

# MEDICAL TRAINING FACILITIES



A Report

of the

JOINT STATE GOVERNMENT COMMISSION

to the

GENERAL ASSEMBLY

of the

COMMONWEALTH OF PENNSYLVANIA

SESSION OF 1955

The Joint State Government Commission was created by Act of 1937, July 1, P. L. 2460, as amended 1939, June 26, P. L. 1084; 1943, March 8, P. L. 13, as a continuing agency for the development of facts and recommendations on all phases of government for the use of the General Assembly.

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JOINT STATE GOVERNMENT COMMISSION  
SUBCOMMITTEE ON FEASIBILITY OF ESTABLISHING A  
MEDICAL SCHOOL EXCLUSIVELY FOR THE TRAINING  
OF PENNSYLVANIA RESIDENTS

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## LETTER OF TRANSMITTAL

*To the Members of the General Assembly of the  
Commonwealth of Pennsylvania:*

In accordance with the directive contained in House Concurrent Resolution No. 79, Session of 1953, there is presented herewith a report on the feasibility of establishing a medical school exclusively for the training of residents of the Commonwealth of Pennsylvania.

To facilitate the study, the Commission, under authority of Act of 1943, March 8, P. L. 13, Section 1, created a subcommittee on the feasibility of establishing a medical school exclusively for the training of Pennsylvania residents. On behalf of the Commission, the cooperation of the subcommittee is gratefully acknowledged.

The Commission wishes also to express its appreciation to administrative and financial officers of the several medical schools in Pennsylvania for their cooperation in supplying pertinent data.

BAKER ROYER, *Chairman*

*Joint State Government Commission  
Capitol Building  
Harrisburg, Pennsylvania*



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## **FINDING**

The Joint State Government Commission finds that, at this time, the establishment of a school of medicine exclusively for the training of Pennsylvania residents is not feasible.

## **RECOMMENDATIONS**

The Joint State Government Commission recommends that:

I. When additional facilities for medical education are required, such facilities be provided at existing medical schools.

II. Medical schools, as a condition to receiving Commonwealth aid, be required to (1) maintain their records in such fashion as to show, on a per-student basis, total training costs, expenses on current account, overhead costs, and value of donated services, and (2) submit to the appropriations committees of the General Assembly records showing total enrollment and enrollment of Pennsylvania residents.

III. Pennsylvania medical schools receiving Commonwealth aid establish differential tuition charges in favor of Pennsylvania residents.

IV. The General Assembly direct a continuing study of medical education in Pennsylvania.



## INTRODUCTION

The objective of proposals for establishment of a medical school "exclusively for the training of residents of the Commonwealth" may be to improve the opportunities of Pennsylvanians to become doctors of medicine, regardless of where they are likely to practice, or to increase the number of practicing physicians in Pennsylvania.

Section I of this report deals with the opportunities of Pennsylvanians to obtain a medical education. The section presents data relating to medical training facilities in Pennsylvania and other states, numbers of applications and applicants for admission to medical schools, and, for the six medical schools in Pennsylvania, the number of qualified Pennsylvania applicants denied admission (excluding applicants known to have been admitted to other medical schools), admission policies, tuition charges, costs, and Commonwealth appropriations.

Section II presents an analysis of data relating to the number of physicians per population in Pennsylvania and other states and the interstate migration of medical school graduates.



## Section I

### MEDICAL TRAINING OPPORTUNITIES AVAILABLE TO PENNSYLVANIANS

Since the medical training opportunities of Pennsylvanians are not confined to Pennsylvania medical schools, informed judgment regarding the "feasibility of establishing a medical school exclusively for the training of residents of the Commonwealth" requires an examination of medical training facilities both in Pennsylvania and in other states.

Table 1, to which reference is made throughout this section, presents for each medical school in the United States, as of 1953-54, ownership, enrollment, tuition charges, percent of first-year students who at the time of matriculation were residents of the state in which the school is located, and number of applications per student admitted.

As shown in column 1 of the table, there are 73 medical schools in the United States which in 1953-54 offered a four-year course of instruction leading to the degree of Doctor of Medicine. The schools are located in 32 states and the District of Columbia. Six schools are located in Pennsylvania; of these, three are affiliated with universities and three have no university affiliation.

In addition to the four-year schools, six schools—Dartmouth Medical School in New Hampshire and the schools at the universities of Mississippi, Missouri, North Dakota, South Dakota, and West Virginia—offer but a two-year course, which must be supplemented by an additional two years of training at a four-year institution if it is to lead to the degree of Doctor of Medicine.

#### OWNERSHIP OF MEDICAL SCHOOLS

Of the 73 schools offering four-year courses, 40 are privately owned, 30 are state owned, and 3 are municipally owned. The ownership pattern

associated with schools of medicine resembles the pattern of institutions of higher education in general: The East relies heavily upon private institutions; other sections of the country make extensive use of publicly owned facilities.

All of the medical schools in Pennsylvania are privately owned and receive state appropriations for general purposes.<sup>1</sup>

#### MEDICAL SCHOOL ENROLLMENT

In 1953-54, enrollment (column 2 of Table 1) at the four-year medical schools ranged from 181 at Woman's Medical College in Pennsylvania to 750 at the University of Tennessee College of Medicine. Enrollment in the six medical schools in Pennsylvania varied from 181 at Woman's Medical College to 666 at Jefferson Medical College.

#### STUDENT CHARGES AT MEDICAL SCHOOLS

Columns 3 and 4 of Table 1 present, for each medical school in the United States, data relating to annual student charges for residents of the state in which the school is located and for non-residents.

None of the privately owned schools differentiated in its charges to resident and nonresident students. For students attending these schools, charges ranged from \$577 at the Howard University College of Medicine in the District of Columbia to \$1,283 at the College of Medical Evangelists in Los Angeles, with an average of \$856. For resident students attending publicly owned medical schools, charges ranged from \$103

<sup>1</sup> For total Commonwealth appropriations (1941-43 through 1953-55) to Pennsylvania medical schools, see Appendix A.

Table 1

MEDICAL SCHOOLS IN THE UNITED STATES—ENROLLMENT, TUITION AND FEES, PERCENT OF FIRST-YEAR STUDENTS FROM STATE IN WHICH SCHOOL IS LOCATED, AND NUMBER OF APPLICATIONS PER STUDENT ADMITTED: 1953-54

Medical School, by State *	Enrollment	Tuition and Fees		Percent of First-year Students from State in which School Is Located	Number of Applications per Student Admitted
		For Residents of State in which School Is Located	For Non-residents		
(1)	(2)	(3)	(4)	(5)	(6)
<b>ALABAMA</b>					
Medical College of Alabama †	295	\$450	\$700	100%	2.2
<b>ARKANSAS</b>					
Univ. of Arkansas School of Medicine †	318	380	a	100	1.9
<b>CALIFORNIA</b>					
Univ. of California School of Medicine †	309	334	584	88	5.0
College of Medical Evangelists	365	1,283	1,283	43	2.1
Univ. of Southern California School of Medicine	273	920	920	88	6.9
Stanford Univ. School of Medicine	237	870	870	88	8.1
<b>COLORADO</b>					
Univ. of Colorado School of Medicine †	305	655	2,655	83	2.0
<b>CONNECTICUT</b>					
Yale Univ. School of Medicine	303	829	829	13	8.5
<b>DISTRICT OF COLUMBIA</b>					
Georgetown Univ. School of Medicine	455	960	960	6	7.6
George Washington Univ. School of Medicine	350	850	850	13	9.7
Howard Univ. College of Medicine	299	577	577	10	10.0
<b>GEORGIA</b>					
Medical College of Georgia †	304	390	690	100	2.1
Emory Univ. School of Medicine	285	800	800	38	6.2
<b>ILLINOIS</b>					
Univ. of Illinois College of Medicine †	667	288	588	100	3.1
Chicago Medical School	280	762	762	6	13.0
Northwestern Univ. Medical School	533	930	930	37	11.2
Stritch School of Medicine of Loyola Univ.	336	675	675	64	7.8
Univ. of Chicago School of Medicine	280	904	904	21	11.2
<b>INDIANA</b>					
Indiana Univ. School of Medicine †	575	320	600	95	2.7
<b>IOWA</b>					
State Univ. of Iowa College of Medicine †	458	256	566	88	1.2
<b>KANSAS</b>					
Univ. of Kansas School of Medicine †	456	475	925	88	1.9
<b>KENTUCKY</b>					
Univ. of Louisville School of Medicine ‡	381	800	1,200	86	2.3
<b>LOUISIANA</b>					
Louisiana State Univ. School of Medicine †	448	120	520	100	2.6
Tulane Univ. of Louisiana School of Medicine	516	800	800	16	8.3
<b>MARYLAND</b>					
Univ. of Maryland School of Medicine and College of Physicians and Surgeons †	404	533	783	59	3.7
Johns Hopkins Univ. School of Medicine	294	939	939	19	5.1

Table 1 (Continued)

Medical School, by State *	Enrollment	Tuition and Fees		Percent of First-year Students from State in which School Is Located	Number of Appli- cations per Student Admitted
		For Residents of State in which School Is Located	For Non- residents		
(1)	(2)	(3)	(4)	(5)	(6)
<b>MASSACHUSETTS</b>					
Boston Univ. School of Medicine .....	288	\$881	\$881	47%	13.9
Harvard Medical School .....	531	850	850	20	10.6
Tufts College Medical School .....	449	862	862	64	4.5
<b>MICHIGAN</b>					
Univ. of Michigan Medical School † .....	728	400	700	86	2.4
Wayne Univ. College of Medicine ‡ .....	277	537	a	100	2.9
<b>MINNESOTA</b>					
Univ. of Minnesota Medical School † .....	490	362	700	95	2.1
<b>MISSISSIPPI</b>					
Univ. of Mississippi School of Medicine (two-year) † ...	113	410	610	100	2.1
<b>MISSOURI</b>					
Univ. of Missouri School of Medicine (two-year) † ....	85	277	277	100	2.2
St. Louis Univ. School of Medicine .....	491	896	896	15	8.6
Washington Univ. School of Medicine .....	366	906	906	22	15.0
<b>NEBRASKA</b>					
Univ. of Nebraska College of Medicine † .....	344	450	615	92	2.7
Creighton Univ. School of Medicine .....	300	809	809	25	9.8
<b>NEW HAMPSHIRE</b>					
Dartmouth Medical School (two-year) .....	46	800	800	8	11.4
<b>NEW YORK</b>					
State Univ. of New York					
College of Medicine—New York City † .....	573	715	715	91	8.1
College of Medicine—Syracuse † .....	285	715	715	93	13.8
Albany Medical College .....	212	1,007	1,007	80	15.2
Univ. of Buffalo School of Medicine .....	279	878	878	85	8.4
Columbia Univ. College of Physicians and Surgeons ....	465	900	900	53	10.6
Cornell Univ. Medical College .....	337	925	925	51	17.1
New York Medical College, Flower and Fifth Avenue Hospitals .....	478	865	865	61	14.5
New York Univ. College of Medicine .....	530	917	917	81	11.2
Univ. of Rochester School of Medicine and Dentistry ...	280	800	800	56	13.0
<b>NORTH CAROLINA</b>					
Univ. of North Carolina School of Medicine † .....	226	600	1,200	100	4.0
Duke University School of Medicine .....	316	922	922	44	8.1
Bowman Gray School of Medicine of Wake Forest College	200	750	750	54	11.4
<b>NORTH DAKOTA</b>					
Univ. of North Dakota School of Medicine (two-year) †	70	138	223	84	1.8
<b>OHIO</b>					
Ohio State Univ. College of Medicine † .....	575	525	780	100	2.5
Univ. of Cincinnati College of Medicine ‡ .....	352	575 <sup>b</sup>	700 <sup>c</sup>	83	8.7
Western Reserve Univ. School of Medicine .....	335	800	800	68	12.4
<b>OKLAHOMA</b>					
Univ. of Oklahoma School of Medicine † .....	380	400	800	100	1.6
<b>OREGON</b>					
Univ. of Oregon Medical School † .....	267	456	636	75	3.5

Table 1 (Continued)

Medical School, by State *	Enrollment	Tuition and Fees		Percent of First-year Students from State in which School Is Located	Number of Applications per Student Admitted
		For Residents of State in which School Is Located	For Non-residents		
(1)	(2)	(3)	(4)	(5)	(6)
PENNSYLVANIA					
Hahnemann Medical College and Hospital of Philadelphia	393	\$854	\$854	70%	11.0
Jefferson Medical College of Philadelphia	666	800	800	71	10.1
Temple Univ. School of Medicine	516	800	800	65	13.0
Univ. of Pennsylvania School of Medicine	502	921	921	57	12.4
Univ. of Pittsburgh School of Medicine	381	700	700	98	4.6
Woman's Medical College of Pennsylvania	181	860	860	33	4.2
SOUTH CAROLINA					
Medical College of South Carolina †	275	432	1,532	100	1.7
SOUTH DAKOTA					
Univ. of South Dakota School of Medical Sciences (two-year) †	63	315	525	68	5.1
TENNESSEE					
Univ. of Tennessee College of Medicine †	750	450	675	59	1.5
Meharry Medical College	257	621	621	11	6.9
Vanderbilt Univ. School of Medicine	206	810	810	36	13.2
TEXAS					
Southwestern Medical School of the Univ. of Texas †	394	125	375	100	2.7
Univ. of Texas School of Medicine †	599	103	103	100	2.4
Baylor Univ. College of Medicine	358	789	789	84	5.6
UTAH					
Univ. of Utah College of Medicine †	198	480	830	81	7.0
VERMONT					
Univ. of Vermont College of Medicine †	189	567	1,000	41	5.0
VIRGINIA					
Univ. of Virginia School of Medicine †	292	465	865	76	6.2
Medical College of Virginia †	372	563	888	87	3.8
WASHINGTON					
Univ. of Washington School of Medicine †	287	390 <sup>d</sup>	585 <sup>d</sup>	95	2.7
WEST VIRGINIA					
West Virginia Univ. School of Medicine (two-year) †	61	263	705	100	3.7
WISCONSIN					
Univ. of Wisconsin Medical School †	318	318	638	97	1.8
Marquette Univ. School of Medicine	391	850	850	59	9.2

\* Unless otherwise designated, schools are privately owned. For locations and dates of organization, see Appendix B.

† State-owned school.

‡ Municipality-owned school.

<sup>a</sup> Nonresidents not admitted.

<sup>b</sup> For residents of Cincinnati.

<sup>c</sup> For nonresidents of Cincinnati.

<sup>d</sup> Residents of Alaska are charged the same tuition as residents of Washington.

SOURCES: *Journal of the American Medical Association*, Vol. CLVI, No. 2 (September 11, 1954).

John M. Stalnaker, "The Study of Applicants," *Journal of Medical Education*, XXIX, No. 4 (April, 1954).



at the University of Texas School of Medicine to \$800 at the University of Louisville School of Medicine, with an average of \$423, which is \$433 less than the average for privately owned schools. However, 32 of the publicly owned schools differentiated in their charges between resident and nonresident students.<sup>2</sup> This differential ranged from \$85 at the University of North Dakota School of Medicine to \$2,000 at the University of Colorado School of Medicine; the average differential in charges for nonresidents was \$313.

Student charges at the six medical schools in Pennsylvania for the academic year 1953-54 ranged from \$700 at the University of Pittsburgh to \$921 at the University of Pennsylvania. No differentiation in student charges between Pennsylvania resident and nonresident students is made at any of these schools.

#### COMMONWEALTH APPROPRIATIONS TO MEDICAL SCHOOLS

Table 2 (columns 3, 4, and 5) shows receipts of the medical schools in the Commonwealth from student charges and, on a per-student and per-Pennsylvania-student basis, from Commonwealth appropriations.<sup>3</sup> Average annual Commonwealth appropriations *per student* (column 4) varied within rather narrow limits—from \$1,463 for Hahnemann Medical College to \$1,628 for the University of Pittsburgh School of Medicine. On the other hand, average annual Commonwealth appropriations *per Pennsylvania resident student* (column 5) varied widely—from \$1,662 for the University of Pittsburgh School of Medicine to \$4,391 for Woman's Medical College.

<sup>2</sup> Two publicly owned medical schools, as a matter of stated policy, did not admit nonresident students. Four others made no differentiation in charges between resident and nonresident students, but two of these, and some of the 32 which did make differential charges to nonresidents, had no nonresident admissions in 1953.

<sup>3</sup> Commonwealth appropriations are for general purposes and are not earmarked for training or research.

#### PER-STUDENT COSTS

It is difficult to determine with exactitude the cost incurred by a medical school in Pennsylvania in training a medical student. The cost incurred by the school consists of both expenses on current account and charges on capital account. The institutions under review do not keep their records in such a manner as to permit establishment of reliable cost data. However, in cooperation with financial officers of the institutions, the staff of the Joint State Government Commission has analyzed the records of five schools and established approximate training costs, in accordance with accepted accounting procedures, for the academic year 1953-54. These data are shown in columns 6, 7, and 8 of Table 2.

Most of the schools, in addition to furnishing instruction, engage in research activities. In those cases in which a faculty member was engaged in both teaching and research, a portion of his salary was allocated to training costs on a time basis. It should be noted, however, that participation in research is generally considered a valuable adjunct to teaching activity.

Currently, the costs incurred by the long-established<sup>4</sup> Pennsylvania medical schools do not constitute the entire cost of training medical students. Some instructional services are rendered to the schools without charge. Estimates of the value of such services rendered during the academic year 1953-54 have been made by the deans of four of the medical schools in Pennsylvania and are presented in column 9 of Table 2. While the estimates range from \$548 (Hahnemann) to \$1,330 (Woman's) per student, the services are valued at approximately \$10 per hour at each school; the differences are due principally to variations in the number of hours of instruction furnished without charge to the various schools.

<sup>4</sup> All of the medical schools in Pennsylvania were founded over fifty years ago. For dates of organization, see Appendix B.

Table 2

ENROLLMENT, PER-STUDENT RECEIPTS FROM STUDENT AND COMMONWEALTH, PER-STUDENT TRAINING COSTS INCURRED BY SCHOOL, AND PER-STUDENT VALUE OF SERVICES RENDERED WITHOUT CHARGE, FOR EACH MEDICAL SCHOOL IN PENNSYLVANIA: ACADEMIC YEAR 1953-54

School	Enroll- ment	Per-student Receipts of School From Student and Commonwealth			Per-student Training Cost Incurred by School			Per-student Value of Services Rendered without Charge
		Student Charges	Per Student	Commonwealth Appropriation	Expenses on Current Account	Charges on Capital Account	Total	
				Per Pennsylvania Resident Student				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Hahnemann Medical College . . . . .	393	\$854	\$1,463	\$1,993	\$2,685	\$730	\$3,415	\$548
Jefferson Medical College . . . . .	666	800	1,475	2,259	3,700	332	4,032	607
Temple University School of Medi- cine . . . . .	516	800	1,540	2,205	1,996	281	2,277	752
University of Pennsylvania School of Medicine . . . . .	502	921	1,551	2,610	2,203	180	2,383	*
University of Pittsburgh School of Medicine . . . . .	381	700	1,628	1,662	*	*	*	*
Woman's Medical College . . . . .	181	860	1,565	4,391	2,888	358	3,246	1,330

\* Not available.

SOURCES: Columns 2, 4, and 5—Enrollment as reported by the deans of the respective schools, and Appropriation Acts of the General Assembly, Commonwealth of Pennsylvania, Session of 1953.

Column 3—*Journal of the American Medical Association*, Vol. CLVI, No. 2 (September, 1954).

Columns 6, 7, and 8—Estimated by staff of the Joint State Government Commission with the cooperation of the officers of the medical schools. Complete accounts of capital investments were not available, either at cost value or replacement value, except for Hahnemann Medical College, where a complete appraisal of buildings and equipment was made in 1950 and has been kept current, and Temple University School of Medicine, which has a complete record of original costs. The annual charges on capital account for all other medical schools are based upon estimated values. The rates of amortization of investment for purposes of this table are 2 percent for buildings and 5 percent for equipment, fixtures, and furniture.

Column 9—Estimates furnished by the deans of the respective schools.

Table 3

NUMBERS OF APPLICATIONS, APPLICANTS, AND APPLICANTS ACCEPTED AT MEDICAL SCHOOLS IN THE UNITED STATES: 1934-1942 AND 1947-1953

<i>Academic Year</i>	<i>Number of Applications</i>	<i>Number of Applicants</i>	<i>Applications per Applicant</i>	<i>Number of Applicants Accepted</i>	<i>Ratio of Applicants to Accepted Applicants</i>
(1)	(2)	(3)	(4)	(5)	(6)
1934-35 .....	32,321	12,779	2.5	7,419	1.7
1935-36 .....	34,427	12,740	2.7	6,900	1.8
1936-37 .....	35,439	12,192	2.9	6,465	1.9
1937-38 .....	34,416	12,207	2.8	6,410	1.9
1938-39 .....	36,268	12,131	3.0	6,223	1.9
1939-40 .....	34,871	11,800	3.0	6,211	1.9
1940-41 .....	34,434	11,854	2.9	6,328	1.9
1941-42 .....	34,655	11,940	2.9	6,822	1.8
1942-43 .....	39,111	14,043	2.8	6,835	2.1
1947-48 .....	56,279	18,829	3.0	....	...
1948-49 .....	81,662	24,242	3.4	6,973	3.5
1949-50 .....	88,244	24,434	3.6	....	...
1950-51 .....	81,931	22,279	3.7	7,254	3.1
1951-52 .....	70,678	19,920	3.5	7,663	2.6
1952-53 .....	56,319	16,763	3.4	7,778	2.2
1953-54 .....	48,586	14,678	3.3	7,756	1.9

SOURCES: *Health Manpower Source Book*, Section I, Physicians (Washington, D. C.: Federal Security Agency, Public Health Service Publication No. 263 [May, 1952—Preliminary],) p. 37.

John M. Stalnaker, "The Study of Applicants," *Medical Education Today—Its Aims, Problems and Trends* (Chicago, Ill.: Association of American Medical Colleges, 1953), p. 41.

John M. Stalnaker, "The Study of Applicants," *Journal of Medical Education*, XXIX, No. 4 (April, 1954), 13, 15.

#### APPLICATIONS AND APPLICANTS

The ratio of applicants for medical school admission to accepted applicants is an index of the demand for admission to medical schools. Over the last two decades this ratio has undergone noticeable changes. This variation may be noted in Table 3, which shows the total number of applications received by medical schools in the United States, the number of applicants represented by these applications, applications per applicant, the number of applicants accepted, and the ratio of applicants to accepted applicants, for those academic years from 1934-35 through 1953-54 for which published data were available.

The ratio of applicants to accepted applicants (column 6) was relatively stable over the period 1934-35 through 1941-42, ranging from 1.7 to 1.9, increased to a peak of 3.5 in 1948-49, and declined to 1.9 in 1953-54.

It should be pointed out that the number of applications exceeds the number of applicants because a single applicant may apply for admission to more than one school (see column 4). A sizeable decline in the number of applications received, similar to the national trend since 1950-51, is reflected in the experience of Pennsylvania medical schools, shown in Table 4.

The ratio of applications to admissions at each medical school in the United States in 1953 is

**Table 4**  
**NUMBERS OF APPLICATIONS RECEIVED BY MEDICAL SCHOOLS IN PENNSYLVANIA,**  
**BY SCHOOL: 1935-1942, 1948-49, AND 1950-1953**

<i>Academic Year</i>	<i>Hahnemann Medical College</i>	<i>Jefferson Medical College</i>	<i>Temple University School of Medicine</i>	<i>University of Pennsylvania School of Medicine</i>	<i>University of Pittsburgh School of Medicine</i>	<i>Woman's Medical College</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1935-36 .....	766	622	1,089	1,066	260	104
1936-37 .....	808	658	1,093	1,206	241	78
1937-38 .....	955	672	1,166	1,263	239	81
1938-39 .....	1,011	738	1,217	1,237	336	147
1939-40 .....	996	709	1,157	1,215	329	113
1940-41 .....	923	706	1,128	1,105	303	133
1941-42 .....	672	668	1,087	1,118	325	142
1942-43 .....	1,041	622	1,339	860	372	184
1948-49 .....	1,381	1,734	3,202	2,851	919	334
1950-51 .....	1,840	2,796	3,092	2,804	924	302
1951-52 .....	1,758	2,592	2,577	2,180	779	225
1952-53 .....	1,416	2,077	2,134	1,897	616	201
1953-54 .....	1,157	1,711	1,761	1,544	455	209

SOURCE: *Journal of Medical Education*, various issues, 1936 through 1954.

shown in column 6 of Table 1. This ratio ranged from 1.2 at the State University of Iowa College of Medicine to 17.1 at the Cornell University Medical College in New York City. For the schools in Pennsylvania, the ratio varied from 4.2 at Woman's Medical College to 13.0 at Temple University School of Medicine.

#### ADMISSION REQUIREMENTS

It appears that the ratio of applications to admissions for a given school is determined in part by the expectations of potential applicants for meeting the admission requirements of the school. Insofar as such expectations are reduced because of admission requirements unrelated to scholarship and aptitude (such as residence requirements), the scholastic and aptitude qualifications of the applicants from which the school may select

its students tend to be correspondingly reduced. To illustrate: For the entering class in 1950-51, "the average of the Medical College Admission Test scores for students admitted to those 39 schools which apparently practiced little or no restrictions [on the basis of residence, race, religion, or sex] was significantly higher than the comparable average for students admitted to 40 schools which did restrict."<sup>5</sup>

A study of the admission requirements of the six Pennsylvania medical schools,<sup>6</sup> as published in their respective bulletins, shows that:

1. Though the six medical schools may admit an applicant who has but three years of work at a

<sup>5</sup> John E. Deitrich, M.D., and Robert C. Berson, M.D., *Medical Schools in the United States at Mid-Century*, (New York: McGraw-Hill Book Company, Inc., 1953), p. 220.

<sup>6</sup> A summary of the admission requirements of the medical schools in Pennsylvania is presented in Appendix C.

liberal arts college, all except the schools of Temple University and the University of Pittsburgh indicate a preference for applicants who have completed four years of college work.

2. All six schools require an applicant to show evidence that he has successfully completed specified college courses in the basic sciences.

3. Four of the six—Hahnemann Medical College, Temple University School of Medicine, University of Pennsylvania School of Medicine, and Woman's Medical College—require that an applicant take the Medical College Admission Test.

4. Four of the institutions—all except Temple University School of Medicine and the University of Pittsburgh School of Medicine—require that an applicant take a physical examination.

5. Four schools admit both men and women. Jefferson Medical College admits only men; Woman's Medical College admits only women.

#### RESIDENT STUDENTS AND RESIDENCE REQUIREMENTS

In 1953-54, the proportion of first-year students from the state in which the school is located was greater, on the average, for publicly owned than for privately owned medical schools. (See Table 1, column 5.) It appears that this is in part attributable to the residence requirements and differential tuition charges of publicly owned schools.

Though the official bulletins of the six medical schools in Pennsylvania—all privately owned—do not specify any residence requirements, perusal of Table 5 indicates that since 1948 the majority of the members of the first-year class of each school, with the exception of Woman's Medical College, were residents of the Commonwealth.

Some students at medical schools in Pennsylvania become legal residents of the Commonwealth during their course of study at these schools. Table 5 indicates that, despite this, the

percent of all students who were residents of the Commonwealth was, in some years, less than could have been expected on the basis of the percents of first-year students in that year and the three prior years who were Commonwealth residents. This situation appears to be attributable in part to two factors: First, in the evaluation of the scholarship and aptitude of applicants by admissions committees at Pennsylvania medical schools, doubts are resolved in favor of the resident applicant rather than the nonresident applicant.<sup>7</sup> This procedure is likely to produce a higher "drop-out" rate for resident than for nonresident students. And, when students are admitted with advanced standing in the third year, especially from the two-year medical schools, there seems to be a high probability that such students will be residents of states other than Pennsylvania. For example, in 1953-54, of the 226 first-year students enrolled in the six two-year medical schools, only one, a student at the Dartmouth Medical School, was a Pennsylvania resident.

#### PENNSYLVANIA APPLICANTS AND MEDICAL TRAINING FACILITIES

In 1953, 1,186 residents of Pennsylvania applied for admission to medical schools in the United States; of this number, 52 percent were not admitted. The evidence indicates that, currently, most Pennsylvania applicants who are not admitted either do not apply to, or are not qualified for admission to, Pennsylvania medical schools. The Joint State Government Commission has been advised by the deans of the Pennsylvania medical schools that, aside from applicants known to have been admitted elsewhere, for the academic year beginning in September, 1954, a total of less than ten *qualified* Pennsylvania applicants were denied admission to Penn-

<sup>7</sup> Testimony of the deans of Pennsylvania medical schools before the Commission's subcommittee, November 30, 1954.

Table 5  
COMMONWEALTH RESIDENT STUDENTS AS PERCENT OF FIRST-YEAR STUDENTS AND AS PERCENT OF ALL STUDENTS  
AT MEDICAL SCHOOLS IN PENNSYLVANIA, BY SCHOOL:  
ACADEMIC YEARS 1945-46 THROUGH 1953-54

<i>Student Group and School</i>	1945-46	1946-47	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIRST-YEAR STUDENTS									
Hahnemann Medical College .....	50%	46%	49%	59%	69%	71%	73%	73%	70%
Jefferson Medical College .....	51	62	60	58	62	64	64	63	71
Temple University School of Medicine .....	40	53	54	54	72	70	62	71	65
University of Pennsylvania School of Medicine .....	45	59	54	58	51	62	61	58	57
University of Pittsburgh School of Medicine .....	70	99	97	100	99	99	100	99	98
Woman's Medical College .....	38	31	14	22	18	28	26	42	33
ALL STUDENTS									
Hahnemann Medical College .....	48%	51%	53%	55%	59%	63%	68%	72%	74%
Jefferson Medical College .....	63	62	60	57	59	61	61	62	65
Temple University School of Medicine .....	52	55	55	57	59	63	65	68	69
University of Pennsylvania School of Medicine .....	55	54	52	53	51	55	58	58	60
University of Pittsburgh School of Medicine .....	90	92	92	93	98	96	95	96	97
Woman's Medical College .....	31	30	31	26	22	20	21	28	37

SOURCES: *Journal of the American Medical Association*, September (Medical Education) issues, 1946 through 1954, and data furnished by the deans of the respective medical schools, 1954-1955.

sylvania schools because of the capacity limitations of existing training facilities.<sup>8</sup>

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<sup>8</sup> The accommodation of more Pennsylvania students at Pennsylvania medical schools could result from the establishment of a medical school in New Jersey, which until 1954 had no medical training facilities. In the academic year 1953-54, 71 students in the first-year classes of Pennsylvania medical schools were residents of New Jersey. The medical school established at Seton Hall University, to be conducted at the Medical Center in Jersey City, New Jersey, is expected to be ready to accept students in September, 1955.

It appears that it is not economical to construct medical training facilities for an anticipated total load of less than about 200 students, which would call for the admission of approximately 50 new students per year. Such an annual enrollment would be considerably in excess of the total number of *qualified* Pennsylvania applicants who were not accepted by Pennsylvania medical schools in 1954.





## Section II

# NUMBERS OF PHYSICIANS AND INTERSTATE MIGRATION OF MEDICAL SCHOOL GRADUATES

The patient-load which can be carried by a single physician is influenced by a number of factors which change over time, among them medical techniques, hospital and clinical facilities, organizational arrangements for medical practice, and means of communication and transportation.

### NUMBERS OF PHYSICIANS

At a given time, comparisons of the availability of physicians' services among geographic areas must be based upon the number of physicians (and the number of specialists) in relation to the population to be served. Table 6 shows, for each of the forty-eight states, the number of active non-federal physicians per 100,000 civilian population (1949), by type of practice. In Pennsylvania, the number of active non-federal physicians per 100,000 population was 128, compared to the national average of 121 (column 2). Further, column 7 indicates that 37 percent of the physicians in private practice in Pennsylvania limited their practice to a specialty, compared to 36 percent for the United States as a whole.

In 1953, there were 734 persons per licensed physician in Pennsylvania. The number varied by county from 296 persons in Montour County to

3,372 persons in Sullivan County.<sup>1</sup> (For details, see Appendix D.)

Among the measurable factors which appear to influence the number of physicians serving the population of a given state or locality are degree of urbanization, extent of hospital and clinical facilities, per capita income, availability of public health services, number of residents who complete medical training in the state or elsewhere, and extent of medical training facilities.

While the relative importance of the various factors has not yet been established, available evidence strongly suggests that the extent of medical training facilities is not the governing factor. For example, Pennsylvania (with six medical schools) and New Jersey (with no medical school) had the same number of active non-federal physicians per 100,000 civilian population in 1949. In addition, Arizona, Delaware, Florida, Idaho, Maine, Montana, Nevada, and Rhode Island—all states without medical schools—had more active physicians per population than had Alabama, Mississippi, and South Carolina—all states with medical schools.

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<sup>1</sup> Comparable data are not available for the United States. It should be noted that "physicians licensed" is more inclusive than "active non-federal physicians."

Table 6

## ACTIVE NON-FEDERAL PHYSICIANS PER 100,000 CIVILIAN POPULATION, BY TYPE OF PRACTICE, BY STATE: 1949

[States listed in the order of their rank by total shown in column 2]

State	Total	Physicians in Private Practice					Physicians Not in Private Practice	
		Total	General Practitioners	General Practitioners with Some Specialization	Full-time Specialists Number	Percent of Total	In Hospital Service	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
UNITED STATES .....	121	102	49	16	37	36.3%	17	2
District of Columbia .....	267	189	78	13	98	51.9	69	9
New York .....	196	161	67	25	69	42.9	31	4
Massachusetts .....	170	133	64	19	50	37.6	33	4
Colorado .....	158	131	58	21	52	39.7	26	1
Connecticut .....	152	122	50	15	57	46.7	25	5
California .....	142	123	58	15	50	40.7	17	2
Illinois .....	141	120	60	20	40	33.3	18	3
Vermont .....	140	119	67	20	32	26.9	15	6
Maryland .....	136	97	47	9	41	42.3	34	5
Minnesota .....	132	95	50	12	33	34.7	34	3
New Jersey* .....	128	117	52	25	40	34.2	9	2
Pennsylvania .....	128	106	50	17	39	36.8	18	4
Delaware* .....	126	101	54	10	37	36.6	21	4
New Hampshire .....	126	117	57	24	36	30.8	7	2
Missouri .....	120	98	47	14	37	37.8	20	2
Rhode Island* .....	118	103	43	15	45	43.7	14	1
Ohio .....	116	96	45	15	36	37.5	18	2
Utah .....	115	92	44	15	33	35.9	19	4
Nebraska .....	113	102	57	14	31	30.4	9	2
Nevada* .....	110	107	55	16	36	33.6	2	1
Oregon .....	109	93	50	9	34	36.6	12	4

State	Physicians in Private Practice						Physicians Not in Private Practice	
	Total	Total	General Practitioners	General Practitioners with Some Specialization	Full-time Specialists		In Hospital Service	Other
					Number	Percent of Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Michigan .....	106	85	38	14	33	38.8	19	2
Washington .....	106	94	45	14	35	37.2	10	2
Iowa .....	105	91	50	17	24	26.4	12	2
Louisiana .....	104	77	39	10	28	36.4	21	6
Wisconsin .....	104	89	48	15	26	29.2	12	3
Indiana .....	103	91	49	16	26	28.6	11	1
Kansas .....	103	88	46	18	24	27.3	14	1
Arizona* .....	97	91	34	17	40	44.0	6	..
Maine* .....	97	88	48	17	23	26.1	7	2
Texas .....	95	85	43	14	28	32.9	9	1
Montana* .....	94	92	49	15	28	30.4	2	..
Oklahoma .....	94	86	45	15	26	30.2	6	2
Florida* .....	91	84	38	12	34	40.5	6	1
Virginia .....	91	72	40	9	23	31.9	16	3
Tennessee .....	90	73	38	10	25	34.2	15	2
Georgia .....	84	71	35	12	24	33.8	11	2
Kentucky .....	84	76	44	10	22	28.9	7	1
West Virginia .....	84	77	40	11	26	33.8	6	1
Wyoming* .....	83	80	49	19	12	15.0	1	2
Arkansas .....	82	75	49	12	14	18.7	5	2
North Carolina .....	79	64	34	8	22	34.4	12	3
Idaho* .....	77	76	47	12	17	22.4	..	1
North Dakota .....	75	71	36	12	23	32.4	3	1
New Mexico* .....	73	66	33	12	21	31.8	5	2
South Dakota .....	73	72	39	17	16	22.2	..	1
South Carolina .....	69	61	36	10	15	24.6	5	3
Alabama .....	68	60	33	10	17	28.3	7	1
Mississippi .....	64	60	39	9	12	20.0	2	2

\* No medical school in state.

SOURCE: *Health Manpower Source Book*, Section I, Physicians (Washington, D. C.: Federal Security Agency, Public Health Service Publication No. 263 [May, 1952—Preliminary]), p. 18.

## INTERSTATE MIGRATION OF MEDICAL SCHOOL GRADUATES

The interstate migration of medical school graduates is of considerable magnitude. Table 7 presents for each of the forty-eight states, as of 1949, the number of active physicians graduated from all medical schools located in the state (column 2) and the number of these physicians residing in the state (column 3) and outside of the state (column 4). Column 5 shows the number of active physicians residing in the state but trained elsewhere. Column 6 presents the net "export or import" of physicians (the difference between columns 4 and 5). Column 7 expresses the net export as a percentage of the total number of active physicians who were trained within the state.

Of the 31 states in which four-year medical schools were located, 16 showed a net export equivalent to from 2 percent to 65 percent of the physicians trained within the state, and 15 showed a net import.

While, in 1949, 80 percent of the active physicians in Pennsylvania were graduates of Pennsyl-

vania medical schools,<sup>2</sup> 8,840, or 47 percent, of the 18,647 active physicians who had been trained in Pennsylvania were practicing outside the Commonwealth. This emigration was partially offset by an immigration of 2,447 physicians trained in medical schools outside of Pennsylvania. This resulted in a net export of 6,393 doctors of medicine, the equivalent of 34 percent of those trained in Pennsylvania.

Data for past years indicate that the percentage of Pennsylvania residents who leave the Commonwealth after graduation from Pennsylvania medical schools is smaller than the comparable percentage of nonresidents. Of the 1940 graduates of medical schools in Pennsylvania who were residents of the Commonwealth at the time of matriculation, 28 percent were practicing outside of Pennsylvania in 1940, as compared with 85 percent of the 1940 graduates who were residents of other states at the time of matriculation.<sup>3</sup>

<sup>2</sup> Appendix D presents a distribution of physicians licensed to practice in Pennsylvania in 1953, by location of the medical schools from which they graduated.

<sup>3</sup> Based on an analysis of data furnished by Dr. Herman G. Weiskotten, M.D., chairman of the Council on Medical Education of the American Medical Association, and Marion E. Altenderfer, statistician of the Division of Public Health Methods, Public Health Service, U. S. Department of Health, Education, and Welfare.

**Table 7**  
**NUMBER OF ACTIVE PHYSICIANS TRAINED IN STATE, AND NET EXPORT AND IMPORT**  
**OF ACTIVE PHYSICIANS, BY STATE: 1949**

State	Active Physicians Trained in State			Physicians Presently Residing in State but Trained Elsewhere	Net Export (—) or Import of Physicians (Col. 5 less Col. 4)	Net Export (—) as Percent of Physicians Trained in State
	Total Number	Number Presently Residing in State	Number Not Presently Residing in State			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Alabama .....	356	258	98	1,471	1,373	.....
Arizona .....	.....	.....	.....	623	623	.....
Arkansas .....	1,332	602	730	499	—231	—17.3%
California .....	5,636	4,563	1,073	8,101	7,028	.....
Colorado .....	1,226	594	632	947	315	.....
Connecticut .....	1,360	471	889	2,216	1,327	.....
Delaware .....	.....	.....	.....	366	366	.....
Florida .....	.....	.....	.....	2,425	2,425	.....
Georgia .....	2,894	1,488	1,406	895	—511	—17.7
Idaho .....	.....	.....	.....	401	401	.....
Illinois .....	12,480	5,669	6,811	2,402	—4,409	—35.3
Indiana .....	2,786	1,875	911	1,395	484	.....
Iowa .....	2,323	1,099	1,224	1,119	—105	— 4.5
Kansas .....	1,584	662	922	817	—105	— 6.6
Kentucky .....	2,894	1,068	1,826	819	—1,007	—34.8
Louisiana .....	4,634	1,822	2,812	688	—2,124	—45.8
Maine .....	.....	.....	.....	600	600	.....
Maryland .....	5,988	1,669	4,319	1,103	—3,216	—53.7
Massachusetts .....	9,352	4,283	5,069	1,920	—3,149	—33.7
Michigan .....	5,894	3,431	2,463	2,352	—111	— 1.9
Minnesota .....	3,509	2,005	1,504	1,516	12	.....
Mississippi .....	.....	.....	.....	1,032	1,032	.....
Missouri .....	5,861	1,911	3,950	1,625	—2,325	—39.7
Montana .....	.....	.....	.....	457	457	.....
Nebraska .....	3,648	993	2,655	296	—2,359	—64.7

(Continued on following page.)

Table 7 (Continued)

State	Active Physicians Trained in State			Physicians Presently Residing in State but Trained Elsewhere	Net Export (—) or Import of Physicians (Col. 5 less Col. 4)	Net Export (—) as Percent of Physicians Trained in State
	Total Number	Number Presently Residing in State	Number Not Presently Residing in State			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Nevada .....	.....	.....	.....	151	151	.....
New Hampshire .....	.....	.....	.....	543	543	.....
New Jersey .....	.....	.....	.....	5,063	5,063	.....
New Mexico .....	.....	.....	.....	369	369	.....
New York .....	20,944	14,279	6,665	7,282	617	.....
North Carolina .....	1,041	338	703	2,378	1,675	.....
North Dakota .....	.....	.....	.....	343	343	.....
Ohio .....	5,966	3,898	2,068	3,585	1,517	.....
Oklahoma .....	1,241	690	551	885	334	.....
Oregon .....	1,419	708	711	765	54	.....
PENNSYLVANIA .....	18,647	9,807	8,840	2,447	—6,393	—34.3
Rhode Island .....	.....	.....	.....	804	804	.....
South Carolina .....	1,222	815	407	527	120	.....
South Dakota .....	.....	.....	.....	374	374	.....
Tennessee .....	6,030	1,608	4,422	782	—3,640	—60.4
Texas .....	3,987	3,108	879	2,917	2,038	.....
Utah .....	144	72	72	590	518	.....
Vermont .....	1,241	340	901	160	—741	—59.7
Virginia .....	3,819	1,508	2,311	1,053	—1,258	—32.9
Washington* .....	.....	.....	.....	2,105	2,105	.....
West Virginia .....	.....	.....	.....	1,291	1,291	.....
Wisconsin .....	2,717	1,471	1,246	1,408	162	.....
Wyoming .....	.....	.....	.....	198	198	.....
District of Columbia ..	5,153	1,111	4,042	1,007	—3,035	—58.9

\* First class of the University of Washington School of Medicine was graduated in 1950.

SOURCE: John E. Deitrick, M.D., and Robert C. Berson, M.D., *Medical Schools in the United States at Mid-Century* (New York: McGraw-Hill Book Company, Inc., 1953), Appendix 3. (Data were assembled from 147,328 of 202,000 punch cards for the 1950 *American Medical Directory*.)

## **APPENDICES**





## Appendix A

### BIENNIAL COMMONWEALTH APPROPRIATIONS TO PENNSYLVANIA MEDICAL SCHOOLS: 1941-43 THROUGH 1953-55

<i>School</i>	<i>1941-43</i>	<i>1943-45</i>	<i>1945-47</i>	<i>1947-49</i>	<i>1949-51</i>	<i>1951-53</i>	<i>1953-55</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hahnemann Medical College .....	\$150,000	\$165,000	\$200,000	\$415,500 <sup>a</sup>	\$680,000	\$1,000,000	\$1,150,000
Jefferson Medical College .....	150,000	165,000	200,000	588,000 <sup>b</sup>	876,000 <sup>c</sup>	1,500,000	1,987,800
Temple University School of Medicine .....	d	d	d	d	d	1,375,000	1,581,250
University of Pennsylvania School of Medicine .....	d	d	d	d	d	d	1,563,660
University of Pittsburgh School of Medicine .....	d	d	d	d	d	d	1,213,000
Woman's Medical College .....	120,000	120,000	132,000	165,000	250,000	332,000	566,470

<sup>a</sup> Passed legislature in amount of \$490,500.

<sup>b</sup> Passed legislature in amount of \$663,800.

<sup>c</sup> Passed legislature in amount of \$900,000.

<sup>d</sup> Included in General Appropriation to institutions.

SOURCE: Appropriation Acts of the General Assembly, Commonwealth of Pennsylvania, Sessions 1941 to 1953, inclusive.



## Appendix B

### LOCATIONS AND DATES OF ORGANIZATION OF MEDICAL SCHOOLS IN THE UNITED STATES

#### ALABAMA

Medical College of Alabama, Birmingham (1943)

#### ARKANSAS

University of Arkansas School of Medicine, Little Rock (1879)

#### CALIFORNIA

College of Medical Evangelists, Loma Linda-Los Angeles (1909)

University of Southern California School of Medicine, Los Angeles (1895)

Stanford University School of Medicine, San Francisco (1908)

University of California School of Medicine, San Francisco (1864)

#### COLORADO

University of Colorado School of Medicine, Denver (1883)

#### CONNECTICUT

Yale University School of Medicine, New Haven (1812)

#### DISTRICT OF COLUMBIA

Georgetown University School of Medicine, Washington (1851)

George Washington University School of Medicine, Washington (1825)

Howard University College of Medicine, Washington (1869)

#### GEORGIA

Emory University School of Medicine, Atlanta (1854)

Medical College of Georgia, Augusta (1828)

#### ILLINOIS

Chicago Medical School, Chicago (1912)

Northwestern University School of Medicine, Chicago (1859)

Stritch School of Medicine of Loyola University, Chicago (1915)

University of Chicago School of Medicine, Chicago (1924)

University of Illinois College of Medicine, Chicago (1882)

#### INDIANA

Indiana University School of Medicine, Bloomington-Indianapolis (1903)

#### IOWA

State University of Iowa College of Medicine, Iowa City (1870)

#### KANSAS

University of Kansas School of Medicine, Lawrence-Kansas City (1880)

#### KENTUCKY

University of Louisville School of Medicine, Louisville (1837)

#### LOUISIANA

Louisiana State University School of Medicine, New Orleans (1931)

Tulane University of Louisiana School of Medicine, New Orleans (1834)

#### MARYLAND

Johns Hopkins University School of Medicine, Baltimore (1893)

University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore (1807)

#### MASSACHUSETTS

Boston University School of Medicine, Boston (1873)

Harvard Medical School, Boston (1782)

Tufts College Medical School, Boston (1893)

#### MICHIGAN

University of Michigan Medical School, Ann Arbor (1850)

Wayne University College of Medicine, Detroit (1868)

#### MINNESOTA

University of Minnesota Medical School, Minneapolis (1888)

#### MISSISSIPPI

University of Mississippi School of Medicine, University (1903)

#### MISSOURI

St. Louis University School of Medicine, St. Louis (1901)

Washington University School of Medicine, St. Louis (1842)

University of Missouri School of Medicine, Columbia (1872)

#### NEBRASKA

Creighton University School of Medicine, Omaha (1892)

University of Nebraska College of Medicine, Omaha (1881)

#### NEW HAMPSHIRE

Dartmouth Medical School, Hanover (1797)

#### NEW YORK

Albany Medical College, Albany (1838)

University of Buffalo School of Medicine, Buffalo (1846)

Columbia University College of Physicians and Surgeons, New York City (1814)

Cornell University Medical College, New York City (1898)

New York Medical College, Flower and Fifth Avenue Hospitals, New York City (1858)

New York University College of Medicine, New York City (1841)

State University of New York College of Medicine, New York City (1858)

University of Rochester School of Medicine and Dentistry, Rochester (1925)

State University of New York College of Medicine, Syracuse (1872)

#### NORTH CAROLINA

Duke University School of Medicine, Durham (1930)

Bowman Gray School of Medicine of Wake Forest College, Winston-Salem (1902)

University of North Carolina School of Medicine, Chapel Hill (1902)

#### NORTH DAKOTA

University of North Dakota School of Medicine, Grand Forks (1905)

#### OHIO

University of Cincinnati College of Medicine, Cincinnati (1819)

Western Reserve University School of Medicine, Cleveland (1843)

Ohio State University College of Medicine, Columbus (1914)

#### OKLAHOMA

University of Oklahoma School of Medicine, Oklahoma City (1910)

#### OREGON

University of Oregon Medical School, Portland (1887)

#### PENNSYLVANIA

Hahnemann Medical College and Hospital of Philadelphia, Philadelphia (1848)

Jefferson Medical College of Philadelphia, Philadelphia (1825)

Temple University School of Medicine, Philadelphia (1901)

University of Pennsylvania School of Medicine, Philadelphia (1765)

University of Pittsburgh School of Medicine, Pittsburgh (1886)

Woman's Medical College of Pennsylvania, Philadelphia (1850)

#### SOUTH CAROLINA

Medical College of South Carolina, Charleston (1823)

#### SOUTH DAKOTA

University of South Dakota School of Medical Sciences, Vermillion (1907)

#### TENNESSEE

University of Tennessee College of Medicine, Memphis (1876)

Meharry Medical College, Nashville (1876)

Vanderbilt University School of Medicine, Nashville (1874)

#### TEXAS

Southwestern Medical School of the University of Texas, Dallas (1943)

University of Texas School of Medicine, Galveston (1892)

Baylor University College of Medicine, Houston (1900)

#### UTAH

University of Utah College of Medicine, Salt Lake City (1905)

#### VERMONT

University of Vermont College of Medicine, Burlington (1822)

#### VIRGINIA

University of Virginia School of Medicine, Charlottesville (1827)

Medical College of Virginia, Richmond (1838)

#### WASHINGTON

University of Washington School of Medicine, Seattle (1946)

#### WEST VIRGINIA

West Virginia University School of Medicine, Morgantown (1912)

#### WISCONSIN

University of Wisconsin Medical School, Madison (1907)

Marquette University School of Medicine, Milwaukee (1912)

## Appendix C

### SUMMARY OF ADMISSION REQUIREMENTS OF MEDICAL SCHOOLS IN PENNSYLVANIA: ACADEMIC YEAR 1952-53

[Based on bulletins of the respective schools, 1952-53]

Of the six medical schools in Pennsylvania, four admit both men and women. Enrollment at Jefferson Medical College is restricted to men, and enrollment at Woman's Medical College is restricted to women.

Other requirements for admission were as follows:

#### ACADEMIC HIGH SCHOOL EDUCATION

*Jefferson Medical College:* Four years of approved high-school credits required.

*Temple University School of Medicine:* Four-year course required.

*University of Pittsburgh School of Medicine:* Specific subjects required. Applicants unable to provide satisfactory credentials from preparatory schools required to pass entrance examinations conducted by Pennsylvania Department of Public Instruction or College Entrance Examination Board.

*Other schools:* No statement.

#### UNDERGRADUATE COLLEGE EDUCATION

*Hahnemann Medical College:* Specific course requirements. Preference given to applicants with degrees from institutions approved by American Medical Association. Emphasis placed on "B" average or better in science courses. Candidates with but three years of college work considered only in exceptional cases.

*Jefferson Medical College:* Three years, with specific course requirements. Right is reserved to recommend further study and degree.

*Temple University School of Medicine:* Three years at approved college of arts and sciences. Specific course requirements.

*University of Pennsylvania Medical School:* Four years considered most desirable. Specific course requirements. Applicants without degrees accepted only in exceptional cases.

*University of Pittsburgh School of Medicine:* Three years, with specific course requirements.

*Woman's Medical College:* Four-year liberal arts course with degree from accredited college considered best preparation. Three years minimum. Specific course requirements; others suggested.

#### MEDICAL COLLEGE ADMISSION TEST

<i>Hahnemann Medical College:</i>	} Required.
<i>Temple University School of Medicine:</i>	
<i>University of Pennsylvania School of Medicine:</i>	
<i>Woman's Medical College:</i>	
<i>Other schools:</i> No statement.	

#### REFERENCES

*Hahnemann Medical College:* Individuals selected by applicant must attest to his character, initiative, and personality.

*Jefferson Medical College:* References from professors of physics, chemistry, and biology at undergraduate college, or undergraduate college committee recommendation required.

*Temple University School of Medicine:* References required from two science professors at undergraduate college.

*University of Pennsylvania School of Medicine:* References required from science teachers at undergraduate college.

*University of Pittsburgh School of Medicine:* "Certificate" of applicant's good moral character required from two physicians "in good standing" in state of applicant's residence.

*Woman's Medical College:* No statement.

#### PERSONAL INTERVIEW

*Hahnemann Medical College:* May be required upon request of Committee on Admissions.

*University of Pennsylvania School of Medicine:* Required if deemed desirable.

*Other schools:* No statement.

EVALUATION OF COMMITTEE ON ADMISSION

Jefferson Medical College: Applicant must be of good moral character.

University of Pennsylvania School of Medicine: Evaluation relates to character, ability and fitness to pursue study of medicine, and promise for future as a physician in comparison with other applicants.

Other schools: No statement.

PHYSICAL EXAMINATION

Hahnemann Medical College: } Required.  
Jefferson Medical College: }  
University of Pennsylvania }  
School of Medicine: }  
Woman's Medical College: }  
Other schools: No statement.

## Appendix D

### NUMBER OF PHYSICIANS IN PENNSYLVANIA, BY COUNTY, BY LOCATION OF MEDICAL SCHOOL ATTENDED: SEPTEMBER, 1953

County	<i>Graduates of Medical Schools in Pennsylvania</i>						<i>Graduates of Other Medical Schools in the United States, by Census Region</i>							Total Physicians	Population per Physician
	<i>Univ. of Pennsylvania School of Medicine*</i>	<i>Jefferson Medical College</i>	<i>Univ. of Pittsburgh School of Medicine</i>	<i>Temple Univ. School of Medicine</i>	<i>Hahnemann Medical College</i>	<i>Woman's Medical College</i>	<i>South Atlantic, Central, and West States †</i>	<i>East North Central and West States ‡</i>	<i>New England and Middle Atlantic States ¶</i>	<i>Mountain and Pacific States §</i>	<i>Graduates of Foreign Medical Schools</i>				
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)				
State Total .....	2,866	2,709	1,851	1,591	1,565	357	1,378	843	725	41	367	14,293	734		
Adams .....	12	9	...	5	1	1	5	1	1	..	..	35	1,263		
Allegheny .....	159	145	1,145	55	94	21	213	187	113	5	69	2,206	687		
Armstrong .....	9	9	20	7	..	..	4	3	2	..	1	55	1,470		
Beaver .....	15	23	55	11	18	2	13	15	7	..	1	160	1,095		
Bedford .....	5	2	3	3	1	..	6	1	..	..	..	21	1,942		
Berks .....	91	94	5	46	57	5	36	11	14	1	11	371	689		
Blair .....	20	28	17	15	19	2	20	4	5	..	7	137	1,018		
Bradford .....	13	13	5	7	2	1	15	8	11	..	2	77	672		
Bucks .....	34	38	1	24	25	2	6	9	8	..	3	150	964		
Butler .....	19	11	26	7	1	3	6	7	4	..	3	87	1,119		
Cambria .....	25	40	31	20	24	2	27	24	6	..	4	203	1,032		
Cameron .....	..	..	..	..	..	..	2	1	..	..	..	3	2,341		
Carbon .....	7	18	..	9	10	1	4	1	1	..	..	51	1,128		
Centre .....	10	16	12	4	9	1	2	4	3	1	..	62	1,063		
Chester .....	71	18	1	23	40	4	18	7	8	1	1	192	829		
Clarion .....	3	3	9	2	..	..	3	5	..	..	..	25	1,534		
Clearfield .....	7	15	7	2	6	..	8	7	3	..	3	58	1,482		
Clinton .....	7	8	2	1	6	..	4	1	..	..	..	29	1,260		
Columbia .....	9	16	3	9	8	..	4	1	3	..	..	53	1,009		
Crawford .....	15	12	14	6	6	2	6	9	7	..	2	79	999		
Cumberland .....	23	20	5	22	10	3	12	4	4	..	..	103	917		
Dauphin .....	77	69	9	37	23	10	49	15	17	2	6	314	630		
Delaware .....	169	165	6	69	110	28	49	15	34	4	11	660	628		
Elk .....	5	5	8	3	2	2	4	..	3	..	1	33	1,046		
Erie .....	34	30	45	18	12	5	34	46	30	..	14	268	819		

*Graduates of Other Medical Schools in  
the United States, by Census Region*

County	<i>Graduates of Medical Schools in Pennsylvania</i>						<i>South Atlantic, East South Central, and West South Central States †</i>	<i>East North and West North Central States ‡</i>	<i>New England and Middle Atlantic States ¶</i>	<i>Mountain and Pacific States §</i>	<i>Graduates of Foreign Medical Schools</i>	<i>Total Physicians</i>	<i>Popula- tion per Physician</i>
	<i>Univ. of Pennsyl- vania School of Medicine*</i>	<i>Jefferson Medical College</i>	<i>Univ. of Pittsburgh School of Medicine</i>	<i>Temple Univ. School of Medicine</i>	<i>Habne- mann Medical College</i>	<i>Woman's Medical College</i>	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Fayette .....	20	30	31	7	5	1	32	14	5	..	4	149	1,274
Forest .....	..	2	..	..	..	..	2	..	..	..	..	4	1,236
Franklin .....	18	18	8	9	7	4	13	3	3	..	3	86	883
Fulton .....	1	..	..	..	1	..	1	..	1	..	..	4	2,597
Greene .....	2	7	11	2	2	..	3	7	..	..	..	34	1,335
Huntingdon .....	8	13	4	2	2	1	1	1	4	..	..	36	1,135
Indiana .....	3	8	15	9	1	1	7	4	3	..	1	52	1,483
Jefferson .....	5	9	8	7	4	..	5	2	3	..	1	44	1,117
Juniata .....	4	2	..	2	1	..	..	..	1	..	..	10	1,524
Lackawanna .....	39	78	1	21	42	1	81	25	21	..	11	320	804
Lancaster .....	67	77	7	30	35	12	25	7	10	..	6	276	850
Lawrence .....	7	17	29	10	4	3	6	15	7	..	1	99	1,061
Lebanon .....	22	21	3	8	19	3	13	..	4	..	1	94	869
Lehigh .....	68	49	4	47	35	5	18	12	16	2	4	260	762
Luzerne .....	67	139	3	50	73	9	56	20	39	1	15	472	831
Lycoming .....	32	26	6	25	4	3	19	3	10	..	2	130	779
McKean .....	9	8	12	2	3	2	5	4	11	..	3	59	959
Mercer .....	13	20	36	15	7	4	9	11	7	..	1	123	910
Mifflin .....	8	11	3	5	2	2	5	5	..	..	2	43	1,016
Monroe .....	21	15	1	3	3	2	1	1	4	..	..	51	662
Montgomery .....	254	163	10	104	122	20	49	37	53	2	19	833	424
Montour .....	11	17	1	4	1	1	5	5	7	..	2	54	296
Northampton .....	62	65	4	23	17	3	29	7	30	1	7	248	747
Northumberland ..	21	37	..	9	9	3	10	4	4	..	2	99	1,182
Perry .....	3	3	1	1	1	..	2	..	2	..	2	15	1,652
Philadelphia .....	1,109	834	18	666	567	158	284	162	148	14	119	4,079	508
Pike .....	2	..	1	..	2	..	..	1	2	..	..	8	1,053
Potter .....	2	5	..	1	3	..	1	2	1	..	..	15	1,121
Schuylkill .....	27	52	2	29	42	3	13	4	4	..	6	182	1,102
Snyder .....	..	4	1	6	6	1	2	..	1	1	..	22	1,041



Graduates of Medical Schools in Pennsylvania							Graduates of Other Medical Schools in the United States, by Census Region						
County	Univ. of Pennsylvania School of Medicine*	Jefferson Medical College	Univ. of Pittsburgh School of Medicine	Temple Univ. School of Medicine	Habnemann Medical College	Woman's Medical College	South Atlantic, East South Central, and West States †	East North Central and West States ‡	New England and Middle Atlantic States ¶	Mountain and Pacific States §	Graduates of Foreign Medical Schools	Total Physicians	Population per Physician
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Somerset	3	13	10	8	2	1	10	4	3	..	2	56	1,461
Sullivan	..	..	..	..	..	..	1	1	..	..	..	2	3,372
Susquehanna	6	10	..	2	3	..	2	4	..	..	..	27	1,184
Tioga	5	7	2	4	..	1	3	4	1	..	2	29	1,223
Union	8	1	2	4	3	1	1	..	..	..	1	21	1,102
Venango	6	5	15	5	4	3	4	13	4	..	1	60	1,089
Warren	3	6	11	3	4	2	4	7	4	3	3	50	854
Washington	19	25	64	6	4	3	29	20	4	1	2	177	1,184
Wayne	3	6	2	4	1	1	6	3	6	..	..	32	890
Westmoreland	35	46	88	14	17	4	29	37	11	2	3	286	1,095
Wyoming	1	3	..	6	..	1	..	3	1	..	..	15	1,118
York	33	50	8	33	23	3	42	5	6	..	2	205	989

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\* Includes graduates of the Medico-Chirurgical College of Philadelphia, which merged with the University of Pennsylvania School of Medicine in 1916.  
 † South Atlantic States: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, District of Columbia.  
 East South Central States: Alabama, Kentucky, Mississippi, Tennessee.  
 West South Central States: Arkansas, Louisiana, Oklahoma, Texas.  
 ‡ East North Central States: Illinois, Indiana, Michigan, Ohio, Wisconsin.  
 West North Central States: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.  
 ¶ New England States: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.  
 Middle Atlantic States: New Jersey, New York (Pennsylvania shown separately, by schools).  
 § Mountain States: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming.  
 Pacific States: California, Oregon, Washington.  
 SOURCE: Pennsylvania Department of Public Instruction, State Board of Medical Education and Licensure.













