Statistics on Physicians, 1950-63

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MANY PERSONS who participate in planning for health services at the Federal, State, and local levels have occasion to require information on the supply of physicians. Through statistics and records of the American Medical Association and the American Osteopathic Association, data are available on numbers, location, and type of practice of physicians with M.D. or D.O. degrees. Yet, questions have arisen as to the inclusion of physicians in certain locations and in certain types of practice and to what population these numbers should be related in computing physician-population ratios.

On December 12, 1963, a meeting was called by the Federal Office of Emergency Planning to discuss "uniformity and accuracy in the compilation of national health manpower statistics." In attendance were members of the Health Resources Advisory Committee to the Office of Emergency Planning, representatives of nongovernmental associations (American Hospital Association, American Medical Association, American Osteopathic Association, Association of American Medical Colleges, Educational Council for Foreign Medical Graduates, and National Commission on Community Health Services), and staff personnel from Federal agencies (health adviser of the Office of Emergency Planning, Immigration and Naturalization Service of the Department of Justice, Office of Assistant Secretary of the Department of Defense, and Public Health Service of the Department of Health, Education, and Welfare).

The decisions resulting from this conference

Mrs. Pennell is chief of the Health Manpower Branch, Division of Public Health Methods, Public Health Service. are reflected in the accompanying tables. The basic data have been provided by Robert Enlow, director, circulation and records department, American Medical Association, and Josephine Seyl, director, membership and statistics department, American Osteopathic Association.

Physicians (M.D.)

The discussion on physician statistics centered around these six items: (a) December 31 rather than midyear statistics; (b) non-Federal physicians with temporary foreign address; (c) non-Federal physicians with address temporarily unknown to AMA; (d) foreign physicians in training programs; (e) foreign physicians in research and other forms of practice (exclusive of interns and residents); and (f) physicians not in medical practice.

December 31 statistics. Before 1960 statistics on physicians were based on the tabulations in the front of each edition of the American Medical Directory. For example, the 20th edition, dated 1958, has summary tables on physicians by location and by type of practice as of mid-1957. The graduates of 1957 are not included in that directory.

Beginning in mid-1960, the AMA Directory Report Service issued summary data on a quarterly basis. Therefore, the next two editions of the directory, 1961 and 1963, are without tables.

The conferees decided that statistics as of December 31 would be preferable to mid-year data, since this date would permit inclusion of the physicians graduated during the year. Hence the data compiled for tables 1 and 2 are as of the end of each calendar year.

Temporary foreign address. The AMA quarterly presentation dated January 20, 1964,

shows a total count of 278,275 physicians comprising 21,914 Federal; 253,228 non-Federal in the 50 States and the District of Columbia, Puerto Rico, and other U.S. outlying areas; 1,335 non-Federal whose addresses are temporarily unknown to the association; and 1,798 non-Federal with temporary foreign addresses. Since there is no way to measure the population served by the last group of physicians, the conferees decided that they should be omitted from the accompanying tabulations. Thus the revised total is 276,477 physicians (M.D.) as of the end of 1963 (table 1).

A similar adjustment has been made in the AMA quarterly presentations dated January 23, 1961, January 15, 1962, and February 4, 1963, which have been used as the basis for new totals as of the end of the years 1960, 1961, and 1962, respectively.

Address temporarily unknown. decided to include in the supply of physicians those non-Federal M.D.'s whose addresses are temporarily unknown to the AMA.

For 1960 and 1961 an adjustment has been made in the earlier reports of 3,073 and 2,312 which have been revised to 1,407 and 1,410, to bring the figures more in line with the two later years. This was determined more accurately after transfer to automatic data processing. Many of these physicians were in the older age groups and therefore presumed dead. They were dropped from the records when no replies were received after three requests. Furthermore, the AMA policy has been changed to reclassify as inactive all persons with address temporarily unknown.

Foreign physicians in training programs. It had been the AMA policy not to include in the ·U.S. physician supply foreign doctors who indicated that they planned to return to their countries on completion of their internship and residency training. Since all trainees—whether of American, Canadian, or foreign nationalityprovide medical services to the American public, the conferees decided that all trainees should also be included in the physician statistics.

The AMA Directory of Approved Internships and Residencies reports the number of positions filled as of September 1 of each year and these data have been used to adjust the count of non-Federal interns and residents. The revision consisted of the addition of 4.015 in 1960, 2.160

Table 1. Number of physicians by location, December 31, 1960–63¹

| Status and location | 1960 | 1961 | 1962 | 1963 |
|---|----------|----------|----------|------------|
| Total physicians (M.D. and D.O.) | 267, 334 | 275, 181 | 281, 277 | 289, 190 |
| Total physicians (M.D.) ² | 252, 984 | 260, 519 | 268, 680 | * 276, 477 |
| | 16, 980 | 19, 186 | 22, 180 | 21, 914 |
| | 10, 226 | 11, 563 | 12, 753 | 12, 483 |
| | 1, 864 | 2, 330 | 2, 865 | 2, 974 |
| | 4, 890 | 5, 293 | 6, 562 | 6, 457 |
| Non-Federal physicians, total | 234, 597 | 239, 923 | 245, 085 | 253, 228 |
| | 233, 137 | 238, 387 | 243, 476 | 3 251, 481 |
| | 1, 308 | 1, 388 | 1, 464 | 1, 596 |
| | 152 | 148 | 145 | 151 |
| Physicians with address temporarily unknown | 1, 407 | 1, 410 | 1, 415 | 1, 335 |
| Total physicians (D.O.) Federal physicians Non-Federal physicians | 14, 350 | 14, 662 | 12, 597 | 12, 713 |
| | 6 | 5 | 5 | 11 |
| | 14, 344 | 14, 657 | 12, 592 | 12, 702 |

¹ Comparable data not available for single years prior to 1960; 1960-63 data on non-Federal M.D.'s are not strictly comparable because foreign physicians (other than interns and residents) who were not licensed but had obtained standard certificates from the Educational Council for Foreign Medical Graduates were included for the first time in 1961 and those with temporary certificates in 1963.

² Excludes non-Federal physicians with temporary foreign addresses.

Source: Statistics and records of the American Medical Association and the American Osteopathic Association.

³ Preliminary

⁴ Regardless of location. Noncommissioned physicians are included with non-Federal physicians. ⁵ American Samoa, Canal Zone, Guam, Pacific Islands, and Virgin Islands.

Table 2. Number of physicians by type of practice, December 31, 1960-63 1

| Status and type of practice | 1960 | 1961 | 1962 | 1963 |
|---|---|---|--|---|
| Total physicians (M.D. and D.O.) | 267, 334 | 275, 181 | 281, 277 | 289, 190 |
| Total physicians (M.D.) Federal physicians, total Interns and residents Other forms of practice | 252, 984 16, 980 2, 768 14, 212 | 260, 519 19, 186 3, 075 16, 111 | 268, 680 22, 180 3, 856 18, 324 | ² 276, 477 21, 914 3, 363 18, 551 |
| Non-Federal physicians, total Private practice Interns and residents ³ Other forms of practice ^{4 5} Inactive | 234, 597 168, 142 34, 794 19, 841 11, 820 | 239, 923 171, 339 34, 735 21, 429 12, 420 | 245, 085 171, 142 34, 188 26, 806 12, 949 | 253, 228 174, 974 2 35, 156 29, 686 13, 412 |
| Physicians with address temporarily unknown | 1, 407 | 1, 410 | 1, 415 | 1, 335 |
| Total physicians (D.O.) Federal physicians Non-Federal physicians, total Private practice Interns and residents Other forms of practice Inactive Status not reported | 11,034 729 407 | 14, 662 5 14, 657 11, 370 851 352 1, 218 866 | 12, 597 5 12, 592 9, 701 641 284 1, 187 779 | 12, 713 11 12, 702 9, 818 655 288 1, 188 753 |

¹ Comparable data not available for single years prior to 1960.

² Preliminary.

* Full-time staff in hospital service (other than interns and residents), medical school faculty, administrative

medicine, laboratory medicine, preventive medicine, and research.

Source: Statistics and records of the American Medical Association and the American Osteopathic Association.

in 1961, and 922 in 1962 to the previously published data. The adjustment for 1963 has not yet been made, pending compilation of data as of September 1, 1963, to be available later this year (table 2).

Foreign physicians other than interns and residents. It had long been known that sizable numbers of unlicensed foreign physicians in this country were providing medical services through research and other forms of practice (exclusive of interns and residents). Since these persons did not obtain licenses, they were not identified for inclusion in the AMA records.

In 1961 about 3,000 foreign physicians were identified for the first time when they obtained standard certificates from the Educational Council for Foreign Medical Graduates. This continued into 1962. In 1963 at least 3,000 more were identified when they obtained temporary certificates from ECFMG. These physicians are reflected in the net gain in physician supply

in 1961-63. The implication is that the 1960 figure shown in tables 1 and 2 is low by about 7,500 foreign physicians.

That large numbers of unlicensed foreign physicians are not included in the AMA records is no longer a problem. Further discussion now centers around whether it is feasible to identify all alien physicians who register in 1965 with the Immigration and Naturalization Service and to have the Public Health Service match them by name to the AMA records. This procedure would provide an estimate of the number not currently included (probably several hundred but fewer than one thousand).

Physicians not in medical practice. The 1963 count of M.D.'s includes 13, 412 reported as inactive, of whom 10,660 are retired and 2,752 are not in practice. The AMA questionnaire has no definition of retired nor any measure of services being provided by an individual physician. Whether these physicians should be counted as

³ The number of non-Federal interns and residents has been adjusted so that the sum of Federal and non-Federal interns and residents equals the number of filled positions reported in the AMA Directory of Approved Internships and Residencies as of September 1 of each year 1960–63, as follows: 37,562; 37,810; 38,044; and 38,519 (preliminary for 1963).

⁵ Foreign physicians (other than interns and residents) who were not licensed but had obtained standard certificates from the Educational Council for Foreign Medical Graduates were included for the first time in 1961 and those with temporary certificates in 1963.

a part of the physician supply is moot. However, it was the general opinion of the conferees that they be included, at least for the time being.

It was recognized that there were some strong minority opinions on this point, particularly when attention was called to the large numbers of older physicians who are reported as active. The 1963 figure of 174,974 M.D.'s in private practice includes 20,758 in the age group 65 and over. Also, 6 out of 10 physicians in the age group 70 and over are reported as active.

The conferees did not debate the exclusion of any other type of practice, such as medical school faculty, administration, laboratory medicine, preventive medicine, or research.

Physicians (D.O.)

Physicians graduated from U.S. osteopathic colleges are to be included in the national manpower statistics. Hence the accompanying tables show total physicians with M.D. or D.O. degrees. The American Osteopathic Association's data are as of December 31, and they include graduates of the year.

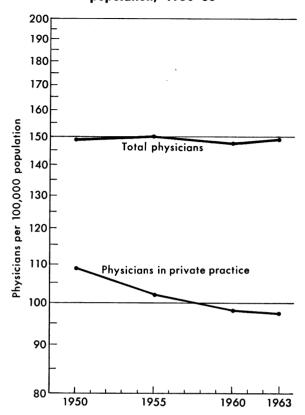
The former College of Osteopathic Physicians and Surgeons in Los Angeles was converted into a college granting the M.D. degree. It is known as the California College of Medicine, organized in 1962. About 2,400 persons graduated from that school in 1962 and prior years, who reside in California and who applied for an M.D. degree, have been included with the M.D.'s and excluded from the D.O.'s in 1962. The AMA records show them all as graduated in 1962 and they are reflected in the net gain of M.D.'s during that year.

Population

Data are available on the numbers of civilians in the United States, Puerto Rico, and other U.S. outlying areas, and the Armed Forces in the United States and abroad, through the Current Population Reports issued by the Bureau of the Census.

With regard to U.S. citizens in foreign countries, the decision was to include U.S. Government civilian employees, their dependents, and dependents of Armed Forces personnel. Data based on annual reports prepared by the Department of State are shown in table 3.

Physicians (M.D. and D.O.) in relation to population, 1950–63



The numbers of U.S. citizens working at civilian jobs, studying in foreign universities, or residing abroad for other reasons are not known. They are enumerated on a voluntary basis at the time of the decennial censuses and the coverage is recognized as incomplete. Furthermore, the majority of these persons would not expect to receive their medical services from the U.S. physician supply as defined in table 1. Therefore, the decision was made to exclude these persons from the population base.

Physician-Population Ratios

Ratio of total physicians to total population. In 1963 there were 289,200 physicians (M.D. and D.O.) to provide medical services for 194,117,000 persons; a rate of 149 physicians per 100,000 total population (table 4).

In 1960 there were 267,334 physicians, according to the data in tables 1 and 2. As noted previously, this figure does not reflect the large numbers of unlicensed foreign physicians here

in 1960 who were added for the first time to the AMA records in the period 1961-63. The actual net gain in our physician supply is about 4,800 per year, taking into account the new additions to the profession and the deaths among those already in the profession. Thus a more accurate estimate for 1960 would be about 274,800 total physicians; a rate of 148 per 100,000 total population.

Comparable data for single years prior to 1960 are not available in the detail shown in tables 1 and 2 for the years 1960-63. However, Public Health Service estimates for the years 1950 and 1955 indicate that the rate was about 149 to 150 physicians per 100,000 population.

Thus there has been little change in the physician-population ratio (see graph).

Ratio of private practitioners to civilians. Private practice as used here means the major activity of the non-Federal physician who indicated this type of practice on his response to the professional association. Federal and non-Federal physicians who are full-time staff in hospital service generally provide direct care to patients; some may engage in private practice outside their full-time hospital activities. Again, some physicians who are full-time medical school faculty may engage in private practice. This is true also for physicians in other forms of practice, such as administrative medi-

Population (in thousands) by location, December 31, selected years from 1950 to 1963

| Status and location | 1950 | 1955 | 1960 | 1963 |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Total population | 156, 472 | 170, 499 | 185, 369 | 194, 117 |
| Civilians | 153, 635 151, 238 2, 213 184 | 167, 038 164, 597 2, 235 206 | 182, 348 179, 780 2, 349 219 | 190, 845 188, 088 2, 519 238 |
| U.S. citizens in foreign countries 2 | 453 | 545 | 475 | 551 |
| Armed Forces50 States and District of ColumbiaAbroad | 2, 384 1, 735 649 | 2, 916 2, 128 788 | 2, 546 1, 888 658 | 2, 721 2, 004 717 |

Table 4. Physicians in relation to population, December 31, selected years from 1950 to 1963

| Status | 1950 | 1955 | 1960 | 1963 |
|---|----------|----------|----------|----------|
| Total physicians ¹ | 232, 700 | 255, 200 | 274, 800 | 289, 200 |
| | 220, 000 | 241, 700 | 260, 500 | 276, 500 |
| | 12, 700 | 13, 500 | 14, 300 | 12, 700 |
| Rate per 100,000 total population Physicians in private practice M.D.'s D.O.'s Rate per 100,000 civilians | 149 | 150 | 148 | 149 |
| | 168, 100 | 169, 900 | 179, 200 | 184, 800 |
| | 158, 200 | 159, 400 | 168, 200 | 175, 000 |
| | 9, 900 | 10, 500 | 11, 000 | 9, 800 |

¹ Includes (a) Federal physicians regardless of location, (b) non-Federal physicians in the 50 States and the District of Columbia, Puerto Rico, and other U.S. outlying areas, and (c) non-Federal physicians with address temporarily unknown. Excludes non-Federal physicians with temporary foreign address.

² The 1950, 1955, and 1960 counts of M.D.'s have been adjusted to include unlicensed foreign physicians com-

parable to those included in the 1963 count.

¹ American Samoa, Canal Zone, Guam, Pacific Islands, and Virgin Islands.

² U.S. Government civilian employees, their dependents, and the dependents of Armed Forces personnel. Excludes U.S. citizens working at civilian jobs, studying in foreign universities, or residing abroad for other reasons.

Sources: Bureau of the Census: Current population reports. Population Estimates, Series P-25, Nos. 238, 272, 273, and 283. Department of State: Annual report on U.S. citizen personnel and their dependents . . . as of March 31, 1963 (and 3 prior years). Tables B and C are not available for distribution. Number of dependents of military for 1960 has been adjusted.

cine, laboratory medicine, preventive medicine, and research. But for none of these groups is private practice the major activity.

In 1963 there were 184,800 physicians (M.D. and D.O.) in private practice. This figure may be related to the civilian population of 190,845,000 persons, thus producing a rate of 97 practitioners per 100,000 civilians.

In 1960 there were 179,200 physicians in private practice in relation to 182,348,000 civilians, or 98 practitioners per 100,000 civilians. In this 3-year period the supply of physicians in private practice increased 3.1 percent while the civilian population gained 4.7 percent, thus accounting for the decline in the physician-population ratio.

Comparable data for single years prior to 1960 are not available. However, Public Health

Service estimates for the years 1950 and 1955 indicate that the rate has been steadily declining from 109 per 100,000 civilians in 1950 to 97 in 1963.

As added evidence, the proportion of total physicians who are classified as in private practice has declined over the years. About 72 percent of the total were in private practice in 1950, about 67 percent in 1955, about 65 percent in 1960, and about 64 percent in 1963.

Note: Detailed information on the physician supply in 1963 by region, State, urban-rural distribution, type of practice, and specialty is given in the Health Manpower Source Book (PHS Publication No. 263, section 18) scheduled for publication in October 1964. The source book also presents basic data on the trend in education and the physician supply in 1963 with projections to 1975.

Public Health Service Staff Appointments

Dr. Burnet M. Davis, acting chief of the Division of Community Health Services, Public Health Service, from April 1, 1964, was appointed chief effective June 8, 1964. Previously he had been assistant chief of the division and chief of the Medical Care Administration Branch.

Commissioned in the Public Health Service on January 20, 1942, Dr. Davis has served as a medical officer at the National Institutes of Health, field medical officer in the migrant health program of the War Food Administration in Atlanta, Ga., liaison officer to the British Ministry of health, and in several posts at PHS headquarters.

Dr. Davis received a B.A. degree in chemistry at Harvard University in 1932 and a B.A. in physiology from Oxford University, England, in 1934. He earned his medical degree at Harvard University in 1937.

Dr. Frederick L. Stone became director of the National Institute of General Medical Sciences, National Institutes of Health, August 7, 1964, succeeding Dr. Clinton C. Powell, who retired July 31, 1964.

Dr. Stone had been chief of the Division of Research Facilities and Resources, NIH, from 1962 until this appointment. Between 1948 and 1962 he was chief of the Research Fellowships Branch in the Division of Research Grants, chief of the Extramural Programs in the National Institute of Neurological Diseases and Blindness, assistant to the associate director of NIH, and assistant chief of the Division of General Medical Sciences. From 1954 to 1956, Dr. Stone served 1 year as assistant vice chancellor for professional services in the Schools of the Health Professions, University of Pittsburgh, and 1 year as director of the medical and scientific department, National Multiple Sclerosis Society, New York City.

He received a B.S. degree from Middlebury College, Vt., in 1937, and a Ph. D. degree from the University of Rochester in 1948.