animal facilities to meet demands caused by stricter federal standards and a backlog of deferred maintenance. The Group is segregating its request for these funds since NIH does not currently have general research construction authority. Restoring such authority is a priority for the Group.

ADAMHA

FY 1987 Appropriation	FY 1988 Current Services	FY 1988 Ad Hoc Request
$475	$515	$590

($ in millions)

The Group's request for ADAMHA for research into mental and addictive disorders is consistent with the recommendation of the Institute of Medicine of the National Academy of Sciences. The proposal would fund at full cost approximately 40 percent of all approved research project grants (about 770 new and competing grants) as a first step towards achieving a 50 percent award rate by FY 1992. The Group is also advocating the support of 1,300 ADAMHA trainees. Research facilities would be innovated and modernized; research centers, research career development awards, and other major mechanisms would receive 20 percent increases.

DEVELOPMENT OF AAMC POSITION ON MANPOWER POLICY

At the 1986 officers' retreat participants were asked whether and how the Association should be engaged in the debate to develop a national health manpower policy. The officers believed that the Association should begin as early as possible to exert leadership in developing a consensus in the academic medical community on future physician supply and distribution.

Presently the AAMC has a collection of uncoordinated policy statements on health manpower, developed in the 1970s, that are not relevant to today's concerns. The Association's last detailed commentary on health manpower was its 1981 response to the final report of the Graduate Medical Education National Advisory Committee.

To develop its manpower position, the Association proposes to establish a Task Force on Medical Manpower. The retreat participants recommend that the Task Force consider establishing subcommittees on physician supply, training research personnel, implications for patient services, and other subcommittees as needed.

Additionally, the Task Force is charged with considering the anti-trust implications of Association action in this area and developing legislative positions as necessary to achieve AAMC goals. The work of the Task Force will provide the focus for the Association's 1987 annual meeting.

The specific charges to the Task Force and its subcommittees will be developed after the Executive Council meeting to reflect members' views about appropriate questions to be included within the purview of each group.

RECOMMENDATION

That the Executive Council adopted the following statement:

> The Association of American Medical Colleges believes that a critical evaluation of the numbers and types of physicians being trained to serve this country's future medical needs is required. To this end, the AAMC is establishing a Task Force on Medical Manpower charged with reviewing physician supply and production, considering the necessary manpower mix for provision of services in teaching hospitals, facilitating access to health care services, and assuring a sufficient number of appropriately trained researchers in the biomedical and behavioral sciences.

CAS

COUNCIL OF ACADEMIC SOCIETIES

ASSOCIATION OF AMERICAN MEDICAL COLLEGES
1 Dupont Circle, N.W.
Washington, D.C. 20036

January 16, 1987

TO: CAS Member Societies
FROM: Elizabeth M. Short, M.D.
SUBJ: Fiscal 1987 NIH and ADAMHA Budgets

URGENT ACTION REQUESTED

On January 5 the administration publicly announced the president's proposed budget for fiscal 1988. This budget contains a controversial proposal that would significantly reduce the research funds available to the National Institutes of Health (NIH) and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) for the current 1987 fiscal year.

The president's fiscal 1988 budget for the NIH proposes to "extend the availability" of $334 million from the current fiscal 1987 appropriation until fiscal 1988 and expend these funds only in fiscal 1988. A similar proposal to shift $5 million from fiscal 1987 to fiscal 1988 is contained in the president's 1988 ADAMHA budget.

The administration proposes to accomplish the $334 million reduction in fiscal 1987 NIH budget by reducing the number of competing research project grants awarded in 1987 by 700 to a total of 5,700 (which will "save" approximately $115 million) and by reducing the size of noncompeting continuation research project awards ($219 million).

Unlike previous years, the administration's proposal is not a rescission nor a deferral. Instead, the president's request for supplemental appropriations for fiscal 1987, which was forwarded to Congress on January 5, contains a request to extend the availability of 5.5 percent of the funds appropriated for the NIH for fiscal 1987 into fiscal 1988 and a proposal to amend the conference version of H.R. 5233 -- the Labor-HHS-Education appropriations act for fiscal 1987 -- to delete the congressional mandate for 6,200 new and competing research project grants for fiscal 1987 and substitute 19,000 total research project grants in fiscal 1987. The administration has promised that no action will be taken to implement this proposal until the Congress enacts it.

At the same time, the NIH is confronted with the managerial question of whether to continue to obligate the $334 million in anticipation that Congress will reject the administration's proposal. One option that the NIH is considering to conserve the $219 million in the noncompeting budget line would be to immediately impose across-the-board reductions in all noncompeting research project awards with start dates after January 1, 1987, even though the enabling legislation has not been approved. We estimate that these reductions would average 10 percent; however, some institutes may have to implement reductions of 15 to 20 percent. There are concerns that the Executive Branch, for reasons of "prudent management," may soon implement this policy as if it has already been approved by Congress.

The administration has described its proposed budget as an effort to provide a long-term policy of "stable and sustainable support for basic biomedical research;" moreover, this shift of funds into fiscal 1988 is being characterized as a 2-year availability, which ignores the fact that funds moved into fiscal 1988 cannot be spent in fiscal 1987, as originally intended by the Congress.

The academic and scientific communities must act immediately to persuade the Congress to reject the administration's proposal as quickly as possible to avoid severely disrupting the nation's research effort in the biomedical and behavioral sciences. The AAMC, in conjunction with the Ad Hoc Group for Medical Research Funding, is preparing a letter to Congress requesting immediate action to reject this proposal and preserve intact the fiscal 1987 appropriation provided by the Congress. CAS member societies that wish to endorse this letter should contact my staff associate David Moore at (202) 828-0482 upon receipt of this memo.

CAS societies also may wish to have their members contact their own congressmen to request action on this vital issue. Societies are encouraged to contact the chairmen of the House and Senate subcommittees on HHS apropriations. These are:

The Honorable William Natcher
Committee on Appropriations
Subcommittee on Labor, Health and
Human Services, and Education
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Lawton Chiles
Committee on Appropriations
Subcommittee on Labor, Health and
Human Services, and Education
U.S. Senate
Washington, D.C. 20510

Your assistance on this vital issue is both needed and greatly appreciated.

association of american medical colleges

January 23, 1987

Dear Colleague:

This is to request your participation in a coordinated, two-part strategy to defeat the Administration's proposed cut of NIH and ADAMHA FY 87 funding:

1) Concerted action to persuade Congress to reject the proposal (a sine qua non of success), and

2) Litigation to prohibit NIH from pursuing its apparent intention to reduce funding of some grants immediately.

Background

The President's fiscal 1988 budget for the NIH proposes to "extend the availability" of $334 million from the current fiscal 1987 appropriation until fiscal 1988 and expend these funds only in fiscal 1988. A similar proposal, to shift $5 million from fiscal 1987 to fiscal 1988 is contained in the President's 1988 ADAMHA budget.

The Administration proposes to accomplish the $334 million reduction in fiscal 1987 NIH budget by reducing the number of competing research project grants awarded in 1987 by 700 to a total of 5,700 (which will "save" approximately $115 million) and by reducing the size of noncompeting continuation research project awards ($219 million).

Unlike previous years, the Administration has not proposed a rescission or a deferral. Instead, the President's request for supplemental appropriations for fiscal 1987, which was forwarded to Congress on January 5, contains a request to extend the availability of 5.5 percent of the funds appropriated for the NIH for fiscal 1987 (approximately $334 million) into fiscal 1988 and a proposal to amend the conference version of H.R. 5233 -- the Labor-HHS-Education appropriations act for fiscal 1987 -- to delete the Congressional mandate for 6,200 new and competing research project grants for fiscal 1987 and substitute 19,000 total research project grants in fiscal 1987. The Administration has promised that no action will be taken to implement this proposal until the Congress enacts it.

An all out effort is needed to persuade Congress to act quickly and decisively to reject this attempted downward revision of the recently enacted appropriation which was carefully designed to fit within the Graham-Rudman-Hollings ceiling.

Suite 200/One Dupont Circle, N.W./Washington, D.C. 20036/(202) 828-0400

NIH appears to be moving to implement these cuts immediately, notwithstanding the pledge in the President's request that no action will be taken to carry out the proposal until Congress enacts it. Whether the NIH actions result from covert instructions or are merely to preserve smooth operations in the event the President's request is adopted, the AAMC is persuaded that it is both illegal and actionable, and has retained counsel to explore this perception. The Association is now seeking potential co-plaintiffs, and is prepared to proceed as soon as: the NIH actions become public; and, the evidence to demonstrate the harm such actions will cause becomes available.

Action Needed

1) Please review the attached draft letter to members of Congress. Our hope is that all members of the ad hoc Group for Medical Research Funding will be joined by others in agreeing to sign on to this letter on an urgent basis. Our target for transmittal is January 29, 1987.

2) Join us as co-plaintiff in our efforts to obtain a Federal court injunction against the NIH implementation. AAMC has sponsored the initial legal research and regards the prospects of a favorable outcome as very good. But, this effort will be costly. We are developing a war chest now. We need commitments from a number of organizations for funding. We ask that you pledge a minimum of $5,000 and a maximum of $10,000 to assure that this effort can proceed. Please act quickly. Remember the community stands to lose about a million dollars a day for each of delay.

Please call me at (202) 828-0470 if you require further information.

Sincerely,

Thomas J. Kennedy for J.U.D

John F. Sherman, Ph.D.
Vice President

NOTE: Our attorneys advise that there is no legal inhibition to participation in the litigation by organizations classified as tax exempt charities under 501(c)3 of the Internal Revenue Code by virtue of that status.

The Ad Hoc Group For Medical Research Funding

February 4, 1987

Dear Senator:

In 1986 the 99th Congress passed, and the President signed, legislation providing the National Institutes of Health (NIH) and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) with substantial and necessary appropriations increases. These increases included special additional funds to combat AIDS and other diseases affecting millions of Americans. Notwithstanding this clear, bipartisan Congressional support for biomedical and behavioral research, the Administration is now acting unilaterally to undermine the terms of last year's appropriation.

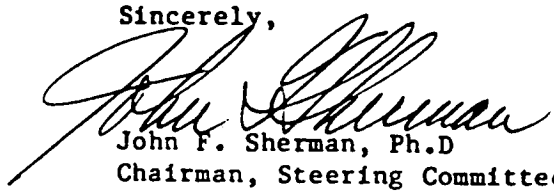
The Administration's FY 1988 budget for the NIH proposes to "extend the availability" of $334 million from the current FY 1987 appropriation through FY 1988, and expend those funds only in FY 1988. The $334 million will be "saved" by reducing: the number of new and competing research project grants awarded in FY 1987 by 700 below the number required by the 1987 appropriation law; and, the average size of all research project grants that are awarded. Awards may be reduced by as much as 20 percent from levels recommended by scientific peer review groups. A similar proposal to shift $5 million of FY 1987 ADAMHA funding into FY 1988 is also contained in the President's budget.

Despite the fact that in its formal request for "extended availability" of FY 1987 funds the Administration pledged not to implement this proposal unless and until it was approved by Congress, cuts are now being made in research grants as though the proposal had in fact been enacted. These cuts are enormously disruptive to research activity, and once a research project is cut back in scope, even a restoration of funds oftentimes cannot easily return the research to its originally anticipated scale.

The undersigned organizations -- which are broadly representative of the nation's biomedical and behavioral research scientists, research institutions and providers and consumers of health care -- urge you to speedily reject the Administration's budget request in this area. In so doing you will reaffirm the Congressional commitment to NIH and ADAMHA research reflected in the FY 1987 appropriations legislation. We further request your assistance in ensuring that NIH and ADAMHA operate in strict conformity with the provisions in the FY 1987 appropriations law, pending Congressional action on the FY 1987 budget revisions that have been submitted.

We appreciate your invaluable support in the past, and hope that you will extend similar consideration to our request regarding the Administration's extremely damaging budget proposal.

Sincerely,



John F. Sherman, Ph.D
Chairman, Steering Committee, Ad Hoc
Group for Medical Research Funding
On behalf of:

-30-

One DuPont Circle, N.W., Suite 224, Washington, D.C. 20036 (202) 828-0525

Academy for Child and Adolescent Psychiatry
Academy of Physical Medicine and Rehabilitation
American Academy of Dermatology
American Academy of Neurology
American Academy of Opthamology
American Academy of Otolaryngology--Head and Neck Surgery, Inc.
American Academy of Pediatrics
American Association of Anatomists
American Association of Chairmen of Departments of Psychiatry
American Association of Colleges of Nursing
American Association of Colleges of Osteopathic Medicine
American Association of Dental Schools
American Association of Directors of Psychiatric Residency Training
American Association of Immunologists
American Association of Neurological Surgeons
American Association of Nurse Anesthetists
American Association of Pathologists
American Association of University Professors
American College of Nuclear Physicians
American College of Physicians
American Congress of Rehabilitation Medicine
American Council on Education
American Dental Hygenists' Association
American Diabetes Association
American Federation for Clinical Research
American Gastroenterological Association
American Heart Association
American Institute of Nutrition
American Lung Association
American Neurological Association
American Pediatric Society
American Physiological Society
American Psychiatric Association
American Society for Cell Biology
American Society for Clinical Investigation
American Society for Clinical Pharmacology and Therapeutics
American Society for Gastrointestinal Endoscopy
American Society for Microbiology
American Society for Pharmacology and Experimental Therapeutics
American Society of Biological Chemists
American Society of Clinical Oncology
American Society of Hematology
American Society of Human Genetics
American Urological Association
Association for Academic Psychiatry
Association of Academic Health Centers
Association of American Cancer Institutes
Association of American Medical Colleges
Association of American Universities
Association of Anatomy Chairmen
Association of Medical School Departments of Biochemistry
Association of Medical School Pediatric Department Chairmen
Association of Minority Health Professions Schools
Association of Professional Sleep Societies
Association of Professors of Dermatology, Inc.
Association of Professors of Medicine

Association of Schools of Public Health
Association of University Anesthetists
Association of University Professors of Neurology
Child Neurology Society
Congress of Neurological Surgeons
Cooley's Anemia Foundation
Council of Graduate Schools
Cystic Fibrosis Foundation
Delegation for Basic Biomedical Research
Digestive Disease National Coalition
Endocrine Society
Epilepsy Foundation of America
Federation of American Societies for Experimental Biology
Foundation for Biomedical Research
Gerontological Society of America
Joint Council of Allergy and Immunology
Juvenile Diabetes Association
National Association for Biomedical Research
National Association of Pediatric Nurse Associates and Practitioners
National Association of Private Psychiatric Hospitals
National Association of State Universities and Land Grant Colleges
National Cancer Research Coalition
National Hemophilia Foundation
National League of Nursing
National Mental Health Association
National Multiple Sclerosis Society
National Organization of Rare Disorders, Inc.
Rehabilitation Institute of Chicago
Society of Academic Anesthesia Chairmen
Society of Teachers of Emergency Medicine
Society for Investigative Dermatology, Inc.
Society for Nuclear Medicine
Society for Neuroscience
Society for Pediatric Research
The Arthritis Foundation
Tourette Syndrome Association
University Association for Emergency Medicine

IMMEDIATE ACTION REQUESTED

ASSOCIATION OF AMERICAN MEDICAL COLLEGES

MEMORANDUM #87-4 February 4, 1987

TO: Council of Deans
Council of Teaching Hospitals
Council of Academic Societies

FROM: Robert G. Petersdorf, M.D., President

SUBJECT: FY 1987 NIH and ADAMHA Funding Is In Jeopardy

Three weeks ago, the President released his fiscal year (FY) 1988 budget proposal. The budget would significantly reduce the research funds available to the National Institutes of Health (NIH) and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) for the current fiscal year (1987). For NIH, the budget proposes to "extend the availability" of $334 million from the current FY 1987 appropriation through FY 1988, with the intention of expending this money only in FY 1988. A shift of $5 million in ADAMHA research funds from FY 1987 to FY 1988 is also proposed.

For NIH, the Administration would accomplish the $334 million reduction in FY 1987 by reducing the number of competing research project grants awarded by 700 (which will "save" approximately $115 million), and by reducing the size of all research project awards, both competing and non-competing (saving $219 million). Only research project grants are affected by the President's proposal.

The Administration implicitly views this proposal as neither a rescission nor a deferral, but rather, a request for specific special legislation outside the purview of the Budget and Impoundment Control Act, and contained in the President's supplemental appropriations request for FY 1987. The letter asks Congress: to extend the availability of 5.5 percent of the funds appropriated for the NIH for FY 1987 into FY 1988 (this amounts to some $334 million); and to amend the conference version of H.R. 5233 -- the FY 1987 funding legislation for the Departments of Labor, HHS, and Education -- to delete the congressional mandate for NIH to award 6,200 new and competing renewal research project grants for FY 1987, and to substitute a requirement that NIH fund at least a total of 19,000 research project grants in FY 1987. In language accompanying the Supplemental Appropriations bill, the Administration has promised that no action will be taken to implement this proposal until and unless Congress specifically approves it. Nevertheless, the NIH institutes have been directed to cut individual project grant awards with "start dates" of January 1, 1987 and thereafter in amounts sufficient to save about $220 million in FY 1987. Institutions should be aware that the magnitude of these cuts in individual awards is -- by far -- over and above what would have otherwise occurred due to the inability of the FY 1987 appropriation to fully fund awards at study section-recommended levels. The average size of the cut resulting from the FY '87 budget proposal should be about 7% per award, although this figure will probably vary widely by institute.

The biomedical research community simply should not countenance a proposal by the Executive Branch to revise the terms of the FY 1987 appropriations law that the President approved less than 3 months ago. It does not merely undermine the conduct and administration of medical research; it could, if successful, set an ominous precedent for future behavior. Therefore, you are urged to contact your Congressional delegations to categorically reject the Administration's FY 1987 budget proposal for NIH and ADAMHA as soon as possible. The AAMC is currently pursuing legal remedies to restrain the NIH from taking actions that appear to assume Congressional approval of the President's proposal and to be inconsistent with the President's commitment not to act without Congressional approval. But this tack will ultimately prove futile unless Congress also formally rejects the proposal. In writing your delegations, you may want to describe the damage that is already being done to specific research projects as a result of cuts recently imposed. You are also urged to send copies of your correspondence to:

Honorable William Natcher
Chairman, Subcommittee on Labor,
Health and Human Services,
and Education Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Honorable Lawton Chiles
Chairman, Subcommittee on Labor,
Health and Human Services,
and Education Appropriations
U.S. Senate
Washington, D.C. 20510

Finally, enclosed for your information and consideration is a copy of a memorandum recently sent to members of the Association of American Universities (AAU) on this subject. Note particularly the message in the upper two-thirds of page two; it may embody a policy that your institution would like to adopt.

For more information on this issue, please contact Dr. Thomas J. Kennedy, Jr. (202/828-0528), Mr. David Baime, (202/828-0525), or Dr. John F. Sherman (202/828-0470).

Enclosure

ASSOCIATION OF AMERICAN MEDICAL COLLEGES

MEMORANDUM #87-9 February 27, 1987

TO: Council of Deans
Council of Teaching Hospitals
Council of Academic Societies

FROM: Robert G. Petersdorf, M.D.

SUBJ: Status of NIH FY 87 Funds

Preparations for the suit being developed by the AAMC and twenty-one co-plaintiffs to release and restore funds appropriated for NIH (being withheld in premature implementation of a Presidential legislative proposal) have come to an abrupt halt. The meeting to gain final consensus of the co-plaintiffs, scheduled for Wednesday noon, changed direction as a result of an action of OMB director, James C. Miller, III. His letter to HHS Secretary Otis R. Bowen (reproduced on the back of this sheet) is regarded by OMB and informed Capital Hill sources, as resolving the issue. Since follow-up requires interpretation and action by the Secretary and subsequently by the NIH, it is premature to expect a definitive conclusion at this time. We are holding our legal action in abeyance until the smoke clears and the results are determinable with precision.

We expect NIH, ultimately, to rescind the spending plan which restricts the availability of funds pending Congressional action and to restore the budget-motivated cuts in research grant awards made between January and the present. Unless these actions are taken within a reasonable period, we will reconsider the advisability of pursuing a legal remedy. We are poised to file on very short notice.

cc: Federal Liaison Staff
AAHC Members

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

FEB 24 1987

Honorable Otis R. Bowen
Secretary
Department of Health and Human Services
Washington, D.C. 20201

Dear Secretary Bowen:

As you know, the President's budget for the National Institutes of Health proposes to extend the availability of about $334 million in FY87 appropriated funds into FY88. In transmitting this proposal to the Congress on January 5, 1987, the President assured the Congress that there would be "no Executive Branch action to defer or otherwise restrict the funds currently available until after Congressional enactment of this proposal."

If, on the basis of President's budget proposal, the Department is withholding or otherwise restricting the availability of funds, please cease such actions.

In addition, to the extent the Department has undertaken policies which may be inconsistent with the President's assurance, please advise this agency of the facts concerning such actions and of any further steps which you believe are necessary in light of the Impoundment and Control Act.

Sincerely,

SIGNED

James C. Miller III
Director

THE SECRETARY OF HEALTH AND HUMAN SERVICES
WASHINGTON D.C. 20201

MAR 2 1987

The Honorable William H. Natcher
Chairman
Subcommittee on Labor, Health
and Human Services, Education
and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This letter is to inform you of actions that the Department is taking relevant to the Administration's proposal to carry over to 1988 $334 million of NIH research funds and $5 million at ADAMHA.

You were earlier informed that NIH had begun implementing a 1987 interim operating plan which provided research project grants a 5 percent increase in average cost per award over 1986 -- an amount less than that assumed in the appropriation. The plan was adopted not only to preserve the options of the Congress as it considered the President's budget proposal, but also to be fair to all grantees should the Congress revise the 1987 appropriation.

As of February 24 the Public Health Service ceased to restrict the availability of 1987 appropriated funds while the Congress considers the budget proposal. The entire amount will be obligated during the current fiscal year unless the Congress enacts legislation to the contrary. In that event, only those projects scheduled to receive awards subsequent to Congressional action would have their grants reduced.

Amended awards will be issued as soon as possible to all grantees whose awards have been affected by the interim plan and whose projects merit the additional support. Also, competing research project grants at NIH will be made at a rate which will assure the award of the full 6,354 projects intended at the current appropriation level in a manner fully consistent with historical patterns.

Sincerely,

Otis R. Bowen, M.D.
Secretary

Survey of Public Affairs Activities of CAS Societies

This survey was undertaken in conjunction with COD and COTH surveys of the organizational structure with which individual institutions or societies within the AAMC governance handle public policy issues of interest. We wanted to improve our understanding of the full scope of public affairs contacts and activities within our constituency and to understand the mechanisms available to them to receive, disseminate and act upon AAMC memoranda or phone contacts concerning issues of importance to academic medicine.

Eighty-one of the 82 member societies responded. Almost all indicated that in their view one important way they participated in public affairs was through receiving information from AAMC, through discussions in CAS Administrative Board and Council and through the Association's response on their behalf on key legislative and regulatory issues.

In addition the survey revealed that some societies participated actively in public affairs through their own committees and staff, while many more were active in joint committees or less formal arrangements for information sharing and development of positions with other societies within their discipline. Table I shows that the chairmen's groups actively participate in public affairs most often through formal or informal information sharing and policy formulation within their discipline. Table II summarizes the intensity of public affairs activity by discipline. Many disciplines, through one or more of their societies, have ways of contacting all members and even activating a grassroots lobbying effort on key issues. Table III summarizes the responses to the survey questions.

Conclusion: This survey indicates that many societies participate in public policy activities in joint efforts within their discipline as well as on an interdisciplinary basis through the CAS/AAMC. The specific information obtained on the capabilities of individual societies should assist staff in their contacts with CAS members on key public policy issues.

Discussion: A number of societies expressed interest in how they might better organize and/or how other societies organized their public affairs activities. A panel presentation at the CAS Spring Meeting will provide an opportunity for active societies to describe and discuss the organization they have found effective in enhancing their participation in public affairs.

Table I. Public Affairs Activities of Chairmen's Group

I. Independently Active

1. Association of Professors of Dermatology
2. Association of Professors of Medicine

II. Jointly Active

A. Through Joint Committees

1. Association of Anatomy Chairmen
2. Society of Academic Anesthesia Chairmen
3. Society of Teachers of Emergency Medicine
4. Association of University Professors of Neurology
5. Association of Professors of Gynecology and Obstetrics
6. Association of Medical School Pediatric Department Chairmen

B. Informally through Academy, College or Research Organization

1. Association of Medical School Microbiology Chairmen
2. Association of Pathology Chairmen
3. Association for Medical School Pharmacology
4. Association of Chairmen of Departments of Physiology
5. Association of Teachers of Preventive Medicine
6. Association of Departments of Family Medicine
7. Society of Surgical Chairmen
8. Association of University Professors of Ophthalmology
9. Association of Orthopaedic Chairmen
10. Association of Academic Departments of Otolaryngology
11. American Association of Departments of Psychiatry
12. Thoracic Surgery Directors Association

III. Not Active

1. Society of University Urologists

IV. No Response

1. Association of Medical School Departments of Biochemistry

Table II. Public Affairs Activities of CAS Societies by Discipline

1. Grassroots Activity

   Anatomy
   Microbiology
   Anesthesia
   Dermatology
   Family Medicine
   Allergy and Immunology
   Obstetrics and Gynecology
   Ophthalmology
   Orthopaedics
   Otolaryngology
   Pediatrics
   Physical Medicine and Rehabilitation
   Radiology

2. Active Public Policy Committees

   Neuroscience Biochemistry
   Physiology
   Neurology

3. Legislative Tracking

   Pathology
   Pharmacology
   Preventive Medicine
   Plastic Surgery
   Thoracic Surgery

4. Emerging Interest

   Critical Care
   Emergency Medicine

5. No Interest

   Behavioral Sciences
   Urology

Internal Medicine, Surgery, and Psychiatry range from 1 to 5, based on the individual societies' responses.

Table III CAS Public Affairs Survey Responses:
81 of 82 Societies responding

1. Does your society have a public or legislative affairs committee?

	YES	NO
Basic	15 (88.2%)	2 (11.8%)
Clinical	30 (46.9%)	34 (53.1%)
TOTAL	45 (55.6%)	36 (44.4%)

2. Does your society participate with other societies in the areas of public or legislative affairs?

	YES	NO
Basic	15 (88.2%)	2 (11.8%)
Clinical	30 (46.9%)	34 (53.1%)
TOTAL	45 (55.6%)	36 (44.4%)

3. What types of mechanisms do you use for these joint efforts? (Note: Some respondents selected more than one mechanism.)

	Basic	Clinical	TOTAL
Ad Hoc Coalitions	10	28	38
Standing Committees	7	22	29
Individual Contacts	5	3	8
Staff Contacts	1	2	3
Others	1	7	8

4. Does your society have a mechanism for rapid communication with the membership for urgent lobbying of legislative issues?

	YES	NO
Basic	10 (58.9%)	7 (41.1%)
Clinical	36 (56.2%)	28 (43.8%)
TOTAL	46 (56.8%)	35 (43.2%)

If so, what type of mechanism is used?
(Note: Some respondents selected more than one mechanism.)

	Basic	Clinical	TOTAL
Telephone Cascade	8	19	27
Mailgrams	2	18	20
Express Mail	3	10	13
Mail	0	4	4
Newsletter	0	3	3
Electronic Mail	0	2	2

Who is contacted?
(Note: Some respondents selected more than one choice.)

	Basic	Clinical	TOTAL
Officers	5	20	25
Public Policy Committee	7	14	21
Full Membership	3	17	20
Board of Directors	2	12	14
Grass Roots	1	4	5
Select Members	1	4	5
Program Directors	1	1	2

A number of societies indicated that the subset of members contacted is dependent upon the nature and urgency of the issue.

5. Does your society have a mechanism for grass roots lobbying?

	YES	NO
Basic	4 (23.5%)	13 (76.5%)
Clinical	24 (37.5%)	40 (62.5%)
TOTAL	28 (34.6%)	53 (65.4%)

If so, is it organized by:
(Note: Some respondents selected more than one choice.)

	Basic	Clinical	TOTAL
Congressional District	1	6	7
Medical School	2	5	7
State	0	6	6
Academic Medical Center	1	3	4
State, Local or Regional Societies	0	4	4
Others	1	12	13

6. Does your society have a newsletter?

	YES	NO
Basic	13 (76.5%)	4 (23.5%)
Clinical	46 (71.9%)	18 (28.1%)
TOTAL	59 (72.8%)	22 (27.2%)

If so, how often is it sent?

Twice monthly	2
Monthly	7
6 times/year	11
4 times/year	17
2-4 times/year	9
2 times year	10
"Occasionally"	2

To whom is it sent?

Full Membership	50
Board	4
Officers	2
Public Affairs Cmte	1
Grass Roots	1
Others	1

7. Does your society have any other means of regular written communication with the membership?

	YES	NO
Basic	10 (58.8%)	7 (41.2%)
Clinical	51 (79.7%)	13 (20.3%)
TOTAL	61 (75.3%)	20 (24.7%)

If so, is it:
(Note: Some respondents selected more than one choice.)

Society Journal	34
President's Letters	24
Memoranda	11
Meeting Notices and Minutes	5
Legislative Info to Chapters	1

8. Does your society have a professional staff for public and legislative affairs?

	YES	NO
Basic	7 (41.2%)	10 (58.8%)
Clinical	25 (39.1%)	39 (60.9%)
TOTAL	32 (39.5%)	49 (60.5%)

RESEARCH FACILITIES CONSTRUCTION

There has been much written about the aging and deterioration of the physical plant at our nation's research-intensive medical schools and universities since the NIH research facilities construction program lapsed in 1970. The burden of renovation of laboratory space has fallen on the universities and the direct costs of research grants. New construction costs have been financed by depreciation/user fees charged to indirect costs and since 1982, by indirect cost reimbursement of interest on university-acquired debt for laboratory construction. Institutions which cannot/have not assumed a debt burden have increasingly turned to "pork barrel" to meet the need; that is, direct Congressional appropriation for individual research buildings located in a specific Congressman's district.

Pressure is mounting to reestablish a competitive research construction grants program at NIH such as existed from 1956-1970. Legislation to authorize such a program, administered through the Division of Research Resources, will be proposed this spring by the Ad Hoc Group for Medical Research Funding. The proposed program would be a competitive grants program with 50 percent institutional matching funds required.

The Ad Hoc Group is also seeking ongoing funding through all NIH Institutes for remodeling and renovation of existing research space. Their NIH budget request for FY88 includes $238 million for facilities renovation.

GENERAL CLINICAL RESEARCH CENTERS

The NIH supports 78 General Clinical Research Centers at our nation's teaching hospitals in 30 states. These centers are the shared resource focal point for 90 percent of NIH-funded clinical research parojects. They provide inpatient and outpatient facilities, skilled nursing and allied health staffing, core laboratories and other resources for more than 3500 investigator-initiated NIH research projects. The program is administered through the Division of Research Resources (DRR) of NIH. Center grant applications are merit-reviewed by the General Clinical Research Centers Committee, currently chaired by John F. Burke, M.D., Professor of Surgery at Harvard, and approved by the DRR Advisory Council, chaired by James B. Wyngaarden, M.D., Director, NIH.

The budget for the GCRC Centers Program has traditionally been made up of a Congressional Appropriation and offsetting revenue derived from third party payor reimbursement of GCRC bed day charges for patients who have regular health care rendered in the course of a research admission or who are regular medical patient "boarders" on empty GCRC beds. In recent years, cost containment pressures from insurance companies have steadily eroded the reimbursed "income" to the GCRC program. Reduction in hospital length of stay and census has dropped the number of boarders and stringent review of claims has led third party payors to dispute care rendered to patients upon whom research is also done. Reimbursement revenue has fallen 12 percent per year for the last 4 years and the budget impact on the GCRC program has been double that, because each bed day which is no longer reimbursed is now paid by the GCRC, resulting in both loss of income and increase in expenses.

This shift from revenue to expense has occurred rapidly and outpaced the budget projections for this program, resulting in a severe shortfall in the Centers budgets for FY87. This year $115.8 million will be needed to run the Centers program at the FY86 level of research effort. Anticipated third party revenue is $8 million. Thus, $107 million of NIH funds is needed. The Congressional appropriation for the GCRC extramural centers grants was $91.6 million, leaving a shortfall of $15.2 million in needed revenue for 1987. The award letters to all centers were sent in December 1986 and January 1987 and budgets were cut between 10 to 40 percent below FY86. Cuts were not uniformly distributed because of the heterogeneity of the centers and their research missions.

It is likely that only a supplemental appropriation will remedy this shortfall in FY87 and the Association of GCRC Program Directors is organizing to request such an urgent supplemental from the House and Senate Appropriations Committees. The support of academic colleagues whose research programs will be affected by these cuts will be important to the success of this effort.

- Prospective Payment of Radiology, Anesthesiology, and Pathology Services Provided by Physicians to Hospital Inpatients
(Savings of $10 million in FY 1988)

Medicare payment for physician services is one of the fastest growing parts of the Federal budget. Under current law, Medicare uses the inherently inflationary fee-for-service reimbursement system to pay for physician services. This proposal would modify the mechanism which Medicare uses to pay for radiology, anesthesiology, and pathology (RAP) services provided to hospital inpatients. Medicare would pay an average rate for the RAP services associated with a specified procedure.

Source: HHS Fiscal 1988 Budget, January 1987

ENT-06 INCLUDE HOSPITAL-BASED PHYSICIANS' SERVICES IN HOSPITALS' PROSPECTIVE PAYMENTS

Savings from CBO Baseline	Annual Savings (millions of dollars) 1988	1989	1990	1991	1992	Cumulative Five-Year Savings
Outlays	70	170	240	310	400	1,190

Radiologists, anesthesiologists, and pathologists (RAPs) are supporting physicians who typically have contractual arrangements with hospitals that grant them exclusive rights to provide services to hospitals and their inpatients. These contractual arrangements typically cover payment provisions for certain administrative services provided to the hospitals by RAPs, but not for their patient-related services. Instead, RAPs bill patients (or their insurers) directly, on a fee-for-service basis. Because hospitals select the RAPs who will provide services to their inpatients, however, hospitals are in a better position than patients to negotiate with these hospital-based physicians.

Medicare could eliminate fee-for-service reimbursement for the inpatient services provided by RAPs. Instead, the hospitals' DRG payments under Part A of Medicare could be expanded to reflect the costs of all services provided by RAPs to hospital inpatients, with payments to RAPs constrained to grow at the same rate as DRG payments in future years. If this change was implemented beginning January 1, 1988, with each DRG rate for 1987 first increased by the average cost to Medicare in 1987 for

services provided by RAPs to patients in that DRG and then updated by an appropriate price index, savings would be $70 million in fiscal year 1988. Savings would total about $1.2 billion over the five-year projection period, reducing Medicare's net outlays for physicians' services by about 0.7 percent. These estimates assume that shifting costs to the outpatient sector would be prevented for the most part by, for example, denying payment for related RAP services provided within seven days on either side of an inpatient stay.

This option would give hospitals incentives they now lack to negotiate reasonable rates of pay for RAPs and to use their services efficiently. As a result, payments for the services provided by RAPs would be lower under this payment method than under the current system, thus reducing both

Medicare's and patients' costs. In fact, coinsurance and balance-billing amounts for which patients are currently liable under Part B of Medicare would be eliminated on inpatient services provided by RAPs. Consequently, out-of-pocket costs for patients would drop by a much higher percentage than Medicare's costs.

Either RAPs or hospitals, however, would be worse off under this option. Total payments to RAPs for services to Medicare inpatients would fall, unless hospitals accepted the loss by paying RAPs more, on average, than the amount by which DRG rates were increased. The allocation of this reduction in receipts between RAPs and hospitals would vary by locality, depending on the extent of competition for the services of RAPs. The reduction in Medicare receipts that would occur under this option might adversely affect access for Medicare enrollees in some isolated areas. But this effect would not be widespread because RAPs are among the most highly paid physician specialties, and because most hospitals have fared well under the prospective payment system.

Source: Reducing the Deficit: Spending and Revenue Options
CBO 1987 Annual Report to the Senate and House Committees on the Budget
January 1987

PER CASE PAYMENT OF RADIOLOGISTS, ANESTHESIOLOGISTS, AND PATHOLOGISTS

A number of alternatives to fee for service have been considered for paying for physicians' services. Medicare pays hospitals on a per case basis, using diagnosis related groups to classify patients. Similar methods have been considered for paying for all physicians' services to hospitalized patients (Congressional Budget Office, 1986; Jencks and Dobson, 1985; Office of Technology Assessment, 1986). A study mandated by Congress that is to assess the feasibility and advisability of such an approach has been under way for some time at the Health Care Financing Administration. The effects of such a change on program costs, efficiency, access, and quality of care are not known.

It has also been suggested that only a subset of physician services to hospitalized patients be paid on the basis of diagnosis related groups: services provided by radiologists, anesthesiologists, and pathologists. This approach received attention in the Congress last year. In response to Congressional interest, the Congressional Research Service and the General Accounting Office initiated studies relating to payment of hospital based physicians. In addition, the Omnibus Budget Reconciliation Act of 1986 mandated a study by the Secretary of HHS.

The Reagan administration recently proposed in its 1988 budget that radiologists, anesthesiologists, and pathologists (RAPs) be paid according to a schedule based on diagnosis related groups. The nature of the administration's proposal--which services the payment is to cover, to whom the payment is to be made, how the payment is to be determined, assignment policy, and so forth--is not yet known.

The Commission intends to examine the merits of paying for this set of physicians' services on a per admission basis. The administration will be asked to present its proposal. The Commission will ask for the results of each of the studies mentioned above, will invite comment from interested groups, and may conduct additional analyses.

Source: Medicare Physician Payment: An Agenda for Reform 3/1/87
Physician Payment Reviwe Commission Annual Report to Congress

Hearing on Catastrophic Health Insurance Coverage
House Ways and Means Committee/Subcommittee on Health
March 4, 1987

The House Subcommittee on Health, chaired by Rep. Fortney (Pete) Stark (D-CA), today heard testimony from Rep. Claude Pepper (D-FL), and three panels of witnesses on current proposals before the House to provide catastrophic health insurance coverage under Medicare. The Stark/Gradison bills, H.R. 1280 and 1281, would limit out-of-pocket expenses for Medicare beneficiaries, and are described as a "long overdue first step" in providing comprehensive catastrophic coverage. Rep. Pepper's bill, H.R. 65, would be much more comprehensive, including coverage for long term care, hearing and vision services, and dental care for seniors. Attached is a comparison of the proposed legislation with the Administration/Bowen proposal.

Methods of Financing

The Stark/Gradison bills represent a limited and cautious approach to the question of catastrophic coverage and its financing; they do not place any more taxes on workers or employers, only on seniors themselves. The proposals involve financing in a "progressive manner". Higher income seniors would pay for the expanded benefit, by taxing the subsidized portion of the actuarial value of Medicare Parts A and B. Sixty-five percent of seniors would pay no additional tax, if this "means test" tax approach is used.

The Pepper bill differs in that it further proposes raising the base of Social Security withholding from $42,000 to "as high as necessary" in order to raise the additional revenues needed for the increase in covered services. There was some discussion as to whether lifting the FICA cap would represent a shift in the underlying philosophy of Social Security, since benefits would have to be limited, and would not follow wages. Members of the Subcommittee raised concerns that the proposed legislation should be "generationally neutral"--i.e., that one generation should pay for itself, rather than creating "one more intergenerational transfer"--and suggested that Rep. Pepper's proposal might violate this notion.

Other Issues

There appeared to be agreement among the witnesses that the three areas of most concern to the elderly, besides the

issues of deductibles and premiums, are 1) physician payment above Medicare's "reasonable charge" provisions; 2) coverage for long term care and home health; and 3) coverage for prescription drugs, especially for the chronically ill.

Dr. Judith Feder, Co-director of the Center for Health Policy Studies at Georgetown, pointed out that the notion of what is "catastrophic" is relative--medical expenses must be seen in relation to income. Dr. Gail Wilensky, Vice President of Project Hope, outlined the three advantages of the Stark/Gradison bill: 1) it maintains the separation between Part A and Part B of Medicare; 2) it limits out-of-pocket liability; and 3) it introduces the concept of "ability to pay" as an important financing mechanism and a precedent in the Medicare problem. Although the Stark/Gradison bill does not address all of the areas needing reform, Dr. Wilensky cautioned that we should "not let the 'ideal' become the enemy of the good".

The Congressional Budget Office is currently completing a comprehensive study in order to determine the feasibility of raising revenues for catastrophic coverage in these various ways. The Subcommittee members are awaiting this report before evaluating whether the Pepper proposal might be incorporated into the Stark/Gradison bill.

COMPARISON OF PROPOSALS FOR CATASTROPHIC HEALTH INSURANCE COVERAGE UNDER MEDICARE

	Administration/ Bowen	Stark/ Gradison	Pepper
Services Covered	Acute care only (unlimited inpatient hospital coverage, subject to a $2000/year "cap" on out-of-pocket expenditures for Medicare coinsurance and deductibles)	Acute Care extended to unlimited inpatient days one hospital deductible per yr; "cap" on Part B coinsurance and deductibles of $1000/yr indexed to the COLA hospice and SNF benefits extended; SNF coinsurance reduced and transferred to first 7 days of care	Both acute and long-term care Hearing, vision, foot, dental, and preventive care
Financing Mechanism	Increase in monthly Medicare premium	Taxation of portions of the actuarial value of Medicare Parts A and B; "progressive" financing, since only 35% of elderly with highest incomes will be taxed	Same as Stark plus increase in base of FICA withholding from $42,000 to possibly $100,000
Potential Drawbacks	No out-of-pocket costs for the following would count toward the annual cap: long-term nursing care, out-patient prescription drugs, dental services, home health services, physical exams, balance billing by "non-assigned" physicians, optical supplies and services	Does not address the 2 largest categories of out-of-pocket expenditures borne by beneficiaries: long-term care and prescription drugs Financing option is a radical departure from present Medicare support mechanisms; modest proposed benefit improvements may not justify such radical change	Would cover all needed services for elderly, but alternative financing option may represent a departure from underlying philosophy of Social Security system

PARTICIPATION OF HOUSESTAFF IN THE ASSOCIATION

Background

On at least three occasions the AAMC has considered the question of housestaff representation and whether such representation was appropriate within its mission to advance medical education. Currently, there is no formal involvement of housestaff, although efforts are made to include residents on appropriate committees and periodic conferences for 30-35 residents are convened.

The suggested methods of participation considered in the past include:

-- direct representation with one or more seats on the Executive Council but no other organizational structure

-- providing housestaff representatives with one or more seats on an existing administrative board

-- organizing a Group on Housestaff Affairs along the lines of other AAMC groups. Presumably the group would be open to administrative officers and faculty members with responsibility for graduate medical education.

-- housestaff could be organized along the lines of the Organization of Student Representatives into an Organization of Housestaff Representatives reporting to or through an existing Administrative Board, with one or more seats on the Executive Council

-- the OSR could be broadened so that both medical students and residents were represented.

Reasons for not including housestaff in the past have been:

-- no formal request from housestaff

-- a desire not to encourage "unionization" of housestaff or consideration of employment rather than educational issues within AAMC

-- difficulty in identifying "representative" housestaff by institution, specialty, and/or year of training

-- no clear consensus on appropriate locus within AAMC for housestaff input

At the September Administrative Board meetings, discussions were again initiated to incorporate housestaff into the Association. Although there were some concerns about where housestaff might be located within AAMC and what housestaff issues the Association might be engaged in, there was receptivity to further discussion and consideration of their involvement.

Recommendation

The Executive Committee approved the formation of an AAMC Ad Hoc Committee on House Staff Participation to:

-- define the mission or objectives of housestaff participation in the Association.

-- consider the most appropriate way for them to be incorporated, considering both past and new suggestions for their representation.

DHHS - National Institutes of Health
1988 CONGRESSIONAL JUSTIFICATION

Summary by Appropriation

(Dollars in thousands)

	1986 Actual Obligations 1/ 2/	1987 Appropriation 2/	1987 Obligations 2/	1988 Request Budget Authority	1988 Request Obligations
NCI	$1,228,751	$1,403,236	$1,339,124	$1,302,823	$1,366,935
NHLBI	827,069	930,263	873,660	821,887	878,490
NIDR	99,918	118,036	112,482	108,048	113,602
NIDDK	434,505	509,247	473,860	440,504	475,891
NINCDS	414,739	490,494	455,483	423,193	458,204
NIAID	404,820	545,766	519,274	551,102	577,594
NIGMS	493,878	571,179	526,323	482,004	526,860
NICHD	309,843	366,955	343,551	322,032	345,436
NEI	186,511	216,774	201,583	184,829	200,020
NIEHS	188,969	209,409	203,150	198,431	204,690
NIA	151,025	177,017	166,027	156,174	167,164
NIAMS	113,266	140,896	131,816	123,009	132,089
DRR	296,946	322,871	322,871	263,324	263,324
NCNR	16,209	19,018	17,553	16,133	17,598
FIC	10,873	11,426	11,426	11,566	11,566
Subtotal, IRDs	5,177,322	6,032,587	5,698,183	5,405,059	5,739,463
NLM	55,280	61,910	61,910	64,399	64,399
OD	47,883	57,551	57,551	59,819	59,819
B & F	19,933	31,900	31,900	5,000	5,000
Total	5,300,418	6,183,948	5,849,544	5,534,277	5,868,681
Advanced Appropriation	—	—	—	2,726,000	—
Total	5,300,418	6,183,948	5,849,544	8,260,277	5,868,681

1/ Institute appropriations include the AIDS reimbursements from the OD.

2/ The 1986 and 1987 columns have been adjusted for comparability as follows: Minority Health transfer, -$1,072 and -$1,680; and OS Working Capital Fund, +$4,513 and +$4,968.

	1986 Actual 1/ 2/		1987 Appropriation 2/		1987 Estimate 2/		1988 Request	
Research Grants	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Projects:								
Noncompeting	12585	$1,972,088	13457	$2,339,797	13457	$2,187,321	13422	$2,220,989
Admin. supp.	(397)	19,859	(389)	16,088	(389)	15,094	(389)	15,187
Competing	6211	930,274	6354	1,109,586	5654	928,652	5709	907,788
Subtotal, RPG	18796	2,922,221	19811	3,465,471	19111	3,131,067	19131	3,143,964
Research Centers:								
Special/competing	348	318,495	368	356,554	368	356,554	368	355,519
GCRC	78	86,298	78	91,675	78	91,675	78	91,624
Biotech	63	33,766	63	34,992	63	34,992	63	34,992
LASPR	47	33,762	50	38,210	50	38,210	50	37,936
Borgas	1	1,913	1	1,934	1	1,934	1	1,934
Subtotal, Centers	537	474,254	560	523,365	560	523,365	560	522,005
Other Research:								
Careers	1341	79,520	1478	89,247	1478	89,247	1455	89,759
Organ systems	1	852	1	821	1	821	1	821
Clinical education	56	3,165	35	2,002	35	2,002	32	2,002
Cooperatvie clinical	234	50,431	280	63,775	280	63,775	263	63,775
BRS	726	91,427	759	93,010	759	93,010	154	33,098
MBRS	98	33,357	101	37,615	101	37,615	97	37,660
Other	668	45,434	916	65,354	916	65,354	882	63,390
Subtotal, Other	3124	304,186	3570	351,824	3570	351,824	2884	290,505
Total, RGs	22457	3,700,661	23941	4,340,660	23241	4,006,256	22575	3,956,474
Training								
Individual	1753	38,867	1797	40,170	1797	40,170	1794	40,284
Institutional	8629	173,893	9070	191,489	9070	191,489	9073	192,936
Total	10382	212,780	10867	231,659	10867	231,659	10867	233,220
Contracts	1324	396,009	1409	488,221	1409	488,221	1469	547,805
Intramural		580,421		657,867		657,867		685,946
Research Mgt. & Support		214,640		237,654		237,654		248,586
Cancer Control		61,372		67,026		67,026		67,432
Construction		9,439		9,500		9,500		---
Subtotal, IRDs Obligations		5,177,322		6,032,587		5,698,183		5,739,463
Library of Medicine		55,280		61,910		61,910		64,399
Office of the Director		47,883		57,551		57,551		59,819
Buildings & Facilities		19,933		31,900		31,900		5,000
Total Obligations		5,300,418		6,183,948		5,849,544		5,868,681
Adjustments 3/		-22,069		---		---		---
Extended Availability		---		---		334,404		-334,404
Subtotal, Budget Authority		5,278,349		6,183,948		6,183,948		5,534,277
Advanced appropriation, Outyear 1988 Comp. RPG Cost		---		---		---		2,726,000
Total Budget Authority		5,278,349		6,183,948		6,183,948		8,260,277

1/ Mechanism activities include the AIDS reimbursements from the OD.

2/ The 1986 and 1987 columns have been adjusted for comparability as follows: Minority Health transfer, -$1,072 and -$1,680; and OS Working Capital Fund, +$4,513 and +$4,968.

3/ This adjustment is made to arrive at 1986 budget authority. It includes -$11,247 in carryover for research project grants; -$2,779 for AREA grants; -$5,000 for NCMR transferred from NHSA; -$3,000 for St. George (NCI); -$5,674 in B & F; +$4,056 placed in reserve for consultant services; and +$1,575 in unobligated balance lapsing.

Note: This chart is in thousands of dollars.

ADAMHA RESEARCH AND RESEARCH TRAINING BUDGET
(in millions of dollars)

Institute	FY 86 Actual	FY 87 Estimate	FY 88 Proposal
NIMH			
Research	$ 204.1	$ 246.7	$229.7
Training	36.4	27.5	24.9
NIDA			
Research	70.6	133.1	105.3
Training	1.4	2.3	2.4
NIAAA			
Research	54.4	71.2	67.7
Training	1.4	2.5	2.7

Table 1: VA Medical and Prosthetic Research
(Budget authority in Millions of Dollars)

	FY85 Actual	FY86 Actual	FY87 Appropriation	FY87 Estimate	FY88 Request
Medical Research	165.6	157.1	164.3	162.3	166.3
Rehabilitation Research	15.3	15.3	17.6	17.6	17.6
Health Services Research	6.4	6.5	8.0	8.0	8.6
CDC Agent Orange	5.4	2.2	0	2.0	3.9
Women's Study	-	-	-	-	2.4
TOTAL	192.7	181.1	189.9	189.9	198.8
Supplemental request				2.9[1]	
DOD-VA Coop Studies	-	-	20.0	12.0	[8.0]
TOTAL VA Research	192.7	181.1	209.9	204.8[2]	[206.8]

[1] Supplemental request submitted by the Administration to pay a portion of the mandated federal civilian pay raise ($1.9 million) and the new Federal Employees' Retirement System (FERS) ($1.0 million)

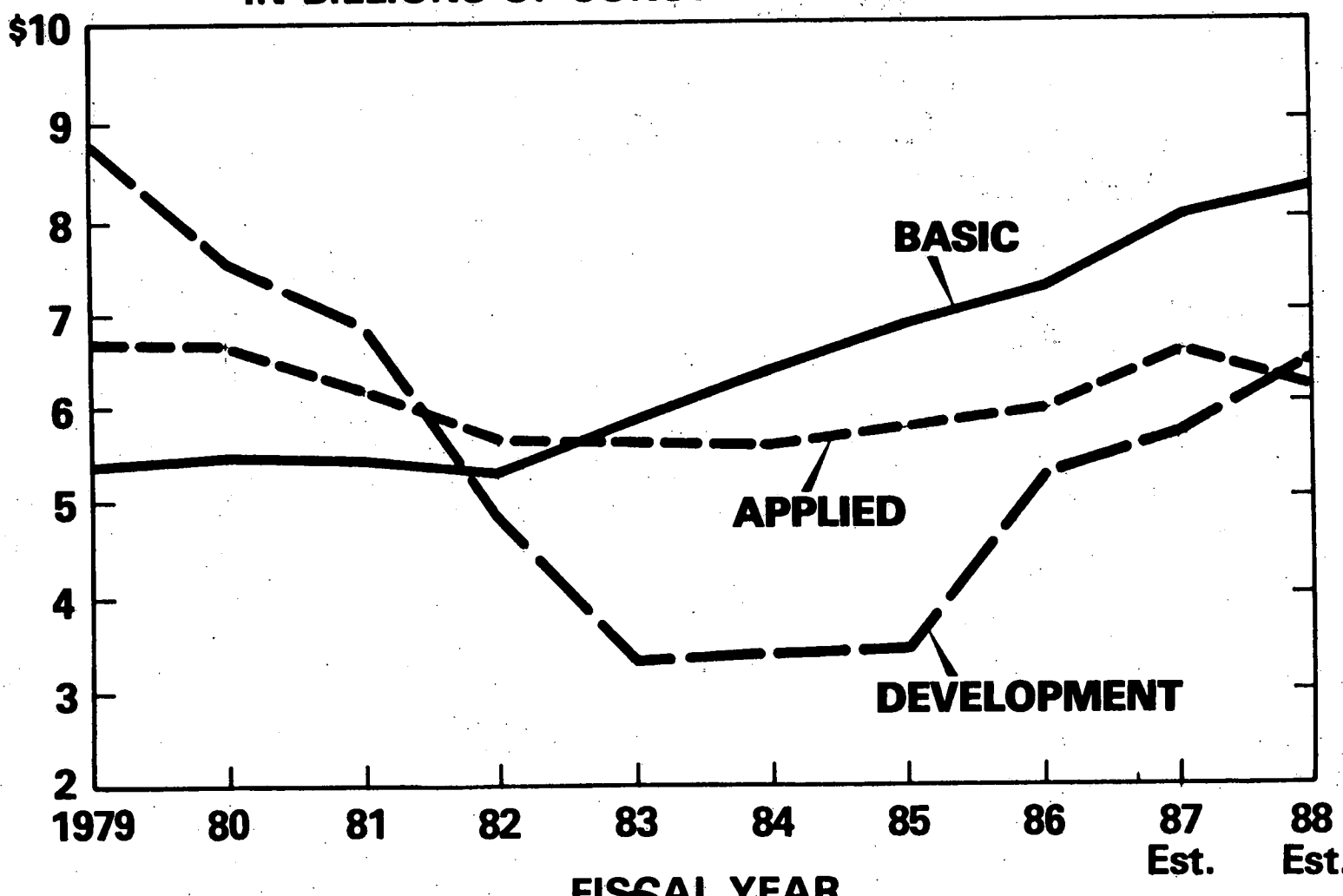
[2] Only $12 million of the FY87 DOD-VA cooperative research studies is to be spent in FY87, however Administration budget documents show the entire amount being appropriated in this fiscal year; for a grand total of $212.8 million.

Preliminary Summary of Major Agency R&D Budgets
($ millions)

	FY 86	FY 87	FY 88
Basic Research	8,145	9,300	9,700
DoD	994	976	1,000
All Other	7,151	8,324	8,700
Total R&D	52,062	57,693	62,400
DoD	33,646	36,613	42,000
All Other	18,415	21,081	20,400
NIH			
Basic Research	3,134	3,800	3,550
Total R&D	4,977	6,034	5,500
NSF			
Basic Research	1,256	1,350	1,600
Total R&D	1,334	1,428	1,694
DOE			
Basic Research	946	1,067	1,149
Total R&D	4,692	4,975	4,679
NASA			
Basic Research	850	1,092	1,260
Total R&D	3,478	3,842	4,700

TOTAL FEDERAL R&D OBLIGATIONS (NONDEFENSE)

IN BILLIONS OF CONSTANT 1985 DOLLARS



aamc association of american medical colleges

February 17, 1987

Dear _____:

The AAMC's ad hoc Committee on Graduate Medical Education and the Transition from Medical School to Residency recommended that a date be established for the provision of students' academic credentials to residency program directors. The important information that is needed to establish a date is the optimal interval between when deans' letters are received and the deadline for submission of rank order lists to the National Residency Matching Program by residency program directors.

In the past, programs participating in the NRMP have generally requested that deans' letters be received sometime during October, which was 12 to 14 weeks before the deadline for submission of rank order lists. The NRMP intends to change its 1988 schedule, moving the deadline for rank order lists to later in the year. You have recently been asked to indicate your preferences among three dates for the NRMP schedule.

On April 8, the Council of Deans will consider when their deans' letters should be released. Information about the preferred interval for programs in your specialty between receipt of these letters and the submission of rank order lists will assist the deans in their deliberations. Please return the enclosed ballot by March 6, 1987. If you have any questions, please call me at (202) 828-0475. Thank you for your assistance.

Sincerely yours,

August G. Swanson, M.D.
Vice President for Academic Affairs

PLEASE RETURN BY MARCH 6, 1987

The optimal interval between receipt of deans' letters and submission of rank order lists to the NRMP is:

12 weeks _____

14 weeks _____

16 weeks _____

_____ weeks

FUTURE MEETING DATES

AAMC Annual Meetings

1987	November 6-12	Washington, D. C.
	CAS Business Meeting: Monday, November 9, 1987	
1988	November 12-17	Chicago

CAS Spring Meeting

1988	April 13-15	San Diego

CAS Administrative Board Meetings

1987	April 15-16	Washington, D. C.
	June 17-18	Washington, D. C.
	September 9-10	Washington, D. C.