GOVERNMENT
Storage
1019
Y4 In 8/4 H 34/16
Y4 In 8/4 H34/16

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE

KANSAS STATE UNIVERSITY LIBRARY
MAR 25 1963
MANHATTAN, KANSAS

HEARINGS

BEFORE THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE HOUSE OF REPRESENTATIVES

EIGHTY-EIGHTH CONGRESS

FIRST SESSION

ON

H.R. 12, H.R. 180, H.R. 2527, H.R. 3182

BILLS TO INCREASE THE OPPORTUNITIES FOR TRAINING OF PHYSICIANS, DENTISTS, AND PROFESSIONAL PUBLIC HEALTH PERSONNEL, AND FOR OTHER PURPOSES

H.R. 3180

A BILL TO AUTHORIZE A 10-YEAR PROGRAM OF GRANTS FOR CONSTRUCTION OF MEDICAL, DENTAL, AND PUBLIC HEALTH EDUCATIONAL FACILITIES, AND FOR OTHER PURPOSES

FEBRUARY 5, 6, AND 7, 1963

Printed for the use of the
Committee on Interstate and Foreign Commerce

U.S. GOVERNMENT PRINTING OFFICE
94933 WASHINGTON : 1963

KSU LIBRARIES A11900 813142
AUTHENTICATED U.S. GOVERNMENT INFORMATION GPO

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

OREN HARRIS, Arkansas, *Chairman*

JOHN BELL WILLIAMS, Mississippi
KENNETH A. ROBERTS, Alabama
HARLEY O. STAGGERS, West Virginia
WALTER ROGERS, Texas
SAMUEL N. FRIEDEL, Maryland
TORBERT H. MACDONALD, Massachusetts
GEORGE M. RHODES, Pennsylvania
JOHN JARMAN, Oklahoma
LEO W. O'BRIEN, New York
JOHN E. MOSS, California
JOHN D. DINGELL, Michigan
PAUL G. ROGERS, Florida
ROBERT W. HEMPHILL, South Carolina
DAN ROSTENKOWSKI, Illinois
JAMES C. HEALEY, New York
HORACE R. KORNEGAY, North Carolina
W. R. HULL, JR., Missouri
GILLIS W. LONG, Louisiana
LIONEL VAN DEERLIN, California

JOHN B. BENNETT, Michigan
WILLIAM L. SPRINGER, Illinois
PAUL F. SCHENCK, Ohio
J. ARTHUR YOUNGER, California
MILTON W. GLENN, New Jersey
SAMUEL L. DEVINE, Ohio
ANCHOR NELSEN, Minnesota
HASTINGS KEITH, Massachusetts
WILLARD S. CURTIN, Pennsylvania
ABNER W. SIBAL, Connecticut
GLENN CUNNINGHAM, Nebraska
JAMES T. BROYHILL, North Carolina
DONALD G. BROTZMAN, Colorado

W. E. WILLIAMSON, *Clerk*
KENNETH J. PAINTER, *Assistant Clerk*

Professional Staff

ANDREW STEVENSON
KURT BORCHARDT
SAM G. SPAL
GEORGE W. PERRY

UNIVERSITY LIBRARY
MAR 25 1963
MANHATTAN, KANSAS

CONTENTS

	Page
Hearings held on—	
February 5, 1963	1
February 6, 1963	157
February 7, 1963	249
President's special message on improving American health	355
Text of—	
H.R. 12	2
H.R. 180	10
H.R. 2527	27
H.R. 3180	16
H.R. 3182	19
Report on H.R. 12 from—	
Bureau of the Budget	35
Comptroller General of the United States	36
Health, Education, and Welfare Department	35
Statement of—	
Adams, Joseph P., attorney, International Chiropractors Association	344
Bamberger, Lisbeth, assistant director, Department of Social Security, AFL–CIO	150
Bennett, Hon. Charles E., a Representative in Congress from the State of Florida	147
Berson, Dr. Robert, dean, South Texas Medical School	333
Blauch, Lloyd E., consultant, American Podiatry Association	349
Bliven, Dr. Charles W., executive secretary, American Association of Colleges of Pharmacy	311
Brauer, Dr. John, chairman, Committee on Legislation, American Dental Association	169
Celebrezze Hon. Anthony J., Secretary of Health, Education, and Welfare	37
Cohelan, Hon. Jeffery, a Representative in Congress from the State of California	149
Conway, Bernard J., American Dental Association	169
Dorman, Dr. Gerald D., member, Board of Trustees, American Medical Association	249
Fair, Clinton, legislative representative, AFL–CIO	150
Fogarty, Hon. John E., a Representative in Congress from the State of Rhode Island	142
Gourley, Lawrence L., Washington counsel, American Osteopathic Association	200
Hester, James M., on behalf of American Council on Education	318
Hollers, Dr. James P., president-elect, American Dental Association	169
Jehle, Philip F., Washington representative, National Association of Retail Druggists	244
Jones, Boisfeuillet, Special Assistant to the Secretary on Health and Medical Affairs, Department of Health, Education, and Welfare	37, 76
MacCracken, W. P., Jr., Washington counsel, American Optometric Association	324
McKittrick, Dr. Leland S., chairman, Council on Medical Education and Hospitals, American Medical Association	249
McLaughlin, Merlyn, on behalf of American Osteopathic Association	200
Miller, Clinton R., assistant to the president, National Health Federation	236
Montoya, Hon. Joseph M., a Representative in Congress from the State of New Mexico	148
Nelson, Dr. Russell A., on behalf of American Hospital Association	157

Statement of—Continued Page
Pheiffer, Dr. Chester H., on behalf of American Optometric Association 324
Porterfield, Dr. John, University of California 229
Powers, Dr. Lee, associate director, Association of American Medical Colleges 333
Pratt, Charles Orlando, general counsel, National Health Federation 236
Rubin, Dr. Abe, executive secretary and editor of the journal, American Podiatry Association 349
Shipman, Richard C., assistant director, Legislative Service Division, National Farmers Union 218
Soderman, Dr. William, dean, School of Medicine, University of Texas 333
Stebbins, Dr. Ernest L., vice president, Association of Schools of Public Health 192
Terry, Dr. Luther L., Surgeon General, Public Health Service, Department of Health, Education, and Welfare 37, 76
Thompson, Julia C., Washington representative, American Nurses' Association, Inc 345
Wiggins, Dr. Walter S., secretary, Council on Medical Education and Hospitals, American Medical Association 249
Williamson, Kenneth, associate director, American Hospital Association 157
Yale, Dr. Irving, chairman, Council on Education, American Podiatry Association 349
Additional information submitted for the record by—
American Association of Colleges of Pharmacy:
Average annual number of pharmacists, and requirements for replacements, and total need for pharmacists for 5-year periods, 1960–75, table 314
Graduates from undergraduate curriculums of U.S. schools of pharmacy, 1958–62, table 314
Undergraduate enrollment in U.S. schools of pharmacy, 1958–62, table 314
American Association of Colleges of Podiatry, letter from Dr. L. C Numbers, secretary 376
American Cancer Society, Inc., statement of Dr. Harold S. Diehl, senior vice president for research and medical affairs and deputy executive vice president 386
American Federation of Labor and Congress of Industrial Organizations, letter from Andrew J. Biemiller, director, department of legislation, transmitting suggested amendments to H.R. 12 155
American Library Association, statement of Frederick G. Kilgour 368
American Medical Association:
Applications under loan guarantee program 292–309
Letter from Dr. F. J. L. Blasingame transmitting data on medical care donated by physicians of the United States 280
Medical education loan guarantee program 253
Medical education loan guarantee program, progress report through December 31, 1962 259
American Pharmaceutical Association, statement of 370
American Optometric Association:
Letter from William P. MacCracken, Jr 332
Suggested amendments to H.R. 12 329
American Osteopathic Association:
Geographic distribution of osteopathic students, 1962, table 210
Letters from—
Barth, Dr. Frederic H 203
Kistner, Dr. R. A 202
Tilley, Dr. R. McFarlane 204
Number of full- and part-time specialists, by type of specialty, 1962, table 217
Number of physicians (M.D. and D.O.) and physician-population ratios, 1931–62, table 216
Summary of application, admission, and enrollment data for each of the 5 schools of osteopathy for the 6-year period, 1957–58 to 1962–63, table 218

Additional information submitted for the record by—Continued
American Osteopathic Association—Continued
Page
Type of practice of physicians (M.D. and D.O.), 1962, table 216
Type of specialty of physicians (M.D. and D.O.), 1962, table 217
Where osteopathic first-year students received undergraduate training, fall 1962, table 211
Andelman, Dr. Samuel L., letter from 373
Berson, Dr. Robert C., letter from, transmitting additional statement of Association of American Medical Colleges 339
Bucher, Dr. Robert M., letter from 363
California Department of Public Health, letter from Dr. Malcolm H. Merrill, director 378
California State Board of Public Health, letter from Dr. Charles E. Smith, president 379
Carr, Dr. W. Kelley, letter from, transmitting summary of recent dental manpower history of the United States 381
Coker, R. E., Jr., letter from 388
Cummings, Nathan, letter from 373
Daddario, Hon. Emilio Q., letter from 362
Duffield, Lorita, letter from 385
Farber, Dr. Robert E., letter from 379
Gellis, Dr. Sydney S., letter from 364
Hawaii Public Health Association, letter from Dr. Katherine J. Edgar, president 373
Health, Education, and Welfare Department:
Expenditures 1949–62, for construction of—
Dental schools 94
Medical schools 94
Letter from Dr. David E. Price, Acting Surgeon General, transmitting information regarding distribution of physicians in the United States, with particular reference to rural counties 94
Letter from Dr. Luther L. Terry, Surgeon General 64
Projected requirements for physicians and dentists, table 91
Hebbard, Frederick W., letter from 383
Henley, W. Ballentine, letters from 389
Illinois Department of Mental Health, telegram from Dr. Francis J. Gerty, director 364
International Chiropractors Association, telegram from Dr. John Q. Thaxton, president 364
Kamp, Dr. Maurice, letter from 369
Lanier, Jess, mayor of Bessemer, Ala., statement on behalf of Alabama League of Municipalities 141
Lewis, Dr. Charles G., telegram from 365
Lippard, Dr. Vernon W., letter from 364
Maryland Nurses Association, Inc., letter from Alice J. Akehurst, president 371
Michigan State Nurses Association, letter from Susan M. Bruno, assistant executive secretary 365
Mississippi State Medical Association, letter from Dr. C. P. Crenshaw, president 374
Mullane, Mary K., letter from 372
National Chiropractic Association, statement of Dr. Emmett J. Murphy, director of industrial relations 366
National Farmers Union:
Percent distribution of medical college graduates in private practice whose prior residence was in various size communities by size of community of practice, 1950 class, table 221
Physician-population ratio in each State and type of practice of physicians, chart 222
Urban-rural differences in physician supply, chart 223
National Tuberculosis Association, letter from Dr. James E. Perkins, managing director 384
Nebraska State Nurses' Association, letter from Ruby McArthur, chairman, legislative committee 365
Ohio Department of Health, telegram from Dr. Ralph E. Dwork, director 382

Additional information submitted for the record by—Continued Page
Oregon Nurses Association, Inc., letter from Bertha G. Byrne, executive secretary 380
Oregon Public Health Association, letter from Vivian E. Runte, president 380
Payne, Anthony M. M., telegram from 372
Pharmaceutical Manufacturers Association, letter from Dr. Austin Smith 377
Snyder, Dr. John C., letter from 383
Student American Medical Association, letter from James A. Brooks, national president 362
Trussell, Dr. Ray E., telegram from 372
U.S. Conference of City Health Officers, letter from Dr. Eugene A. Gillis 385
Washington State Nurses Association, telegram from Helen Hanson, president 370
Wegman, Dr. Myron E., letter from 384
West Virginia Nurses Association, Inc., letter from Juliann Ritter, executive director 370
Woodhall, Dr. Barnes, letters from 367, 368
Yager, Dr. J. Allen, letter from 378
Young, Dr. M. M., letter from 372

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE

TUESDAY, FEBRUARY 5, 1963

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to notice, at 10 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman) presiding.

The CHAIRMAN. The committee will come to order.

Today the committee begins hearings on H.R. 12, a bill to increase the training opportunities for physicians, dentists, and other professional health personnel. This bill, which I introduced at the outset of this session of Congress, is identical to H.R. 4999, which was reported by this committee last year, after extensive hearings and several days in executive session, except, of course, for the deletion of a provision relating to a 3-year extension of grants for the construction of health research facilities.

It will be recalled that that program was enacted during the last Congress.

Identical bills have been introduced by our colleague from California, a member of this committee, Mr. Moss, H.R. 2527; the gentleman from Pennsylvania, Mr. Fulton, H.R. 3182. In addition, bills on the same subject were introduced by our colleague from Florida, Mr. Bennett, H.R. 180; our colleague from Rhode Island, Mr. Fogarty, H.R. 3180. The latter bill limits its aid to construction of medical, dental, and public health teaching facilities only.

I think all of us realize that the bills under consideration provide Federal aid for the construction of teaching facilities for medical, dental, public health, and other professional health personnel. Except for H.R. 3180, they also provide for liberal loans, with some forgiveness features, to students pursuing a full-time course of study in a school of medicine, osteopathy, or dentistry. This was by committee amendment in the last Congress.

Our committee has jurisdiction over public health matters, and we are concerned in the case of this legislation with the problem of meeting a severe shortage of health personnel. This is, therefore, clearly a problem which the country should meet. If our Nation is to benefit fully from its medical research programs and maintain present levels of physicians and dentists in proportion to the population, action must be taken now to provide facilities for the training of such additional health personnel.

The President in his state of the Union message to Congress alluded to this problem in stating that over the next 10 years we must increase the capacity of our medical schools by 50 percent and our dental schools by 100 percent, if we want to keep the present ratio of doctors and

dentists from declining. It seems to me that we are now at the crossroads in dealing with the health needs of generations of Americans to come. The record which this committee made during the last Congress is very clear on this point. I am hopeful that the record which we shall make during these hearings will further strengthen the record that was made during that time.

Now, in these hearings we are dealing with the question of what the Federal role shall be with regard to health manpower. In future hearings which we have already planned or are scheduling, this committee will attempt to take an inventory of the multiplicity of Federal programs dealing with health matters because we want to make certain that these programs are reasonably consistent and balanced to meet the health needs of the people of the Nation.

At this point, H.R. 12 and the other bills to be considered, which I have just mentioned, will be included in the record, together with departmental reports.

H.R. 12, H.R. 180, H.R. 3180, H.R. 3182, and H.R. 2527, and the reports thereon, follow:)

[H.R. 12, 88th Cong., 1st sess.]

A BILL To increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Act of 1963".

GRANTS FOR CONSTRUCTION OF MEDICAL, DENTAL, PHARMACEUTICAL, OPTOMETRIC, PODIATRIC, NURSING, OSTEOPATHIC, AND PUBLIC HEALTH TEACHING FACILITIES

SEC. 2. (a) Title VII of the Public Health Service Act (42 U.S.C. chap. 6A) is amended by inserting "AND TEACHING" after "RESEARCH" in the heading thereof, by inserting "AND TRAINING OF PROFESSIONAL HEALTH PERSONNEL" after "FACILITIES" in such heading, and by inserting immediately below such heading "PART A—GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES", and by changing the words "this title" wherever they appear in such title to read "this part".

(b) Such title is further amended by adding at the end thereof the following:

"PART B—GRANTS FOR CONSTRUCTION OF TEACHING FACILITIES FOR MEDICAL, DENTAL, AND OTHER HEALTH PERSONNEL

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 720. There are hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973 (1) not to exceed $45,000,000 for grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, or professional public health personnel, (2) not to exceed $15,000,000 for grants to assist in the construction of new teaching facilities for the training of dentists, and (3) not to exceed $15,000,000 for replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists.

"APPROVAL OF APPLICATIONS

"SEC. 721. (a) No application for a grant under this part may be approved unless it is submitted to the Surgeon General prior to July 1, 1972.

"(b)(1) To be eligible to apply for a grant to assist in the construction of any facility under this part, the applicant must be (A) a public or other nonprofit school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or public health and (B) accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that a new school

which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this part, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this part if the Commissioner of Education finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(2) Notwithstanding paragraph (1), in the case of an affiliated hospital, an application which is approved by the school of medicine with which the hospital is affiliated and which otherwise complies with the requirements of this part may be filed by any public or other nonprofit agency qualified to file an application under section 625.

"(3) In the case of any application, whether filed by a school or, in the case of an affiliated hospital, by any other public or other nonprofit agency, for a grant under this part to assist in the construction of a facility which is a hospital as defined in section 631—

"(A) if the facility is needed in connection with a new school, only that portion of the project to construct the facility which the Surgeon General determines to be reasonably attributable to the need of such school for the facility for teaching purposes,

"(B) if the construction is in connection with expansion of the training capacity of an existing school, only that portion of the project to construct the facility which the Surgeon General determines to be reasonably attributable to the need of such school for the facility in order to expand its training capacity,

"(C) if the construction is in connection with renovation or rehabilitation of facilities used by an existing school, only that portion of the project which the Surgeon General determines to be reasonably attributable to the need of such school for the facilities in order to prevent curtailment of enrollment or quality of training of the school,

shall be regarded as the project with respect to which payments may be made under section 722.

"(c) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that—

"(1) the applicant meets the eligibility conditions set forth in subsection (b);

"(2) the application contains or is supported by reasonable assurances that (A) for not less than ten years after completion of construction, the facility will be used for the purposes of the teaching for which it is to be constructed, (B) sufficient funds will be available to meet the non-Federal share of the cost of constructing the facility, (C) sufficient funds will be available, when construction is completed, for effective use of the facility for the training for which it is being constructed, and (D) in the case of an application for construction to expand the training capacity of an existing school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, the first-year enrollment at such school during the first full school year after the completion of the construction and for each of the next nine school years thereafter will exceed the highest first-year enrollment at such school for any of the five full school years preceding the year in which the application is made by at least 5 per centum of such highest first-year enrollment, or by five students, whichever is greater;

"(3) (A) in the case of an application for a grant from funds appropriated pursuant to clause (1) of section 720, such application is for aid in the construction of a new school of medicine, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, or construction which will expand the training capacity of an existing school of medicine, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, (B) in the case of an application for a grant from funds appropriated pursuant to clause (2) of such section, such application is for aid in the construction of a new school of dentistry or construction which will expand the capacity of an existing school of dentistry, or (C) in the case of an application for a grant from funds appropriated pursuant to clause (3) of such section, such application is for aid in construction which will replace or rehabilitate facilities of, or used by, an existing school of medicine, dentistry, pharmacy, optometry, podiatry, nursing, osteopathy, or public health which are so obsolete as to

require the school to curtail substantially either its enrollment or the quality of the training provided;

"(4) the plans and specifications are in accordance with regulations relating to minimum standards of construction and equipment;

"(5) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractors in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c); and

"(6) if the application requests aid in construction of a facility which is a hospital or diagnostic or treatment center, as defined in section 631, an application with respect thereto has been filed under title VI and has been denied thereunder because (A) the project has no or insufficient priority, or (B) funds are not available for the project from the State's allotments under title VI.

Before approving or disapproving an application under this part, the Surgeon General shall secure the advice of the National Advisory Council on Education for Health Professions established by section 725 (hereinafter in this part referred to as the 'Council').

"(d) In considering applications for grants, the Council and the Surgeon General shall take into account—

"(1) (A) in the case of a project for a new school or for expansion of the facilities of, or used by, an existing school, the relative effectiveness of the proposed facilities in expanding the capacity for the training of first-year students of medicine, dentistry, pharmacy, optometry, podiatry, nursing, or osteopathy (or, in the case of a two-year school which is expanding to a four-year school, expanding the capacity for four-year training of students in the field), or for the training of professional public health personnel, and in promoting an equitable geographical distribution of opportunities for such macists, optometrists, podiatrists, nurses, dentists, or professional public training (giving due consideration to population, available physicians, pharhealth personnel, and available resources in various areas of the Nation for training such persons); or

"(B) in the case of a project for replacement or rehabilitation of existing facilities of, or used by, a school, the relative need for such replacement or rehabilitation to prevent curtailment of the school's enrollment or deterioration of the quality of the training provided by the school, and the relative size of any such curtailment and its effect on the geographical distribution of opportunities for training (giving consideration to the factors mentioned above in paragraph (A)); and

"(2) in the case of an applicant in a State which has in existence a State planning agency, or which participates in a regional or other interstate planning agency, described in section 728, the relationship of the application to the construction or training program which is being developed by such agency with respect to such State and, if such agency has reviewed such application, any comment thereon submitted by such agency.

"AMOUNT OF GRANT PAYMENTS

SEC. 722. (a) (1) Except as provided in paragraph (2) of this subsection, the amount of any grant under this part shall be such amount as the Surgeon General determines to be appropriate after obtaining the advice of the Council; except that (A) in the case of a grant for a project for a new school, and in the case of a grant for new facilities for an existing school in cases where such facilities are of particular importance in providing a major expansion of training capacity, as determined in accordance with regulations, such amount may not exceed 66⅔ per centum of the necessary cost of construction, as determined by the Surgeon General, of such project; and (B) in the case of any other grant,

such amount may not exceed 50 per centum of the necessary cost of construction, as so determined, of the project with respect to which the grant is made.

"(2) The amount of any grant under this part for construction of a project with respect to a school of public health shall be such amount as the Surgeon General determines to be appropriate after obtaining the advice of the Council, and may not exceed 75 per centum of the necessary cost of construction, as determined by the Surgeon General, of such project.

"(b) Upon approval of any application for a grant under this part, the Surgeon General shall reserve, from any appropriation available therefor, the amount of such grant as determined under subsection (a); the amount so reserved may be paid in advance or by way of reimbursement, and in such installments consistent with construction progress, as the Surgeon General may determine. The Surgeon General's reservation of any amount under this section may be amended by him, either upon approval of an amendment of the application or upon revision of the estimated cost of construction of the facility.

"(c) In determining the amount of any grant under this part, there shall be excluded from the cost of construction an amount equal to the sum of (1) the amount of any other Federal grant which the applicant has obtained, or is assured of obtaining, with respect to the construction which is to be financed in part by grants authorized under this part, and (2) the amount of any non-Federal funds required to be expended as a condition of such other Federal grant.

"RECAPTURE OF PAYMENTS

"SEC. 723. If, within ten years after completion of any construction for which funds have been paid under this part—

"(a) the applicant or other owner of the facility shall cease to be a public or nonprofit school or, in case the facility was an affiliated hospital, the applicant or other owner of the facility ceases to be a public or other nonprofit agency qualified to file an application under section 625, or

"(b) the facility shall cease to be used for the teaching purposes for which it was constructed (unless the Surgeon General determines, in accordance with regulations, that there is good cause for releasing the applicant or other owner from the obligation to do so),

the United States shall be entitled to recover from the applicant or other owner of the facility the amount bearing the same ratio to the then value (as determined by agreement of the parties or by action brought in the United States district court for the district in which such facility is situated) of the facility, as the amount of the Federal participation bore to the cost of construction of such facility.

"DEFINITIONS

"SEC. 724. As used in this part—

"(1) The terms 'construction' and 'cost of construction' include (A) the construction of new buildings, the expansion of existing buildings, and remodeling, replacement, renovation, major repair (to the extent permitted by regulations), or alteration of existing buildings, including architects' fees, but not including the cost of acquisition of land or off-site improvements, and (B) initial equipment of new buildings and of the expanded, remodeled, repaired, renovated, or altered part of existing buildings;

"(2) The term 'nonprofit school' means a school owned and operated by one or more corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual;

"(3) The term 'affiliated hospital' means a hospital, as defined in section 631, which is not owned by, but is affiliated (to the extent and in the manner determined in accordance with regulations) with, a school of medicine which meets the eligibility conditions set forth in section 721(b)(1);

"(4) The terms 'school of medicine', 'school of dentistry', 'school of osteopathy', 'school of pharmacy', 'school of optmetry', 'school of podiatry', and 'school of public health' mean a school which provides training leading, respectively, to a degree of doctor of medicine, a degree of doctor of dentistry or an equivalent degree, a degree of doctor of osteopathy, a degree of bachelor of science in pharmacy or doctor of pharmacy, a degree of doctor of optmetry or an equivalent degree, a degree of doctor of podiatry or doctor of surgical chiropody, and a graduate degree in public health; and

"(5) The term 'school of nursing' means a department, school, division, or other administrative unit, in a college or university, which provides, primarily or ex-

clusively, a program of education in professional nursing and allied subjects leading to the degree of bachelor of arts, bachelor of science, bachelor of nursing, or other baccalaureate degree of equivalent rank; or to a graduate degree in nursing.

"NATIONAL ADVISORY COUNCIL ON EDUCATION FOR HEALTH PROFESSIONS

"SEC. 725. (a) There is hereby established in the Public Health Service a National Advisory Council on Education for Health Professions, consisting of the Surgeon General of the Public Health Service, who shall be Chairman, and the Commissioner of Education, both of whom shall be ex officio members, and sixteen members appointed by the Secretary without regard to the civil service laws. Four of the appointed members shall be selected from the general public and twelve shall be selected from among leading authorities in the fields of higher education, at least eight of whom are particularly concerned with training in medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or the public health professions. In selecting persons for appointment to the Council, consideration shall be given to such factors, among others, as (1) experience in the planning, constructing, financing, or administration of schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or schools of public health, and (2) familiarity with the need for teaching facilities in all areas of the Nation.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part, and in the review of applications thereunder.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part, for such periods, in addition to conference periods, as he may determine. The Surgeon General shall, in addition, make appropriate provision for consultation between and coordination of the work of the Council and the National Advisory Council on Health Research Facilities with respect to matters bearing on the purposes and administration of this part.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at a rate to be fixed by the Secretary but not exceeding $50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"NONINTERFERENCE WITH ADMINISTRATION OF INSTITUTIONS

"SEC. 726. Nothing contained in this part shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over, or impose any requirement or condition with respect to, the personnel, curriculum, methods of instruction, or administration of any institution.

"REGULATIONS

"SEC. 727. (a) The Surgeon General, after consultation with the Council and with the approval of the Secretary, shall prescribe general regulations for this part covering the eligibility of institutions, the order of priority in approving applications, the terms and conditions for approving applications, determinations of the amounts of grants, and minimum standards of construction and equipment for various types of institutions.

"(b) The Surgeon General is authorized to make, with the approval of the Secretary, such other regulations as he finds necessary to carry out the provisions of this part.

"TECHNICAL ASSISTANCE

"SEC. 728. In carrying out the purposes of this part, and to further the development of State, or joint or coordinated regional or other interstate, planning of programs for relieving shortages of training capacity in the fields of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, and public health, through constructing teaching facilities, providing adequate financial support for schools, or otherwise, the Surgeon General is authorized to provide technical assistance and consultative services to State or interstate planning agencies established for any of such purposes.

"PLANNING GRANTS FOR HEALTH EDUCATION PROGRAMS

"SEC. 729. There is hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, the sum of $500,000 to enable the Surgeon General to make grants to regional, interstate, State, or local public or nonprofit private agencies and organizations and to any public or nonprofit private institution for planning and determining the need for teaching facilities for, or otherwise planning a new, expanded, or improved program of, training physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists.

"PART C—STUDENT LOANS

"LOAN AGREEMENTS

"SEC. 740. (a) The Secretary of Health, Education, and Welfare is authorized to enter into an agreement for the establishment and operation of a student loan fund in accordance with this part with any public or other nonprofit school of medicine, osteopathy, or dentistry (as defined in section 724) which is located in a State and is accredited as provided in section 721(b)(1)(B).

"(b) Each agreement entered into under this section shall—

"(1) provide for establishment of a student loan fund by the school;

"(2) provide for deposit in the fund of (A) the amounts allocated under this part to the school by the Secretary, (B) an additional amount from other sources equal to not less than one-ninth of amounts deposited pursuant to clause (A), (C) collections of principal and interest on loans made from the fund, and (D) any other earnings of the fund;

"(3) provide that the fund shall be used only for loans to students of the school in accordance with the agreement and for costs of collection of such loans and interest thereon; and

"(4) contain such other provisions as are necessary to protect the financial interests of the United States.

"LOAN PROVISIONS

"SEC. 741. (a) Loans from a loan fund established under this part may not exceed $2,000 for any student for any academic year or its equivalent, reduced by the amounts loaned to such student for that year out of a loan fund established under section 204 of the National Defense Education Act of 1958. In the granting of such loans, a school shall give preference to persons who enter as first-year students after June 30, 1963.

"(b) Any such loans shall be made on such terms and conditions as the school may determine, but may be made only to a student in need of the amount thereof to pursue a full-time course of study at the school leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, or doctor of osteopathy.

"(c) Such loans shall be repayable in equal or graduated periodic installments (with the right of the borrower to accelerate repayment) over the ten-year period which begins three years after the student ceases to pursue a full-time course of study at a school of medicine, osteopathy, or dentistry, excluding from such ten-year period all periods (up to three years) of (1) active duty performed by the borrower as a member of a uniformed service, or (2) service as a volunteer under the Peace Corps Act.

"(d) The liability to repay the unpaid balance of such a loan and accrued interest thereon shall be canceled upon the death of the borrower, or if the Secretary determines that he has become permanently and totally disabled.

"(e) Such loans shall bear interest, on the unpaid balance of the loan, at the rate of 3 per centum per annum, computed only for periods during which the loan is repayable.

"(f) Where any person who obtained one or more loans from a loan fund established under this part—

"(1)(A) engages in the practice of medicine, dentistry, or osteopathy in an area in a State determined by the appropriate State health authority to have a shortage of and need for physicians or dentists; or

"(B) is employed full-time as a physician or dentist by any public agency, is on active duty as a physician or dentist with a uniformed service, or is employed full-time as a physician or dentist by any nonprofit private agency or organization located in a State; and

"(2)(A) in the case of practice described in paragraph (1)(A) of this subsection, the appropriate State health authority certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such practice helps to meet the shortage of and need for physicians or dentists in the area where the practice occurs;

"(B) in the case of employment (other than Federal employment or service in a uniformed service) by any public agency or nonprofit private agency or organization, the State health authority for the State in which the employment is performed certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such employment helps meet a shortage of and need for persons to perform such employment; and

"(C) in the case of Federal employment or service in a uniformed service, the head of the employing agency or uniformed service, as the case may be, certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such employment or service helps meet a shortage of and need for persons to perform such employment or such military service;

then 10 percentum of the total of such loans, plus accrued interest on such amount, which are unpaid as of the date such practice or employment, or such service in a uniformed service begins, shall be canceled thereafter for each year of such practice, employment, or service, or combination thereof, up to a total of 50 per centum of such total, plus accrued interest thereon.

"(g) Loans shall be made under this part without security or endorsement, except that if the borrower is a minor and the note or other evidence of obligation executed by him would not, under the applicable law, create a binding obligation, either security or endorsement may be required.

"(h) No note or other evidence of a loan made under this part may be transferred or assigned by the school making the loan except that, if the borrower transfers to another school participating in the program under this part, such note or other evidence of a loan may be transferred to such other school.

"(i) Where all or any part of a loan, or interest, is canceled under this section, the Secretary shall pay to the school an amount equal to the school's proportionate share of the canceled portion, as determined by the Secretary.

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 742. (a) There are hereby authorized to be appropriated to the Secretary of Health, Education, and Welfare to carry out this part $5,100,000 for the fiscal year ending June 30, 1964, $10,200,000 for the fiscal year ending June 30, 1965, $15,400,000 for the fiscal year ending June 30, 1966, $20,600,000 for the fiscal year ending June 30, 1967, $21,000,000 for the fiscal year ending June 30, 1968, and such sums for the fiscal year ending June 30, 1969, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan for any academic year ending before July 1, 1968, to continue or complete their education. Sums appropriated pursuant to this subsection shall be allotted among loan funds at schools which have established loan funds under this part.

"(b)(1) The Secretary shall from time to time set dates by which schools with which he has in effect agreements under this part must file applications for allotments to their loan funds.

"(2) If the total of the amounts requested for any fiscal year in such applications exceeds the amounts appropriated under this part for this fiscal year, the allotment to the loan fund of each such school shall be reduced to whichever of the following is the smaller: (A) the amount requested in its application or (B) an amount which bears the same ratio to the amounts appropriated as the number of students estimated by the Secretary to be enrolled in such school during such fiscal year bears to the estimated total number of students in all such schools during such year. Amounts remaining after allotment under the preceding sentence shall be reallotted in accordance with clause (B) of such sentence among schools whose application requested more than the amounts so allotted to their loan funds, but with such adjustments as may be necessary to prevent the total allotted to any such school's loan fund from exceeding the total so requested by it.

"(3) Allotments to a loan fund of a school shall be paid to it from time to time in such installments as the Secretary determines will not result in unnecessary accumulations in the loan fund at such school.

"DISTRIBUTION OF ASSETS FROM LOAN FUNDS

"SEC. 743. (a) After June 30, 1971, and not later than September 30, 1971, there shall be a capital distribution of the balance of the loan fund established under this part by each school as follows:

"(1) The Secretary shall first be paid an amount which bears the same ratio to the balance in such fund at the close of June 30, 1971, as the total amount of the allotments to such fund by the Secretary under this part bears to the total amounts in such fund derived from such allotments and from funds deposited therein pursuant to section 740(b)(2)(B).

"(2) The remainder of such balance shall be paid to the school.

"(b) After September 30, 1971, each school with which the Secretary has made an agreement under this part shall pay to the Secretary, not less often than quarterly, the same proportionate share of amounts received by the school after June 30, 1971, in payment of principal or interest on loans made from the loan fund established pursuant to such agreement as was determined for the Secretary under subsection (a).

"LOANS TO SCHOOLS

"SEC. 744. Upon application by any school with which he has made an agreement under this part, the Secretary may make a loan to such school for the purpose of helping to finance deposits required by section 740(b)(2)(B) in a loan fund established pursuant to such agreement. Such loan may be made only if the school shows it is unable to secure such funds upon reasonable terms and conditions from non-Federal sources. Loans made under this section shall bear interest at a rate sufficient to cover (1) the cost of the funds to the Treasury, (2) the cost of administering this section, and (3) probable losses.

"ADMINISTRATIVE PROVISIONS

"SEC. 745. The Secretary may agree to modifications of agreement or loans made under this part, and may compromise, waive, or release any right, title, claim, or demand of the United States arising or acquired under this part."

SEC. 3. (a) Section 705(c) of the Public Health Service Act is amended by striking out "and" at the end of paragraph (2), by striking out the period at the end of paragraph (3) and inserting in lieu thereof "; and", and by adding after paragraph (3) the following new paragraph:

"(4) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractor in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c)."

(b) Part A of title VII of such Act is further amended by inserting after section 710 the following new sections:

"TECHNICAL ASSISTANCE

"SEC. 711. The Surgeon General is authorized to provide assistance to applicants under this part, and other public or nonprofit institutions engaging or competent to engage in research, or research and related purposes, in the sciences related to health, in designing and planning the construction of facilities for the conduct of such research or research and related purposes.

"CONSTRUCTION OF REGIONAL FACILITIES

"SEC. 712. When the Surgeon General finds, in accordance with regulations, that the purposes of this part can best be achieved through the construction of research, or research and related purposes, facilities of particular value or significance for the Nation or a region thereof, and that because of the cost of such facilities or their use as a national or regional resource for research or related purposes a grant pursuant to the preceding provisions of this part does not provide an effective or appropriate means of financing the construction of such facilities, he may construct or make arrangements for constructing, through contracts for paying (including advance or installment payments) part or all of the cost of construction or otherwise, facilities for the conduct of research, or for research and related purposes, in the sciences related to health. The Surgeon General may, where he deems such action appropriate, make arrangements, by contract or otherwise, for the operation of such facilities (for the conduct of such research, or research and related purposes) or may make contributions toward the cost of such operation of facilities of this nature whether or not constructed pursuant to, or with aid provided under, this section. Title to any facility constructed under this section may be transferred by the Surgeon General on behalf of the United States to any public or nonprofit private institution competent to engage in the type of research, or research and related purposes, for which the facility was constructed. Such transfer shall be made subject to the condition that the facility will be operated for the research, or research and related purposes, for which it was constructed and to such other conditions as the Surgeon General deems necessary to carry out the objectives of this part and to protect the interests of the United States."

[H.R. 180, 88th Cong., 1st sess.]

A BILL To increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Act of 1963".

GRANTS FOR CONSTRUCTION OF MEDICAL, DENTAL, OSTEOPATHIC, AND PUBLIC HEALTH TEACHING FACILITIES

SEC. 2. (a) Title VII of the Public Health Service Act (42 U.S.C. chap 6A) is amended by inserting "AND TEACHING" after "RESEARCH" in the heading thereof, by inserting "AND TRAINING OF PROFESSIONAL HEALTH PERSONNEL" after "FACILITIES" in such heading, and by inserting immediately below such heading "PART A—GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES", and by changing the words "this title" wherever they appear in such title to read "this part".

(b) Such title is further amended by adding at the end thereof the following:

"PART B—GRANTS FOR CONSTRUCTION OF MEDICAL, DENTAL, OSTEOPATHIC, AND PUBLIC HEALTH TEACHING FACILITIES

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 720. There are hereby authorized to be apropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973 (1) not to exceed $45,000,000 for grants to assist in the construction of new teaching facilities for the training of physicians or professional public health personnel, (2) not to exceed $15,000,000 for grants to assist in the construction of new teaching facilities for the training of dentists, and (3) not to exceed $15,000,000 for replacement or rehabilitation of existing teaching facilities for the training of physicians, professional public health personnel, or dentists.

"APPROVAL OF APPLICATIONS

"SEC. 721. (a) No application for a grant under this part may be approved unless it is submitted to the Surgeon General prior to July 1, 1972.

"(b) To be eligible to apply for a grant to assist in the construction of any facility under this part, the applicant must be (1) a public or other nonprofit school of medicine, dentistry, osteopathy, or public health and (2) accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that a new school which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this part, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this part if the Commissioner of Education finds, after consultation with the appropriate accreditation bodies or bodies, that there is a resonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(c) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that—

"(1) the applicant meets the eligibility conditions set forth in subsection (b);

"(2) the application contains or is supported by reasonable assurances that (A) for not less than ten years after completion of construction, the facility will be used for the purposes of the teaching for which it is to be constructed, (B) sufficient funds will be available to meet the non-Federal share of the cost of constructing the facility, and (C) sufficient funds will be available, when construction is completed, for effective use of the facility for the training for which it is being constructed;

"(3) (A) in the case of an application for a grant from funds appropriated pursuant to clause (1) of section 720, such application is for aid in the construction of a new school of medicine, osteopathy, or public health, or construction which will expand the training capacity of an existing such school, (B) in the case of an application for a grant from funds appropriated pursuant to clause (2) of such section, such application is for aid in the construction of a new school of dentistry or construction which will expand the capacity of an existing school of dentistry, or (C) in the case of an application for a grant from funds appropriated pursuant to clause (3) of such section, such application is for aid in construction which will replace or rehabilitate facilities of an existing school of medicine, dentistry, osteopathy, or public health which are so obsolete as to require the school to curtail substantially either its enrollment or the quality of the training provided;

"(4) the plans and specifications are in accordance with regulations relating to minimum standards of construction and equipment;

"(5) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractors in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c); and

"(6) if the application requests aid in construction of a facility which is a hospital or diagnostic or treatment center, as defined in section 631, an application with respect thereto has been filed under title VI and has been denied thereunder because (A) the project has no or insufficient priority, or (B) funds are not available for the project from the State's allotments under title VI.

Before approving or disapproving an application under this part, the Surgeon General shall secure the advice of the National Advisory Council on Education for Health Professions established by section 725 (hereinafter in this part referred to as the 'Council').

"(d) In considering applications for grants, the Council and the Surgeon General shall take into account—

"(1) (A) in the case of a project for a new school or for expansion of the facilities of an existing school, the relative effectiveness of the proposed facilities in expanding the capacity for the training of first-year students of

medicine, dentistry, or osteopathy (or, in the case of a two-year school which is expanding to a four-year school, expanding the capacity for four-year training of students in the field), or for the training of professional public health personnel, and in promoting an equitable geographical distribution of opportunities for such training (giving due consideration to population, available physicians, dentists, or professional public health personnel, and available resources in various areas of the Nation for training such persons); or

"(B) in the case of a project for replacement or rehabilitation of existing facilities of a school, the relative need for such replacement or rehabilitation to prevent curtailment of the school's enrollment or deterioration of the quality of the training provided by the school, and the relative size of any such curtailment and its effect on the geographical distribution of opportunities for training (giving consideration to the factors mentioned above in paragraph (1)); and

"(2) in the case of an applicant in a State which has in existence a State planning agency, or which participates in a regional or other interstate planning agency, described in section 728, the relationship of the application to the construction or training program which is being developed by such agency with respect to such State and, if such agency has reviewed such application, any comment thereon submitted by such agency.

"AMOUNT OF GRANT; PAYMENTS

"SEC. 722. (a) The amount of any grant under this part shall be that recommended by the Council or such lesser amount as the Surgeon General determines to be appropriate; except that (1) in the case of a grant for a project for a new school, and in the case of a grant for new facilities for an existing school in cases where such facilities are of particular importance in providing a major expansion of training capacity, as determined in accordance with regulations, such amount may not exceed 66⅔ per centum of the necessary cost of construction, as determined by the Surgeon General, of such project; and (2) in the case of any other grant, such amount may not exceed 50 per centum of the necessary cost of construction, as so determined, of the project with respect to which the grant is made.

"(b) Upon approval of any application for a grant under this part, the Surgeon General shall reserve, from any appropriation available therefor, the amount of such grants as determined under subsection (a); the amount so reserved may be paid in advance or by way of reimbursement, and in such installments consistent with construction progress, as the Surgeon General may determine. The Surgeon General's reservation of any amount under this section may be amended by him, either upon approval of an amendment of the application or upon revision of the estimated cost of construction of the facility.

"(c) In determining the amount of any grant under this part, there shall be excluded from the cost of construction an amount equal to the sum of (1) the amount of any other Federal grant which the applicant has obtained, or is assured of obtaining, with respect to the construction which is to be financed in part by grants authorized under this part, and (2) the amount of any non-Federal funds required to be expended as a condition of such other Federal grant.

"RECAPTURE OF PAYMENTS

"SEC. 723. If, within ten years after completion of any construction for which funds have been paid under this part—

"(a) the applicant or other owner of the facility shall cease to be a public or nonprofit school, or

"(b) the facility shall cease to be used for the teaching purposes for which it was constructed (unless the Surgeon General determines, in accordance with regulations, that there is good cause for releasing the applicant or other owner from the obligation to do so),

the United States shall be entitled to recover from the applicant or other owner of the facility the amount bearing the same ratio to the then value (as determined by agreement of the parties or by action brought in the United States district court for the district in which such facility is situated) of the facility, as the amount of the Federal participation bore to the cost of construction of such facility.

"DEFINITIONS

"SEC. 724. As used in this part—

"(1) The terms 'construction' and 'cost of construction' include (A) the construction of new buildings, the expansion of existing buildings, and remodeling, replacement, renovation, major repair (to the extent permitted by regulations), or alteration of existing buildings, including architects' fees, but not including the cost of acquisition of land or off-site improvement, and (B) initial equipment of new buildings and of the expanded, remodeled, repaired, renovated, or altered part of existing buildings;

"(2) The term 'nonprofit school' means a school owned and operated by one or more corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual; and

"(3) The terms 'school of medicine', 'school of dentistry', 'school of osteopathy', and 'school of public health' mean a school which provides training leading, respectively, to a degree of doctor of medicine, a degree of doctor of dentistry or an equivalent degree, a degree of doctor of osteopathy, and a graduate degree in public health.

"NATIONAL ADVISORY COUNCIL ON EDUCATION FOR HEALTH PROFESSIONS

"SEC. 725. (a) There is hereby established in the Public Health Service a National Advisory Council on Education for Health Professions, consisting of the Surgeon General of the Public Health Service, who shall be Chairman, and the Commissioner of Education, both of whom shall be ex officio members, and twelve members appointed by the Secretary without regard to the civil service laws. Four of the appointed members shall be selected from the general public and eight shall be selected from among leading authorities in the fields of higher education, at least four of whom are particularly concerned with training in medicine, dentistry, osteopathy, or the public health professions. In selecting persons for appointment to the Council, consideration shall be given to such factors, among others, as (1) experience in the planning, constructing, financing, or administration of schools of medicine, dentistry, or osteopathy, or schools of public health, and (2) familiarity with the need for teaching facilities in all areas of the Nation.

"(b) The Council shall advise and assist the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part and part C, and in the review of applications thereunder.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part, for such periods, in addition to conference periods, as he may determine. The Surgeon General shall, in addition, make appropriate provision for consultation between and coordination of the work of the Council and the National Advisory Council on Health Research Facilities with respect to matters bearing on the purposes and administration of this part and part C.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at a rate to be fixed by the Secretary but not exceeding $50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"NONINTERFERENCE WITH ADMINISTRATION OF INSTITUTIONS

"SEC. 726. Nothing contained in this part shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over, or impose any requirement or condition with respect to, the personnel, curriculum, methods of instruction, or administration of any institution.

"REGULATIONS

"SEC. 727. (a) The Surgeon General, after consultation with the Council and with the approval of the Secretary, shall prescribe general regulations for this part covering the eligibility of institutions, the order of priority in approving

applications, the terms and conditions for approving applications, determinations of the amounts of grants, and minimum standards of construction and equipment for various types of institutions.

"(b) The Surgeon General is authorized to make, with the approval of the Secretary, such other regulations as he finds necessary to carry out the provisions of this part.

"TECHNICAL ASSISTANCE

"SEC. 728. In carrying out the purposes of this part, and to further the development of State, or joint or coordinated regional or other interstate, planning or programs for relieving shortages of training capacity in the fields of medicine, dentistry, osteopathy, and public health, through constructing teaching facilities, providing adequate financial support for schools, or otherwise, the Surgeon General is authorized to provide technical assistance and consultative services to State or interstate planning agencies established for any of such purposes.

"PLANNING GRANTS FOR MEDICAL, OSTEOPATHIC, DENTAL, OR PROFESSIONAL PUBLIC HEALTH EDUCATION PROGRAMS

"SEC. 729. There is hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, the sum of $500,000 to enable the Surgeon General to make grants to regional, interstate, State, or local public or private nonprofit agencies and organizations and to any public or private nonprofit institution for planning and determining the need for teaching facilities for, or otherwise planning a new, expanded, or improved program of, training physicians, professional public health personnel, or dentists.

"PART C—SCHOLARSHIP GRANTS TO SCHOOLS OF MEDICINE, OSTEOPATHY, OR DENTISTRY

"SCHOLARSHIP GRANTS

"SEC. 740. (a) The Surgeon General shall make grants to each public or other nonprofit school of medicine, osteopathy, or dentistry (as defined in sectin 724), which is accredited as provided in section 721(b)(2), for scholarships to be awarded annually by such school to students thereof.

"(b) The amount of the grant under subsection (a) to each such school shall be equal to $1,500 multiplied by (1) for the fiscal year ending June 30, 1964, one-fourth of the number of first-year students of such school; (2) for the fiscal year ending June 30, 1965, one-fourth of the number of first-year students and second-year students of such school; (3) for the fiscal year ending June 30, 1966, one-fourth of the number of first-year students, second-year students, and third-year students of such school; and (4) for each fiscal year thereafter, one-fourth of the number of students of such school.

"(c)(1) Scholarships may be awarded by schools from grants under subsection (a) only to individuals who have been accepted by them for enrollment as full-time first-year students in the case of awards from grants under subsection (a) for the fiscal year ending June 30, 1964; only to individuals who have been so accepted and individuals enrolled and in good standing as full-time second-year students in the case of such awards from such grants for the fiscal year ending June 30, 1965; and only to individuals so accepted or enrolled and individuals enrolled and in good standing as full-time third-year students in the case of such awards from such grants for the fiscal year ending June 30, 1966; and thereafter only to individuals who have been so accepted and individuals who are enrolled as full-time students in the school.

"(2) Scholarships awarded from grants under subsection (a) for any school year shall be awarded to talented students on the basis of need for financial assistance in pursuing a course of study at the school for such year. Any such scholarship awarded for a school year shall cover such portion of the student's tuition, fees, books, equipment, and living expenses at the school making the award, but not to exceed $2,000 for any year, as such school may determine the student needs for such year on the basis of his requirements and financial resources.

"(d) The Surgeon General shall also make cost of education payments to schools which receive grants under subsection (a). Such payments to any school for a year shall be equal to $1,000 for each of its students who is awarded a

scholarship from a grant under subsection (a) for such year, but not in excess of the number of students determined for such school for such year under clause (1), (2), (3), or (4), as the case may be, of subsection (b).

"(e) Grants under subsection (a) and payments under subsection (d) shall be made in accordance with regulations prescribed after consultation with the National Advisory Council on Education for the Health Professions (established by section 725). Such regulations shall include provisions relating to determination, for purposes of grants or payments for a fiscal year, of the number of students enrolled in a particular year-class on the basis of estimates, or on the basis of the number in such year-class in an earlier year, or on such other basis as he deems appropriate for making such determination, and including methods of making such determination when a year-class was not in existence in an earlier year at a school.

"(f) Grants under subsection (a) and payments under subsection (d) may be paid in advance or by way of reimbursement, and at such intervals as the Surgeon General may find necessary; and with appropriate adjustments on account of overpayments or underpayments previously made."

EXTENSION AND EXPANSION OF RESEARCH FACILITIES GRANTS

SEC. 3. (a) Effective with respect to appropriations for fiscal years beginning after June 30, 1964, section 704 of the Public Health Service Act is amended by striking out "$30,000,000" and inserting in lieu thereof "$50,000,000". Such section is further amended by striking out "five succeeding fiscal years" and inserting in lieu thereof "eight succeeding fiscal years".

(b) Section 705(a) of such Act is amended by striking out "June 30, 1961" and inserting in lieu thereof "June 30, 1966".

(c) Section 706(a) of such Act is amended by striking out ", or in the case of a multipurpose facility," and inserting in lieu thereof "in the case of a facility which the Surgeon General determines is to be used for research, or research and purposes related thereto (including research training), in the sciences related to health or, in the case of any other multipurpose facility,".

(d) Sections 704 and 705(c)(2) of such Act are each amended by inserting ", or research and related purposes, after "research", wherever it appears therein. Section 705 (e) of such Act is amended by inserting ", or research and related purposes," after "research" the first time it appears therein and inserting "or related purposes" after "research" the second time it appears therein. Section 707(b) of such Act is amended by inserting ", or research and related purposes," after "research purposes". Section 706(a) of such Act is amended by striking out "facility for research" and inserting in lieu thereof "facility for research, or research and related purposes,". Section 708 of such Act is amended by inserting "or related purposes" after "research".

(e) Section 705(c) of such Act is further amended by striking out "and" at the end of paragraph (2), by striking out the period at the end of paragraph (3) and inserting in lieu thereof "; and", and by adding after paragraph (3) the following new paragraph:

"(4) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractor in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c)."

(f) Part A of title VII of such Act is further amended by inserting after section 710 the folowing new sections:

"TECHNICAL ASSISTANCE

"SEC. 711. The Surgeon General is authorized to provide assistance to applicants under this part, and other public or nonprofit institutions engaging or competent to engage in research, or research and related purposes, in the

sciences related to health, in designing and planning the construction of facilities for the conduct of such research or research training.

"CONSTRUCTION OF REGIONAL FACILITIES

"SEC. 712. When the Surgeon General finds, in accordance with regulations, that the purposes of this part can best be achieved through the construction of research, or research and related purposes, facilities of particular value or significance for the Nation or a region thereof, and that because of the cost of such facilities or their use as a national or regional resource for research or related purposes a grant pursuant to the preceding provisions of this part does not provide an effective or appropriate means of financing the construction of such facilities, he may construct or make arrangements for constructing, through contracts for paying (including advance or installment payments) part or all of the cost of construction or otherwise, facilities for the conduct of research, or for research and related purposes, in the sciences related to health. The Surgeon General may, where he deems such action appropriate, make arrangements, by contract or otherwise, for the operation of such facilities (for the conduct of such research, or research and related purposes) or may make contributions toward the cost of such operation of facilities of this nature whether or not constructed pursuant to, or with aid provided under, this section. Title to any facility constructed under this section may be transferred by the Surgeon General on behalf of the United States to any public or nonprofit private institution competent to engage in the type of research, or research and related purposes, for which the facility was constructed. Such transfer shall be made subject to the condition that the facility will be operated for the research, or research and related purposes, for which it was constructed and to such other conditions as the Surgeon General deems necessary to carry out the objectives of this part and to protect the interests of the United States."

(g) The parenthetical phrase in the first sentence of section 433 (a) of such Act which reads "(including grants-in-aid for drawing plans, erection of buildings, and acquisition of land therefor)" is repealed.

[H.R. 3180, 88th Cong., 1st sess.]

A BILL To authorize a ten-year program of grants for construction of medical, dental, and public health educational facilities, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Educational Facilities Construction Act of 1963".

GRANTS FOR HEALTH EDUCATIONAL FACILITIES

SEC. 2. The Public Health Service Act (42 U.S.C., chapter 6A) is amended by adding at the end thereof the following new title:

"TITLE VIII—HEALTH EDUCATIONAL FACILITIES CONSTRUCTION PROGRAM

SEC. 801. The Congress hereby finds and declares that—

"(a) increased demand for health services and health research necessitates the expansion and improvement of existing health educational facilities;

"(b) steadily increasing tuition fees and increasing contributions from private citizens, associations, funds, and foundations, and from the health professions themselves have proven insufficient to provide the necessary capital funds required for such expansion and improvement;

"(c) it is, therefore, the policy of the Congress to provide funds for construction of health educational facilities for our public and nonprofit medical, dental, and public health schools, thus insuring the continued production of an adequate number of properly qualified and trained physicians, dentists, teachers, and research scientists.

"DEFINITIONS

"SEC. 802. As used in this title—

"(1) The term 'Council' means the National Advisory Council on Health Educational Facilities established by section 803.

"(2) The terms 'construction' and 'cost of construction' include (A) the construction of new buildings and the expansion, remodeling, and alteration of existing buildings, including architects' fees in excess of amounts granted under section 804(c)(3), but not including the cost of acquisition of land or off-site improvements, except in the case of existing structures suitable for use as health educational facilities, and (B) equipping new buildings and existing buildings, whether or not expanded, remodeled, or altered.

"(3) The term 'nonprofit', as applied to a school, means a school owned and operated by one or more nonprofit corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual.

"(4) The term 'medical school' includes two-year schools and means a school providing training leading to the degree of doctor of medicine or osteopathy, approved or accredited by a recognized body or bodies approved by the Surgeon General after he had obtained the advice and recommendation of the Council, except that a new school which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this title, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this title if the Surgeon General finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(5) The term 'dental school' means a school which provides training leading to the degree of doctor of dental surgery, or an equivalent degree, approved or accredited by a recognized body or bodies approved by the Surgeon General after he has obtained the advice and recommendation of the Council, except that a new school which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this title, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this title if the Surgeon General finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(6) The term 'pubic health school' means a school which provides comprehensive professional training, specialized consultative services, and technical assistance in the fields of public health and in the administration of State and local public health programs, except that a new school which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this title, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this title if the Surgeon General finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(7) The term 'health educational facilities' includes educational and related research facilities in medicine, dentistry, and pubic health.

"NATIONAL ADVISORY COUNCIL ON HEALTH EDUCATIONAL FACILITIES

"SEC. 803. (a) There is hereby established in the Public Health Service a National Advisory Council on Health Educational Facilities, consisting of the Surgeon General of the Public Health Service, who shall be Chairman, and the Commissioner of Education, who shall be ex officio members, and ten members appointed by the Secretary without regard to the civil service laws. The ten appointed members shall be leaders in the fields of health sciences, education, or public affairs, and four of the ten shall be persons active in the fields of professional health education.

"(b) The Council shall—

"(1) advise and assist the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this title; and

"(2) consider all applications for grants under this title and make to the Surgeon General such recommendations as it deems advisable with respect to (a) the approval of such applications, and (b) the amount which should be granted to each institution whose application, in its opinion, should be approved.

"(c) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Secretary, shall be entitled to receive compensation at a rate to be fixed by the Secretary but not exceeding $50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 804. (a) To assist in the construction of health educational facilities, as provided in this title, there is hereby authorized to be appropriated—

"(1) $50,000,000 for the fiscal year beginning July 1, 1963, and each of the four succeeding fiscal years for grants for the expansion and improvement of existing schools of medicine, dentistry, and public health; and

"(2) $60,000,000 for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, for grants for the construction of new schools of medicine, dentistry, or public health.

"(b) Sums appropriated pursuant to this section shall remain available until expended.

"(c) No such grant shall be in excess of 50 per centum of the cost of construction with respect to which it is made, except that—

"(1) in the case of new schools, grants may be made in an amount not to exceed 66⅔ per centum of the cost of construction; and

"(2) in the case of existing schools, grants may be made in an amount not to exceed 66⅔ per centum of that portion of the costs of construction found by the Surgeon General to be reasonably attributable to expanded capacity for freshman enrollment; and

"(3) upon application of any medical, dental, or public health school, a grant of not to exceed $25,000 may be made for the purpose of preparing initial plans with estimates for the proposed new construction.

"(e) In the case of existing schools, no grant or grants shall be made to any one medical school in excess of $3,000,000 or to any one dental or public health school in excess of $1,000,000 for the total five-year program authorized in this section, exclusive of amounts granted under subsection (b)(3) of this section.

"APPLICATIONS BY MEDICAL, DENTAL, AND PUBLIC HEALTH SCHOOLS FOR GRANTS

"SEC. 805. Any new or existing public or nonprofit medical, dental, or public health school desiring a grant under this title may file an application therefor with the Surgeon General for the fiscal year in which such grant is desired. Such application shall contain such information as the Surgeon General may by regulation prescribe and shall contain adequate assurances that the school will be operated as a public or nonprofit institution, and comply with all provisions of this title and regulations promulgated pursuant thereto.

"GRANTS FOR CONSTRUCTION

"SEC. 806. (a) The Surgeon General, in accordance with regulations, and upon the recommendation of the Council, shall determine from time to time the amount to be paid to each medical, dental, or public health school from appropriations under section 804 and shall certify to the Secretary of the Treasury the amounts so determined. Upon receipt of any such certification, the Secretary of the Treasury shall, prior to audit or settlement by the General Accounting Office, pay in accordance with such certification.

"(b) Not to exceed 20 per centum of the amount of any grant for a new school may, at the discretion of the applicant, be allocated to permanent endowment for the cost of maintenance of the new facility.

"REGULATIONS

"SEC. 807. All regulations under this title with respect to payments to medical, dental, or public health schools shall be made only after obtaining the advice and recommendation of the Council.

"GENERAL PROVISIONS

"SEC. 808. Nothing in this title shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any con-

trol over, or prescribe any requirements with respect to, the curriculum or administration of any medical, dental, or public health school, or the admission of applicants thereto."

TECHNICAL AMENDMENTS TO ACT OF JULY 1, 1944

SEC. 3. (a) The Act of July 1, 1944 (58 Stat. 682), as amended, is hereby further amended by changing the number of title VIII to title IX and by changing the numbers of sections 801 to 814, inclusive, and references thereto, to sections 901 to 914, respectively.

(b) Section 1 of the Public Health Service Act is amended to read as follows:

"SECTION 1. Titles I to VIII, inclusive, of this Act may be cited as the 'Public Health Service Act'."

[H.R. 3182, 88th Cong., 1st sess.]

A BILL To increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Act of 1963".

GRANTS FOR CONSTRUCTION OF MEDICAL, DENTAL, PHARMACEUTICAL, OPTOMETRIC, PODIATRIC, NURSING, OSTEOPATHIC, AND PUBLIC HEALTH TEACHING FACILITIES

SEC. 2. (a) Title VII of the Public Health Service Act (42 U.S.C. Chap. 6A) is amended by inserting "AND TEACHING" after "RESEARCH" in the heading thereof, by inserting "AND TRAINING OF PROFESSIONAL HEALTH PERSONNEL" after "FACILITIES" in such heading, and by inserting immediately below such heading "PART A—GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES", and by changing the words "this title" wherever they appear in such title to read "this part".

(b) Such title is further amended by adding at the end thereof the following:

"PART B—GRANTS FOR CONSTRUCTION OF TEACHING FACILITIES FOR MEDICAL, DENTAL, AND OTHER HEALTH PERSONNEL

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 720. There are hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, (1) not to exceed $45,000,000 for grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, or professional public health personnel, (2) not to exceed $15,000,000 for grants to assist in the construction of new teaching facilities for the training of dentists, and (3) not to exceed $15,000,000 for replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists.

"APPROVAL OF APPLICATIONS

"SEC. 721. (a) No application for a grant under this part may be approved unless it is submitted to the Surgeon General prior to July 1, 1972.

"(b)(1) To be eligible to apply for a grant to assist in the construction of any facility under this part, the applicant must be (A) a public or other nonprofit school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or public health and (B) accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that a new school which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this part, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this part if the Comimssioner of Education finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(2) Notwithstanding paragraph (1), in the case of an affiliated hospital, an application which is approved by the school of medicine with which the

hospital is affiliated and which otherwise complies with the requirements of this part may be filed by any public or other nonprofit agency qualified to file an application under section 625.

"(3) In the case of any application, whether filed by a school or, in the case of an affiliated hospital, by any other public or other nonprofit agency, for a grant under this part to assist in the construction of a facility which is a hospital as defined in section 631—

"(A) if the facility is needed in connection with a new school, only that portion of the project to construct the facility which the Surgeon General determines to be reasonably attributable to the need of such school for the facility for teaching purposes,

"(B) if the construction is in connection with expansion of the training capacity of an existing school, only that portion of the project to construct the facility which the Surgeon General determines to be reasonably attributable to the need of such school for the facility in order to expand its training capacity.

"(C) if the construction is in connection with renovation or rehabilitation of facilities used by an existing school, only that portion of the project which the Surgeon General determines to be reasonably attributable to the need of such school for the facilities in order to prevent curtailment of enrollment or quality of training of the school,

shall be regarded as the project with respect to which payments may be made under section 722.

"(c) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that—

"(1) the applicant meets the eligibility conditions set forth in subsection (b);

"(2) the application contains or is supported by reasonable assurances that (A) for not less than ten years after completion of construction, the facility will be used for the purposes of the teaching for which it is to be constructed, (B) sufficient funds will be available to meet the non-Federal share of the cost of constructing the facility, (C) sufficient funds will be available, when construction is completed, for effective use of the facility for the training for which it is being constructed, and (D) in the case of an application for construction to expand the training capacity of an existing school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, the first-year enrollment at such school during the first full school year after the completion of the construction and for each of the next nine school years thereafter will exceed the highest first-year enrollment at such school for any of the five full school years preceding the year in which the application is made by at least 5 per centum of such highest first-year enrollment, or by five students, whichever is greater;

"(3)(A) in the case of an application for a grant from funds appropriated pursuant to clause (1) of section 720, such application is for aid in the construction of a new school of medicine, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, or construction which will expand the training capacity of an existing school of medicine, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, (B) in the case of an application for a grant from funds appropriated pursuant to clause (2) of such section, such application is for aid in the construction of a new school of dentistry or construction which will expand the capacity of an existing school of dentistry, or (C) in the case of an application for a grant from funds appropriated pursuant to clause (3) of such section, such application is for aid in construction which will replace or rehabilitate facilities of, or used by, an existing school of medicine, dentistry, pharmacy, optometry, podiatry, nursing, osteopathy, or public health which are so obsolete as to require the school to curtail substantially either its enrollment or the quality of the training provided;

"(4) the plans and specifications are in accordance with regulations relating to minimum standards of construction and equipment;

"(5) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractors in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of

pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c); and

"(6) if the application requests aid in construction of a facility which is a hospital or diagnostic or treatment center, as defined in section 631, an application with respect thereto has been filed under title VI and has been denied thereunder because (A) the project has no or insufficient priority, or (B) funds are not available for the project from the State's allotments under title VI.

Before approving or disapproving an application under this part, the Surgeon General shall secure the advice of the National Advisory Council on Education for Health Professions established by section 725 (hereinafter in this part referred to as the 'Council').

"(d) In considering applications for grants, the Council and the Surgeon General shall take into account—

"(1) (A) in the case of a project for a new school or for expansion of the facilities of, or used by, an existing school, the relative effectiveness of the proposed facilities in expanding the capacity for the training of first-year students of medicine, dentistry, pharmacy, optometry, podiatry, nursing, or osteopathy (or, in the case of a two-year school which is expanding to a four-year school, expanding the capacity for four-year training of students in the field), or the training of professional public health personnel, and in promoting an equitable geographical distribution of opportunities for such training (giving due consideration to population, available physicians, pharmacists, optometrists, podiatrists, nurses, dentists, or professional public health personnel, and available resources in various areas of the Nation for training such persons); or

"(B) in the case of a project for replacement or rehabilitation of existing facilities of, or used by, a school, the relative need for such replacement or rehabilitation to prevent curtailment of the school's enrollment or deterioration of the quality of the training provided by the school, and the relative size of any such curtailment and its effect on the geographical distribution of opportunities for training (giving consideration to the factors mentioned above in paragraph (A)); and

"(2) in the case of an applicant in a State which has in existence a State planning agency, or which participates in a regional or other interstate planning agency, described in section 728, the relationship of the application to the construction or training program which is being developed by such agency with respect to such State and, if such agency has reviewed such application, any comment thereon submitted by such agency.

"AMOUNT OF GRANT; PAYMENTS

"SEC. 722. (a) (1) Except as provided in paragraph (2) of this subsection, the amount of any grant under this part shall be such amount as the Surgeon General determines to be appropriate after obtaining the advice of the Council; except that (A) in the case of a grant for a project for a new school, and in the case of a grant for new facilities for an existing school in cases where such facilities are of particular importance in providing a major expansion of training capacity, as determined in accordance with regulations, such amount may not exceed 66⅔ per centum of the necessary cost of construction, as determined by the Surgeon General, of such project; and (B) in the case of any other grant, such amount may not exceed 50 per centum of the necessary cost of construction, as so determined, of the project with respect to which the grant is made.

"(2) The amount of any grant under this part for construction of a project with respect to a school of public health shall be such amount as the Surgeon General determines to be appropriate after obtaining the advice of the Council, and may not exceed 75 per centum of the necessary cost of construction, as determined by the Surgeon General, of such project.

"(b) Upon approval of any application for a grant under this part, the Surgeon General shall reserve, from any appropriation available therefor, the amount of such grant as determined under subsection (a); the amount so reserved may be paid in advance or by way of reimbursement, and in such installments consistent with construction progress, as the Surgeon General

may determine. The Surgeon General's reservation of any amount under this section may be amended by him, either upon approval of an amendment of the application or upon revision of the estimated cost of construction of the facility.

"(c) In determining the amount of any grant under this part, there shall be excluded from the cost of construction an amount equal to the sum of (1) the amount of any other Federal grant which the applicant has obtained, or is assured of obtaining, with respect to the construction which is to be financed in part by grants authorized under this part, and (2) the amount of any non-Federal funds required to be expended as a condition of such other Federal grant.

"RECAPTURE OF PAYMENTS

"SEC. 723. If, within ten years after completion of any construction for which funds have been paid under this part—

"(a) The applicant or other owner of the facility shall cease to be a public or nonprofit school or, in case the facility was an affiliated hospital, the applicant or other owner of the facility ceases to be a public or other nonprofit agency qualified to file an application under section 625, or

"(b) the facility shall cease to be used for the teaching purposes for which it was constructed (unless the Surgeon General determines, in accordance with regulations, that there is good cause for releasing the applicant or other owner from the obligation to do so),

the United States shall be entitled to recover from the applicant or other owner of the facility the amount bearing the same ratio to the then value (as determined by agreement of the parties or by action brought in the United States district court for the district in which such facility is situated) of the facility, as the amount of the Federal participation bore to the cost of construction of such facility.

"DEFINITIONS

"SEC. 724. As used in this part—

"(1) The terms 'construction' and 'cost of construction' include (A) the construction of new buildings, the expansion of existing buildings, and remodeling, replacement, renovation, major repair (to the extent permitted by regulations), or alteration of existing buildings, including architects' fees, but not including the cost of acquisition of land or offsite improvements, and (B) initial equipment of new buildings and of the expanded, remodeled, repaired, renovated, or altered part of existing buildings;

"(2) The term 'nonprofit school' means a school owned and operated by one or more corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual;

"(3) The term 'affiliated hospital' means a hospital, as defined in section 631, which is not owned by, but is affiliated (to the extent and in the manner determined in accordance with regulations) with, a school of medicine which meets the eligibility conditions set forth in section 721(b)(1);

"(4) The terms 'school of medicine', 'school of denistry', 'school of osteopathy', 'school of pharmacy', 'school of optometry', 'school of podiatry', and 'school of public health' mean a school which provides training leading, respectively, to a degree of doctor of medicine, a degree of doctor of dentistry or an equivalent degree, a degree of doctor of osteopathy, a degree of bachelor of science in pharmacy or doctor of pharmacy, a degree of doctor of optometry or an equivalent degree, a degree of doctor of podiatry or doctor of surgical chiropody, and a graduate degree in public health; and

"(5) The term 'school of nursing' means a department, school, division, or other administrative unit, in a college or university, which provides, primarily or exclusively, a program of education in professional nursing and allied subjects leading to the degree of bachelor of arts, bachelor of science, bachelor of nursing, or other baccalaureate degree of equivalent rank; or to a graduate degree in nursing.

"NATIONAL ADVISORY COUNCIL ON EDUCATION FOR HEALTH PROFESSIONS

"SEC. 725. (a) There is hereby established in the Public Health Service a National Advisory Council on Education for Health Professions, consisting of the Surgeon General of the Public Health Service, who shall be Chairman, and the Commissioner of Education, both of whom shall be ex officio members, and

sixteen members appointed by the Secretary without regard to the civil service laws. Four of the appointed members shall be selected from the general public and twelve shall be selected from among leading authorities in the fields of higher education, at least eight of whom are particularly concerned with training in medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or the public health professions. In selecting persons for appointment to the Council, consideration shall be given to such factors, among others, as (1) experience in the planning, constructing, financing, or administration of schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or schools of public health, and (2) familiarity with the need for teaching facilities in all areas of the Nation.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part, and in the review of applications thereunder.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part, for such periods, in addition to conference periods, as he may determine. The Surgeon General shall, in addition, make appropriate provision for consultation between and coordination of the work of the Council and the National Advisory Council on Health Research Facilities with respect to matters bearing on the purposes and administration of this part.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at a rate to be fixed by the Secretary but not exceeding $50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"NONINTERFERENCE WITH ADMINISTRATION OF INSTITUTIONS

"SEC. 726. Nothing contained in this part shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over, or impose any requirement or condition with respect to, the personnel, curriculum, methods of instruction, or administration of any institution.

"REGULATIONS

"SEC. 727. (a) The Surgeon General, after consultation with the Council and with the approval of the Secretary, shall prescribe general regulations for this part covering the eligibility of institutions, the order of priority in approving applications, the terms and conditions for approving applications, determinations of the amounts of grants, and minimum standards of construction and equipment for various types of institutions.

"(b) The Surgeon General is authorized to make, with the approval of the Secretary, such other regulations as he finds necessary to carry out the provisions of this part.

"TECHNICAL ASSISTANCE

"SEC. 728. In carrying out the purposes of this part, and to further the development of State, or joint or coordinated regional or other interstate, planning of programs for relieving shortages of training capacity in the fields of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, and public health, through constructing teaching facilities, providing adequate financial support for schools, or otherwise, the Surgeon General is authorized to provide technical assistance and consultative services to State or interstate planning agencies established for any of such purposes.

"PLANNING GRANTS FOR HEALTH EDUCATION PROGRAMS

"SEC. 729. There is hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, the sum of $500,000 to enable the Surgeon General to make grants to regional, interstate, State, or local public or nonprofit private agencies and organizations and to any public or nonprofit private institution for planning and determining the need for teaching facilities for, or otherwise planning a new, expanded, or improved program

of, training physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists.

"PART C—STUDENT LOANS

"LOAN AGREEMENTS

"SEC. 740. (a) The Secretary of Health, Education, and Welfare is authorized to enter into an agreement for the establishment and operation of a student loan fund in accordance with this part with any public or other nonprofit school of medicine, osteopathy, or dentistry (as defined in section 724) which is located in a State and is accredited as provided in section 721(b)(1)(B).

"(b) Each agreement entered into under this section shall—

"(1) provide for establishment of a student loan fund by the school;

"(2) provide for deposit in the fund of (A) the amounts allocated under this part to the school by the Secretary, (B) an additional amount from other sources equal to not less than one-ninth of amounts deposited pursuant to clause (A), (C) collections of principal and interest on loans made from the fund, and (D) any other earnings of the fund;

"(3) provide that the fund shall be used only for loans to students of the school in accordance with the agreement and for costs of collection of such loans and interest thereon; and

"(4) contain such other provisions as are necessary to protect the financial interests of the United States.

"LOAN PROVISIONS

"SEC. 741. (a) Loans from a loan fund established under this part may not exceed $2,000 for any student for any academic year or its equivalent, reduced by the amounts loaned to such student for that year out of a loan fund established under section 204 of the National Defense Education Act of 1958. In the granting of such loans, a school shall give preference to persons who enter as first-year students after June 30, 1963.

"(b) Any such loans shall be made on such terms and conditions as the school may determine, but may be made only to a student in need of the amount thereof to pursue a full-time course of study at the school leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, or doctor of osteopathy.

"(c) Such loans shall be repayable in equal or graduated periodic installments (with the right of the borrower to accelerate repayment) over the ten-year period which begins three years after the student ceases to pursue a full-time course of study at a school of medicine, osteopathy, or dentistry, excluding from such ten-year period all periods (up to three years) of (1) active duty performed by the borrower as a member of a uniformed service, or (2) service as a volunteer under the Peace Corps Act.

"(d) The liability to repay the unpaid balance of such a loan and accrued interest thereon shall be canceled upon the death of the borrower, or if the Secretary determines that he has become permanently and totally disabled.

"(e) Such loans shall bear interest, on the unpaid balance of the loan, at the rate of 3 per centum per annum, computed only for periods during which the loan is repayable.

"(f) Where any person who obtained one or more loans from a loan fund established under this part—

"(1)(A) engages in the practice of medicine, dentistry, or osteopathy in an area in a State determined by the appropriate State health authority to have a shortage of and need for physicians or dentists; or

"(B) is employed full-time as a physician or dentist by any public agency, is on active duty as a physician or dentist with a uniformed service, or is employed full-time as a physician or dentist by any nonprofit private agency or organization located in a State; and

"(2)(A) in the case of practice described in paragraph (1)(A) of this subsection, the appropriate State health authority certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such practice helps to meet the shortage of and need for physicians or dentists in the area where the practice occurs;

"(B) in the case of employment (other than Federal employment or service in a uniformed service) by any public agency or nonprofit private agency or organization, the State health authority for the State in which the em-

ployment is performed certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such employment helps meet a shortage of and need for persons to perform such employment; and

"(C) in the case of Federal employment or service in a uniformed service, the head of the employing agency or uniformed service, as the case may be, certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such employment or service helps meet a shortage of and need for persons to perform such employment or such military service;

then 10 per centum of the total of such loans, plus accrued interest on such amount, which are unpaid as of the date such practice or employment, or such service in a uniformed service begins, shall be canceled thereafter for each year of such practice, employment, or service, or combination thereof, up to a total of 50 per centum of such total, plus accrued interest thereon.

"(g) Loans shall be made under this part without security or endorsement, except that if the borrower is a minor and the note or other evidence of obligation executed by him would not, under the applicable law, create a binding obligation, either security or endorsement may be required.

"(h) No note or other evidence of a loan made under this part may be transferred or assigned by the school making the loan except that, if the borrower transfers to another school participating in the program under this part, such note or other evidence of a loan may be transferred to such other school.

"(i) Where all or any part of a loan, or interest, is canceled under this section, the Secretary shall pay to the school an amount equal to the school's proportionate share of the canceled portion, as determined by the Secretary.

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 742. (a) There are hereby authorized to be appropriated to the Secretary of Health, Education, and Welfare to carry out this part $5,100,000 for the fiscal year ending June 30, 1964, $10,200,000 for the fiscal year ending June 30, 1965, $15,400,000 for the fiscal year ending June 30, 1966, $20,600,000 for the fiscal year ending June 30, 1967, $21,000,000 for the fiscal year ending June 30, 1968, and such sums for the fiscal year ending June 30, 1969, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan for any academic year ending before July 1, 1968, to continue or complete their education. Sums appropriated pursuant to this subsection shall be allotted among loan funds at schools which have established loan funds under this part.

"(b)(1) The Secretary shall from time to time set dates by which schools with which he has in effect agreements under this part must file applications for allotments to their loan funds.

"(2) If the total of the amounts requested for any fiscal year in such applications exceeds the amounts appropriated under this part for that fiscal year, the allotment to the loan fund of each such school shall be reduced to whichever of the following is the smaller: (A) the amount requested in its application or (B) an amount which bears the same ratio to the amounts appropriated as the number of students estimated by the Secretary to be enrolled in such school during such fiscal year bears to the estimated total number of students in all such schools during such year. Amounts remaining after allotment under the preceding sentence shall be reallotted in accordance with clause (B) of such sentence among schools whose applications requested more than the amounts so allotted to their loan funds, but with such adjustments as may be necessary to prevent the total allotted to any such school's loan fund from exceeding the total so requested by it.

"(3) Allotments to a loan fund of a school shall be paid to it from time to time in such installments as the Secretary determines will not result in unnecessary accumulations in the loan fund at such school.

"DISTRIBUTION OF ASSETS FROM LOAN FUNDS

"SEC. 743. (a) After June 30, 1971, and not later than September 30, 1971, there shall be a capital distribution of the balance of the loan fund established under this part by each school as follows:

"(1) The Secretary shall first be paid an amount which bears the same ratio to the balance in such fund at the close of June 30, 1971, as the total

amount of the allotments to such fund by the Secretary under this part bears to the total amounts in such fund derived from such allotments and from funds deposited therein pursuant to section 740(b)(2)(B).

"(2) The remainder of such balance shall be paid to the school.

"(b) After September 30, 1971, each school with which the Secretary has made an agreement under this part shall pay to the Secretary, not less often than quarterly, the same proportionate share of amounts received by the school after June 30, 1971, in payment of principal or interest on loans made from the loan fund established pursuant to such agreement as was determined for the Secretary under subsection (a).

"LOANS TO SCHOOLS

"SEC. 744. Upon application by any school with which he has made an agreement under this part, the Secretary may make a loan to such school for the purpose of helping to finance deposits required by section 740(b)(2)(B) in a loan fund established pursuant to such agreement. Such loan may be made only if the school shows it is unable to secure such funds upon reasonable terms and conditions from non-Federal sources. Loans made under this section shall bear interest at a rate sufficient to cover (1) the cost of the funds to the Treasury, (2) the cost of administering this section, and (3) probable losses.

"ADMINISTRATIVE PROVISIONS

"SEC. 745. The Secretary may agree to modifications of agreements or loans made under this part, and may compromise, waive, or release any right, title, claim, or demand of the United States arising or acquired under this part."

SEC. 3. (a) Section 705(c) of the Public Health Service Act is amended by striking out "and" at the end of paragraph (2), by striking out the period at the end of paragraph (3) and inserting in lieu thereof "; and", and by adding after paragraph (3) the following new paragraph:

"(4) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractor in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c)."

(b) Part A of title VII of such Act is further amended by inserting after section 710 the following new sections:

"TECHNICAL ASSISTANCE

"SEC. 711. The Surgeon General is authorized to provide assistance to applicants under this part, and other public or nonprofit institutions engaging or competent to engage in research, or research and related purposes, in the sciences related to health, in designing and planning the construction of facilities for the conduct of such research or research and related purposes.

"CONSTRUCTION OF REGIONAL FACILITIES

"SEC. 712. When the Surgeon General finds, in accordance with regulations, that the purposes of this part can best be achieved through the construction of research, or research and related purposes, facilities of particular value or significance for the Nation or a region thereof, and that because of the cost of such facilities or their use as a national or regional resource for research or related purposes a grant pursuant to the preceding provisions of this part does not provide an effective or appropriate means of financing the construction of such facilities, he may construct or make arrangements for constructing, through contracts for paying (including advance or installment payments) part or all of the cost of construction or otherwise, facilities for the conduct of research, or for research and related purposes, in the sciences related to health. The Surgeon General may, where he deems such action appropriate, make arrange-

ments, by contract or otherwise, for the operation of such facilities (for the conduct of such research, or research and related purposes) or may make contributions toward the cost of such operation of facilities of this nature whether or not constructed pursuant to, or with aid provided under, this section. Title to any facility constructed under this section may be transferred by the Surgeon General on behalf of the United States to any public or nonprofit private institution competent to engage in the type of research, or research and related purposes, for which the facility was constructed. Such transfer shall be made subject to the condition that the facility will be operated for the research, or research and related purposes, for which it was constructed and to such other conditions as the Surgeon General deems necessary to carry out the objectives of this part and to protect the interests of the United States."

[H.R. 2527, 88th Cong., 1st sess.]

A BILL To increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Professions Educational Assistance Act of 1963."

GRANTS FOR CONSTRUCTION OF MEDICAL, DENTAL, PHARMACEUTICAL, OPTOMETRIC, PODIATRIC, NURSING, OSTEOPATHIC, AND PUBLIC HEALTH TEACHING FACILITIES

SEC. 2. (a) Title VII of the Public Health Service Act (42 U.S.C. chap. 6A) is amended by inserting "AND TEACHING" after "RESEARCH" in the heading thereof, by inserting "AND TRAINING OF PROFESSIONAL HEALTH PERSONNEL" after "FACILITIES" in such heading, and by inserting immediately below such heading "PART A—GRANTS FOR CONSTRUCTION OF HEALTH RESEARCH FACILITIES", and by changing the words "this title" wherever they appear in such title to read "this part".

(b) Such title is further amended by adding at the end thereof the following:

"PART B—GRANTS FOR CONSTRUCTION OF TEACHING FACILITIES FOR MEDICAL, DENTAL, AND OTHER HEALTH PERSONNEL

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 720. There are hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, (1) not to exceed $45,000,000 for grants to assist in the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, or professional public health personnel, (2) not to exceed $15,000,000 for grants to assist in the construction of new teaching facilities for the training of dentists, and (3) not to exceed $15,000,000 for replacement or rehabilitation of existing teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists.

"APPROVAL OF APPLICATIONS

"SEC. 721. (a) No application for a grant under this part may be approved unless it is submitted to the Surgeon General prior to July 1, 1972.

"(b) (1) To be eligible to apply for a grant to assist in the construction of any facility under this part, the applicant must be (A) a public or other nonprofit school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or public health and (B) accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, except that a new school which (by reason of no, or an insufficient, period of operation) is not, at the time of application for a grant to construct a facility under this part, eligible for accreditation by such a recognized body or bodies, shall be deemed accredited for purposes of this part if the Commissioner of Education finds, after consultation with the appropriate accreditation body or bodies, that there is reasonable assurance that the school will, upon completion of such facility, meet the accreditation standards of such body or bodies.

"(2) Notwithstanding paragraph (1), in the case of an affiliated hospital, an application which is approved by the school of medicine with which the hospital is affiliated and which otherwise complies with the requirements of this part may be filed by any public or other nonprofit agency qualified to file an application under section 625.

"(3) In the case of any application, whether filed by a school or, in the case of an affiliated hospital, by any other public or other nonprofit agency, for a grant under this part to assist in the construction of a facility which is a hospital as defined in section 631—

"(A) if the facility is needed in connection with a new school, only that portion of the project to construct the facility which the Surgeon General determines to be reasonably attributable to the need of such school for the facility for teaching purposes,

"(B) if the construction is in connection with expansion of the training capacity of an existing school, only that portion of the project to construct the facility which the Surgeon General determines to be reasonably attributable to the need of such school for the facility in order to expand its training capacity,

"(C) if the construction is in connection with renovation or rehabilitation of facilities used by an existing school, only that portion of the project which the Surgeon General determines to be reasonably attributable to the need of such school for the facilities in order to prevent curtailment of enrollment or quality of training of the school,

shall be regarded as the project with respect to which payments may be made under section 722.

"(c) A grant under this part may be made only if the application therefor is approved by the Surgeon General upon his determination that—

"(1) the applicant meets the eligibility conditions set forth in subsection (b);

"(2) the application contains or is supported by reasonable assurances that (A) for not less than ten years after completion of construction, the facility will be used for the purposes of the teaching for which it is to be constructed, (B) sufficient funds will be available to meet the non-Federal share of the cost of constructing the facility, (C) sufficient funds will be available, when construction is completed, for effective use of the facility for the training for which it is being constructed, and (D) in the case of an application for construction to expand the training capacity of an existing school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, the first-year enrollment at such school during the first full school year after the completion of the construction and for each of the next nine school years thereafter will exceed the highest first-year enrollment at such school for any of the five full school years preceding the year in which the application is made by at least 5 per centum of such highest first-year enrollment, or by five students, whichever is greater;

"(3) (A) in the case of an application for a grant from funds appropriated pursuant to clause (1) of section 720, such application is for aid in the construction of a new school of medicine, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, or construction which will expand the training capacity of an existing school of medicine, osteopathy, pharmacy, optometry, podiatry, nursing, or public health, (B) in the case of an application for a grant from funds appropriated pursuant to clause (2) of such section, such application is for aid in the construction of a new school of dentistry or construction which will expand the capacity of an existing school of dentistry, or (C) in the case of an application for a grant from funds appropriated pursuant to clause (3) of such section, such application is for aid in construction which will replace or rehabilitate facilities of, or used by, an existing school of medicine, dentistry, pharmacy, optometry, podiatry, nursing osteopathy, or public health which are so obsolete as to require the school to curtail substantially either its enrollment or the quality of the training provided;

"(4) the plans and specifications are in accordance with regulations relating to minimum standards of construction and equipment;

"(5) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractors in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of

Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c); and

"(6) if the application requests aid in construction of a facility which is a hospital or diagnostic or treatment center, as defined in section 631, an application with respect thereto has been filed under title VI and has been denied thereunder because (A) the project has no or insufficient priority, or (B) funds are not available for the project from the State's allotments under title VI.

Before approving or disapproving an application under this part, the Surgeon General shall secure the advice of the National Advisory Council on Education for Health Professions established by section 725 (hereinafter in this part referred to as the 'Council').

"(d) In considering applications for grants, the Council and the Surgeon General shall take into account—

"(1) (A) in the case of a project for a new school or for expansion of the facilities of, or used by, an existing school, the relative effectiveness of the proposed facilities in expanding the capacity for the training of first-year students of medicine, dentistry, pharmacy, optometry, podiatry, nursing, or osteopathy (or, in the case of a two-year school which is expanding to a four-year school, expanding the capacity for four-year training of students in the field), or for the training of professional public health personnel, and in promoting an equitable geographical distribution of opportunities for such training (giving due consideration to population, available physicians, pharmacists, optometrists, podiatrists, nurses, dentists, or professional public health personnel, and available resources in various areas of the Nation for training such persons); or

"(B) in the case of a project for replacement or rehabilitation of existing facilities of, or used by, a school, the relative need for such replacement or rehabilitation to prevent curtailment of the school's enrollment or deterioration of the quality of the training provided by the school, and the relative size of any such curtailment and its effect on the geographical distribution of opportunities for training (giving consideration to the factors mentioned above in paragraph (A)); and

"(2) in the case of an applicant in a State which has in existence a State planning agency, or which participates in a regional or other interstate planning agency, described in section 728, the relationship of the application to the construction or training program which is being developed by such agency with respect to such State and, if such agency has reviewed such application, any comment thereon submitted by such agency.

"AMOUNT OF GRANT; PAYMENTS

"SEC. 722. (a) (1) Except as provided in paragraph (2) of this subsection, the amount of any grant under this part shall be such amount as the Surgeon General determines to be appropriate after obtaining the advice of the Council; except that (A) in the case of a grant for a project for a new school, and in the case of a grant for new facilities for an existing school in cases where such facilities are of particular importance in providing a major expansion of training capacity, as determined in accordance with regulations, such amount may not exceed 66⅔ per centum of the necessary cost of construction, as determined by the Surgeon General, of such project; and (B) in the case of any other grant, such amount may not exceed 50 per centum of the necessary cost of construction, as so determined, of the project with respect to which the grant is made.

"(2) The amount of any grant under this part for construction of a project with respect to a school of public health shall be such amount as the Surgeon General determines to be appropriate after obtaining the advice of the Council, and may not exceed 75 per centum of the necessary cost of construction, as determined by the Surgeon General, of such project.

"(b) Upon approval of any application for a grant under this part, the Surgeon General shall reserve, from any appropriation available therefor, the amount of such grant as determined under subsection (a); the amount so reserved may be paid in advance or by way of reimbursement, and in such installments consistent with construction progress, as the Surgeon General may determine. The Surgeon General's reservation of any amount under this section may

be amended by him, either upon approval of an amendment of the application or upon revision of the estimated cost of construction of the facility.

"(c) In determining the amount of any grant under this part, there shall be excluded from the cost of construction an amount equal to the sum of (1) the amount of any other Federal grant which the applicant has obtained, or is assured of obtaining, with respect to the construction which is to be financed in part by grants authorized under this part, and (2) the amount of any non-Federal funds required to be expended as a condition of such other Federal grant.

"RECAPTURE OF PAYMENTS

"SEC. 723. If, within ten years after completion of any construction for which funds have been paid under this part—

"(a) the applicant or other owner of the facility shall cease to be a public or nonprofit school or, in case the facility was an affiliated hospital, the applicant or other owner of the facility ceases to be a public or other nonprofit agency qualified to file an application under section 625, or

"(b) the facility shall cease to be used for the teaching purposes for which it was constructed (unless the Surgeon General determines, in accordance with regulations, that there is good cause for releasing the applicant or other owner from the obligation to do so),

the United States shall be entitled to recover from the applicant or other owner of the facility the amount bearing the same ratio to the then value (as determined by agreement of the parties or by action brought in the United States district court for the district in which such facility is situated) of the facility, as the amount of the Federal participation bore to the cost of construction of such facility.

"DEFINITIONS

"SEC. 724. As used in this part—

"(1) The terms 'construction' and 'cost of construction' include (A) the construction of new buildings, the expansion of existing buildings, and remodeling, replacement, renovation, major repair (to the extent permitted by regulations), or alteration of existing buildings, including architects' fees, but not including the cost of acquisition of land or offsite improvements, and (B) initial equipment of new buildings and of the expanded, remodeled, repaired, renovated, or altered part of existing buildings;

"(2) The term 'nonprofit school' means a school owned and operated by one or more corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual;

"(3) The term 'affiliated hospital' means a hospital, as defined in section 631, which is not owned by, but is affiliated (to the extent and in the manner determined in accordance with regulations) with, a school of medicine which meets the eligibility conditions set forth in section 721(b)(1);

"(4) The terms 'school of medicine', 'school of dentistry', 'school of osteopathy', 'school of pharmacy', 'school of optometry', 'school of podiatry', and 'school of public health' mean a school which provides training leading, respectively, to a degree of doctor of medicine, a degree of doctor of dentistry or an equivalent degree, a degree of doctor of osteopathy, a degree of bachelor of science in pharmacy or doctor of pharmacy, a degree of doctor of optometry or an equivalent degree, a degree of doctor of podiatry or doctor of surgical chiropody, and a graduate degree in public health; and

"(5) The term 'school of nursing' means a department, school, division, or other administrative unit, in a college or university, which provides, primarily or exclusively, a program of education in professional nursing and allied subjects leading to the degree of bachelor of arts, bachelor of science, bachelor of nursing, or other baccalaureate degree of equivalent rank; or to a graduate degree in nursing.

"NATIONAL ADVISORY COUNCIL ON EDUCATION FOR HEALTH PROFESSIONS

"SEC. 725. (*a*) There is hereby established in the Public Health Service a National Advisory Council on Education for Health Professions, consisting of the Surgeon General of the Public Health Service, who shall be Chairman, and the Commissioner of Education, both of whom shall be ex officio members, and sixteen members appointed by the Secretary without regard to the civil service laws. Four of the appointed members shall be selected from the general public

and twelve shall be selected from among leading authorities in the fields of higher education, at least eight of whom are particularly concerned with training in medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or the public health professions. In selecting persons for appointment to the Council, consideration shall be given to such factors, among others, as (1) experience in the planning, construction, financing, or administration of schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, or schools of public health, and (2) familiarity with the need for teaching facilities in all areas of the Nation.

"(b) The Council shall advise the Surgeon General in the preparation of general regulations and with respect to policy matters arising in the administration of this part, and in the review of applications thereunder.

"(c) The Surgeon General is authorized to use the services of any member or members of the Council in connection with matters related to the administration of this part, for such periods, in addition to conference periods, as he may determine. The Surgeon General shall, in addition, make appropriate provision for consultation between and coordination of the work of the Council and the National Advisory Council on Health Research Facilities with respect to matters bearing on the purposes and administration of this part.

"(d) Appointed members of the Council, while attending conferences or meetings of the Council or while otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at a rate to be fixed by the Secretary but not exceeding $50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"NONINTERFERENCE WITH ADMINISTRATION OF INSTITUTIONS

"SEC. 726. Nothing contained in this part shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over, or impose any requirement or condition with respect to, the personnel, curriculum, methods of instruction, or administration of any institution.

"REGULATIONS

"SEC. 727. (a) The Surgeon General, after consultation with the Council and with the approval of the Secretary, shall prescribe general regulations for this part covering the eligibility of institutions, the order of priority in approving applications, the terms and conditions for approving applications, determinations of the amounts of grants, and minimum standards of construction and equipment for various types of institutions.

"(b) The Surgeon General is authorized to make, with the approval of the Secretary, such other regulations as he finds necessary to carry out the provisions of this part.

"TECHNICAL ASSISTANCE

"SEC. 728. In carrying out the purposes of this part, and to further the development of State, or joint or coordinated regional or other interstate, planning of programs for relieving shortages of training capacity in the fields of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, and public health, through constructing teaching facilities, providing adequate financial support for schools, or otherwise, the Surgeon General is authorized to provide technical assistance and consultative services to State or interstate planning agencies established for any of such purposes.

"PLANNING GRANTS FOR HEALTH EDUCATION PROGRAMS

"SEC. 729. There is hereby authorized to be appropriated for each fiscal year in the period beginning July 1, 1963, and ending June 30, 1973, the sum of $500,000 to enable the Surgeon General to make grants to regional, interstate, State, or local public or nonprofit private agencies and organizations and to any public or nonprofit private institution for planning and determining the need for teaching facilities for, or otherwise planning a new, expanded, or improved program of, training physicians, pharmacists, optometrists, podiatrists, nurses, professional public health personnel, or dentists.

"PART C—STUDENT LOANS

"LOAN AGREEMENTS

"SEC. 740. (a) The Secretary of Health, Education, and Welfare is authorized to enter into an agreement for the establishment and operation of a student loan fund in accordance with this part with any public or other nonprofit school of medicine, osteopathy, or dentistry (as defined in section 724) which is located in a State and is accredited as provided in section 721(b)(1)(B).

"(b) Each agreement entered into under this section shall—

"(1) provide for establishment of a student loan fund by the school;

"(2) provide for deposit in the fund of (A) the amounts allocated under this part to the school by the Secretary, (B) an additional amount from other sources equal to not less than one-ninth of amounts deposited pursuant to clause (A), (C) collections of principal and interest on loans made from the fund, and (D) any other earnings of the fund;

"(3) provide that the fund shall be used only for loans to students of the school in accordance with the agreement and for costs of collection of such loans and interest thereon; and

"(4) contain such other provisions as are necessary to protect the financial interests of the United States.

"LOAN PROVISIONS

"SEC. 741. (a) Loans from a loan fund established under this part may not exceed $2,000 for any student for any academic year or its equivalent, reduced by the amounts loaned to such student for that year out of a loan fund established under section 204 of the National Defense Education Act of 1958. In the granting of such loans, a school shall give preference to persons who enter as first-year students after June 30, 1963.

"(b) Any such loans shall be made on such terms and conditions as the school may determine, but may be made only to a student in need of the amount thereof to pursue a full-time course of study at the school leading to a degree of doctor of medicine, doctor of dentistry or an equivalent degree, or doctor of osteopathy.

"(c) Such loans shall be repayable in equal or graduated periodic installments (with the right of the borrower to accelerate repayment) over the ten-year period which begins three years after the student ceases to pursue a full-time course of study at a school of medicine, osteopathy, or dentistry, excluding from such ten-year period all periods (up to three years) of (1) active duty performed by the borrower as a member of a uniformed service, or (2) service as a volunteer under the Peace Corps Act.

"(d) The liability to repay the unpaid balance of such a loan and accrued interest thereon shall be canceled upon the death of the borrower, or if the Secretary determines that he has become permanently and totally disabled.

"(e) Such loans shall bear interest, on the unpaid balance of the loan, at the rate of 3 per centum per annum, computed only for periods during which the loan is repayable.

"(f) Where any person who obtained one or more loans from a loan fund established under this part—

"(1)(A) engages in the practice of medicine, dentistry, or osteopathy in an area in a State determined by the appropriate State health authority to have a shortage of and need for physicians or dentists; or

"(B) is employed full-time as a physician or dentist by any public agency, is on active duty as a physician or dentist with a uniformed service, or is employed full-time as a physician or dentist by any nonprofit private agency or organization located in a State; and

"(2)(A) in the case of practice described in paragraph (1)(A) of this subsection, the appropriate State health authority certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such practice helps to meet the shortage of and need for physicians or dentists in the area where the practice occurs;

"(B) in the case of employment (other than Federal employment or service in a uniformed service) by any public agency or nonprofit private agency or organization, the State health authority for the State in which the employment is performed certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe

that such employment helps meet a shortage of and need for persons to perform such employment; and

"(C) in the case of Federal employment or service in a uniformed service, the head of the employing agency or uniformed service, as the case may be, certifies to the Secretary of Health, Education, and Welfare in such form and at such times as the Secretary may prescribe that such employment or service helps meet a shortage of and need for persons to perform such employment or such military service;

then 10 per centum of the total of such loans, plus accrued interest on such amount, which are unpaid as of the date such practice or employment, or such service in a uniformed service begins, shall be canceled thereafter for each year of such practice, employment, or service, or combination thereof, up to a total of 50 per centum of such total, plus accrued interest thereon.

"(g) Loans shall be made under this part without security or endorsement, except that if the borrower is a minor and the note or other evidence of obligation executed by him would not, under the applicable law, create a binding obligation, either security or endorsement may be required.

"(h) No note or other evidence of a loan made under this part may be transferred or assigned by the school making the loan except that, if the borrower transfers to another school participating in the program under this part, such note or other evidence of a loan may be transferred to such other school.

"(i) Where all or any part of a loan, or interest, is canceled under this section, the Secretary shall pay to the school an amount equal to the school's proportionate share of the canceled portion, as determined by the Secretary.

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 742. (a) There are hereby authorized to be appropriated to the Secretary of Health, Education, and Welfare to carry out this part $5,100,000 for the fiscal year ending June 30, 1964, $10,200,000 for the fiscal year ending June 30, 1965, $15,400,000 for the fiscal year ending June 30, 1966, $20,600,000 for the fiscal year ending June 30, 1967, $21,000,000 for the fiscal year ending June 30, 1968, and such sums for the fiscal year ending June 30, 1969, and each of the two succeeding fiscal years as may be necessary to enable students who have received a loan for any academic year ending before July 1, 1968, to continue or complete their education. Sums appropriated pursuant to this subsection shall be allotted among loan funds at schools which have established loan funds under this part.

"(b)(1) The Secretary shall from time to time set dates by which schools with which he has in effect agreements under this part must file applications for allotments to their loan funds.

"(2) If the total of the amounts requested for any fiscal year in such applications exceeds the amounts appropriated under this part for that fiscal year, the allotment to the loan fund of each such school shall be reduced to whichever of the following is the smaller: (A) the amount requested in its application or (B) an amount which bears the same ratio to the amounts appropriated as the number of students estimated by the Secretary to be enrolled in such school during such fiscal year bears to the estimated total number of students in all such schools during such year. Amounts remaining after allotment under the preceding sentence shall be reallotted in accordance with clause (B) of such sentence among schools whose applications requested more than the amounts so allotted to their loan funds, but with such adjustments as may be necessary to prevent the total allotted to any such school's loan fund from exceeding the total so requested by it.

"(3) Allotments to a loan fund of a school shall be paid to it from time to time in such installments as the Secretary determines will not result in unnecessary accumulations in the loan fund at such school.

"DISTRIBUTION OF ASSETS FROM LOAN FUNDS

"SEC. 743. (a) After June 30, 1971, and not later than September 30, 1971, there shall be a capital distribution of the balance of the loan fund established under this part by each school as follows:

"(1) The Secretary shall first be paid an amount which bears the same ratio to the balance in such fund at the close of June 30, 1971, as the total amount of the allotments to such fund by the Secretary under this part bears to the total amounts in such fund derived from such allotments and from funds deposited therein pursuant to section 740(b)(2)(B).

"(2) The remainder of such balance shall be paid to the school.

"(b) After September 30, 1971, each school with which the Secretary has made an agreement under this part shall pay to the Secretary, not less often than quarterly, the same proportionate share of amounts received by the school after June 30, 1971, in payment of principal or interest on loans made from the loan fund established pursuant to such agreement as was determined for the Secretary under subsection (a).

"LOANS TO SCHOOLS

"SEC. 744. Upon application by any school with which he has made an agreement under this part, the Secretary may make a loan to such school for the purpose of helping to finance deposits required by section 740(b)(2)(B) in a loan fund established pursuant to such agreement. Such loan may be made only if the school shows it is unable to secure such funds upon reasonable terms and conditions from non-Federal sources. Loans made under this section shall bear interest at a rate sufficient to cover (1) the cost of the funds to the Treasury, (2) the cost of administering this section, and (3) probable losses.

"ADMINISTRATIVE PROVISIONS

"SEC. 745. The Secretary may agree to modifications of agreements or loans made under this part, and may compromise, waive, or release any right, title, claim, or demand of the United States arising or acquired under this part." out "June 30, 1962" and inserting in lieu thereof "June 30, 1965."

SEC. 3 (a) Section 705(c) of the Public Health Service is amended by striking out "and" at the end of paragraph (2), by striking out the period at the end of pargraph (3) and inserting in lieu thereof "; and", and by adding after paragraph (3) the following new paragraph:

"(4) the application contains or is supported by adequate assurance that any laborer or mechanic employed by any contractor or subcontractor in the performance of work on the construction of the facility (A) will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a–276a5), and (B) will receive compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in any workweek in excess of eight hours in any workday or forty hours in the workweek. The Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267), and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c)."

(b) Part A of title VII of such Act is further amended by inserting after section 710 the following new sections:

"TECHNICAL ASSISTANCE

"SEC. 711. The Surgeon General is authorized to provide assistance to applicants under this part, and other public or nonprofit institutions engaging or competent to engage in research, or research and related purposes, in the sciences related to health, in designing and planning the construction of facilities for the conduct of such research or research and related purposes.

"CONSTRUCTION OF REGIONAL FACILITIES

"SEC. 712. When the Surgeon General finds, in accordance with regulations, that the purposes of this part can best be achieved through the construction of research, or research and related purposes, facilities of particular value or significance for the Nation or a region thereof, and that because of the cost of such facilities or their use as a national or regional resource for research or related purposes a grant pursuant to the preceding provisions of this part does not provide an effective or appropriate means of financing the construction of such facilities, he may construct or make arrangements for constructing, through contracts for paying (including advance or installment payments) part or all of the cost of construction or otherwise, facilities for the conduct of research, or for research and related purposes, in the sciences related to health. The Surgeon General may, where he deems such action appropriate, make arrangements, by contract or otherwise, for the operation of such facilities (for the conduct of such research, or research and related purposes) or may make con-

tributions toward the cost of such operation of facilities of this nature whether or not constructed pursuant to, or with aid provided under, this section. Title to any facility constructed under this section may be transferred by the Surgeon General on behalf of the United States to any public or nonprofit private institution competent to engage in the type of research, or research and related purposes, for which the facility was constructed. Such transfer shall be made subject to the condition that the facility will be operated for the research, or research and related purposes, for which it was constructed and to such other conditions as the Surgeon General deems necessary to carry out the objectives of this part and to protect the interests of the United States."

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., February 12, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your letter of January 30, 1963, requesting a report on H.R. 12, a bill to increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes.

For the reasons set forth in the statement I made at your committee's February 5, 1963, hearing, we strongly urge prompt and favorable action by your committee on this bill.

The Bureau of the Budget has advised that enactment of legislation along the lines of H.R. 12 would be in accord with the program of the President.

Enclosed are 5-year estimates of appropriation, expenditure, and personnel requirements under the bill.

Sincerely,

ANTHONY J. CELEBREZZE, *Secretary.*

The Health Professions Educational Assistance Act of 1963—Estimate of additional cost, 1964–68

Item	1964	1965	1966	1967	1968
APPROPRIATION REQUIREMENTS					
I. Grants for construction of medical, dental, osteopathic, and public health teaching facilities	$25,000,000	$75,000,000	$75,000,000	$75,000,000	$75,000,000
Planning grants	500,000	500,000	500,000	500,000	500,000
II. Student loans	5,100,000	10,200,000	15,400,000	20,600,000	21,000,000
III. Administration	350,000	400,000	400,000	400,000	400,000
Total	30,950,000	86,100,000	91,300,000	96,500,000	96,900,000
EXPENDITURES					
I. Grants for construction of medical, dental, osteopathic, and public health teaching facilities	2,500,000	12,500,000	35,000,000	60,000,000	70,000,000
Planning grants	500,000	500,000	500,000	500,000	500,000
II. Student loans	5,100,000	10,200,000	15,400,000	20,600,000	21,000,000
III. Administration	350,000	400,000	400,000	400,000	400,000
Total	8,450,000	23,600,000	51,300,000	81,500,000	91,900,000
Man-years of employment	34	40	40	40	40

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., February 12, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Bureau of the Budget regarding H.R. 12, a bill to increase the opportunities for training physicians, dentists, and professional public health personnel, and for other purposes.

The bill provides a 10-year program of grants for the construction of teaching facilities for medical, dental, and other health personnel, a loan program to provide financial assistance to enable a larger number of students of medicine, osteopathy, and dentistry to meet the high cost of such education, and the extension of the health research facilities construction grant program.

I am authorized to advise you that enactment of legislation along the lines of H.R. 12 would be in accord with the program of the President.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, February 5, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives.

DEAR MR. CHAIRMAN: Your letter of January 30, 1963, with enclosure, request our comments on H.R. 12, 88th Congress, and offers us the opportunity of testifying in the hearings before your committee to be held thereon.

This bill would provide grants-in-aid for construction of medical, dental, pharmaceutical, optometric, podiatric, nursing, osteopathic, and public health teaching facilities, as well as scholarship loans to schools of medicine, osteopathy, or dentistry for use by such schools to make loans to the students thereof. The bill is substantially similar to H.R. 4999, 87th Congress, which was reported by your committee, House Report 1489, 87th Congress, 2d session.

On pages 22 and 23 of House Report 1489, there is set forth our report to you of January 26, 1962, B–143181, on H.R. 4999, as it was introduced. While the bill as reported did not adopt our recommendation to include therein an access to records and audit clause, the comments relative thereto contained in our report, which are also hereinafter set forth, reflect our views on H.R. 12.

The bill would provide additional grant programs to be administered by the Public Health Service. No provision is made in the bill nor in legislation applicable to other grant programs now authorized by the Public Health Service Act, as amended, to require a grantee to keep adequate cost records of the projects or undertakings to which the Federal Government makes financial contributions, or to authorize the Surgeon General or the Comptroller General to have access to the grantee's records for purposes of audit and examination. In view of the increase in grant programs over the last several years, we believe that in order to determine whether grant funds have been expended for the purpose for which the grant was made, the grantee should be required by law to keep records which would fully disclose the disposition of such funds. We also believe that the agency as well as the General Accounting Office should be permitted to have access to the grantee's records for the purpose of audit and examination. We therefore suggest that consideration be given to amending the bill to include such requirements with respect to the proposed new programs, or preferably by an amendment of the Public Health Service Act to cover all grant programs therein authorized. The latter could be accomplished by the following language:

"RECORDS AND AUDIT

"(a) Each recipient of assistance under this Act shall keep such records as the Surgeon General shall prescribe, including records which fully disclose the amount and disposition by recipient of the proceeds of such grants, the total cost of the project or undertaking in connection with which such funds are given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

"(b) The Secretary of Health, Education, and Welfare and the Comptroller General of the United States or any of their duly authorized representatives shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act."

While we appreciate the committee's permission to testify on H.R. 12, we believe that the foregoing comments adequately present our views on the proposed legislation, and for this reason we do not contemplate presenting testimony.

If the committee should have any questions relating to our recommendation, we shall be glad to respond to them.

We have no other comments or recommendations with respect to the bill.

Sincerely yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

The CHAIRMAN. Our first witness this morning will be the Secretary of Health, Education, and Welfare, the Honorable Anthony J. Celebrezze.

We are privileged to have you with us today, Mr. Secretary. I believe this is your first appearance before this committee since you assumed the highly important, arduous duties of the great Department over which you preside. We will, of course, have the benefit of your views and suggestions, not only today, but on other subject matters within your Department in the days to come.

We are pleased to have you with us and shall be glad to have your statement.

STATEMENT OF HON. ANTHONY J. CELEBREZZE, SECRETARY OF THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE; ACCOMPANIED BY DR. LUTHER L. TERRY, SURGEON GENERAL; AND BOISFEUILLET JONES, SPECIAL ASSISTANT TO THE SECRETARY (HEALTH AND MEDICAL AFFAIRS)

Secretary CELEBREZZE. Mr. Chairman and distinguished members of the committee, I have with me today, also, Mr. Jones, who is the Special Assistant to the Secretary on Health and Medical Affairs, and the Surgeon General, Dr. Terry.

I am pleased to appear before this committee in support of legislation designed to meet the Nation's critical need for more professional health personnel. The scheduling of this early hearing on legislation developed and advanced by your committee last year is very heartening to us, Mr. Chairman. It clearly suggests that you and we are in agreement on the urgent need for enactment of such legislation at the earliest possible date.

In stressing the urgency of this need, I do not mean to imply that training for the health professions is more important than medical research, mental health, the construction of health facilities, or certain other health problems covered by current legislative proposals. Rather, the legislation under consideration today derives its importance and its urgency from the needs of all of these other fields. While each has its own special requirements, they all share one common problem—the need for more professional manpower. Hospitals, public health agencies, the armed services, research laboratories, and communities in search of private practitioners are all competing against each other for an increasingly short supply of professional personnel. A substantial increase in the annual output of the schools that train professional health manpower is therefore an essential prerequisite to future advances in all fields of health.

In our opinion, your committee's consideration of this legislation last year provides an excellent starting point for legislative action in the present Congress. We submitted to the last Congress a carefully prepared proposal directed toward the most critical national needs in this field. This proposal, together with a number of alternative

proposals and suggested amendments, was thoroughly considered by your committee in hearings in January of last year. Late in March you reported favorably a bill that retained most of our key proposals, but with a number of modifications based on findings and recommendations presented during your hearings.

The printed hearings and your committee report represent a remarkably comprehensive, thorough, and enlightening legislative record. Little, if anything, needs to be added to this record, in our opinion. The basic information is in your committee report. The key questions have been asked and answered. The alternative approaches to the problem have been explored.

The legislation under consideration this morning contains the same proposals you studied last year. In fact, H.R. 12 is identical with the bill reported by your committee last March, except for the omission of the provisions extending the research facility grant program, which were subsequently enacted as amendments to another bill.

Under these circumstances we see no need—from our standpoint, at least—for submitting any detailed analyses this morning. We have only two additional contributions to make to your excellent committee record on this legislation.

First, I would like to comment very briefly on the key provisions of H.R. 12, with particular attention to those provisions which depart from our original proposals. The purpose of these comments is not to restate or reevaluate alternative provisions, but rather to summarize our departmental views on the principal issues and approaches involved.

Second, Surgeon General Terry has a brief statement aimed at clarifying some of the key concepts and data regarding medical manpower shortages. His statement will serve to reinforce the data already in your committee records.

Our original proposal submitted in the last Congress contained a twofold approach to the problem.

First, we proposed a 10-year program of construction grants, supplemented with planning grants, to help build teaching facilities for schools of medicine, dentistry, osteopathy, and public health. Most of these grant funds would be available only to build new schools or to expand the enrollment capacity of existing schools. The priority and matching provisions would reinforce this emphasis on expansion of enrollments.

Second, to assure an adequate supply of qualified applicants, we recommended a program of scholarship grants for talented but needy students in schools of medicine, dentistry, and osteopathy. Paralleling this scholarship program was a proposal for cost-of-instruction payments to schools to meet part of the costs of training these Federal scholarship holders.

In addition to these manpower provisions, the bill we submitted included proposals to extend for 3 years the existing program of construction grants for health research facilities, and to make certain other amendments relating to this program.

H.R. 12 parallels our original proposal in many respects but differs in others.

The teaching facility construction and planning grant provisions are substantially identical with our proposals except for two modifications:

(1) Specific enrollment expansion requirements—both for grant eligibility and for maximum Federal aid—are prescribed in the bill.

(2) Eligibility for construction grants is extended to include collegiate schools of nursing and schools of pharmacy, optometry, and podiatry. As indicated in your committee report, however, this broadened eligibility is to be conditioned upon a finding of a national manpower shortage in these additional categories, and a national shortage of enrollment capacity in the schools training for these professions.

We believe that the more specific enrollment expansion requirements in H.R. 12 are appropriate and will serve to underscore the primary objective of the construction grant provisions. In view of the conspicuous national shortages of nurses, and the limited enrollment capacity of collegiate schools of nursing in many parts of the country, a clear case can be made for making construction grants available to such schools. As pointed out in your committee report, however, there is no current evidence that the limited enrollment capacity of schools in the other three categories constitutes an immediate problem from the standpoint of national manpower requirements. We would not object, however, to the inclusion of these three categories of schools on the conditional basis indicated in your committee report.

In lieu of our proposals for scholarship grants and cost-of-instruction payments to schools, H.R. 12 would substitute a program of student loans. While these loan provisions generally parallel those of the National Defense Education Act, the repayment and forgiveness features are specifically tailored to the needs and circumstances of students in the health professions.

We believe that a substantial program of financial aid for students is an essential feature of any medical and dental manpower bill. In view of the long and exceptionally costly training required for these professions, many highly qualified students from low- and middle-income families are looking to other fields for their careers. In many of the physical sciences they are attracted by the availability of scholarship and fellowship funds unparalleled in medical and dental education. While we doubt that a loan program alone will prove sufficient, we believe the loan provisions of H.R. 12 are sound and would be of substantial help in reducing the financial barrier to education for these health professions.

In summary, we believe that enactment of H.R. 12 would represent a major step toward meeting our increasingly critical need for additional health personnel. As I indicated earlier in this statement, Mr. Chairman, we believe it is far more important now to complete the action on this legislation than to consider anew the various alternative approaches to our common goal. We appreciate the progress your committee has already made toward this objective, and we pledge our full support and assistance in completing the task before you.

The CHAIRMAN. Does that conclude your statement, Mr. Secretary?

Secretary CELEBREZZE. That concludes my statement, Mr. Chairman.

The CHAIRMAN. I take it, in view of the fact it has already been referred to by me and also by you, that it would be well that the hearings conducted on the proposed program in the last Congress, in connection with our consideration of H.R. 4999 and other related bills, become a part of this record by reference.

Mr. Williams, any questions?

Mr. WILLIAMS. I have no questions, Mr. Chairman.

The CHAIRMAN. Mr. Springer?

Mr. SPRINGER. Mr. Secretary, when your predecessor was before this committee last year, I asked the question whether or not the legislation contained anything for expanding the number of doctors. Does this bill contain such?

Secretary CELEBREZZE. Expansion for the number of doctors?

Mr. SPRINGER. Yes.

Secretary CELEBREZZE. Under your student loan program we feel that more students will be able to study medicine than there are now available because of financial matters.

Mr. SPRINGER. Actually, I do not think you have quite gotten to the point. You have more students now applying than could possibly get into schools. Are you going to increase the number of students who will study?

Secretary CELEBREZZE. Our figures show, while there are a great many students applying now, because of financial conditions the schools cannot be as selective as to the quality of students, and therefore they are going further down the scale of quality in their admission of students. Where we have many capable individuals who would like to study medicine but cannot afford the $20,000 or so that it takes to educate a new doctor, the result is that we do not have the choice, even now, of the best type of student to go to medical school.

Mr. SPRINGER. I just had a letter from a medical school, the university in Illinois, this morning in two fields: First, admission to medical schools, and second, admission to the school for orthodontia and grants for orthodontia, the dental school.

For 10 places in the school of orthodontia, there were 89 applicants. That is nine times as many as they could accept. It was not quite that severe as to the number that could be accommodated in the medical school.

My point, Mr. Secretary, is to bring it much closer: If you can grant the University of Illinois a grant, are any more students going to be able to study in that medical and dental school? That is my question.

Secretary CELEBREZZE. No.

That is why, Congressman, there is a two-pronged approach to the total problem: One is the construction approach to make the facilities available; the other is the loan program to make the students available.

So, if you go parallel with the two approaches, then you will have the additional facilities to train the additional students.

What I am saying now is that because of lack of expansion facilities, we cannot increase the number of the medical students as we want to, and second, we do not even have the choice that we would like to have as to quality, because so many students who are very capable are going into other professions.

Mr. SPRINGER. I think we have here in the report, Mr. Secretary, and I will read it, I think the committee ought to know about it:

> As a general guide, however, the committee would expect that, in the case of a medical or dental school, no first-year enrollment expansion of less than 15 to 20 percent, or 15 additional first-year student places, whichever is larger, would be considered to be a major expansion. The committee desires to emphasize, however, that under the legislation the 66⅔-percent figure constitutes

a ceiling on Federal grants, and that the meeting of the minimum requirements does not necessarily entitle an applicant to a maximum grant of 66⅔ percent.

Also—

For construction grants to expand the training capacity of an existing school, where no major expansion is involved, the first-year enrollment would have to be at least 5 percent greater than the highest first-year enrollment at such school for any of the 5 full school years preceding the year of application, but in any event such an increase must make possible the admission of not fewer than five additional students.

I think this presents the problem.

That is all, Mr. Chairman.

The CHAIRMAN. I might say, if I recall correctly, that with the permission of the members this proviso was included in the bill reported last year on amendment offered by the gentleman from Illinois.

Mr. SPRINGER. That is right. I just wanted to be sure that was in the bill this year.

The CHAIRMAN. I wanted to give him full credit for what the committee thought was a most appropriate amendment, and I would like to emphasize the point Mr. Springer raises:

That this committee has indicated, Mr. Secretary, that, if the purposes and objectives of this proposed legislation are met, we would expect that there would be additional places, facilities, schoolrooms, classrooms, and other things which are necessary to bring more students into the field of medicine, because, as I stated in my opening remarks a moment ago and as is pretty well known, if we are to meet the future needs, there will have to be facilities to accommodate more students in classrooms, preparing themselves for it.

Secretary CELEBREZZE. Perhaps I did not understand. I was answering the question I thought the distinguished Congressman had asked: On the level we are now, we have more applicants than available facilities. And I was trying to make the point that, on the level we are at now, we do not have the choice as to quality of students. I did qualify that later on, and I hope I made myself clear, that, if we are going to take in these new students, we have to go in two parallel lines.

One is construction for the purpose that the chairman said, for additional facilities, and the other is, through a loan program, to increase the number of qualified students who want to study medicine in this country.

The CHAIRMAN. Mr. Roberts?

Mr. ROBERTS. Thank you, Mr. Chairman.

Mr. Secretary, do you think that this problem of shortage of doctors, dentists, and other medical people is due primarily to a lack of facilities?

Secretary CELEBREZZE. I would say it is due to a lack of two things: lack of facilities and lack of the financial means of those who want to study medicine, because of the cost of studying medicine today.

The average family just cannot afford it. When you include the cost of premedical undergraduate work, then you are talking in terms of $18,000 to $20,000 in total expenditures.

So I think there are two reasons: lack of capacity and lack of sufficient numbers of well-qualified students who want to study medicine and dentistry.

Mr. ROBERTS. Is there not also the problem that a lot of students are going into other types of professions? They are going into engineering and into science professions, and would this, do you think, change that situation greatly?

Secretary CELEBREZZE. Yes.

Scholarship aid is more readily available in those areas, and fellowships are more liberal in those areas, as I stated in my opening statement. As a result, they are doing what a great many other students are doing when they do not have the financial means: they just go into some other profession.

I think that has been true in many cases.

Mr. ROBERTS. Do you think that this bill will in any way lessen the quality of the students who apply for admission to medical schools?

Secretary CELEBREZZE. Oh, no. This will improve it tremendously, in my opinion.

Mr. ROBERTS. There has been quite a bit of testimony by other witnesses that one of the big troubles is that we do not have the number of students applying for admission to study medicine that we have had in the past.

Secretary CELEBREZZE. Yes.

And the point I am trying to make is that the deficiency is because of the cost of medical education.

Mr. ROBERTS. Let me ask you this: Have you read Secretary Ribicoff's statement that is contained on page 29 of the hearings last year?

Secretary CELEBREZZE. I do not believe I have, Mr. Roberts.

Mr. ROBERTS. Page 29, at the top of the page. I would call to your attention the last two sentences in Secretary Ribicoff's answer to the question directed by Mr. Williams. Mr. Ribicoff, now Senator Ribicoff, said:

> The bill specifically provides that in no way will there be an interference by the Federal Government in the administration or the curriculum or the running of these medical or dental schools.

Do you agree with that statement?

Secretary CELEBREZZE. Yes; such a provision is contained in your present bill, too. That is still in the bill.

Mr. ROBERTS. Going down a little bit further, he said:

> As far as we are concerned, there is nothing in this bill which tells a State who they should admit and when they should admit and how they should admit. You will note that this bill specifically gives the grants to each medical school. The medical school then distributes the scholarship itself.

What I want to know is, Do you agree with that statement?

Secretary CELEBREZZE. It is a fact in the wording of the bill, and, since I support the bill, I must agree with that statement.

Mr. ROBERTS. As far as you are concerned, the administration of these students, the qualifications to be passed on by the board of admissions, there will not be any attempt on your part or on the part of the Health, Education, and Welfare Department to control the admission of these students?

Secretary CELEBREZZE. No.

I think that is specifically prohibited. That is internal administration, and we are prohibited from getting into the internal administration of any institution. That is specifically stated in the bill.

Mr. ROBERTS. Thank you very much. That is all I have.

The CHAIRMAN. Mr. Schenck?

Mr. SCHENCK. Thank you, Mr. Chairman.

Mr. Secretary, I believe this bill provides for the authorization of some $75 million in matching grant funds for construction. Do you consider that a sufficient amount?

Secretary CELEBREZZE. In my judgment, it would give us an opportunity to really get started. As we continue—because we are talking now about a 10-year program—we could evaluate the program as we went along, but I think it would be an excellent start at this point.

Mr. SCHENCK. Mr. Secretary, are there any laws in various States now which would prohibit the States from taking advantage of these grants, matching funds, in their own State universities?

Secretary CELEBREZZE. None that I know of, but I would have to check it further, Congressman.

Mr. SCHENCK. Mr. Secretary, do you feel that the rate of producing doctors, graduating doctors, is now keeping pace with the rate of population increase? In other words, are we maintaining the same number of doctors per 100,000 population?

Secretary CELEBREZZE. In 14 States there are fewer than 100 physicians per 100,000 population; in 4 States there are 160 or more per 100,000; but the rate for the whole United States has stayed practically static since 1940. In 1940 we had 135 physicians per 100,000 population. Today in 1962 we have 137 per 100,000, or 2 more.

If by the end of this century we are going to have some 320 million people in the United States, however, we had better start preparing for it now.

Mr. SCHENCK. The point I was trying to make, Mr. Secretary, are the number of doctors being graduated from schools and going into practice keeping pace with the rate of the population growth? I understood you to say that they are.

Secretary CELEBREZZE. No; they are not keeping pace with the population growth. There were 135 physicians per 100,000 in 1940. That figure is 137 per 100,000 in 1962, but our projection is by 1970 it will be down to 126. So that while doctors and population have been almost on a parallel in 22 years, the population is now going up much faster.

Mr. SCHENCK. And you feel, Mr. Secretary, that the present facilities are being used to their highest and best use, so far as the number of doctors being graduated?

Secretary CELEBREZZE. I have no evidence to show to the contrary, and I think that is a correct statement.

Mr. SCHENCK. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Staggers?

Mr. STAGGERS. Mr. Secretary, I think it has been established that there is a need for more doctors in America for the population, especially when taking into consideration the increase in population. Also, we need facilities, as explained by my colleague from Illinois; that different ones had asked for admission to the medical school and could not get in, and dental school; and also, by your testimony and others, that the cost of educating doctors has become prohibitive, out of the reach of the ordinary individual in this land.

I think this bill tries to fulfill all three of those weaknesses: to supply more doctors, to supply more facilities, and by helping those

needy students with loans up to $2,000 per year. And, of course, it is not free; they have to pay it back. But we have been over these hearings, as our chairman said, and heard testimony for weeks. These are the conclusions that our committee came to in marking up the bill.

Do you believe that this bill is adequate for the time being?

Secretary CELEBREZZE. Yes.

Mr. STAGGERS. I know in your testimony you say that this should go ahead now.

Secretary CELEBREZZE. Yes; as I said in my opening statement.

Mr. STAGGERS. I am in agreement with you, Mr. Secretary, that if we open it up and get into other fields, we might be here a long time.

I want to ask one more question in relation to the supply of doctors. Are we not now using many doctors from foreign lands, that were educated in the medical schools of other nations, in emergency places all over this land?

Secretary CELEBREZZE. Yes.

I have the figures here. Last year alone we licensed some 1,700 foreign doctors.

Mr. STAGGERS. Last year?

Secretary CELEBREZZE. This is last year alone.

Mr. STAGGERS. I get this information from all over my district: that many of the doctors who have been educated in other nations are being brought in and asked to be licensed in order to take up the slack where doctors are needed.

Secretary CELEBREZZE. I can give you the exact figures.

Mr. STAGGERS. I would like to have that, if you have it.

Secretary CELEBREZZE. I will give you the figures for 1950 through 1961.

In 1950, we had 458 foreign doctors being licensed. In 1955, it jumped to 1,057. In 1956, it was 1,002. In 1958, it was 1,316. In 1959, it was 1,776. In 1960, 1,569. In 1961, 1,730.

Mr. STAGGERS. Does that mean new doctors each year?

Secretary CELEBREZZE. Yes.

Mr. STAGGERS. Or is that the total?

Secretary CELEBREZZE. There are graduates from medical schools licensed for the first time.

Mr. STAGGERS. I would like to ask this: Is that partly because of the cost, the higher cost, of educating students in this land than perhaps in other lands? Would that have anything to do with it?

Secretary CELEBREZZE. The point I am trying to impress upon the committee is that there is a shortage of facilities, plus the cost to the student, and I think you have to think of both in order to answer your question properly.

Mr. STAGGERS. In order to supply the need which has been established for doctors?

Secretary CELEBREZZE. Yes.

Mr. STAGGERS. I am going to make this statement to you in your capacity as to a telephone call that I had this week. It was yesterday. One person interested in a hospital wanted to know if they could not come to Washington to the Army or Navy hospital here and interview the young doctors who are being discharged so that they might be able to induce them to come and work in a hospital in that area; that they had tried different places in the land.

I said, "Maybe it is a matter of not paying the proper wages."

And they said they thought they were paying wages commensurate with other areas. But, evidently, they have a terrific lack of doctors.

I know that in other hospitals we have had similar complaints.

I wish to thank the chairman and Secretary for his testimony.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. Thank you, Mr. Chairman.

Mr. Secretary, I gather from your testimony that you consider H.R. 12 one of the priority measures of your Department; is that true?

Secretary CELEBREZZE. Yes; and I am basing much of that upon your committee record of last year.

Mr. YOUNGER. In regard to your budget, I find only one item, aid to medical education, proposed legislation. You propose the obligation authority of only $34 million.

Secretary CELEBREZZE. We are talking about fiscal year 1964.

Mr. YOUNGER. Correct.

Secretary CELEBREZZE. Yes; because you have to get the buildings built and the student loan program set up, and you always spend much less the first year of the program than you do as you build up to capacity in the other years.

Mr. YOUNGER. That is your budget, but you are only providing for expenditures of $9 million?

Secretary CELEBREZZE. Can I give you our figures?

Mr. YOUNGER. Yes.

Secretary CELEBREZZE. On this program. We are talking about this specific program——

The CHAIRMAN. For what fiscal year?

Secretary CELEBREZZE. For fiscal year 1964, for grants for construction of teaching facilities, for planning grants, for loans to medical and dental schools, and administrative costs, our total budget request would be $30,950,000.

In 1965, that would jump to $86,100,000. In 1966, that would jump to $91,300,000. In 1967, $96,500,000. In 1968, $96,900,000.

And then it would begin leveling off in the year 1969, $91,700,000. In 1970, $86,500,000. In 1971, $81,300,000. In 1972, $75,900,000. In 1973, $75,900,000.

And the total cost of this 10-year program would be $813,050,000, or about an average of $81 million a year.

Mr. YOUNGER. $81 million a year?

Secretary CELEBREZZE. That is the average. In some years more than that will be spent.

Mr. YOUNGER. But, so far as fiscal 1964, your figures of $34,352,000 for aid to medical education——

Secretary CELEBREZZE. $30,950,000.

Mr. YOUNGER. $34 million, according to your budget submitted by the President. I have a copy right here.

Secretary CELEBREZZE. I will accept your figure of $34 million.

Mr. YOUNGER. Thank you.

Now, as to the amount of money and so forth, did you read your predecessor's testimony before the committee last year?

Secretary CELEBREZZE. No.

In answer to another question, I said I had not.

Mr. YOUNGER. On page 38, when I was interrogating Secretary Ribicoff, he made this answer. He said:

> It has been the desire of the President to balance the budget.

Has the President expressed any desire to you this year to balance the budget?

Secretary CELEBREZZE. He has expressed a desire time and time again to keep expenditures as low as we possibly can and still meet the critical needs of the Nation.

Mr. YOUNGER. But he has not expressed to you the same desire that he expressed to Mr. Ribicoff—to balance the budget?

Secretary CELEBREZZE. I would not attempt to say what he expressed to Mr. Ribicoff because I was not there when he expressed it.

Mr. YOUNGER. That is in the testimony. Mr. Ribicoff already testified to that effect last year. I am asking: Did the President express that desire to you this year?

Secretary CELEBREZZE. The President expressed a desire to have all of us keep our expenditures as low as possible and still meet critical needs of the Nation. That is the only statement that the President made to us.

Mr. YOUNGER. Last year the appropriations, according to the Secretary, were $102 million more than he could possibly use. How do you feel about your budget this year?

Secretary CELEBREZZE. I think that our budget, as I presented it this year—and we have not presented it yet; the hearings are on the 18th on this—that we are presenting a budget which meets minimum needs in critical areas and, at the same time, provides for the continuation of programs which have already been in existence. Even though you do not intend to expand your programs, in many years the second year of the program becomes more expensive because you are gearing yourself to the total program, and your budget will go up.

But I think that the budget that we are presenting this year to the Congress is a well balanced budget. I am speaking now about my Department.

Mr. YOUNGER. I believe it calls for an increase over last year of $1,764 million.

Secretary CELEBREZZE. That is based on the assumption that our legislative program will pass.

Mr. YOUNGER. That is correct.

Secretary CELEBREZZE. That is based on legislative proposals. In other words, if all of the legislation that we expect to have introduced is passed by Congress, it will cost that much.

Mr. YOUNGER. Last year Mr. Ribicoff also made this statement:

> You mean the House voted much more than we asked for. The Senate voted much more than the House voted, and then there was a conference committee's report. There was a certain amount curtailed in the final result, but what was made available was still much more than the House voted, which was more than we originally felt could be effectively spent.

Secretary CELEBREZZE. I think, Congressman, in order to keep the record straight, you are referring now to NIH grants in which Congress, even though the administration opposes it, grants more to that Department over the objections of the administration.

Now, what happened in that case—and I think I am familiar with it—is that the President lopped off and did not spend this money. He put it in a reserve of some kind. I do not recall the technical phrase.

But, then, when we get before Congress, Congress under the NIH program will say, "Why did you not spend this money again?"

So that what you are telling us is that Congress appropriated more money than we requested.

Mr. YOUNGER. I am not telling you. Mr. Ribicoff was telling us.

Secretary CELEBREZZE. That is what he was referring to. He was referring to the NIH expenditures.

Mr. YOUNGER. And I want to know for sure, when you say in your budget that you are asking for $34 million against an authorization that is in this bill of $75 million——

Secretary CELEBREEZE. I thought that I explained that in the first year of 1964, we would not move into what we refer to as total production so your expenditures are less.

Mr. YOUNGER. Yes, but pretty soon Congress is going to have to get down to a basis where they are not appropriating a lot of money that cannot be used; which is left in the lap of a department to spend at some future time. Now, that case has got to be met head on sometime.

Secretary CELEBREZZE. No——

Mr. YOUNGER. And I am wondering whether the House—of course, that will be the Appropriations Committee's work, not ours, but I am just cautioning you on that, because you will be testifying pretty soon before them, and I would hate to see another case where the Secretary can come before any committee and say to the committee that you appropriated far more money than we can efficiently use, and that is what the Secretary—and I think, very honestly—testified to here before our committee last year.

Mr. ROBERTS. Will the gentleman yield?

Mr. YOUNGER. Yes, I will be glad to.

Mr. ROBERTS. The gentleman is not criticizing the Department for something the Congress did?

Mr. YOUNGER. No, I am not criticizing the Department at all. I am asking now that this new Secretary, when he goes before the Appropriations Committee, that he be sure and caution the committee that he does not want any more money than he can effectively spend, because we have had that——

Secretary CELEBREZZE. That has always been my policy.

Mr. YOUNGER. That is the main thing. I question the advisability of appropriating $75 million or asking for $75 million or $34 million when you are only going to, by your own testimony, spend $9 million during the year. Congress is in session every year.

Secretary CELEBREZZE. My answer would still have to be the same—that this is the start of the program, and expenditures will be less.

Now, if we gear up faster, and things turn out so that we can gear up faster, we will spend more money.

But I say this, since you are on matters of budget: Sometimes within the course of years you have to spend much more in order to reduce your budgets in later years.

Now, let me explain that to you. We are calling for money to fight the causes of delinquency, to fight the cause of dropouts, to rehabilitate our people, so at this point in our history we are going to spend a great deal of money in order to accomplish those objectives and eliminate some of these problems.

If we do the kind of job that I think we are capable of doing, in later years we ought to be able to reduce our expenditures in public

welfare, the assistance programs, if we do the right kind of job. But during this period, during this twilight zone, as I refer to it, you are trying to remove the causes.

Now, there is no sense in just spending money to take care of people without removing the causes, and this administration, at least it has been my impression, is trying to help people help themselves. If we succeed, we ought to be able to reduce our expenditures in relief and in other aid programs. So you have to look at this whole program rather than just a segment of it.

Mr. YOUNGER. That was a very good argument which was put forth, and I think it has some relevance, when we passed the social security program, that actually it would stop welfare appropriations, or diminish them. As a matter of fact, the welfare appropriations by State, Federal, and local governments, since social security went in, have gone way, way, way up, far more rapidly than even the growth of the population.

So I hope that your thoughts are successful.

Secretary CELEBREZZE. We are going to try.

Mr. YOUNGER. But, in looking at the past and the promises that were made concerning social security, it does not offer much. However, there is one question which we debated considerably last year, and that was whether some type of stimulus should not be given to encourage doctors to go into the territory that is now designated by the Surgeon General as short of doctors.

Secretary CELEBREZZE. Yes, there is a provision in the bill that covers that. If the doctor goes into certain categories of practice—they are mentioned in the bill—we forgive up to 50 percent of the loan. That is provided for.

Mr. YOUNGER. And that bears your endorsement?

Secretary CELEBREZZE. Yes, indeed.

Mr. YOUNGER. One other question, in answer to our colleague about the Federal Government interfering or designating who will be admitted to the college, you say it is your intent that the Federal Government shall not interfere?

Secretary CELEBREZZE. It is in the bill.

Mr. YOUNGER. Can you promise that the Attorney General will not interfere?

Secretary CELEBREZZE. I cannot speak for the Attorney General. I have enough headaches running my own Department. But it is in the bill, Congressman. I think it is pretty explicit in the bill that you cannot interfere in the internal management of these institutions.

Mr. YOUNGER. I think there is a law and a Supreme Court decision that has something to say about what the Federal Government can do about integration of schools.

Secretary CELEBREZZE. Yes. I cannot stop the courts from determining questions.

Mr. YOUNGER. Because this is a Federal grant, and if the same philosophy is followed that is followed with the grants on homes and subdivisions, and so forth, that same law would apply; would it not?

Secretary CELEBREZZE. Yes, and I have learned, as a lawyer, never to try to guess what the courts are going to do.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. In order that the record may be very clear, there are no court decisions which I know anything about involving a pro-

gram like this which would require any State official to receive and consider applications for the purpose of determining the qualification of applicants.

Secretary CELEBREZZE. I know of no court decisions, either, Mr. Chairman.

The CHAIRMAN. And that is what Mr. Roberts had in mind when he referred to the authority granted, or intended by this legislation, that admission officials of these schools have autonomy in the operation of the school itself.

Mr. SCHENCK. Mr. Chairman, will you yield on that point?

The CHAIRMAN. Sure.

Mr. SCHENCK. Does the Secretary mean to say that the Department will not have any say at all about the scholarship grants that are granted to universities, that it will permit them to use their complete and full discretion?

Secretary CELEBREZZE. There are no scholarship grants to the university. They are construction grants to the university.

Mr. SCHENCK. Well, loans?

Secretary CELEBREZZE. Are you talking about selection of students for loans?

Mr. SCHENCK. That is right, establishing the criteria under which the university will grant a loan.

Secretary CELEBREZZE. Under the provisions of the bill, as I understand it, a loan has to be based on need and the institution is responsible for determining the need, up to the maximum statutory limits.

Mr. SCHENCK. So the Federal Government would establish some controls. To do otherwise would be irresponsible; would it not?

Secretary CELEBREZZE. Under the provisions of the bill, as I interpret them, Congressman, the question as to admissions is a question which remains with the institution, because, as we stated, that is an internal function of the institution.

As to whether or not a student shall receive a loan, that is based also on the question of the institution exploring the need of the student.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Texas. Thank you, Mr. Chairman.

Mr. Secretary, in regard to that particular point, I am sure that you discussed, in going over this program, the possibility of including what we commonly know as the Powell amendment; did you not?

Secretary CELEBREZZE. I have not heard of the Powell amendment, Mr. Rogers.

Mr. ROGERS of Texas. Let me brief it for you. It simply says that the Federal funds cannot go to any school that practices segregation. I am sure that that must have been discussed by the administration, by this administration and the past administration.

It is discussed on the floor of Congress quite often, but it is not in this bill, is it, Mr. Secretary?

Secretary CELEBREZZE. There is nothing in this bill which in anyway interferes. There is nothing in this bill—you are referring now to a provision of antidiscrimination in the bill?

Mr. ROGERS of Texas. Yes.

Secretary CELEBREZZE. There is nothing in the bill on that.

Mr. ROGERS of Texas. There is nothing in here with regard to fixing the yardstick or the formula by which the student is entitled to a loan.

As I understand it, you are leaving that up to the participating university or college to determine the entrance and the eligibility of the individual student, insofar as the loan is concerned.

Now, your participating universities and colleges, Mr. Secretary, have to be accredited; do they not?

Secretary CELEBREZZE. Yes.

Mr. ROGERS of Texas. And if they practice abuses of any kind, they simply would have their accreditation taken away from them; would they not?

Secretary CELEBREZZE. I assume so.

Mr. ROGERS of Texas. And they would not be allowed to participate in this fund, either, for grants, insofar as the schools are concerned, or loans for the students?

Secretary CELEBREZZE. Well, one control we have over the loans is that we set a ceiling——

Mr. ROGERS of Texas. Yes.

Secretary CELEBREZZE (continuing). Of $2,000 a year for 4 years, or a total of $8,000. In the event that you have obtained money under the NDEA, we also offset that against a loan under the proposed program. That is the only control that we have.

Mr. ROGERS of Texas. Now, Mr. Secretary, on another subject, no matter how we window dress this, it is nothing more or less than Federal aid to education in the fields named in this bill; is it not?

Secretary CELEBREZZE. No. It is primarily a health proposal. That is why we did not put it in the education bill, because we consider it more of a health measure than an education measure.

Mr. ROGERS of Texas. But, whatever we call it, it is Federal aid to education in these particular areas, is it not, because it is money going, not only to the institution that is engaged in teaching these professions, but it is money going to students who want to attend?

Secretary CELEBREZZE. I could not deny that a medical school is an educational institution.

Mr. ROGERS of Texas. Yes.

The point I am making is this, Mr. Secretary: Is this separated from the general education program because the need in this field is more serious than it is in other fields?

Secretary CELEBREZZE. No.

It is separated because we felt that it was a health measure, and I was told that, historically, this type of bill came to this committee instead of the Education Committee.

Mr. ROGERS of Texas. In your statement on the first page you refer to an "increasingly short supply of professional personnel."

Secretary CELEBREZZE. Yes.

Mr. ROGERS of Texas. As I understood your testimony, Mr. Secretary, there are two reasons for the need for this bill:

One is the lack of facilities to train the proper number of people to attend the health needs of our people in this country, and, coupled with that is the lack of financial ability on the part of many who want to get into that field.

Now, Mr. Secretary, let us go back one step further. What do you think has been the cause of the present lack of facilities in this area?

Secretary CELEBREZZE. The cost factor is the primary one. I think about half of the medical schools are private schools. They have been

hit pretty hard with a lack of endowment funds. With respect to the State medical schools, they have been in competition with so many other things for the tax dollar. I think it has been basically a problem of finance more than anything else.

Mr. ROGERS of Texas. A question of economics?

Secretary CELEBREZZE. I am talking about the construction program.

Mr. ROGERS of Texas. The several States determine who practices medicine within their boundaries, do they not?

Secretary CELEBREZZE. Yes. It is up to the State to license the physician.

Mr. ROGERS of Texas. And many of these medical schools are State-maintained, tax-maintained schools, are they not?

Secretary CELEBREZZE. Yes, about half of them, as I said a moment ago.

Mr. ROGERS of Texas. And, of course, we have the denominational schools and other schools devoted to this work, and all can participate in this program because it is a Federal program. That is correct, is it not, Mr. Secretary?

Secretary CELEBREZZE. All participate in it because we think it is a health need of the Nation, and we open the program up to all medical schools.

Mr. ROGERS of Texas. Do you feel, Mr. Secretary——

Secretary CELEBREZZE. Excuse me for interrupting.

Mr. ROGERS of Texas. Surely.

Secretary CELEBREZZE. But under this bill you can also establish a new medical school, if necessary.

Mr. ROGERS of Texas. Let me have that again. You say under this bill you could establish a new medical school?

Secretary CELEBREZZE. Yes.

Mr. ROGERS of Texas. But that would be a medical school within the State and subject to the laws of that State, rather than a Federal medical program?

Secretary CELEBREZZE. Yes.

To obtain a license for the purpose of any profession, dentistry or medicine, you have to be licensed by the particular State in order to practice in that State.

Mr. ROGERS of Texas. Yes.

Now, do you feel, Mr. Secretary, that the lack of facilities to train these people to meet these health needs has been due to the failure of the responsibility of the people in those States to provide the tax money to build up their own institutions?

Secretary CELEBREZZE. I said there was a twofold problem.

Mr. ROGERS of Texas. Yes.

Secretary CELEBREZZE. Lack of adequate finances to build or expand their institutions, and lack of adequate finances to get the number of students who want to study medicine and who do not because they do not have the financial means of doing it.

I still insist that you have to think in parallel terms of the two things.

Mr. ROGERS of Texas. Mr. Secretary, does your research on this problem indicate that it is more or less on a level, let us say, nationwide, or do we have a great number of demands for entrances into

medical schools in, say, New York State, but you have a lot of vacancies in Arizona or Texas and places like that?

Secretary CELEBREZZE. Mr. Rogers, I would like to refer that question to the Surgeon General, because he is more experienced in it.

Dr. TERRY. In general, we have found that all of the places are taken in the existing schools today. The few exceptions have been an occasional individual institution where the quality, not the quantity, of applicants was such that all of the positions were not filled. But, generally speaking, I think we can say today that all of the positions in our medical schools are filled.

Mr. ROGERS of Texas. Doctor, the reason I asked the question was this:

Several doctors have told me that there are many places that go wanting every year in medical schools; that there just are not any students to take them; and I was wondering, if that was correct, what could be done to make it possible to get some people interested?

Dr. TERRY. I would disagree with the connotation of "many." There are a few. Now, the thing that we need, sir, in my opinion, is this:

We need a better quality of student who is applying for medical schools in a larger quantity, and the way to get this is to remove some of the economic obstructions to a lot of students who do not apply because they simply cannot face the economic burden of medical school.

The next point, of course, with this expansion of available manpower to come into our medical schools, is to make more places available.

Mr. ROGERS of Texas. Yes.

Now, I believe the Secretary said that, according to his information, that there were more lucrative, and a greater number of, scholarships available in such professional fields as engineering and other fields. Now, if that is correct—and I am sure the Secretary is well versed on the subject, much better than I am—is there any indication as to why this is so, why there are not scholarships for medical students the same as there would be for engineering students?

Dr. TERRY. May I answer that, sir.

Mr. ROGERS of Texas. Yes.

Dr. TERRY. I think one of the primary causes is the fact that much of our industrial and other private funds which are available in the country for this sort of thing are more directed toward supporting engineers, physicists, and persons in the physical sciences.

Mr. ROGERS of Texas. You feel that the industries are looking for people to take over jobs in that industry, and that the medical profession, apparently, has not made possible scholarships for people to come along and become doctors?

Dr. TERRY. The medical profession has made some available, but it has been nothing to compare with the number available for the persons in physical sciences and natural sciences.

Mr. ROGERS of Texas. Doctor, along that line, I believe you or the Secretary said a minute ago that the ratio of doctors to the population is not going along in the order that it has in the past; that is, that there is a decreasing percentage of doctors insofar as the total population is concerned. Now, is that correct, Doctor?

Dr. TERRY. May I qualify it?

Mr. ROGERS of Texas. Yes.

Dr. TERRY. Actually, in terms of the figures, as they have developed over the last 10 or 15 years, the number of physicians per unit of population has remained roughly the same. In my statement, which I will present to you later, I will point out why this has been true and, yet, we have run into serious shortages.

It is largely due to a deflection of physicians into fields other than general and family practice. Moreover our ratio has remained level only because we have licensed so many foreign graduates.

For instance, today it is estimated that if we had not licensed foreign graduates over the past 10 years, our supply of physicians would have dropped 10 percent.

Mr. ROGERS of Texas. Doctor, right on that point, which is what I was coming to next, there has been a great call for these foreign doctors to come to these small, sparsely populated areas because doctors in this country, apparently, are not wanting to go into those sparsely populated areas, and I know the Secretary pointed out that the bill does take care of the situation so it would make it nice for some doctors to go into those areas if they participate in this program.

But do you feel, Doctor, that there has been any effort by any forces whatever in this country to keep the number of doctors small with relation to the population?

Dr. TERRY. I do not, sir.

Mr. ROGERS of Texas. Do you think, if facilities were made available and finances were made available to these doctors or these boys who want to study medicine, that this situation would adjust itself?

Dr. TERRY. I have no question but that it would, sir.

Mr. ROGERS of Texas. Thank you very much, Mr. Chairman.

The CHAIRMAN. Mr. Devine?

Mr. DEVINE. Thank you, Mr. Chairman.

As a Member of Congress from your home State, Mr. Secretary, I would like to welcome you in your initial appearance before this committee. I think back in the early 1950's we served on joint committees in the Ohio Legislature.

Mr. Secretary, this being the first hearing on this bill, I am not acquainted with H.R. 12 as related to H.R. 4999 last year, but Secretary Ribicoff, in testifying before this committee, said that the bill last year was a 5-year plan and that the total cost would be $600,800,000.

Now, has this been expanded to a 10-year program in this legislation?

Secretary CELEBREZZE. Yes, it is a 10-year program of construction grants.

Mr. DEVINE. And, also, I believe you stated there are no grants here, but these are loans, as far as the students are concerned?

Secretary CELEBREZZE. Loans with forgiveness, Congressman, if they go into certain categories, up to 50 percent.

Mr. DEVINE. Are these reimbursable loans?

Secretary CELEBREZZE. Yes.

Up to half of the loan will be forgiven—you will not have to repay it—if you go into certain categories mentioned in the bill.

Mr. DEVINE. We came up in the conference committee at the last session with some linguistic gymnastics about nonreimbursable loans which amount to grants.

Secretary CELEBREZZE. I think I know what you are referring to, Congressman. Someone came up with something known as non-

repayable loans, and I asked the question at that time: What is a non-repayable loan? This is a forgiveness feature. If you do certain things, we will forgive up to 50 percent plus interest on the loan.

Mr. DEVINE. Last year the cost was $600 million. What is the total cost of this bill, sir?

Secretary CELEBREZZE. We estimated about $813 million.

Mr. DEVINE. On a 10-year plan?

Secretary CELEBREZZE. On a 10-year basis.

Mr. DEVINE. Has your Department come up with any particular way to raise that? Where are we going to get the money?

Secretary CELEBREZZE. Where do you get the money? Where do you get any other money for Federal, State, or local expenditures? Through taxes.

Mr. DEVINE. I know back on the level of our State, when legislation was introduced that would cost a lot of money, there is usually a tax bill that goes with it to raise the funds to pay for the bill.

Last year I asked the Secretary whether he proposed any new taxes to finance this program, and he said "No," and gave the usual answer that has been coming from this administration in the last couple of years—that the national economy will take care of it.

Are any new taxes proposed to run this program?

Secretary CELEBREZZE. Congressman, since we had the privilege of serving in the State legislature together, I have found out they do things a little differently down here.

Mr. DEVINE. I am very gratified that you recognize that, Mr. Secretary.

In connection with this apparent growing shortage of people in the medical field, I think you said the prime reason that legislation of this nature is necessary is because of the economic barrier. Perhaps this should be directed to the Surgeon General. You said that we are not getting the quality of student applicants as we have heretofore.

Are we going to deal only in that area with those persons who have an IQ of 150, and cannot handle the common students who would like to go to medical school? Is that what we are doing?

Dr. TERRY. That is certainly not true, sir. I think you will find a very good spread of people with IQ's much less than 150 in our medical schools.

Mr. DEVINE. What do you mean, the quality of student is not what we want, or words to that effect; that we need a higher quality of applicants?

Dr. TERRY. I mean this—the student of the medical professions is one requiring a certain degree of ability and willingness to apply himself. Generally speaking, the primary consideration for admission of a student to medical school is his scholastic record in college. Basically, this is the principal consideration, unless, of course, there are particular circumstances. An admissions committee of a medical school may understand that someone has not done well because of a particular individual circumstance. But, generally speaking, what we are looking for is capable people who can, and will, go through medical school.

Mr. DEVINE. Doctor, we are not lacking in applicants for medical schools any place in the country, are we?

Dr. TERRY. In certain places we have had shortages, but it has generally been in areas where there has been a geographic limitation on admissions.

Mr. DEVINE. We have quite a number of foreign doctors, foreign-educated doctors, in this country, and they seek to remain here, do they not?

Dr. TERRY. Yes, sir.

Mr. DEVINE. Has the relationship between the cost of a medical education and professional income remained about the same, despite the increased cost of a medical education?

Dr. TERRY. You introduced the foreign graduate in here and then another question, and, I am sorry, I did not get it.

Mr. DEVINE. Well, the foreign doctor likes to remain here because of the increased income in the medical profession. My question is this, Has the relationship between the cost of a medical education and professional income remained the same in spite of the increased costs of medical education?

Dr. TERRY. That is a very difficult question to answer, overall. In the first place, let me go back to your foreign graduate. I think many of the foreign graduates prefer to remain in this country because of the better life, the better facilities with which to work, the better hospitals and this sort of thing, so that there are more factors than just income which would attract foreign graduates to this country.

Now, getting around to the question of the relationship of the cost of medical education to income of physicians, I think we can authenticate the fact that there has been a greater increase, say, in the past two decades, a larger percentage increase, in the cost of medical education than there has been in the percentage increase in the income of the average physician.

Mr. DEVINE. That is interesting. Another reason, perhaps, that some of your foreign doctors—and I would refer specifically to Great Britain—are coming here is because of the climate in the medical profession in Great Britain. Is that a factor?

Dr. TERRY. A few of our graduates come from Great Britain. Many of the students who come to this country from Great Britain are American citizens who have gone there for their medical education.

Mr. DEVINE. Do you feel that perhaps otherwise qualified persons have been discouraged from making application to medical school, not for ecoonmic reasons, but because of the climate that has been created here in Washington by the type of legislation that will affect the medical profession very severely in years to come?

Dr. TERRY. I frankly do not think so.

Mr. DEVINE. You do not think that is a factor?

Dr. TERRY. No, sir.

Mr. DEVINE. I would ask you, Mr. Secretary, getting back to the bill, itself, are you acquainted with the study made by the Ford Foundation, I think, in March or April of a year ago, in which they made a survey of a number of colleges, I believe in the Midwest, and this Ford Foundation study, if I am not mistaken, came up with a finding that these colleges failed to utilize about 40 percent of their space; that they are utilizing about 60 percent of their capacity in handling students.

Are you acquainted with that particular report?

Secretary CELEBREZZE. I have not read that report.

Mr. DEVINE. I might suggest your staff look that up, and you can probably answer that, if this legislation moves on to other areas.

Now, I think you also stated one reason this legislation, rather than coming before the Committee on Education and Labor, came here, because it relates to health.

Secretary CELEBREZZE. Yes.

Mr. DEVINE. Medicare, likewise, relates to health, does it not, although it does have tax angles to it?

Secretary CELEBREZZE. Medicare is an insurance program.

Mr. DEVINE. But it relates to health?

Secretary CELEBREZZE. Well, the ultimate use, but the plan itself is an insurance plan.

Mr. DEVINE. And this is an education plan which relates to health, is that not correct?

Secretary CELEBREZZE. I suppose we can argue all day on that one point.

Mr. DEVINE. Is there anything in this legislation that would assure reciprocity between the States to admit doctors to practice? Say a student graduates from Ohio State University, to practice in——

Secretary CELEBREZZE. I do not think it would be a proper thing in this bill, forcing States on reciprocity. That is by State agreements. I think we would be far afield if we tried to include it in this bill. There is nothing in the bill on that, sir.

Mr. DEVINE. I would certainly agree that that is a State matter, but, you know, when we are using Federal funds, why, we get into a lot of things.

I think that is all, Mr. Chairman.

The CHAIRMAN. Mr. Friedel?

Mr. FRIEDEL. Mr. Chairman.

I want to thank the Secretary for his very fine statement. I have in my hand a report made by the Maryland State Planning Commission on Medical Education and Research Needs in Maryland. This voluminous report is from some of the outstanding physicians at the University of Maryland, Johns Hopkins University, and laymen who put months and months of study into this piece of legislation. Quoting from the report:

> National studies have concluded that unless new medical schools are established and unless present schools enlarge their programs, our Nation will face a critical shortage of physicians.

In the report it goes into how many new students will graduate from the University of Maryland and from Johns Hopkins. They are heartily in accord with the former bill, H.R. 4999.

I want to compliment you on this bill.

I just want to ask one question:

This bill provides grants for construction of medical, dental, pharmaceutical, orthodonty, and so forth. Now, for medical, dental and orthodontic scholarship loans, would there be any objection to including optometrists?

Secretary CELEBREZZE. I believe, if my memory serves me right, that they are included under the construction program although we felt that at this particular time we do not have sufficient evidence or sufficient facts upon which we could come to an intelligent conclusion that there is an actual shortage.

Mr. FRIEDEL. I remember your stating that. I just wanted to know, as I had one of my constituents write to me and ask if I would consider such a proposed amendment.

Thank you, Mr. Chairman.

The CHAIRMAN. If the gentleman permits, you will recall that by the action of the committee last year optometrists were included in the bill.

Mr. FRIEDEL. On loans? I am speaking of loans. I know in the grants.

The CHAIRMAN. In the construction grants.

Mr. FRIEDEL. I am speaking of loans.

The CHAIRMAN. Yes.

Mr. FRIEDEL. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Nelsen?

Mr. NELSEN. Thank you, Mr. Chairman.

Mr. Secretary, in considerating this bill a year ago many of us recognized the fact that many of our rural communities find themselves without a doctor. That would seem to be a No. 1 priority. Having had some connection previously with the University of Minnesota through the legislature, we found that a great number of our students that were graduated go to other States and practice, which is fine, but it does justify some Federal assistance in the field of medicine.

We found the same is true in the public health nursing services. where the same thing happened there.

Now, I noticed in your testimony you pointed out how the original bill started out to take care of these priority items, and a year ago some of us were disturbed because the bill was expanded to such a wide degree that we were of the opinion that perhaps total dollars would not do the job as it ought to do in the priority areas.

I just wanted to call attention to that for the record and compliment you on your approach to the problem, because, in my judgment, there must be some priorities here if the proposal is going to work effectively.

I compliment you on your testimony, and we are pleased that you appeared before us today, and that is all I have, Mr. Chairman.

Thank you.

The CHAIRMAN. Mr. Jarman?

Mr. JARMAN. Mr. Secretary, in the testimony last year reference was made to a loan program for medical students to be inaugurated by the American Medical Association and based upon private contributions.

As a matter of fact, part of the minority statement in the committee report says that:

> The medical profession, through private contributions, has established a low-interest-rate loan guarantee program, which, as of March 1, 1962, is sufficient to make $5 million in loans available to medical students, interns, and residents. This guarantee fund is expected to reach a level sufficient to make $12.5 million in loans available within 1 year, and will expand proportionately as the need and utilization of the guarantee fund continues.

Would you not expect, Mr. Secretary, that the passage of the present bill, H.R. 12, with its provision for loans, would interfere with this private program of the American Medical Association and the ability of the association to raise contributions for it?

Secretary CELEBREZZE. I do not think so. I think that there is enough of an area of need so that both can work at the same time. I think the AMA interest rates are much higher than the 3 percent provided for in the bill, and, of course, under the AMA program you have no forgiveness features in order to channel these doctors into areas where there are critical shortages.

Also, the provisions of our bill cover the other medical professions, not only doctors, but also dentists and osteopaths.

So I do not see any great conflict between the two programs. I hope that the AMA expands their program. I think there is need for it.

Mr. JARMAN. Do you know whether the AMA fund has increased to approximately that $12 or $12.5 million level that was anticipated by the minority portion of the committee report last year?

Secretary CELEBREZZE. I do not know, but I do know that the new AMA loan guarantee program had provided aid to 3,042 students by November 30 of 1962, and that there are about 150 applications per week. I think the demand is so great that there is an area for both programs to work in.

Mr. JARMAN. Does Dr. Terry have any information on the size of that AMA loan fund?

Dr. TERRY. It is my understanding that at the present time it is something in the vicinity of $9 million. This may not be correct. There will be, I believe, AMA testimony before the committee, and they can straighten that out, but it was my understanding it was about $9 million the last time I heard, sir.

Mr. JARMAN. I have only one other question of the Secretary. In a good many States at the present time, medical schools are having real difficulty in securing the funds necessary to pay the salaries of their personnel and to adequately maintain their present facilities.

Under the bill we have before us, provision is made for an increase in current educational resources and the building of new ones. In view of the difficulties experienced in raising operating funds for present facilities, my question would be, sir: Would you feel that sufficient finances can be obtained to operate the facilities that you anticipate would come into being under this bill?

Secretary CELEBREZZE. The administration last year, Congressman, advocated that we make payments for the purpose that you are speaking of, but this provision was knocked out by the committee, along with our scholarship program. With respect to the program as it now is in the bill, as I stated in my opening statement, the administration does not feel it is as broad as what we wanted to do, but that it will meet basic and essential needs. I think we can get by with it. It will not be as lenient or as liberal as what we proposed in the administration bill last year.

Mr. JARMAN. If the bill, H.R. 12, passes as now proposed, would you anticipate, then, that additional Federal funds would be needed to aid in the upkeep of the facilities that might be built.

Secretary CELEBREZZE. I think that a great effort would have to be made to raise more funds. While I cannot say with any degree of certainty until we have had experience on it, I think that the approach that we had last year was a little better approach than our approach this year, but I do not see this problem as a complete barrier or hard-

ship that will defeat the purposes of what we are trying to accomplish here.

Mr. JARMAN. Thank you. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Keith?

Mr. KEITH. Mr. Chairman, one question. It is nice to see you here, Mr. Secretary. I am sorry that I missed your earlier testimony. I would like to invite your attention to the provision contained on page 19, subparagraph (d), "The liability to repay the unpaid balance of such a loan and accrued interest thereon shall be cancelled upon the death of the borrower, or if the Secretary determines that he has become permanently and totally disabled."

As a former life insurance agent, I cannot help but think that the average student who will participate in this program could afford, and would want to carry, sufficient insurance to liquidate that indebtedness, and it would not only help rebuild the fund by the repayment of the loan, but it would tend to help the student borrower assume some responsibility for the indebtedness he has incurred.

I wondered if you would have any objection to striking that provision from the bill?

Secretary CELEBREZZE. Yes, I would object strenuously to it, because one of the basic things that we are trying to accomplish by the bill is to give the student sufficient help to go to college without placing an undue burden upon his family which is without the economic means. And this is now becoming almost a standard provision.

The 3-perecnt interest rate that we would charge would almost certainly take care of losses because of deaths or disability. And I would strenuously oppose taking the provision out because I think to do so would defeat actually what we are trying to do to overcome the great worry of the parents and help them to meet these obligations when they are not financially able to meet them.

Mr. KEITH. Is it intended that there should be in this 3-percent interest fee a sufficient premium to take care of the cost of this insurance?

Secretary CELEBREZZE. No. I did not say an additional premium. I said that the 3-percent interest rate that we are charging would cover the cost of this provision. We have no way now of actually knowing, but we can only estimate that it is sufficient, in my opinion, to cover this provision, based on what we know as to how many students will borrow money and then die before they pay it back. But I think it is a safe provision.

Mr. KEITH. As contrasted with your statement that this is becoming more of a standard provision, I did not realize that we waived this indebtedness on the part of the borrower. It was customary, when I was in college, for people who borrowed money, for them to carry a little life insurance policy to protect the people advancing the money, and the premium would be relatively small in this instance, probably not more than $100 a year, to cover that contingency.

I have no further questions, Mr. Chairman.

The CHAIRMAN. Mr. O'Brien?

Mr. O'BRIEN. Thank you, Mr. Chairman.

I have no desire to intrude on the testimony Dr. Terry will offer, but I know that one of the arguments made last year against similar legislation was that the ratio of doctors to 100,000 of population is

about the same as it was 20 years ago. Then we had other testimony that in 1950 there were 1,300 people in the United States for each family physician, and that the outlook was that this would rise to 2,000 by 1975.

I would like to ask this question:

Is the 1,300 population to each doctor a desirable or a feasible workload?

Dr. TERRY. Those figures, you will notice, were based on the family physician. Now, in the category of family physician we include the general practitioner, the specialist in internal medicine, and the pediatrician. Other types of specialized physicians are excluded from that category so that, with the increasing specialization which has taken place in recent years, the number of family physicians per unit of population has decreased.

Mr. O'BRIEN. I understand that, but what I would like to know is, What would be a desirable ratio?

Dr. TERRY. I do not know, sir, but if we can hold what we have today, I would be very happy, sir.

Mr. O'BRIEN. And we do not do something along the lines of this legislation, we cannot hold what have today?

Dr. TERRY. I do not think we can possibly hold it in the next few years, anyhow, and if this legislation does not get through, we will not be able to meet it at all some 4 or 5 years from now.

Mr. O'BRIEN. I have one other question. We know pretty definitely what the price tag is on this program, and that may be one of the difficulties in our way. Mr. Secretary, is it your considered opinion that the economic saving to the Nation, if we protect the health of our people better than we are to do now, will exceed substantially the cost of this program?

Secretary CELEBREZZE. Yes. That is the point I was trying to make with Mr. Younger earlier.

Mr. O'BRIEN. Thank you, Mr. Chairman.

Mr. CHAIRMAN. Mr. Sibal?

Mr. SIBAL. Mr. Secretary, I would like to return very briefly to the line of questions which Mr. Roberts initiated and which was carried on subsequently by Mr. Younger and Mr. Rogers.

Do I understand from your testimony that, as you see it, you have no problems in your own mind in your own approach to this legislation insofar as schools, medical schools, and other kinds of public health institutions participating in the program, receiving Federal money, even though their admissions policy may be discriminatory?

Secretary CELEBREZZE. I do not know offhand of any private institution which has set up that barrier. We have several State schools which have set up that barrier, and that is now being argued through the court.

Mr. SIBAL. I beg your pardon? I did not hear that.

Secretary CELEBREZZE. That is now being argued through the courts.

Mr. SIBAL. But you do not feel that the approach to this legislation should consider this problem?

Secretary CELEBREZZE. No, for this basic reason—I think we ought to leave this based on our experience and let the other things take their course as they have through the channels of the courts.

Mr. SIBAL. Is it not true that the channels of the courts have led to some very difficult and serious situations where a great deal of conflict, even bloodshed, and much heartaches has resulted?

Secretary CELEBREZZE. Yes. It is unfortunate, but, nevertheless, we are still a Nation of laws and not of men.

Mr. SIBAL. I agree with that, sir. And it would seem to me that when we pass the laws, that we have a responsibility to consider these great national problems. Would you not agree with that?

Secretary CELEBREZZE. Yes, I think you have a right to take that into consideration.

Mr. SIBAL. In other words, it seems to me—and I would like your comment on this—that legislation which in no way required any State institution or any private institution to participate, but did require that if they did participate, certain standards had to be met, would be appropriate. Would you comment on that?

Secretary CELEBREZZE. Let me comment on it in this way before I get to your specific question. I know what you are driving at. It is my basic belief and my basic philosophy, and it shall always be, that citizens are all equal in this great Nation.

Mr. SIBAL. That is right.

Secretary CELEBREZZE. And that they should receive the same opportunities and same advantages; that every family has a right to see that their children can make their own way based on their own initiative and their own talents without any prejudices or biases.

I certainly have no objection in principle to an antidiscrimination provision, but I am also realistic enough to know that we cannot get this type of legislation through. And, rather than continue to defeat both ends, we work through the court procedures, the judicial process, which has been set up in this great country of ours, and, at the same time, we hit at these other problems as we are trying to do, and which we have been blocked from doing. Now, that is the realistic approach to it.

Mr. SIBAL. Does it not amount to this:

That those of us in this country who do not believe in antidiscrimination legislation—and I think this is a small minority of the people of this country—are imposing their views upon the great Congress of the United States, whereas those of us who feel otherwise are sending our tax dollars to institutions which practice discrimination?

Secretary CELEBREZZE. Well, I think in the last years there have been great advances made. Practically every State in the Union to some degree, on the higher education level, has been integrated in the past few years. I think we are making progress on it. It takes understanding, it takes reasoning, and I am sure that we will arrive at that position. We have made tremendous progress, but I think that you cannot just completely cut everything off and let education fight the battle of religion or discrimination or let the medical profession fight the battle of religion and discrimination.

I think we have to be man enough to fight that on a complete frontal attack and not try to put it on the coattails of these other programs.

Mr. SIBAL. This is my point.

Is this not a frontal attack, and are we not avoiding it?

Secretary CELEBREZZE. No.

Mr. SIBAL. And dodging the attack,, if we do not meet it at this level?

Secretary CELEBREZZE. No.

Mr. SIBAL. You do not feel that we are?

Secretary CELEBREZZE. No.

Mr. SIBAL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Florida. Thank you, Mr. Chairman.

Mr. Secretary, I enjoyed your testimony. It has been helpful.

What is your feeling on the problem that might come about with the medical teaching profession if we increase the construction program and increase the number of students? Will this be a problem, or what is being done to meet this?

Secretary CELEBREZZE. I will have to refer that to Dr. Terry, if you do not mind.

Mr. ROGERS of Florida. Yes.

Dr. TERRY. I think that we have had already an increasing number of persons going into medical teaching and I feel that we can enlist more as the supply of physicians increases to meet the problem.

I do not feel that this would be a bottleneck, Mr. Rogers.

Mr. ROGERS of Florida. I am glad to know that. Also, I wanted to ask you, too, I wondered how much this had affected a shortage of doctors or a possible shortage. I think perhaps it has had some effect. That is the increased research program that we have instituted in the country.

For instance, NIH has, I think, probably drawn a great number of people who probably would be practicing, if this Government had not, and if our people had not, decided that it was important to increase our research programs, which is most important.

But I wondered how much this has been a drain on the medical profession, and I have talked with doctors who have felt that it has been, and I wondered if I could get your thoughts on that. Perhaps the Surgeon General would answer that.

Dr. TERRY. I do not think there is any question but that the increased research programs throughout the country have taken some physicians away from the clinical practice of medicine. On the other hand, Mr. Rogers, I look upon it this way. This is the price you have to pay for advancement.

Mr. ROGERS of Florida. Yes.

Dr. TERRY. If you want to develop research to get more information to go ahead, this is the price you have to pay. And the way to correct the problem is not to stop the research, but to make more manpower available for practice as well as research.

Mr. ROGERS of Florida. Yes.

Well, I would agree with that. I would not endorse stopping research, because I think we all have felt the importance of research, and this committee has certainly endorsed research most strongly.

Dr. TERRY. I am well aware of that, sir.

Mr. ROGERS of Florida. But I do think that this should be considered in the whole problem:

That we have, in effect, by emphasizing research more and more every year, helped to create the very problem which this legislation is hoping to solve.

Dr. TERRY. If I may make some remarks on that subject, I think this committee in the last 2 or 3 years has taken some very significant

steps in the other direction. In other words, your Community Health Services and Facilities Act, which this committee passed and which was passed by the Congress in 1961, has been one of our very strong movements back toward shoring up and supporting the practice of medicine in the communities by providing the personnel, the facilities with which to do it. There are many other actions that have been taken by this committee and by the Congress to do this. I think we are moving in this direction.

It is a question of gradual evolution. I think we must evolve with the continuation of our research program, but certainly we have some great needs in terms of service and the delivery of medical care to our people.

The CHAIRMAN. Mr. Cunningham?

Mr. CUNNINGHAM. You said earlier the President wanted to keep expenditures as low as possible and still meet the Nation's critical needs. Last year I believe the department did not recommend assistance to podiatry. That has to do with the feet.

Secretary CELEBREZZE. Yes, a foot doctor.

Mr. CUNNINGHAM. It is a relatively new word that is getting more popular.

Yet in your testimony this year you include that, and I was just wondering what has happened in the past year to make this a critical need. Has something happened to the Nation's feet during the past 12 months?

Secretary CELEBREZZE. In our original bill we did not have it in. After the committee hearings, podiatry was added to the construction provisions of the bill. Our original bill did not have it included.

Mr. CUNNINGHAM. You put it in there because the committee included it last year?

Secretary CELEBREZZE. The committee bill included podiatrists.

Mr. CUNNINGHAM. In a more serious vein, Mr. Rogers mentioned, in asking a question of you——

Secretary CELEBREZZE. Mr. Cunningham, I may add they can only participate in our program to a limited degree. The whole program is not open to them.

Mr. CUNNINGHAM. I recall Mr. Rogers making some reference to the various schools to be benefited under this program, and I believe the Congressman said these must be accredited. Is there some accrediting agency for schools for podiatry?

Secretary CELEBREZZE. I will have to refer that to the Surgeon General.

Dr. TERRY. I am sorry, I do not know, sir.

Mr. CUNNINGHAM. I have nothing against foot doctors, but I am just wondering whether there is any accrediting agency that would make a determination or a judgment as to which of these schools might be properly run and managed. When we had the GI bill, we had, in my opinion, a lot of schools that sprang up overnight that got rich quick with no great deal of supervision, and I was wondering if there is any accrediting agency for podiatry.

Dr. TERRY. I have just been informed that the schools of podiatry have formed a committee which has been studying this question of accreditation.

I think you should be aware that we have not, we did not put this in the bill, the committee put it there. It is put there subject to a

demonstration of a need. As a matter of fact, we do not have the information today to demonstrate that that need exists.

I think if it remains in the bill and is enacted by the Congress, that you can depend upon our studying the matter thoroughly, not only from the standpoint of accreditation, but, specifically, from the standpoint of the need for expanded facilities, since this refers only to the construction provisions.

Mr. JONES. May I answer more specifically your question, Mr. Cunningham?

To be eligible for a grant under the construction provisions, the institution must be accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, so that there would be provision for review by educational authority.

Mr. CUNNINGHAM. You feel that there is such an accrediting agency in the process of formation?

Mr. JONES. That is right, and the Commissioner of Education would review this on a professional basis.

Mr. CUNNINGHAM. One final question:

Would it be possible for the Department to furnish the committee with a list of the names and addresses of the so-called foreign doctors who have come here within the last 5 years for a purpose that I have in mind, if it could be arranged, of making a survey of them as to why they came here? A statement was made earlier they came to take up the void in the need for doctors. I have a suspicion a good many of them came for other reasons, and I would like, if the committee would permit such a study, to find out why they came. That would be for the committee to decide.

My question would be, Would you furnish the names and addresses of these doctors, say, for the last 3 to 5 years?

Dr. TERRY. I should imagine that we would probably be able to get most of them, but you are talking, roughly, about 7,500 persons, sir. It is a big job.

Mr. CUNNINGHAM. Cut it down to a year. You said a thousand and some a year?

Dr. TERRY. One thousand seven hundred and something last year, sir, 1961.

Mr. CUNNINGHAM. If it is possible, would you do that, with the permission of the committee?

Dr. TERRY. Yes, sir.

I am not sure we can get it. It will take us a little time, sir, but we will try to submit it to the committee.

Mr. CUNNINGHAM. Thank you, Mr. Chairman.

(The following letter was later received from Dr. Terry:)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
WASHINGTON, D.C., *February 7, 1963.*

Mr. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. CHAIRMAN: In the course of testifying on H.R. 12 before your committee on February 5, 1963, I was asked by one of the members (Mr. Cunningham) if we could obtain for the use of the committee the names and addresses of foreign-trained physicians licensed by the several States during, say, the last year.

On checking on this matter further I find that we could not obtain this information from our own records. The one source that could furnish up-to-date data on individual physicians is the American Medical Association.

I believe it would be better, under these circumstances, for your committee to approach the Association directly with regard to the availability of this information. This would simplify the process and enable you to obtain the available data in the form most suitable for your committee's needs.

Sincerely yours,

LUTHER L. TERRY, M.D., *Surgeon General.*

The CHAIRMAN. Mr. Hull?

Mr. HULL. Mr. Chairman, I just have one question I would like to ask.

The testimony, Mr. Secretary, of both you and Dr. Terry talked about the industry siphoning off potential doctors, going into more lucrative fields, perhaps. I wondered if you all had made any study, if that were true, of the conditions and why you cannot attract more young people to the medical professions.

I had always understood it was a pretty lucrative field.

Secretary CELEBREZZE. I think, Congressman, our statement was not that the industry was siphoning off our doctors, but the question was asked as to why so many young people are going into the field of engineering and so forth. Our answer was due to the fellowships provided because of the great need by industry for those individuals. Industry, so far as I know, is not siphoning off our doctors.

Mr. HULL. I meant potential doctors.

Secretary CELEBREZZE. Are you referring now to research industry?

Mr. HULL. Yes.

Secretary CELEBREZZE. In the medical professions?

Mr. HULL. Yes.

Secretary CELEBREZZE. Yes, I think that is true to some extent. That was one of the basic reasons, I think, for putting in this special provision in the bill so that we can induce these young people to go into areas of special need where they, perhaps, do not make as much as they would if they were in other fields of practice.

Mr. HULL. I know in my area the family doctor is fast disappearing from the family scene, and it is difficult to get doctors to come.

Secretary CELEBREZZE. Well, you have one other thing, too, that enters into it. You have the young man from the smaller community who studies medicine and then moves away from the smaller community to the larger communties where he has a much broader field in the practice of medicine.

We took that into consideration last year when we submitted legislation to provide financial aid for doctors to get together and build group practice facilities in the smaller areas. One of the most common complaints is, "We just do not have the facilities in our communities."

Mr. HULL. I think that is one of the better programs, because there have been several of those so-called clinics set up. But I would like to know if you have researched it as to what the average income of a practicing doctor is.

Dr. TERRY. Yes, sir, there is information available over the years in terms of the average income of physicians as a whole and in relation to the particular specialities.

Mr. HULL. It is above average or below average than an engineer?

Dr. TERRY. It is above the average income of the country, of course, but it is not above certain selected, other professional groups.

Secretary CELEBREZZE. I can give you some of the figures on it. The average net income of physicians, as reported under surveys of the Medical Economics is as follows:

In 1947, the average net income was $9000; in 1951, it was $13,000; in 1955, it was $16,000; and in 1960, it was $19,000.

So I do not think that that has gone up any more than the normal.

Mr. HULL. That includes all facets of it, public health, VA, and so forth?

Secretary CELEBREZZE. This is the average. We are giving you the average figures. I realize that averages conceal many differences. There was the story about two people, one making $1,000 and the other making $21,000. I said the average was $11,000. The other fellow wanted to know where his $10,000 was. So you have to take that into consideration.

The CHAIRMAN. Mr. Broyhill?

Mr. BROYHILL. Mr. Secretary, do you have any estimate of how many additional graduates of these medical facilities can be expected in 1973 and can be directly attributed to the aid and stimulus given by this bill?

Secretary CELEBREZZE. I will refer that to Mr. Jones.

Mr. JONES. We expect that, over the period of the bill's authorization, that we will be able to meet the goal of increasing the supply of physician graduates by about 50 percent. This would involve major expansion of existing medical schools and the construction of about 20 new schools of medicine.

This would raise the entering freshman class from about 8,200 to about 12,000, which would be required to graduate at least 11,000.

Mr. BROYHILL. And this would, of course, be directly attributable to this bill?

Mr. JONES. The Federal Government's role in this situation is a traditional one of making stimulatory grants for action at State and local level in lieu of direct Federal action. These grants-in-aid are to stimulate and to assist institutions under local sponsorship to do what they would like to do if they had the resources.

I believe it is the considered judgment of the Association of American Medical Colleges, which will later testify before your committee, that this program will go a long way toward providing the stimulation to accomplish the purpose we have in mind.

Mr. BROYHILL. No other questions.

The CHAIRMAN. Mr. Long?

Mr. LONG. Mr. Secretary, in the study that your Department made relative to the income of doctors, was there a comparison drawn as to what was made by persons in the other professions?

Secretary CELEBREZZE. We did not make this study, as I stated. We took it out of a publication called Medical Economics. We did not conduct any study whatsoever. We just used existing material.

Mr. LONG. Does the study show the figures for comparable professions?

Secretary CELEBREZZE. No. We do not have those figures.

Mr. LONG. Dr. Terry, do you have any views on that? Generally, how do you feel the income of a doctor compares with other people in the professions?

Dr. TERRY. I do not think that it departs from the trend or the development of increased income which has occurred in almost all occupational or professional groups over recent years. I do not feel that there has been a disproportional increase for physicians.

Mr. LONG. The figures I have available, of course, are very limited. A study was done 2 years ago by the Louisiana Bar Association, and the comparison of lawyers in the State of Louisiana to doctors was quite disproportionate.

As I say, this, I realize, is inconclusive.

No further questions, Mr. Chairman.

The CHAIRMAN. Mr. Brotzman?

Mr. BROTZMAN. Mr. Secretary, as I have listened to the testimony here today, it strikes me that most of the discussion has centered about the need for more doctors, and I was not here last year, and I know that you were not either, but, as I read this particular bill, it would seem to me like the measure contemplates something more than just doctors, because I note that it mentions pharmacists, optometrists, podiatrists, nurses, or professional public health personnel.

I do not believe that I have heard any testimony, as yet, from you relative to the need as regards these other particular matters that I have just mentioned.

I do not know if you are prepared to testify in this regard or not. But the scope of the bill is broader than the testimony that I have heard here at this juncture.

Secretary CELEBREZZE. As I stated in my opening statement Congressman, the committee expanded the bill to cover several other categories——

Mr. BROTZMAN. I am sorry, you said you did?

Secretary CELEBREZZE. We had a more limited proposal, but we went along with the committee amendment on the understanding that in these other areas there will have to be evidence of a shortage of personnel. These additional categories are not covered under the loan features of the bill.

Now, we know, of course, when we say "doctors," the word "doctor" includes both dentists and doctors. When we say "physician," we know we have to increase physicians by about 50 percent. We know that in the dental profession we have to increase enrollments by almost 100 percent on our projected needs for the future.

In these other areas the evidence is not quite as clear as it is in these two areas in which we are primarily and basically concerned.

Mr. BROTZMAN. May I ask one more question, please.

In section 720, there is provided $45 million for grants. This must be related to something specific. That is, no doubt, the way you arrived at that particular figure.

Now, my question is this:

In your calculation to arrive at the figure of $45 million for grants to assist in construction, did that apply in your calculations to training for physicians and none of those other things mentioned?

Secretary CELEBREZZE. I think it took into consideration the total program of those that we mentioned herein for the construction phase of it. I think we had to, in arriving at the construction phase of it, but we think that the other groups will make only a slight indentation on the total program of $45 million; that your heaviest expenditures will be in these other areas that we are speaking of.

Mr. BROTZMAN. So your $45 million encompasses the whole thing, but at this juncture, at least, you are not prepared to testify as to the need for certain other of those things that are included?

Secretary CELEBREZZE. Only to the extent that we are relying upon your committee action of a year ago, and the testimony before your committee at that time.

Mr. BROTZMAN. I think I have one more question, a very short one because the hour is late.

This applies to how and who actually determines where the location of the additional new facility, where it will be, or where one will be implemented or improved.

Secretary CELEBREZZE. I will refer that to Dr. Terry.

Mr. BROTZMAN. All right.

Dr. TERRY. The mechanism would be basically this, sir:

An institution would make an application for a grant to us. They would be ineligible unless they were an accredited institution or unless it was a new school which was certified by the accrediting agency as one expected to meet accreditation requirements very shortly thereafter.

Once the application for a grant was made to the Public Health Service, this would be reviewed carefully by our staff and then reviewed by our National Advisory Council on Education for Health Professions, which is provided for in the bill. Then, on the recommendation of that Council, we would make the grant, depending upon the percentage increase of enrollment and other things. It would depend upon certain factors which are included in the stipulations within the legislation.

But, basically, the grant would be made by the Surgeon General, with the advice of our National Advisory Council, after careful review and appraisal by staff.

Mr. BROTZMAN. One quick observation.

I think what we are talking about probably is not the need for more doctors, as such. It is the need to care for the people that must have more service along this line. I have listened to questions here today which would indicate that just the fact that we have more doctors is not necessarily going to take care of people in a certain, particular area of this country; that all the new doctors might congregate in one particular locale, which would not help people, let us say, out in the West.

Secretary CELEBREZZE. Except that we would have the inducement in the forgiveness feature to channel some to shortage areas.

Dr. TERRY. Furthermore, there is a natural balancing factor. You cannot get all of your physicians congregating in a city where there will be too many physicians per unit of population. There will be a natural balancing. I think, fundamentally here, sir, there is a question of getting more physicians. I think this is the one—getting more qualified physicians for this country.

Mr. BROTZMAN. I was going to ask you one question after I made my little speech.

Dr. TERRY. I am sorry, Congressman.

Mr. BROTZMAN. That is all right. Let me ask this, would it be intelligent, if some area of the country was not properly served by doctors, to consider locating a school or improving a school in that particular segment of the country? Would that help to focus the at-

tention, and maybe the law of averages would tend to keep more of those people in that particular locale?

Dr. TERRY. In the first place, I think you must remember this, that the initiative for creating the school must come from the local area. We do not initiate it. We are only in a position to aid and abet. Therefore, the stimulus has to come from the State or the community. They have to decide that they want a medical school and are willing to take on the responsibility for operating this, and, in turn, what they will obtain from the graduates of that school.

Mr. BROTZMAN. Thank you.

No more, Mr. Chairman.

The CHAIRMAN. Mr. Van Deerlin?

Mr. VAN DEERLIN. No questions.

The CHAIRMAN. Mr. Secretary, I have a very few questions for which I want to ask your indulgence since the hour is late. We are trying to conclude your appearance here this morning, as I am sure your busy schedule would require your attendance elsewhere this afternoon.

We will have Dr. Terry come back.

In the first place, are there 86 medical schools in the United States?

Dr. TERRY. Eighty-seven, sir.

The CHAIRMAN. Eighty-seven?

Dr. TERRY. Yes.

The CHAIRMAN. One has been established since last year?

Dr. TERRY. I guess so. The count today is 87.

The CHAIRMAN. Now, those 87 schools are established in how many States?

Dr. TERRY. I have the figures here, if you will give me a moment to find them. There are quite a few States that have only 2-year schools and others that have no medical schools at all.

The CHAIRMAN. Our committee report last year, based on the record, stated they were located in 39 of the 50 States. Would you say that is approximately correct?

Dr. TERRY. There are 14 States that have no 4-year medical schools; 3 of those 14 have 2-year medical schools. And in relation to dentistry, there are 24 States that have no schools of dentistry.

The CHAIRMAN. How many of these 38 or 36 States, which have these medical schools, train physicians in greater numbers than are needed within their States?

Dr. TERRY. I would dare say there is hardly a State that trains more students than they need within their State. There may be a few exceptions, but I could not give you those.

The CHAIRMAN. There was information in the record last year that some 20 of these States train as many physicians as they use. In other words, as they need.

Dr. TERRY. "Use" and "need" may be different, Mr. Chairman.

The CHAIRMAN. Yes.

Well, we will put it this way, the report used the word "use."

Dr. TERRY. Yes.

The CHAIRMAN. Well, that means that in only 20 of these States were as many physicians trained as stayed within those States. I suppose that is what is meant by it. The point is that only these States are graduating physicians who are made available to those other 14 or 16 States, whatever they are. Therefore, under the present situation to-

day, the States which do not have schools have only the schools in fewer than some 20 States to draw on to supply their needs.

That is, to me, a very important factor which ought not to be overlooked in this entire situation. That is one of the factors which suggested that efforts ought to be made to bring about the establishment of some new schools in some of these areas which do not have them and need them.

Now, I believe the State of Florida has a medical school underway and that may be the one established during the last year or two. I am not sure of that.

Dr. TERRY. It has been established a little longer than that, sir. There are two medical schools in Florida. One is the University of Miami and the other is the University of Florida at Gainesville.

The CHAIRMAN. And I understand the University of Texas is establishing a medical school—at SanAntonio, I believe.

Dr. TERRY. That is correct.

There is the authorization, legislative authorization, for it, but funds have not yet been made available for it.

The CHAIRMAN. Do I further understand correctly that the new medical school of the University of Texas, to be established at San Antonio, is to be provided for by the State Legislature of Texas on condition that Federal matching funds will be made available for it?

Dr. TERRY. I understand that they are depending on that, sir.

They have not appropriated enough money to build the medical school without Federal aid.

Mr. JONES. Mr. Chairman, if I may, there is one statistic that applies to your question that is available here. Among the 1950 graduates in private practice in 1959, 55 percent of the graduates of public medical schools and 38 percent of the graduates of private medical schools were practicing in the same State as the medical school, so that fewer than half of the graduates of a particular medical school practiced in the State from which the student graduated.

This means that some States are helping to educate citizens from other States, but, by the same token, a State with a medical school is able to hold almost half of its graduates for practice in its own State, on the average.

The CHAIRMAN. That is just another way of stating the situation which I brought to your attention a moment ago.

Mr. JONES. That is quite correct.

The CHAIRMAN. But what I was endeavoring to show by this information is that in the present situation, the States which do not have any medical schools only have a limited number of medical schools in the other States which they can depend upon for their doctors.

Mr. JONES. That is quite correct.

The CHAIRMAN. And I wanted to know if that is true or not.

Mr. JONES. That is right; yes, sir.

The CHAIRMAN. Now, back to the problem that Mr. Hull brought to your attention a moment ago. On the question of the number of qualified applicants, is it true that under the National Defense Education Act, no scholarships are made available for medical students?

Dr. TERRY. Scholarships; that is right, sir. There are some loans available.

The CHAIRMAN. There has been some question—before the Rules Committee—that this program duplicated the National Defense Education Act.

What is your response to that?

Dr. TERRY. My response to that, sir, is that this goes considerably further and is, in effect, more patterned to what we feel the needs are than the National Defense Education Act loans.

In the first place, the maximum under National Defense Education Act is $5,000, with not more than $1,000 a year.

Under this proposal, H.R. 12, it is $8,000 in 4 years, but not more than $2,000 each year.

In the second place, with regard to the repayment period, National Defense Education Act has a 10-year repayment period, beginning 1 year after graduation.

H.R. 12 proposes a 10-year repayment period, but beginning 3 years after graduation.

Insofar as the interest rates are concerned, there is no interest on National Defense Education Act until 1 year after graduation, and then 3 percent on the unpaid balance.

There is no interest on the proposed H.R. 12 loans until 3 years after graduation, and then the rate is same as the National Defense Education Act.

I think, finally, the most important of the whole thing is the forgiveness feature. At the present time the only forgiveness provision in the National Defense Education Act loans is in connection with teaching in primary and secondary schools, which, obviously, these professional people would not do.

In other words, even if they went into a medical school or a university to teach, there would be no forgiveness under the National Defense Education Act. On the other hand, under H.R. 12, there would be forgiveness not only for teaching in medical schools but also for practice in shortage areas and for certain other categories of work, such as Government service.

The CHAIRMAN. Of course, the committee adopted an amendment containing the forgiveness provisions during our consideration of H.R. 4999 last year, and that is the reason those provisions are in this bill.

Dr. TERRY. Yes.

The CHAIRMAN. The overwhelming sentiment of the committee at that time, as I remember it, was that it would be a good thing to have. But I wanted information as to the claim made by members of the Rules Committee, particularly, when we were over there last year, that this is a duplication of the National Defense Education Act.

It was my understanding that there is no duplication at all; that the plain facts were that with respect to medical students, the provisions of the National Defense Education Act simply would not apply, because of the cost and the number of years necessary for their training.

Now, was I correct in that or not?

Dr. TERRY. In my opinion, you were, sir.

The CHAIRMAN. Now, then, from actual experience, have there been any medical students under the National Defense Education Act?

Dr. TERRY. Yes, sir, there have been quite a few. In the fiscal year of 1962, there were 3,213 students in the schools of medicine and 437

students in schools of osteopathy and 1,881 students in schools of dentistry, who received loans under the National Defense Education Act.

The average loan per student for medical students was $640; for osteopathic students, $654; and for dentists, $692.

In the absence of any specific provisions such as those incorporated in H.R. 12, sir, students in medicine, dentistry, and ostepathy have taken advantage of the provisions of the National Defense Education Act.

The CHAIRMAN. Now, what would be your feeling if there were a provision included in the bill requiring no duplication or overlapping?

Dr. TERRY. As a matter of fact, Mr. Chairman, the bill provides that if there are loans under the other, that this has to be substracted from the amount available to that individual. In other words, there could not be duplication in that respect, sir, the way the bill is written.

The CHAIRMAN. I think there are some who would want to make that restriction abundantly clear: That there would not be two programs, even thought one of them is most inadequate for this particular purpose.

Mr. SPRINGER. Mr. Chairman, would you yield for one question?

The CHAIRMAN. Yes.

Mr. SPRINGER. Dr. Terry, under your provision in this bill, is there any basis of need?

Dr. TERRY. Yes, sir. That is a specific stipulation in the law, in the bill: That there has to be a demonstrated need in the view of the responsible administration of the institution in which the student is registered or to be registered.

Mr. SPRINGER. Does that include parental contributions?

Dr. TERRY. I am sure it must, because hardly anyone at that age is independent without parental contribution.

Mr. JONES. Mr. Springer, I might answer that out of experience of administering a loan program in a university that included medical and dental students. The institutions of the country have developed criteria upon the basis of which they determine the financial needs of students for the meager scholarship and loan funds that are available to them. They take into account the total financial resources available to the individual student.

In many instances this involves the capacity of the parents and the family to support them. In some instances, the families are broken. In some instances they have no resources. In some instances the student is beyond an age limit and has been disassociated from his family to the point that he cannot rely on that kind of support.

Mr. SPRINGER. Let me interrupt you just to bring this up short.

Mr. JONES. Yes.

Mr. SPRINGER. Has this criteria been applicable to the National Defense Education Act?

Mr. JONES. Yes, sir.

Mr. SPRINGER. You know that to be a fact?

Mr. JONES. Well, the institution applies its own criteria, and they use the same criteria to apply to the National Defense Education Act as they use in their own loan programs.

Mr. SPRINGER. You know that to be a fact?

Mr. JONES. Well, in terms of my own experience, this is a fact. I cannot speak for all institutions. This is the philosophy under which

the institutions accept the money, and I would assume that generally this has been true. There may be exceptions. It is true in the institutions that I know about.

Mr. SPRINGER. That is all, Mr. Chairman.

The CHAIRMAN. Now, one other thing. This bill provides for a 10-year authorization program, which means during the next 10 years it is contemplated that a program would be budgeted for the purpose of carrying out the program. Contrary to what Mr. Devine indicated a moment ago, the construction program, under the bill reported last year, was for 10 years, and it was so as submitted by the department at that time. This bill provides for 10 years.

I believe, the bill which was reported last year provided for a 5-year loan program, and I am sure that is what Mr. Devine referred to a moment ago. Since the record is not clear, I do want the record to be straight on it.

Now, in view of the importance of this program, what would be your reaction to the committee adopting, say, a 3-year program and giving it a trial to see how it works?

Secretary CELEBREZZE. Mr. Chairman, on a grant program, you might, but on a loan program, I do not see how you could possibly go on a 3-year basis, because your basic education course is 4 years in medicine; that is, I am talking about medical schools. Certainly, you would have to go that far to cover the beginning to the end of the 4 years.

The CHAIRMAN. Of course, you would have the same problem there, Mr. Secretary, whatever number of years you set, unless you say it is a 10-year program. At the end of 6 years, you cut off all loans to new applicants.

Secretary CELEBREZZE. Under the provisions of the bill, no applicant can get a new loan after the year 1968, but you still have to pick up at that point the additional 3 years, and I assume by that time that our revolving fund may have started where some of this money is being paid back in, which we can loan out again.

The CHAIRMAN. Yes, but the committee decided last year, as far as loans are concerned, to limit the program to 5 years. Now, I am sure, from my recollection of it, that that was because we intended taking a look at it at that time to see how it was working.

I have been thinking pretty much along the lines of having a more limited program so that we will have the opportunity of seeing how it is coming along. At the end of that time we can determine whether or not it is justifying the decision of the committee and the Congress.

Secretary CELEBREZZE. Well, of course, under a 3-year program, Mr. Chairman, generally you lose a pretty good portion of the first year, so you really only have a 2-year program in which you are geared up to meet it. I am fearful it would be just too short to do the type of job that we have in mind.

The CHAIRMAN. Well, we did the hospital program that way, and it has worked out pretty well.

Secretary CELEBREZZE. That is true. We keep coming back.

The CHAIRMAN. We have the airport program. It was at the outset, I think, an open-end program, and we closed the end, and have been extending it from time to time as the need permits. You do not have the great questions which have been raised about those programs in that respect as you have now about the open-end NIH program.

That is another reason I am scheduling a program to go into that question. I think this committee is going to have to start looking into it.

It has been my experience over the years that with those programs which we limit from time to time, we do not have the same great problems and all of the publicity, as we have in these programs that are given an open-end extension, depending upon the appropriation. I have come to the point of thinking we had probably better start looking at the whole health program with that in mind.

If that is true, we might as well start here.

I was not going to suggest any limitation to the point where the program would not work, but I do know that the airport program has worked very well, and that has been going on since—1945? I know that the hospital program has been working pretty well, and that has been going on since 1946, I believe, or 1947, or somewhere along in there.

Secretary CELEBREZZE. As I say, Mr. Chairman, I would have no objection to cutting it back from the 10-year program, but it would seem to me that, unlike, basically, the hospital program or the airport program, with which I am familiar as a mayor, here we are dealing with loans for 4 years for students in order to complete 4 years of academic work. So I would suggest——

The CHAIRMAN. That has to do with the loan features of the bill.

Secretary CELEBREZZE. Yes.

The CHAIRMAN. I imagine that those features would have to be given special treatment.

Secretary CELEBREZZE. I thought you were referring to the total program as a 3-year program.

The CHAIRMAN. I have not thought that question through that far. As a matter of fact, I want the committee to think about it. But, anyway, I have been thinking myself of something like that.

Dr. TERRY. Mr. Chairman, may I make a remark there?

I believe the recent authorizations on Hill-Burton hospital constructions have been 5 years. I frankly think that, when you get to dealing with a construction program which is dependent upon when the next session of the legislature meets and the awarding of contracts and all this sort of thing, it would seriously jeopardize such a program if we thought in terms of 3 years; 5 years, I think, would be workable, sir.

The CHAIRMAN. Dr. Terry, we were told that was the case with the airport program; that it would be ruined. I never saw so many chins hanging low. But, you know, we did it, and I am very glad to say that in the few years since then everybody reports they are getting along fine.

Mr. SPRINGER. Mr. Chairman, might I say that in that case, in the Hospital or Hill-Burton Act, nearly all of those are bond issues in which you have to plan a couple of years ahead. It is even worse than this. This would go to the State legislature to get an appropriation.

In those two plans, the airport and the Hill-Burton, they have to even plan for a bond issue, and, yet, they are making it work, and we are getting the benefits of it now.

Secretary CELEBREZZE. The only difficulty is that your State legislatures only meet about 6 months out of every 2 years, and, if you

catch them at the end when they have adjourned, then you have got a year and a half to wait, unless the Governor calls them back for a special session. That has been one of our difficulties.

Mr. SPRINGER. You might be right, Mr. Celebrezze, on Ohio, but in Illinois we never had a bit of trouble. We had a tremendous appropriation program there along these lines.

The CHAIRMAN. And, furthermore, you said a moment ago, Mr. Secretary, that it would take you at least another year, and probably 2 years, before you could get this program going.

Secretary CELEBREZZE. Yes.

The CHAIRMAN. So you would have the accumulation of the first year and the second year getting into it.

Anyway, that is just an idea.

Mr. SPRINGER. Mr. Chairman, I will say there are two things in which this committee has been very interested, and I know some of the southerners have especially been interested in—the amount and the distribution of doctors.

We are hoping in this program we are going to get an incentive to produce more doctors, and, somehow, we are going to get an incentive to put the doctors where they are needed, instead of everybody in the cities and the big towns, that the rural communities are going to get some doctors.

I sure would like some ideas on how that is going to be done.

The CHAIRMAN. Mr. Secretary, thank you very much.

We have kept you much longer than we intended, but we do thank you for your appearance here today and your testimony on behalf of this program.

Dr. TERRY. Mr. Harris, may I submit one thing?

The added medical school within the past year is a former school of osteopathy in California, which was converted to a medical school during the year.

The CHAIRMAN. Thank you, Dr. Terry. You may return at 2 o'clock.

Dr. TERRY. Yes, sir, whenever you say, sir.

The CHAIRMAN. We will hear you and your statement at that time.

The committee will adjourn until 2 o'clock.

(Whereupon, at 12:45 p.m., the hearing was adjourned, to reconvene at 2 p.m. of the same day.)

AFTERNOON SESSION

Mr. ROBERTS. The committee will please be in order. Our next witness is well known to our committee, Dr. Luther Terry, Surgeon General of the United States. We are delighted to have you, Dr. Terry.

Dr. TERRY. Thank you, sir.

Mr. ROBERTS. Your appearances here have always been very fine and very beneficial to our committee. Of course, I suppose I am somewhat prejudiced in view of the fact that you come from my native State. I welcome you to our committee, and you may proceed with your statement.

STATEMENT OF DR. LUTHER L. TERRY, SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE; ACCOMPANIED BY BOISEFEUILLET JONES, SPECIAL ASSISTANT TO THE SECRETARY FOR HEALTH AND MEDICAL AFFAIRS

Dr. TERRY. Thank you, Mr. Chairman. I trust that your prejudice is not such that it has prevented your being objective.

To members of the committee I apologize in certain respects with regard to my statement. The prepared statement will go over some of the material which we discussed at least in part this morning.

However, since my statement is brief, Mr. Chairman, I would like to present the statement to you as we had prepared it, in the hope that it would clarify some of the questions raised this morning.

Mr. ROBERTS. Proceed.

Dr. TERRY. In projecting needs for professional health personnel, attention has been focused primarily on the ratio of manpower to population. Thus, our legislative proposals have set as a minimum goal the maintenance of the present ratios for physicians and dentists. Even to reach this minimum goal, as the President noted in his state of the Union message, will require a 50 percent increase in the capacity of our medical schools over the next 10 years and a 100 percent increase in dental school enrollments.

There are several aspects of the supply picture, however, that tend to be obscured when we talk in terms of ratios alone. The need to increase our manpower supply is more urgent than the ratios suggest.

To get some perspective on this problem, let us go back to 1930 and look at 10 young men newly graduated from medical school. What did these young doctors do then? If they followed the usual pattern for that time, all of them entered hospitals for 1 year of internship. A few had further training.

At the end of 1 year, most of them were in practice. After 2 or 3 years, 8 of the 10 were in private practice—6 of them general practitioners, 1 a specialist in internal medicine, and 1 a surgeon. Of the other 2, 1 was serving in a hospital; the other was in public health or other public service.

In effect, 7 of the 10—the 6 general practitioners and the 1 specialist in internal medicine—were in practice as family physicians.

Now let us look at 10 typical graduates today. All of them will serve a 1-year internship. Most of them will continue with residency training in a hospital for an average of 3 years. Many of them will serve for 2 years in one of the uniformed services. Not until about 5 years after graduation will most of them have completed training and obligated service.

At that time we will find 7 of them in private practice—of whom 2 will be general practitioners, 2 will be in internal medicine or pediatrics, 1 or 2 in surgery, and 1 or 2 in other specialities. Two will be engaged in hospital service or training, one will be in teaching, research, or some other field.

Thus we find that two significant changes in the patterns of activity of new medical graduates have taken place. First, after the completion of medical school it now takes about 5 years, rather than 1 or 2, for most physicians to enter practice. Second, in 1930, 7 out of

10 physicians became family practitioners; today, the rate is about 4 out of 10.

The implications of these changes are many. In 1930 about 70 percent of all active physicians were family physicians; today the figure is only about 40 percent. In 1930, 10 percent of our physicians were full-time surgical specialists; now the proportion is 24 percent. In 1930 only 1 percent of our physicians were psychiatrists; today they account for 5 percent.

In 1930 teaching, research, and public health took the time of less than 2 percent of all physicians in the United States; now the proportion is more than doubled. In 1936, 6 percent of all physicians were in hospital service; now the proportion is almost tripled.

I want to emphasize that even though larger numbers of young physicians are going on for specialized training and thereby are being removed from the pool available to provide family health services, this should not be looked upon as a net loss to the health care picture. Quite the contrary, with the rapid pace of advance in medical science and the increasing need for highly specialized skills in medicine, the increasing numbers entering specialty practice and the growth of teaching and research staffs are contributing greatly to overall improvement in the quality of medical care.

In fact, the increases have been too small. There are today many examples of unmet need in fields other than family practice. Outstanding among them is the lack of an adequate number of psychiatrists in mental hospitals and mental health clinics. Vacancies in general hospital staffs are a threat to the health of the community generally.

As Surgeon General of the Public Health Service I am only too well aware of the difficulties of recruiting physicians for essential public health positions—so great is the competition for specialized medical manpower.

At the same time, there is real cause for concern in the rapid decline in the supply of family physicians. Turned another way, the figures I have given you mean that whereas in 1930 each family physician—including general practitioners, internists, and pediatricians—had a potential patient load of 1,300, today that potential load has reached 1,900. By 1970 it will certainly be well over 2,000.

All this has occurred in the face of greatly increased consumer demands for physicians' services. Most of you are familiar with the increase in the proportion of old people and small children in the population—the very groups who require the most physicians' care.

Almost as well known is the fact that rising educational and economic levels are increasing demands for physicians' care. The growth of health insurance and other health benefits is removing more of the economic barriers to needed service. New ways of extending the lives of chronically ill patients also place more demand on the time of medical practitioners.

Over the past 10 years the output of our medical schools has lagged behind population growth. The physician-population ratio has stayed almost constant only because foreign-trained physicians have filled such a large part of the gap between population growth and increased medical school output. If it were not for the foreign-trained physicians, the ratio of physicians to population would have dropped almost 10 percent below its present level.

To expect physicians to provide increased amounts of service simply by treating more patients in a day—seeing each patient for a shorter time and delegating more tasks to less highly trained assistants—would be unrealistic. Every possibility for improving efficiency deserves to be explored.

However, the days of the leisurely examination and frequent home calls are already long past. Even now, the patient often gets services from the nurse or the technician rather than from the doctor. There is a limit beyond which the number of patients treated by an individual physician cannot be increased without impairing quality of care.

What I have been saying up to now about physicians also applies in considerable degree to dentists and professional public health personnel. The dentist-to-population ratio in the United States has dropped over the past 20 or 30 years and will continue to fall over the next 10 years. But in addition, an increasing proportion of dentists are entering specialty practice, research, and other fields of activity besides general care of patients.

Demands for dental service are mounting with increasing appreciation of the value of these services and growing ability to pay for care. Professional public health personnel are needed in increasing numbers, relative to population, as communities develop new and strengthened service and research programs in this area of activity.

Looking ahead, we see no alternative to a very substantial increase in the output of professional health personnel in the United States. The longer this increase is delayed, the greater is the hazard to the Nation's health.

Mr. ROBERTS. Thank you, Dr. Terry. I appreciate your statement very much, and I think the comparison of the numbers who became general practitioners or family physicians back in 1930 with what it is today points out a very important fact.

We have had a lot of testimony that many communities, especially small rural communities, have a very hard job getting general practitioners out of those areas. Do you feel that the forgiveness section of this bill will be some incentive to bring doctors to these communities that I am speaking of?

Dr. TERRY. Frankly I feel it will help, sir.

Mr. ROBERTS. There is, I believe, a nursing section in this bill. We have had a commission working on that problem. Do you know or have a pretty good idea of when that report will come up before Congress?

Dr. TERRY. Mr. Chairman, the consultant group which was appointed almost a year and a half ago has gone into a very detailed study and has now presented the final study to me.

At the present time the report is being studied in the Public Health Service and in the Department in relation to what position we should take.

However, we are not prepared at this time to submit specific recommendations pertaining to the nursing profession that might be included in H.R. 12.

I think this should be brought out. This morning we tended to talk physicians, sometimes talking about dentists, but I think that we might have been misunderstood by not having mentioned nurses, for this is one of our areas of very great shortage.

Mr. ROBERTS. My thinking is it would be very helpful to the committee if the work of that Commission could be made available to us before we go into executive session on this bill, because as you know there is a lot of feeling in the country that we will need a nurses bill.

I think if you knew something about that report, it would be very helpful to us before we take action on this bill.

Mr. JONES. Mr. Chairman, it has been the purpose of the administration to present to you a special recommendation having to do with nursing. This the President made clear in his health message last year, and the consultant group appointed by the Surgeon General was to develop the data on which a legislative program could be based and recommended to you.

It would be our hope that you could proceed with this legislation and give the administration opportunity to develop a legislative program for nursing, and make that the subject of special consideration by your committee at a later date.

Mr. ROBERTS. Do you mean to imply by that that we should not put any stress on grants for nurses in this particular bill?

Mr. JONES. No, sir. We think that the provision which your committee made last year, which is now in H.R. 12, to include construction grants for collegiate schools of nursing, would be quite in keeping with what would be recommended later.

What I am saying is that I would leave this as it is, if you wish the recommendation, and then subsequently we would bring other recommendations beyond construction grants for teaching facilities.

Mr. ROBERTS. Those other recommendations would have to do with scholarships perhaps?

Mr. JONES. Yes, sir, and whatever the needs that would develop by virtue of this study.

We think nursing is a shortage area with a complete range of training activities that require special consideration over and beyond this particular bill as a vehicle, and we would much prefer to give you recommendations in a package for nursing, independent of this bill except for what you have properly added, construction grant authorization for collegiate schools of nursing.

Mr. ROBERTS. Thank you very much.

Dr. TERRY. On the other hand, Mr. Chairman, I think we can very well anticipate that the consultant group's report will probably, almost certainly, be available to you before final action is taken in the committee on this bill.

Mr. ROBERTS. Thank you very much. Mr. Chairman.

The CHAIRMAN. Doctor, you contemplate having that report out right away, don't you?

Dr. TERRY. Yes, sir. Certainly before the end of the month.

The CHAIRMAN. It would be very interesting to have it, if it includes the matters which are here before us. Insofar as the report concerns other programs pertaining to nursing since these are entirely different subject matters it should be given consideration separate and apart from this program.

Dr. TERRY. That is the way we felt about it, sir.

The CHAIRMAN. I would like to ask for a little further clarification as to how the loan provision would work, as you understand it, in this

proposal. We provided last year in the bill reported by the committee for loans over a period of 5 years.

Dr. TERRY. Yes, sir.

The CHAIRMAN. We have a budget that was presented to us not necessarily on the loan program, but which we developed from what you recommended for scholarships, and arrived at the figures which were included in the report.

Do you have any more recent estimates of the cost required to meet the needs, should the loan provision be agreed to, in view of the AMA program and the opportunities on the local level to meet the needs?

Dr. TERRY. We do, Mr. Harris, have some estimates of the cost of the loan program by years.

The CHAIRMAN. Would you supply them for the record?

Dr. TERRY. Yes, sir. May I give it to you, sir?

The CHAIRMAN. Yes, if you can briefly.

Dr. TERRY. For instance, in 1964 we would expect it to be about $5,100,000.

The CHAIRMAN. How much?

Dr. TERRY. $5,100,000.

The CHAIRMAN. All right.

Dr. TERRY. In 1965 $10,200,000; 1966 $15,400,000; 1967 $20,600,000; 1968, $21 million.

The CHAIRMAN. Those figures are included in the bill. Did we get them from you or did you get them from us?

Dr. TERRY. I am not sure, but I think they are reliable figures, sir.

The CHAIRMAN. I think you can be safe in that statement either way.

Now would the provisions for loans in 1966, for example, include the amount that would be made available for the student who entered with a loan for the first year of 1964?

Dr. TERRY. Each year the school would make a determination of the individual student's needs, and would base the loan to that student on the amount of funds they had available and the relative need of the student.

Particular priority will be given, as brought out in the committee's report, to first year students in terms of trying to attract more promising youngsters into medicine, but at the same time the loans would be available as I understand it, sir, to any level of school during that particular year.

The CHAIRMAN. Maybe you don't understand what I am talking about or at least trying to get at. I would assume that any student with ambition to go to medical school, who did not have the funds to meet the high cost that goes with it to start with, would be in the same position after the second, the third, and even the fourth year as he was in he first year. By that I mean there would be very few who would strike it rich during the time they go to school.

Now the point I am trying to make is that if a student enters in 1964 and you make a loan out of the $5 million which is authorized for the first year, in order for him to get the loan in the second year you have to have authority in the second year.

Dr. TERRY. Yes, sir.

The CHAIRMAN. And if he were to follow all the way through in meeting the need requirements, in order for him to get the loan in

the third and fourth years, a provision for that many years ahead has got to be provided.

Dr. TERRY. That is right, sir.

The CHAIRMAN. All right. That being true, as to the point I raised this morning, what would you do about the new man or the man who is just entering medical school in 1967, for example?

Dr. TERRY. I think you will notice, Mr. Harris, in those figures I gave you, that there is an escalation of roughly $5 million a year for the first several years, which would allow this expansion in the loan program to take place. This is the reason for the increase.

The CHAIRMAN. Yes, but you don't have authorization beyond 1967, so would he be permitted to have a loan even though you have authorization for only 1 year?

Dr. TERRY. Certainly we could not allot any funds without an authorization. I gave you the figures, our estimated figures for 5 years beginning with 1964.

The CHAIRMAN. What I am trying to get at is this. Regardless of how many years it runs, the authority runs from a given period of time to a fixed period of time.

Dr. TERRY. Yes, sir.

The CHAIRMAN. And you stated this morning as did the Secretary, that you could not administer a loan program with this provision because there wouldn't be sufficient time.

Dr. TERRY. I beg your pardon, Mr. Harris, you misunderstood me. I did not raise it with regard to the loan fund. I don't feel that any 5-year limitation would be any serious limitation to us in relation to the loan program.

The thing that I am more concerned about is the construction program if one talks in terms of, for instance, 3 years as mentioned this morning, because it takes such a long time of planning and raising funds at the local State level, that there would be a serious detriment to the construction program if one talked in terms of 3 years, in my opinion. Five years I think would be perfectly reasonable, sir.

Now it is entirely possible that we could conduct the loan program on the basis of a shorter limitation, time authorization, such as 3 years.

The CHAIRMAN. I am glad to have that clarified because I don't share the great concern with a 3-year construction program you have indicated.

We have had that brought to our attention before with respect to other programs. The Congress has met it, where we have been shown that the need was there and the programs were going well. We have always been able to obtain even more enthusiasm for working out a better program which, with each extension, we have been able to have, and that includes the hospital program.

Doctor, as you know the hospital program has been extended time and time again, and it is going to have to be extended again next year, isn't it?

Dr. TERRY. Yes, sir. It expires in 1964.

The CHAIRMAN. And you haven't run into any serious difficulties with your hospital program, have you?

Dr. TERRY. In general I believe our extensions of the Hill-Burton program, sir, have been 5 years.

The CHAIRMAN. But you haven't had any trouble with it when it only had 1 or 2 years to run?

Dr. TERRY. It has been a most successful program, Mr. Harris.

The CHAIRMAN. Regardless of whether the program is 3 years or 5 years or 10 years, we would have a better program, in my judgment, as I said this morning, where we get everybody back in a reasonable time and go over it—become familiar with the needs, improve the extensions that are necessary, and make improvements each time. I don't think that we have yet failed to enhance the program by doing so and feel that it is the proper duty and responsibility of the Congress to pursue this. I am willing to try it.

I was willing to try it with the Airport Construction Act—2 years ago, wasn't it—and I know how greatly concerned so many people were about it. But to the amazement even of those in the administration who have such great concern the arrangement we had is working out fine.

The Congress is going to still be here. I may not and you may not be, but if it is a good program and we can chart the course, why, whoever is here will assume that responsibility at the time.

I am not concerned about it. Thank you very much. We appreciate having your testimony on this subject. I have taken more time than I should have.

Dr. TERRY. Thank you. May I say just one word in this respect. I would certainly defer to your experience and judgment in this respect. I was simply giving my personal reaction.

Furthermore, I would like to say that I don't think that any of our programs have ever suffered from having a careful review by our responsible congressional committees, and I never have any fear of this sort of thing.

The CHAIRMAN. On the contrary, Doctor, I feel that all of us have been subjected to criticism which in my judgment is justified with respect to the NIH program, just because we have not done precisely what we are talking about now.

Mr. ROBERTS. The gentleman from Illinois.

Mr. SPRINGER. Doctor, I want to come back to what I was on this morning. I have read your statement of this morning.

On page 2 of your statement you say "Now let us look at 10 typical graduates today."

The first significant change is that formerly, 30 years ago, you had roughly 60 percent of all of the people with general practitioners. Now that is down to what figure? No, 70 percent, and it is down to 40 percent today.

Dr. TERRY. That is right, sir.

Mr. SPRINGER. That is the problem. Now under the division here you have given there in line 6 of that page:

> At that time we will find seven of them in private practice—of whom two will be general practitioners, two will be in internal medicine or pediatrics, one or two in surgery, and one or two in other specialties. Two will be engaged in hospital service or training, one will be in teaching, research, or some other field.

Now that means the probabilities are there can't be over two of those who are going to be in rural communities, towns of smaller than 10,000?

Dr. TERRY. Oh, yes. We have some pediatricians and surgeons, general surgeons in communities smaller than that, sir.

Mr. SPRINGER. The only towns in which I have pediatricians in my district of 400,000 people is Champaign, Urbana, and Decatur. Those are the only ones with pediatricians in my district in nine counties. That means that with 70,000 and 80,000 that is 150,000, and the other 250,000 don't have any pediatrics, unless they go to these two towns.

Now what I am coming back to is simply this. The direction in which medicine is going—I am not blaming anybody, it is not anybody's fault—medicine is being directed to the cities. You are no longer having people in the rural areas who are able to get service. This is the problem.

For instance, I have two towns where the armed services just took two doctors last year, one was a Cuban and one was an Austrian. Those two communities are close together. Those people have to drive 27 miles in one direction, south 27 miles or east 27 miles to Champaign to get a doctor.

My question after all of this is this: What do you have to suggest in the form of incentives or otherwise to get doctors out in the rural areas?

This is where the problem of medicine lies.

I am not worrying about medicine in the cities. I am not worrying about my town. We have two big clinics. But I am concerned about out in the little towns that are so small they don't even have a hospital.

Dr. TERRY. I think there are several things, Mr. Springer, that can be done and some that are being done today.

One, we need more physicians. I think until this fundamental problem is corrected, that there isn't any answer, but this is basic, and is one factor.

The second thing that we have seen over a period of time is in the Hill-Burton construction program which has greatly implemented the construction of facilities in the small towns. This has tended to draw physicians to those areas.

I don't know what position we would be in today insofar as this distribution is concerned, if we had not had the Hill-Burton program, because it has certainly been very instrumental in this.

And the third thing is that one of the provisions in this bill is a forgiveness feature directed toward attracting men to shortage areas such as the small town and rural areas. And I think it is going to take many such factors working in combination to get the job done.

Mr. SPRINGER. Doctor, I have been fooling with this thing for several years clear back to 1955 when I was on the Health and Science Subcommittee. Instead of making any progress, the same thing you are saying was told to us by the Surgeon General in 1955, exactly the same thing. It hasn't made a particle of difference. The fact is that the distribution of doctors has become more one-sided than ever, so I am going to discount that one.

Now the first thing that you have is more dollars. I don't think this will be a solution unless the doctors go to the places they are needed. We can produce 100,000 more doctors, but unless they go out in the places that I am talking about, it doesn't make any difference how many you produce.

But the point I am coming to, we still do not have a program which has any incentive, and I don't think there is any way under our system

in this country that we can do it except by incentive to get them out in the areas where they ought to be.

We are in the age of specialty in medicine, and I realize that, but when you have only 2 people out of 10 that are coming out of hospitals, 2 out of 10, that means roughly that those 150 I believe that Mr. Harris pointed out that will come out of the University of Illinois next June, only 25 of those, is that about right, or only 30 will go out in the rural areas.

That means roughly the other 120 are going into the city of Chicago, Champaign, Decatur, or will go off to California, Los Angeles.

This is one of the areas that I think ought to be gone into that nothing has been done about. You are coming to us talking about more dollars, and yet there is the greatest amount and distribution of dollars today than ever before in our history. Unless you come back here 3 years from now with some solution, I don't know that I am going to be for extending this program.

I think that the rural Congressmen, the ones who have these problems, are going to insist that something be done about this particular thing, and you had better be thinking about it in the 3 years between now and the time that you come back.

That is all, Mr. Chairman.

Dr. TERRY. We have certainly done a lot of thinking about it, Mr. Springer.

The CHAIRMAN. Will the gentleman yield?

Mr. SPRINGER. Yes.

The CHAIRMAN. I am quite concerned. I represent a rural area and have personal knowledge of the existing conditions which Mr. Springer has emphasized. I am quite concerned about this program, and I should think, Doctor, that when we take up the extension of the Hill-Burton program, we also should consider adding to it. Very careful attention should be given to this problem. Small clinics and so forth in these rural areas can provide the incentive that he speaks of for bringing medical service to those areas.

I note that there is one thing that doctors always want. Where a small town has a very attractive clinic to which they can go they become interested in that community. I think that in considering the extension of that program—and I hope it will be—we might be able to do something about this problem which Mr. Springer brings up.

Mr. ROBERTS. Mr. Chairman, just one comment on that line. Isn't part of the trouble, Dr. Terry, that your master plans for the various States under the law as written now are submitted by the State themselves?

In other words, they set up the priorities as to where these hospitals are built. I just tried to locate a hospital in a small town in my old district the other day, and I was faced with that. There is no Federal planning for that small town because that is left up to the States under the law as it is now written, is that correct?

Dr. TERRY. That is correct, sir. Frankly I think that is where the responsibility ought to be, Mr. Roberts.

I think that the people at the State level should know we can do a lot to be of assistance to them with technical assistance and studies and that sort of information, but they are the ones in my opinion to make the decision.

Mr. ROBERTS. Of course, there again I think that some of the matching money, they have to go to the areas where they can more readily get their funds.

In a city of 40,000 or 50,000, there is usually a better method of raising local revenue than you would have say in a small rural county and a small rural town that is involved. So there again the economics of the thing comes into the picture somewhere.

Dr. TERRY. That is right, sir.

The CHAIRMAN. I don't want that to pass as it appears on the record, because that is not the way the program actually works. Under the Hill-Burton program plans are required of all States. You are familiar with that?

Dr. TERRY. Yes, sir.

The CHAIRMAN. And that at the outset these plans were designed with the assistance and the cooperation of your Office?

Dr. TERRY. That is right, sir.

The CHAIRMAN. And each State then has a plan in which there are small areas here and yonder and all over the State. I have one in my State, as do the rest of us, so it is not the responsibility altogether of the States.

We required that in the initial stages each State must come up with a plan, and before it received any funds, it had to have that plan approved.

Dr. TERRY. That is correct, sir.

The CHAIRMAN. And those plans are still in effect?

Dr. TERRY. That is right, sir. Some have been revised.

The CHAIRMAN. Pardon?

Dr. TERRY. Some have been revised along with the times.

The CHAIRMAN. Yes, and they should be.

Dr. TERRY. Yes, sir.

The CHAIRMAN. I know we are not discussing the hospital program now. I apologize for taking so much time, but I think this probably will be informative to each of you.

A few years ago before you came on the scene—some of these other boys back there ought to remember—we had the same problem in my State. The people in the Department of Health and Welfare in Arkansas were channeling all the funds which went to my State into the University of Arkansas hospital, when a small community down there in my district had had a bond issue collecting taxes, and could not get any help even though it qualified in every other way.

You may recall that this committee adopted an amendment which I withdrew only on condition that that serious problem would be met, and it was met.

I do think that without interfering with the States, more equitable consideration could be given by those who distribute the funds within the States.

I don't want to leave the impression that it isn't the responsibility of the Congress to have some kind of a program to meet these needs, because as I made it very clear in committee and on the floor of the House at that time, this program was not designed to put everything into the capital city of each State as was being done at that time. I might say that since then a much better job is being done in my own State.

Mr. ROBERTS. I don't want to belabor the point, but I just say to the chairman I would like to avail myself of his services, because I know one or two situations where I need some help.

The gentleman from Missouri.

Mr. HULL. Dr. Terry, I represent a rural area in a fast-growing suburban area. You talk about this forgiveness of those general practitioners who might come out to one of those areas.

How long would he stay in that particular area, just long enough to get forgiven, or what assurance would that locale have of his staying there any length of time?

Dr. TERRY. The only assurance that this legislation provides is that he would get 10 percent, a maximum of 10 percent forgiveness per year for 5 years.

Now I think even if this were very instrumental in pulling a young physician into a community for 5 years, in the first place he would no doubt set down some roots there, and there would be a good chance of his remaining there, particularly if he had the facilities with which to work and adequate opportunity.

But I think this is probably about as long a time, Mr. Hull, as you can exercise control through this sort of provision.

Mr. HULL. I just wondered how much control would be involved.

Dr. TERRY. Well, the person has to be certified to be practicing in a shortage area, certified by the State health department.

Mr. HULL. As we all realize, we do have a shortage of doctors. I was rather interested in this. Even now the patient often gets service from the nurse or the technician rather than the doctor. That has been true for many many years in the hospitals. A busy doctor doesn't have time enough to look at the chart, so this is nothing new.

Dr. TERRY. I think we have seen a great tendency in this direction, sir, in recent years.

Mr. HULL. It has been more than recent, because I have had some experience with that. That is all. Thank you, sir.

Dr. TERRY. Yes, sir.

Mr. ROBERTS. The gentleman from California.

Mr. YOUNGER. Thank you, Mr. Chairman.

If this question of the general practitioner is one of the chief problems, as it apparently is, and you have dropped from 7 out of 10 in 30 years to 2 out of 10, what do you anticipate will be the reduction in the next 20 years?

Will we get down to no general practitioners, or will be down to one, or is there a tendency to go back into general practice?

Dr. TERRY. In the first place, Mr. Younger, the figures that we gave were 7 and 4, because for both of those years, 1930 and 1960, we included not only the general practitioner, but also the internist or specialist in internal medicine, and the pediatrician, so that the 7 for 1930 included those three groups as did the 4 later on.

Certainly there has been a tendency in the medical profession toward specialization, I think possibly an overreaction in this direction. I am hopeful that with the rising needs, with the rising accessibility of better facilities, hospitals, clinics, and groups in which to practice in the small towns and more rural areas, we will see a greater tendency toward family practice in the next few years.

Mr. YOUNGER. Do you think it would be helpful if we made an amendment that no loan would be made to any student unless the

student agreed to practice in an area that has been designated as an area in need of physicians?

Dr. TERRY. This would be an action which I would regard as an overreaction to a difficult situation, sir. I would hate to see this done.

Mr. SPRINGER. Would the gentleman yield for one question?

Mr. YOUNGER. Yes.

Mr. SPRINGER. Just this last week I have been trying to do something about this in Illinois. The Illinois Farm Federation, they have the right now to select under the law—this is what we are trying to do to correct the situation—10. That is entirely up to the Illinois Farm Bureau Federation or the Agricultural Association, to select 10 to the University of Illinois next September.

Just this weekend I had one of those boys up before them. Actually the Illinois Farm Bureau had almost 150 boys applying for those 10 places that could not get into the university.

The CHAIRMAN. Could or could not?

Mr. SPRINGER. Could not. In other words, they could not qualify, and were trying to get over into this program where they are selected.

So I just give you that idea that here is one way they thought to do this, and in order to do that they had to sign a pledge that they would practice in an area that is designated as short of doctors.

Now here is one way to get at it—this is an inducement to enter the school. Now, the unit from Mississippi, I think the gentleman will remember last year that Mr. Williams, the ranking Democrat of the majority, mentioned that there is a provision in the Mississippi law with reference to getting at this very problem.

I am not so sure but what we ought to enter into that or something like that ourselves, to be sure that we do get these people out where the need is greatest.

Thank you, Mr. Younger.

Dr. TERRY. In that respect, even though I think our greatest shortage is of family physicians in the smaller towns and rural areas today, I don't think this constitutes our only shortage, and I think if we therefore directed the bill or provisions completely toward this, that we would distort the program and it would not be as effective as the sort of provisions which are in H.R. 12, sir.

Mr. SPRINGER. You may be right on that, but let me say to you, and I am coming back to something I know something about, and that is the 22d District of Illinois, where over two-thirds of all the doctors in my district are in two towns, which constitute only one-third of the district. Thank you, Mr. Younger.

Mr. YOUNGER. Do you think that it might be well to increase the amount of forgiveness from 50 percent to 100 percent on the basis of 10 percent a year, if they practiced in those areas?

Dr. TERRY. This is a judgmental decision on which I really have no better basis than you to make an opinion, but certainly if the Congress desired to do that, it will be fine with us, sir.

We are anxious, too, to assist in getting physicians into these shortage areas.

Mr. YOUNGER. This was my amendment last year. I think if we are going to be helpful, we have got to meet the problem.

I know in my area we have many doctors. We have lots of them. They like to live in California, and it is a good place to practice, and we have good hospitals and everything else, and we don't need any

more out there. We have the Stanford Medical School and the big veterans' hospital.

But I do see that there is a real and burning need in a lot of the areas, and it applies to some of the areas in California.

Dr. TERRY. Yes.

Mr. YOUNGER. And unless we can meet it in this bill, it is not going to serve its purpose. That is why I recommended the amendment last year of doing the same thing which we tried to do in the defense education bill as to teachers, in trying to get the graduates, into the teaching field.

Now the question is a matter of inducement. Will 100 percent or 75 percent be a greater inducement than 50 percent?

Dr. TERRY. I should think probably so, but I don't have any reason to——

Mr. YOUNGER. You would have no objection to it?

Dr. TERRY. No, sir, I would have no objection to it.

Mr. YOUNGER. I notice in your paper that one of the shortages is probably accounted for by the fact that years ago only 1 percent of our physicians were psychiatrists, now it is 5 percent.

Dr. TERRY. Yes, sir.

Mr. YOUNGER. What accounts for that? Are we getting a little mentally disturbed all over the country?

Dr. TERRY. I think probably we are coming closer to realizing what we need, and beginning to more adequately meet the need in that direction than we did in the past, sir. I certainly don't feel that there is any oversupply.

Mr. YOUNGER. From your testimony I would conclude that you probably think there is an oversupply of patients, that the oversupply is here?

Dr. TERRY. No, sir; I would not say there is an oversupply of patients, but I would say that the ratio of patients to physicians is not reassuring, and particularly as we look at the next few years.

Mr. YOUNGER. I think there is a lot to what you say. I think there is need of psychiatry, especially in the schools where we are greatly in need apparently of some psychiatry and guidance in connection with the juvenile delinquents.

Mr. JONES. Mr. Younger, may I report to you, sir, the President has sent to the Congress a special message on this subject today, which covers it in considerable detail.

Mr. YOUNGER. We get a message every day we meet, you know. There is nothing new to that. That is a regular custom every day when we meet. The gentleman from the White House is there with a message in writing.

Mr. JONES. Well, you have got one on this subject.

Mr. YOUNGER. Yes. We may have a superfluous amount of messages.

Now on the question of loans, again on page 19 in the bill it says:

Payable over a 10-year period which begins 3 years after the student ceases to pursue a full-time course of study at a school of medicine, osteopathy, or dentistry including such 10-year period or periods up to 3—

and so forth.

Now according to your testimony, that in general it is about 4 years after a doctor graduates from medicine school before he is actually in practice, is that right?

Dr. TERRY. That is right, sir.

Mr. YOUNGER. He must start paying in 3 years. Don't you think that ought to be changed to meet the potential of the doctor?

Dr. TERRY. I am sure that such a requirement in individual cases would cause difficulties. Overall it probably would not, sir.

In other words, when a student or a physician gets along to that stage of his training, he is usually beginning to get paid something for his residency training, and would have some money in contrast to what he has immediately when he gets out of school.

But I am sure that in individual circumstances, it would impose problems where a man was taking training say which extended for 5 years after his graduation.

Mr. ROGERS of Florida. Will the gentleman yield?

Mr. YOUNGER. Yes, I will be glad to.

Mr. ROGERS of Florida. What has happened to this program that I recall reading about, I think it was even started here at the University Hospital at George Washington University, in trying to condense the educational program for medicine.

Dr. TERRY. There have been quite a few studies within medical schools in this country in terms of both improving the quality and type of the curriculum as well as attempts to shorten it.

I think almost uniformly one can say that so far every attempt to shorten the curriculum has not been successful because of the volume, the massiveness of the material to be covered.

Mr. ROGERS of Florida. Thank you, Mr. Younger.

Mr. YOUNGER. I am thinking of the student who in all probability has borrowed money under the National Defense Act or through some other source during his 4 years of academic work.

Dr. TERRY. Yes, sir.

Mr. YOUNGER. I mean he has that loan, and then he will have the medical school loan on top of that.

Dr. TERRY. Yes, sir.

Mr. YOUNGER. We have to correlate the time that he should have to start paying back on both loans.

It seems to me that we may have to stretch that over a longer of period or make a period in there to give him more time than 3 years from the time that he finishes his medical school before he has to start paying on the loan.

If we write it into the law too severely, there will be no adjustment that could be made. In other words, the university or the college or the Surgeon General would not have the option to extend the time.

Dr. TERRY. One of the problems of course, with NDEA is in that respect it would not be 3 years after he had graduated but 1 year when he would have to start paying back on NDEA loans.

Mr. YOUNGER. I think we ought to give some serious consideration to this, to see whether or not this is ample time for him.

I think we ought to give serious consideration to it, and I think we ought to have some advice from you as to whether or not our incentive is enough in this bill to divert the doctors from the cities to the area where his service is going to be needed, if the bill is to be of any help.

The CHAIRMAN. Will the gentleman yield?

Mr. YOUNGER. Yes.

The CHAIRMAN. I want to say here that I want to thank the Secretary, and Dr. Terry for supporting the provision. I remind the

gentleman it was not the administration or those who were responsible for sending it up. The committee put that provision in the bill, and the committee should be very proud of it, and I think we feel that it helped the situation.

That was our intention, and the fact that they come along supporting us in this effort I think is commendable, and I think it is up to us to write what provisions we think we should have in it to carry out what we intended.

Mr. YOUNGER. That is true, Mr. Chairman. But it seems to me that the doctors, and especially the Surgeon General, ought to know what type of incentive is more likely to succeed.

Now so far as I know, unless some of the new men are doctors, we have no doctor on our committee, and I don't know just what incentive prevails in the doctor's mind or in a medical student's mind. That is why we wrote this idea in the bill last year.

As I say, you will recall that was one of the provisions that I sponsored originally, as I recall. I am not so sure from what has been testified to today that there is a sufficient incentive to get the doctors into these fields.

The CHAIRMAN. The gentleman from California has a splendid idea we thought. We accepted it, and I would like to suggest that he give it a trial before he drops it and develops some other idea.

Mr. YOUNGER. I thought that the purpose of this hearing was to try to improve the bill if we could. That is what I had in mind, and that is what I am trying to get from the Surgeon General, is some ideas whereby we may improve it from what we did last year. That is all.

Mr. ROBERTS. The gentleman from Florida.

Mr. ROGERS of Florida. Thank you, Mr. Chairman. Just a question or two.

It is always good to see you, Dr. Terry, before the committee.

Dr. TERRY. Thank you, Mr. Rogers.

Mr. ROGERS of Florida. I appreciate your good work and that of Mr. Jones as well.

I think it would be helpful to us if it were possible to gather the facts showing what we think really is a shortage in the medical profession, and a projection of that shortage. I feel certain such projections have been made, but I don't know that I have seen any actual figures, and I think it will be helpful if there is any way these can be made available. I think it would be well for us to keep in mind the facts concerning this shortage, and I think too it will be good to show what this bill would do in helping to supply that need, and wipe out this shortage.

In other words, we won't get started on the program here of actually producing doctors, if this is passed, until when?

Dr. TERRY. It will be several years.

Mr. ROGERS of Florida. Several years?

Dr. TERRY. In other words, the earliest result you could get would be in the stimulation and expansion of existing schools.

Mr. ROGERS of Florida. Yes.

Dr. TERRY. This at the minimum would be 3 years.

Mr. ROGERS of Florida. To even get them to take in some freshmen, would be at least 3 years then?

Dr. TERRY. If it involves the creation of a new school, it will be a minimum of 5 years.

Mr. ROGERS of Florida. That is really getting them in, and then how many years to produce a doctor?

Dr. TERRY. No, I am thinking of getting them out. We might give some assistance to schools already in existence.

Mr. ROGERS of Florida. Would this get more students? I thought you would be taking them in, won't you? Can you get new students?

Mr. JONES. To get them in would take from 1 to 3 years.

Mr. ROGERS of Florida. Anywhere within that period?

Mr. JONES. And 4 years to get them out after that.

Mr. ROGERS of Florida. Yes.

Mr. JONES. So the absolute minimum is 5 to 7 years.

Mr. ROGERS of Florida. About 5 to 7 years before we would really begin feeling the benefits of this bill.

Dr. TERRY. That is right.

Mr. ROGERS of Florida. And I think if there is a projection of what our needs will be, and what our present facilities would produce, I think such a projection might be helpful to the committee in explaining this to the House.

Mr. JONES. This is the basis upon which the projections have been made which have led to a prognosis of the need for 50 percent more graduates for medical schools and 100 percent more from dental schools, and it is based on a report "Physicians for Growing America," which was a rather extensive study.

Mr. ROGERS of Florida. I wondered how many would be produced by this bill to help fill this need. If we could have some information of that type, I think it would be helpful. It would be for me.

Dr. TERRY. We will be glad to supply it, sir.

(The information requested follows:)

Projected requirements for physicians and dentists

	Physicians	Dentists
Present number of graduates	7,500	3,300
Number who will be graduated in 1975 at present and planned levels of production	7,900	3,500
Number of graduates needed in 1975 to maintain 1959 ratio to population: Basis for H.R. 12	11,000	6,200

Mr. ROGERS of Florida. Thank you. Thank you, Mr. Chairman.

Mr. ROBERTS. Thank you, Mr. Rogers.

The gentleman from California.

Mr. VAN DERLIN. No questions.

Mr. ROBERTS. The gentleman from Pennsylvania.

Mr. CURTIN. Thank you, Mr. Chairman.

Dr. Terry, is there anything that your office or, so far as you know, HEW does or can do, in addition to what you can do under Hill-Burton, to encourage doctors to stay in general practice in the rural communities?

Dr. TERRY. I don't know of anything specifically that we do beyond the Hill-Burton program. There has been a general expression by myself as well as many members of the staff repeatedly with regard

to this need, imploring the medical schools and hospitals to pay more attention towards training people for this particular type of practice.

On the other hand, I think there has been nothing more specific than that.

Mr. CURTIN. Except for the present Federal program to aid in the establishment of hospital clinics in the various localities where you feel the needs exist, there are no other inducements that you now legally have to encourage this general practice in rural communities, is that true?

Dr. TERRY. Of course in the Hill-Burton program the establishment of general hospitals in small towns and communities has been very important, I think, in keeping physicians in those areas, because physicians today are just not going to practice where they do not have access to adequate facilities. This is the reason the Hill-Burton program to my mind has been instrumental in this direction.

Mr. CURTIN. And the Hill-Burton program is the only inducement to which you presently have access?

Dr. TERRY. I think this is correct, when you speak of a well-defined inducement; yes, sir.

Mr. CURTIN. Thank you.

That is all, Mr. Chairman.

Mr. ROBERTS. The gentleman from Massachusetts.

Mr. KEITH. No questions.

Mr. ROBERTS. The gentleman from North Carolina.

Mr. BROYHILL. I think I understood the overall goal was an increase of 50 percent in graduates of medical schools, is that correct?

Dr. TERRY. Fifty percent for graduates of medical schools, 100 percent in dentistry.

Mr. BROYHILL. Do you have any projections, any figures or information as to what increase in graduates you would have if this bill were not passed, if there were no program of this sort in the works?

Dr. TERRY. We have some estimates. I don't know how accurate they are, sir.

One of our problems in that respect is, as you know, that many schools and universities today are planning on establishing or expanding medical schools. Many of them are holding back today because they do not have the finances to do it.

Now if they realized that this bill was going to fall through, whether they eventually would be able to raise the funds in the next few years we do not know.

Mr. BROYHILL. But you don't have any projections along this line, do you?

Dr. TERRY. May I——

Mr. BROYHILL. I mean from a percentage standpoint.

Dr. TERRY. Here in our report "Physicians for a Growing America," to which we referred earlier, at the time, 1959, when this was made, there was a projection of the number of physicians who would be available at the present production rate.

There is another column which shows recent growth rate as projected through to 1975, and there is a third column that shows what will be necessary to maintain the ratio of physicians to popu-

lation just without any consideration of what the medical schools are doing, but what will be necessary to maintain that ratio.

For instance, the recent growth rate as of 1959 indicated that instead of producing 7,400 as we were in 1959, that by 1975, with that growth rate, we would be producing 9,000.

Now this is far short of what we would need, because we would need at least 11,000 in order to meet just the population growth. I think this is probably a reasonably accurate projection on the basis of whatever information we have or had at that time.

Mr. BROYHILL. In other words, it would be a reasonable projection on the basis of experience of say the past 10 years?

Dr. TERRY. That is right, sir. That was basically the foundation for that projection.

Mr. BROYHILL. It has been brought out that new medical schools—I am thinking particularly of medical schools here—have been built recently.

Dr. TERRY. Yes.

Mr. BROYHILL. What are the average or approximate average costs of these new medical facilities?

Dr. TERRY. A completely new 4-year medical school will cost in the vicinity of $10 million if it does not involve the construction of a teaching hospital as well.

In other words, if there is a city or a community hospital which can be used for the teaching facility, that is the figure. If a teaching hospital is needed, the cost of constructing it will be in the vicinity of $12 million for a 500-bed hospital, and something in the vicinity of $15 million for a 700-bed hospital. So that if you have the whole thing to build, you get up to from $20 to $25 million.

Mr. BROYHILL. In other words, the medical school at the University of Florida or the University of Miami would cost in this vicinity?

Dr. TERRY. The University of Florida Medical School cost about this amount. On the other hand, if a medical school were created in connection with a large existing hospital which had basically the clinical material necessary for the teaching there, the amount that would be necessary to adapt that hospital for teaching purposes would be much much less.

Mr. BROYHILL. I am asking these questions for my own benefit.

Dr. TERRY. Yes, sir.

Mr. BROYHILL. It is perfectly possible that it is in the hearings of last year. Maybe this other question I am going to ask is in here, and I was looking for it, but I was not able to find it. The amount of money say over the past 10 years actually invested in medical schools and in dentistry schools——

Dr. TERRY. In construction?

Mr. BROYHILL. Yes, in construction; I am certain that this is available. If you can just tell me where to get it I will be glad to look it up myself.

Dr. TERRY. If we may, we would like to submit it for the record. I am sure that the figures are available. We do not have them immediately at hand, Mr. Broyhill.

Mr. BROYHILL. That is all.

(The information requested follows:)

MEDICAL SCHOOLS

Expenditures of U.S. medical schools for construction (completed) of teaching and research, hospital and medical service, and other facilities, 1949–62

Type of facility	Expenditures for construction and equipment (thousands of dollars)				
	Total, 1940–62	1949–59	1959–60	1960–61	1961–62
Total	$1,831,251	$1,633,600	$94,774	$53,806	$49,071
Educational and research	641,858	541,100	40,713	38,064	21,981
Hospital and medical service	1,116,002	1,049,000	34,018	10,815	22,169
Other	73,391	43,500	20,043	4,927	4,921

Sources: Association of American Medical Colleges. Datagrams, February 1962. Journal American Medical Association. Education Number, Nov. 17, 1962.

DENTAL SCHOOLS

During the period 1948–61, a total of about $84 million was spent on construction and equipment of dental school facilities.

Source: Public Health Service, Division of Dental Public Health and Resources.

Mr. ROBERTS. I believe that is all from the committee, Doctor.

Dr. TERRY. Thank you, Mr. Roberts, and I would like to say that I greatly appreciate the amount of time the committee has given me here, because we feel that this is a tremendously important program, and we are most anxious for the committee to get as much information on the subject as it can.

Mr. ROBERTS. I feel that Alabama and Georgia have made a fine contribution today.

Mr. JONES. Thank you, Mr. Chairman.

(The following additional information was later received for the record:)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
Washington, D.C., February 25, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. HARRIS: As you have requested, we are supplying for the record additional information about the distribution of physicians in the United States, with particular reference to rural counties.

Sincerely yours,

DAVID E. PRICE,
Acting Surgeon General.

URBAN-RURAL DIFFERENCES IN PHYSICIAN SUPPLY

Physicians, for both economic and professional reasons, tend to concentrate in metropolitan areas. These areas are usually characterized by high per capita income and they offer opportunities for access to large hospitals, frequent contacts with the hospital staffs and, often, access to medical teaching centers. In 1960, 64 percent of the population were living in the counties that are included in these metropolitan areas.

In the following tables the 3,101 counties of the United States have been divided into 4 groups: metropolitan, adjacent, isolated semirural, and isolated rural. The availability of figures on population and physicians by county dictates the use of the county as the unit, although counties in their entirety, do not necessarily make a satisfactory unit for measuring the adequacy of the supply of physicians.

The four groups are defined as follows:

Metropolitan—a county or group of contiguous counties which are essentially metropolitan in character and economically and socially integrated with a central city (or cities) of 50,000 or more inhabitants. In New England, county lines have been followed rather than towns; in Virginia, the independent cities have been counted as parts of the counties in which they had formerly been located. There are 344 counties in the metropolitan group.

Adjacent—counties which are contiguous to metropolitan counties. There are 857 counties in adjacent group.

Isolated semirural—counties not contiguous to a metropolitan county, but which contain an incorporated place of 2,500 to 50,000 population. There are 1,095 counties in this group.

Isolated rural—counties not contiguous to a metropolitan county and not containing an incorporated place of more than 2,500 population. There are 805 counties in this group.

There are 145 physicians per 100,000 population in th metropolitan counties, 72 physicians per 100,000 population in the adjacent counties, 79 per 100,000 in the isolated semirural counties, and 46 per 100,000 in the isolated rural counties:

County group	Population, 1960	Active non-Federal physicians		
		1960, number	1960, rate	1949, rate
United States	179,323,000	212,279	118.4	118.8
Metropolitan counties	113,871,000	164,605	144.6	152.1
Adjacent counties	28,453,000	20,587	72.4	77.4
Isolated semirural counties	30,396,000	24,069	79.2	79.6
Isolated rural counties	6,603,000	3,018	45.7	50.0

There is no one ratio of physicians to population that can be considered to be the right one in all situations. Demand for medical service varies from one area to another both as to amount and kind. Also, the fact that so much of medicine is practiced by specialists complicates the concept of ratios of physicians to population. Even in an ideal situation it would be expected that people in more sparsely settled areas would have to go to urban centers for the services of physicians who specialize in the less common conditions. Determination of the needs of a particular county for physicians cannot be made without a study of the local situation. However, as a rule of thumb, experience in large medical groups indicates that comprehensive medical care, including both general and specialized services, requires on the average 1 physician for about 1,000 persons. A guide for rating community needs for physicians, prepared in 1953 by the American Medical Association Council on Medical Service, considers more than 1,200 persons per physician to be a major evidence of need.

In 1960, one-third of the counties of the United States had more than 2,000 people per physician:

Physicians per 100,000 population	Population per physician	Number of counties
100 and over	Under 1,000	391
66.7 to 99.9	1,000 to 1,499	826
50.0 to 66.6	1,500 to 1,999	730
40.0 to 49.9	2,000 to 2,499	436
33.4 to 39.9	2,500 to 2,999	238
25.0 to 33.3	3,000 to 3,999	205
20.0 to 24.9	4,000 to 4,999	74
0.1 to 19.9	5,000 and over	99
None	No physician	99
Total		3,099

Detail by geographic division and State is given in table 1.

These figures are based on a count of all active non-Federal physicians (M.D.) in the United States in 1960. Omitted are physicians in military service, Veterans' Administration, and the Public Health Service. Data on osteopathic physicians by county are not available.

These figures include general practitioners, specialists, teachers, public health officers, interns, and residents in hospitals, etc. If the figures were limited to family physicians alone (general practitioners, internists, and pediatricians in private practice) the ratios of population to physicians would be substantially higher in most areas. Such information is not available at this time, although it will be available shortly.

Table 2 is a listing, by State and county, showing, for 1960, of the number of physicians, the county population, number of physicians per 100,000 population, and the county group.

TABLE 1.—*Distribution of counties in the United States by number of persons per active non-Federal physician, 1960*

Geographic division and State	Total number of counties	Persons per physician (M.D.)								
		Under 1,000	1,000 to 1,499	1,500 to 1,999	2,000 to 2,499	2,500 to 2,999	3,000 to 3,999	4,000 to 4,999	5,000 and over	No physician
United States	3,101	391	826	727	442	238	205	74	99	99
New England	67	31	25	7	3		1			
Connecticut	8	6	1		1					
Maine	16	4	6	5	1					
Massachusetts	14	11	3							
New Hampshire	10	4	6							
Rhode Island	5	1	2	1	1					
Vermont	14	5	7	1			1			
Middle Atlantic	150	63	64	15	3	3	2			
New Jersey	21	10	9	2						
New York	62	37	22	3						
Pennsylvania	67	16	33	10	3	3	2			
South Atlantic	553	52	125	111	87	64	48	22	30	14
Delaware	3	1	1	1						
District of Columbia	1	1								
Florida	67	6	15	16	13	9	4		2	2
Georgia	159	8	20	35	24	21	21	9	11	10
Maryland	24	5	7	4	4	2	2			
North Carolina	100	7	31	20	15	12	6	5	4	
South Carolina	46	3	7	10	11	7	3	2	2	1
Virginia	98	14	31	12	11	10	9	3	7	1
West Virginia	55	7	13	13	9	3	3	3	4	
East South Central	364	15	65	82	78	51	42	10	19	2
Alabama	67	1	9	15	12	11	12	3	4	
Kentucky	120	5	26	22	27	14	12	4	10	
Mississippi	82	3	15	26	20	9	6	1	1	1
Tennessee	95	6	15	19	19	17	12	2	4	1
West South Central	470	44	101	131	83	43	30	11	11	16
Arkansas	75	4	15	26	15	6	5	2	2	
Louisiana	64	5	10	12	12	10	7	5	2	1
Oklahoma	77	10	14	22	13	7	7	1	3	
Texas	254	25	62	71	43	20	11	3	4	15

TABLE 1.—*Distribution of counties in the United States by number of persons per active non-Federal physician, 1960*—Continued

Geographic division and State	Total number of counties	Persons per physician (M.D.)								
		Under 1,000	1,000 to 1,499	1,500 to 1,999	2,000 to 2,499	2,500 to 2,999	3,000 to 3,999	4,000 to 4,999	5,000 and over	No physician
East North Central	436	46	144	152	49	16	20	3	4	2
Illinois	102	14	39	38	7	1	3			
Indiana	92	8	33	30	9	6	3	2	1	
Michigan	83	9	19	30	15	3	4		1	2
Ohio	88	9	31	29	8	1	8	1	1	
Wisconsin	71	6	22	25	10	5	2		1	
West North Central	619	56	185	128	92	36	46	19	26	31
Iowa	99	12	41	22	18	2	4			
Kansas	105	13	46	25	10	3	5	1	1	1
Minnesota	87	6	33	20	14	3	7	2	2	
Missouri	115	6	14	20	22	11	144	9	13	6
Nebraska	93	10	31	21	9	4	3	2	1	12
North Dakota	53	4	10	7	8	7	6	2	3	6
South Dakota	67	5	10	13	11	6	7	3	6	6
Mountain	280	39	61	72	38	19	13	8	7	23
Arizona	14	1	4	5	2			1	1	
Colorado	63	10	18	12	5	3	2	3	2	8
Idaho	44	7	9	9	9	4	1	2	1	2
Montana	57	9	9	17	11	2	3		1	5
Nevada	17	2	3	5	2		2			3
New Mexico	32	4	3	7	5	6	4		2	1
Utah	29	4	5	8	2	4	1	1		4
Wyoming	24	2	10	9	2			1		
Pacific	162	45	56	29	9	6	3	1	2	11
Alaska	24	4	2	3	2	1	2	1	2	7
California	58	25	22	4	4	1				2
Hawaii	5	2	2		1					
Oregon	36	7	15	7	2	3				2
Washington	39	7	15	15		1	1			
NOTE.—The corresponding intervals of physicians per 100,000 population		[1]	66.7–99.9	50–66.6	40–49.9	33.4–39.9	25–33.3	20–24.9	0.1–19.9	0

[1] 100 and over.

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Alabama:				
Autauga	7	18,739	37.4	3
Baldwin	31	49,088	63.2	3
Barbour	11	24,700	44.5	3
Bibb	7	14,357	48.8	3
Blount	6	25,449	23.6	3
Bullock	7	13,462	52.0	3
Butler	12	24,560	48.9	4
Calhoun	54	95,878	56.3	3
Chambers	17	37,828	44.9	4
Cherokee	4	16,303	24.5	3
Chilton	8	25,693	31.1	4
Choctaw	7	17,870	39.2	5
Clarke	14	25,738	54.4	4
Clay	4	12,400	32.3	5
Cleburne	2	10,911	18.3	5
Coffee	11	30,583	36.0	4
Colbert	30	46,506	64.5	4
Conecuh	8	17,762	45.0	4
Coosa	2	10,726	18.6	5
Covington	23	35,631	64.6	4
Crenshaw	7	14,909	47.0	3
Cullman	19	45,572	41.7	3
Dale	8	31,066	25.8	4
Dallas	34	56,667	60.0	4
De Kalb	11	41,417	26.6	3
Elmore	9	30,524	29.5	3
Escambia	19	33,511	56.7	3
Etowah	76	96,980	78.4	2
Fayette	6	16,148	37.2	3
Franklin	17	21,988	77.3	4
Geneva	12	22,310	53.8	4
Greene	2	13,600	14.7	3
Hale	5	19,537	25.6	3
Henry	6	15,286	39.3	4
Houston	43	50,718	84.8	4
Jackson	12	36,681	32.7	3
Jefferson	834	634,864	131.4	2
Lamar	5	14,271	35.0	5
Lauderdale	51	61,622	82.8	4
Lawrence	8	24,501	32.7	5
Lee	18	49,754	36.2	3
Limestone	12	36,513	32.9	3
Lowndes	4	15,417	25.9	3
Macon	23	26,717	86.1	3
Madison	69	117,348	58.8	2
Marengo	11	27,098	40.6	4
Marion	11	21,837	50.4	4
Marshall	25	48,018	52.1	3
Mobile	273	314,301	86.9	2
Monroe	7	22,372	31.3	4
Montgomery	154	169,210	91.0	2
Morgan	48	60,454	79.4	3
Perry	6	17,358	34.6	4
Pickens	8	21,882	36.6	3
Pike	13	25,987	50.0	3
Randolph	9	19,477	46.2	4
Russell	10	46,351	21.6	2
St. Clair	10	25,388	39.4	3
Shelby	12	32,132	37.3	3
Sumter	9	20,041	44.9	4
Talladega	35	65,495	53.4	4
Tallapoosa	16	35,007	45.7	4
Tuscaloosa	84	109,047	77.0	2
Walker	27	54,211	49.8	3
Washington	3	15,372	19.5	3
Wilcox	6	18,739	32.0	5
Winston	9	14,858	60.6	4
Alabama, total	2,361	3,266,740	72.3	-------
Alaska:				
Prince of Wales	0	1,772	-------	5
Ketchikan	6	10,070	59.6	4
Wrangell-Petersburg	2	4,181	47.8	5
Sitka	6	6,690	89.7	4
Juneau	10	9,745	102.6	4
Lynn Canal-Icy Strait	1	2,945	34.0	5
Cordova-McCarthy	2	1,759	113.7	5
Valdez-Chitina-Whittier	6	2,844	211.0	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Alaska—Continued				
Palmer-Wasilla-Takotna	5	5,188	96.4	5
Anchorage	49	82,833	59.2	4
Seward	3	2,956	101.5	5
Kenai-Cook Inlet	3	6,097	49.2	5
Kodiak	2	7,174	27.9	4
Aleutian Islands	0	6,011	----------	5
Bristol Bay	1	4,024	24.9	5
Bethel	1	5,537	18.1	5
Kuskokwim	0	2,301	----------	5
Yukon-Koyukuk	0	4,097	----------	5
Fairbanks	12	43,412	27.6	4
Upper Yukon	1	1,619	61.8	5
Barrow	0	2,133	----------	5
Kobuk	0	3,560	----------	5
Nome	1	6,091	16.4	5
Wade Hampton	0	3,128	----------	5
Alaska, total	111	226,167	49.1	----------
Arizona:				
Apache	7	30,438	23.0	5
Cochise	30	55,039	54.5	3
Coconino	24	41,857	57.3	4
Gila	18	25,745	69.9	4
Graham	7	14,045	49.8	4
Greenlee	7	11,509	60.8	4
Maricopa	651	663,510	98.1	2
Mohave	4	7,736	51.7	3
Navajo	7	37,994	18.4	4
Pima	279	265,660	105.0	2
Pinal	30	62,673	47.9	3
Santa Cruz	8	10,808	74.0	3
Yavapai	22	28,912	76.1	3
Yuma	30	46,235	64.9	3
Arizona, total	1,124	1,302,161	86.3	----------
Arkansas:				
Arkansas	18	23,355	77.1	4
Ashley	11	24,220	45.4	4
Baxter	6	9,943	60.3	5
Benton	26	36,272	71.7	4
Boone	15	16,116	93.1	4
Bradley	9	14,029	64.2	4
Calhoun	2	5,991	33.4	5
Carroll	8	11,284	70.9	5
Chicot	11	18,990	57.9	4
Clark	11	20,950	52.5	4
Clay	10	21,258	47.0	4
Cleburne	6	9,059	66.2	5
Cleveland	4	6,944	57.6	5
Columbia	16	26,400	60.6	4
Conway	10	15,430	64.8	4
Craighead	33	47,303	69.8	4
Crawford	7	21,318	32.8	3
Crittenden	21	47,564	44.2	3
Cross	8	19,551	40.9	4
Dallas	4	10,522	38.0	4
Desha	12	20,770	57.8	4
Drew	5	15,213	32.9	4
Faulkner	12	24,303	49.4	3
Franklin	6	10,213	58.7	3
Fulton	5	6,657	75.1	5
Garland	77	46,697	164.9	4
Grant	3	8,294	36.2	3
Greene	14	25,198	55.6	4
Hempstead	8	19,661	40.7	3
Hot Spring	12	21,893	54.8	4
Howard	5	10,878	46.0	4
Independence	16	20,048	79.8	4
Izard	4	6,766	59.1	5
Jackson	11	22,843	48.2	4
Jefferson	55	81,373	67.6	3
Johnson	8	12,421	64.4	4
Lafayette	5	11,030	45.3	3
Lawrence	8	17,267	46.3	4
Lee	7	21,001	33.3	4
Lincoln	4	14,447	27.7	5
Little River	6	9,211	65.1	3
Logan	15	15,957	94.0	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Arkansas—Continued				
Lonoke	11	24,551	44.8	3
Madison	2	9,068	22.1	5
Marion	5	6,041	82.8	5
Miller	21	31,686	66.3	2
Mississippi	30	70,174	42.8	4
Monroe	9	17,327	51.9	4
Montgomery	1	5,370	18.6	5
Nevada	8	10,700	74.8	4
Newton	1	5,963	16.8	5
Ouachita	20	31,641	63.2	4
Perry	3	4,927	60.9	3
Phillips	19	43,997	43.2	4
Pike	5	7,864	63.6	5
Poinsett	15	30,834	48.6	4
Polk	7	11,981	58.4	4
Pope	21	21,177	99.2	4
Prairie	4	10,515	38.0	5
Pulaski	510	242,980	209.9	2
Randolph	8	12,520	63.9	4
St. Francis	12	33,303	36.0	4
Saline	13	28,956	44.9	3
Scott	4	7,297	54.8	3
Searcy	2	8,124	24.6	5
Sebastian	76	66,685	114.0	2
Sevier	9	10,156	88.6	4
Sharp	2	6,319	31.7	5
Stone	2	6,294	31.8	5
Union	53	49,518	107.0	4
Van Buren	5	7,228	69.2	5
Washington	54	55,797	96.8	4
White	21	32,745	64.1	4
Woodruff	9	13,954	64.5	5
Yell	7	11,940	58.6	5
Arkansas, total	1,503	1,786,272	84.1	.....
California:				
Alameda	1,572	905,670	173.6	1
Alpine	0	397	.....	5
Amador	4	9,990	40.0	3
Butte	86	82,030	104.8	4
Calaveras	5	10,289	48.6	3
Colusa	6	12,075	49.7	4
Contra Costa	391	409,030	95.6	1
Del Norte	6	17,771	33.8	4
El Dorado	15	29,390	51.0	3
Fresno	365	365,945	99.7	2
Glenn	12	17,245	69.6	4
Humboldt	86	104,892	82.0	4
Imperial	54	72,105	74.9	3
Inyo	9	11,684	77.0	4
Kern	269	291,984	92.1	2
Kings	36	49,954	72.1	3
Lake	13	13,786	94.3	5
Lassen	11	13,597	80.9	4
Los Angeles	9,438	6,038,771	156.3	1
Madera	24	40,468	59.3	3
Marin	256	146,820	174.4	1
Mariposa	4	5,064	79.0	5
Mendocino	64	51,059	125.3	4
Merced	58	90,446	64.1	3
Modoc	5	8,308	60.2	4
Mono	0	2,213	.....	5
Monterey	212	198,351	106.9	3
Napa	142	65,890	215.5	3
Nevada	18	20,911	86.1	3
Orange	727	703,925	103.3	1
Placer	66	56,998	115.8	3
Plumas	15	11,620	129.1	4
Riverside	285	306,191	93.1	2
Sacramento	523	502,778	104.0	2
San Benito	13	15,396	84.4	3
San Bernardino	524	503,591	104.1	2
San Diego	1,118	1,033,011	108.2	1
San Francisco	2,621	742,855	352.8	1
San Joaquin	293	249,989	117.2	2
San Luis Obispo	111	81,044	137.0	3
San Mateo	613	444,387	137.9	1
Santa Barbara	273	168,962	161.6	2

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
California—Continued				
Santa Clara	1,117	642,315	173.9	2
Santa Cruz	111	84,219	131.8	3
Shasta	64	59,468	107.6	4
Sierra	2	2,247	89.0	5
Siskiyou	25	32,885	76.0	4
Solano	119	134,597	88.4	1
Sonoma	213	147,375	144.5	3
Stanislaus	183	157,294	116.3	3
Sutter	15	33,380	44.9	3
Tehama	19	25,305	75.1	4
Trinity	7	9,706	72.1	5
Tulare	141	168,403	83.7	3
Tuolumne	11	14,404	76.4	4
Ventura	211	199,138	106.0	3
Yolo	47	65,727	71.5	3
Yuba	42	33,859	124.0	4
California, total	22,670	15,717,204	144.2	----
Colorado:				
Adams	13	120,296	10.8	2
Alamosa	9	10,000	90.0	4
Arapahoe	75	113,426	66.1	2
Archuleta	1	2,629	38.0	5
Baca	1	6,310	15.8	5
Bent	4	7,419	53.9	4
Boulder	93	74,254	125.2	2
Chaffee	7	8,298	84.4	4
Cheyenne	2	2,789	71.7	5
Clear Creek	2	2,793	71.6	3
Conejos	2	8,428	23.7	5
Costilla	----	4,219	----	5
Crowley	1	3,978	25.1	3
Custer	----	1,305	----	3
Delta	12	15,602	76.9	4
Denver	1,511	493,887	305.9	2
Dolores	----	2,196	----	5
Douglas	3	4,816	62.3	3
Eagle	1	4,677	21.4	5
Elbert	1	3,708	27.0	3
El Paso	178	143,742	123.8	2
Fremont	14	20,196	69.3	3
Garfield	9	12,017	74.9	4
Gilpin	----	685	----	3
Grand	3	3,557	84.3	5
Gunnison	4	5,477	73.0	4
Hinsdale	----	208	----	5
Huerfano	4	7,867	50.8	3
Jackson	1	1,758	56.9	5
Jefferson	70	127,520	54.9	2
Kilwa	----	2,425	----	5
Kit Carson	4	6,957	57.5	5
Lake	6	7,101	84.5	4
La Plata	17	19,225	88.4	4
Larimer	50	53,343	93.7	3
Las Animas	11	19,983	55.0	4
Lincoln	2	5,310	37.7	5
Logan	23	20,302	113.3	4
Mesa	53	50,715	104.5	4
Mineral	----	424	----	5
Moffat	3	7,061	42.5	4
Montezuma	13	14,024	92.7	4
Montrose	9	18,286	49.2	4
Morgan	13	21,192	61.3	3
Otero	16	24,128	66.3	3
Ouray	1	1,601	62.5	5
Park	----	1,822	----	3
Phillips	5	4,440	112.6	5
Pitkin	7	2,381	294.0	5
Prowers	9	13,296	67.7	4
Pueblo	124	118,707	104.5	5
Rio Blanco	4	5,150	77.7	5
Rio Grande	7	11,160	62.7	4
Routt	6	5,900	101.7	5
Saguache	1	4,473	22.4	5
San Juan	1	849	117.8	5
San Miguel	1	2,944	34.0	5
Sedgwick	3	4,242	70.7	5
Summit	1	2,073	48.2	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Colorado—Continued				
Teller	1	2,495	40.1	3
Washington	3	6,625	45.3	5
Weld	65	72,344	89.8	3
Yuma	6	8,912	67.3	5
Colorado, total	2,486	1,753,947	141.7	------
Connecticut:				
Fairfield	983	653,589	150.4	2
Hartford	1,205	689,555	174.8	2
Litchfield	132	119,856	110.2	3
Middlesex	120	88,865	135.0	3
New Haven	1,275	660,315	193.1	2
New London	201	185,745	108.2	2
Tolland	30	68,737	43.6	3
Windham	55	68,572	80.2	3
Connecticut, total	4,001	2,535,234	157.8	------
Delaware:				
Kent	37	65,651	56.4	3
New Castle	409	307,446	133.0	2
Sussex	58	73,195	79.2	4
Delaware, total	504	446,292	112.9	------
District of Columbia	2,365	763,956	309.6	1
District of Columbia, total	2,365	763,956	309.6	1
Florida:				
Alachia	147	74,074	198.5	4
Baker	7	7,363	95.1	3
Bay	35	67,131	52.1	4
Bradford	8	12,446	64.3	3
Brevard	68	111,435	61.0	3
Broward	336	333,946	100.6	2
Calhoun	3	7,422	40.4	5
Charlotte	8	12,594	63.5	4
Citrus	6	9,268	64.7	5
Clay	10	19,535	51.2	3
Collier	13	15,753	82.5	4
Columbia	11	20,077	54.8	4
Dade	1,572	935,047	168.1	2
De Soto	11	11,683	94.2	4
Dixie	2	4,479	44.7	5
Duval	447	455,411	98.2	2
Escambia	118	173,829	67.9	2
Flagler	2	4,566	43.8	5
Franklin	4	6,576	60.8	4
Gadsden	26	41,989	61.9	4
Gilchrist	1	2,868	34.9	5
Glades	0	2,950	----------	5
Gulf	4	9,937	40.3	4
Hamilton	5	7,705	64.9	5
Hardee	7	12,370	56.6	3
Hendry	4	8,119	49.3	4
Hernando	5	11,205	44.6	4
Highlands	15	21,338	70.3	4
Hillsborough	337	397,788	84.7	2
Holmes	3	10,844	27.7	5
Indian River	17	25,309	67.2	4
Jackson	13	36,208	35.9	4
Jefferson	5	9,543	52.4	5
Lafayette	1	2,889	34.6	5
Lake	37	57,383	64.5	3
Lee	45	54,539	82.5	4
Leon	64	74,225	86.2	4
Levy	2	10,364	19.3	5
Liberty	0	3,138	----------	5
Madison	5	14,154	35.3	4
Manatee	51	69,168	73.7	3
Marion	35	51,616	67.8	4
Martin	7	16,932	41.3	3
Monroe	20	47,921	41.7	4
Nassau	7	17,189	40.7	3
Okaloosa	22	61,175	36.0	3
Okeechobee	3	6,424	46.7	4
Orange	272	263,540	103.2	2

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Florida—Continued				
Osceola	9	19,029	47.3	3
Palm Beach	237	228,106	103.9	2
Pasco	11	36,785	29.9	3
Pinellas	364	374,665	97.2	2
Polk	155	195,139	79.4	3
Putnam	18	32,212	55.9	4
St. Johns	17	30,034	56.6	3
St. Lucie	22	39,294	56.0	4
Santa Rosa	10	29,547	33.8	2
Sarasota	99	76,895	128.7	4
Seminole	24	54,947	43.7	2
Sumter	3	11,869	25.3	5
Suwannee	5	14,961	33.4	4
Taylor	7	13,168	53.2	4
Union	2	6,043	33.1	5
Volusia	118	125,319	94.2	4
Wakulla	2	5,257	38.0	5
Walton	6	15,576	38.5	4
Washington	2	11,249	17.8	4
Florida, total	4,932	4,951,560	99.6	----
Georgia:				
Appling	8	13,246	60.4	4
Atkinson	2	6,188	32.3	5
Bacon	4	8,359	47.9	4
Baker	0	4,543	----	3
Baldwin	37	34,064	108.6	4
Banks	0	6,497	----	5
Barrow	8	14,485	55.2	3
Bartow	9	28,267	31.8	3
Ben Hill	5	13,633	36.7	4
Berrien	4	12,038	33.2	4
Bibb	166	141,249	117.5	2
Bleckley	3	9,642	31.1	3
Brantley	1	5,891	17.0	5
Brooks	6	15,292	39.2	4
Bryan	3	6,226	48.2	3
Bulloch	15	24,263	61.8	4
Burke	9	20,596	43.7	3
Butts	3	8,976	33.4	4
Calhoun	3	7,341	40.9	3
Camden	5	9,975	50.1	4
Candler	1	6,672	15.0	5
Carroll	24	36,451	65.8	3
Catoosa	7	21,101	33.2	3
Charlton	2	5,313	37.6	5
Chatham	185	188,299	98.2	2
Chattahoochee	1	13,011	7.7	2
Chattooga	7	19,954	35.1	3
Cherokee	9	23,001	39.1	3
Clarke	56	45,363	123.4	4
Clay	5	4,551	109.9	5
Clayton	11	46,365	23.7	1
Clinch	2	6,545	30.6	4
Cobb	82	114,174	71.8	1
Coffee	12	21,953	54.7	4
Colquitt	23	34,048	67.6	4
Columbia	2	13,423	14.9	3
Cook	4	11,822	33.8	4
Coweta	20	28,893	69.2	3
Crawford	1	4,816	17.2	3
Crisp	8	17,768	45.0	4
Dade	2	8,666	23.1	3
Dawson	0	3,590	----	5
Decatur	15	25,203	59.5	4
De Kalb	93	256,782	36.2	1
Dodge	6	16,483	36.4	4
Dooly	5	11,474	43.6	3
Dougherty	53	75,680	70.0	2
Douglas	5	16,741	29.9	3
Early	6	13,151	45.6	4
Echols	0	1,876	----	5
Effingham	2	10,144	19.7	3
Elbert	13	17,835	72.9	4
Emanuel	7	17,815	39.3	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Georgia—Continued				
Evans	2	6,952	28.8	4
Fannin	3	13,620	22.0	5
Fayette	3	8,199	36.6	3
Floyd	71	69,130	102.7	4
Forsyth	8	12,170	65.7	3
Franklin	8	13,274	60.3	5
Fulton	1,145	556,326	205.8	1
Gilmer	4	8,922	44.8	5
Glascock	1	2,672	37.4	5
Glynn	45	41,954	107.3	4
Gordon	7	19,228	36.4	3
Grady	9	18,015	50.0	4
Greene	7	11,193	62.5	4
Gwinnett	14	43,541	32.2	1
Habersham	15	18,116	82.8	4
Hall	37	49,739	74.4	3
Hancock	3	9,979	30.1	5
Haralson	6	14,543	41.3	4
Harris	3	11,167	26.9	3
Hart	5	15,229	32.8	4
Heard	3	5,333	56.3	5
Henry	4	17,619	22.7	3
Houston	12	39,154	30.6	2
Irwin	4	9,211	43.4	4
Jackson	7	18,499	37.8	4
Jasper	4	6,135	65.2	5
Jeff Davis	4	8,914	44.9	4
Jefferson	10	17,468	57.2	3
Jenkins	2	9,148	21.9	4
Johnson	2	8,048	24.9	5
Jones	1	8,468	11.8	3
Lamar	5	10,240	48.8	4
Lanier	3	5,097	58.9	5
Laurens	19	32,313	58.8	4
Lee	0	6,204	----------	3
Liberty	5	14,487	34.5	4
Lincoln	2	5,906	33.9	5
Long	1	3,874	25.8	5
Lowndes	39	49,270	79.2	4
Lumpkin	4	7,241	55.2	4
McDuffie	6	12,627	47.5	3
McIntosh	3	6,364	47.1	5
Macon	5	13,170	38.0	3
Madison	2	11,246	17.8	5
Marion	1	5,477	18.3	3
Meriwether	13	19,756	65.8	4
Miller	4	6,908	57.9	5
Mitchell	10	19,652	50.9	3
Monroe	3	10,495	28.6	3
Montgomery	2	6,284	31.8	5
Morgan	7	10,280	68.1	4
Murray	4	10,447	38.3	5
Muscogee	123	158,623	77.5	2
Newton	8	20,999	38.1	4
Oconee	1	6,304	15.9	5
Oglethorpe	2	7,926	25.2	5
Paulding	3	13,101	22.9	3
Peach	8	13,846	57.8	3
Pickens	5	8,903	56.2	5
Pierce	5	9,678	51.7	5
Pike	2	7,138	28.0	5
Polk	15	28,015	53.5	4
Pulaski	4	8,204	48.8	3
Putnam	2	7,798	25.6	4
Quitman	0	2,432	----------	5
Rabun	4	7,456	53.6	5
Randolph	3	11,078	27.1	4
Richmond	338	135,601	249.3	2
Rockdale	5	10,572	47.3	3
Schley	1	3,256	30.7	5
Screven	5	14,919	33.5	4
Seminole	5	6,802	73.5	4
Spalding	27	35,404	76.3	3
Stephens	16	18,391	87.0	4
Stewart	3	7,371	40.7	3
Sumter	16	24,652	64.9	

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Georgia—Continued				
Talbot	1	7,127	14.0	3
Taliaferro	0	3,370	----------	5
Tattnall	7	15,837	44.2	4
Taylor	5	8,311	60.2	5
Telfair	8	11,715	68.3	4
Terrell	6	12,742	47.1	3
Thomas	34	34,319	99.1	4
Tift	15	23,487	63.9	4
Toombs	13	16,837	77.2	4
Towns	2	4,538	44.1	5
Treutlen	3	5,874	51.1	5
Troup	42	47,189	89.0	4
Turner	3	8,439	35.5	4
Twiggs	0	7,935	----------	3
Union	3	6,510	46.1	5
Upson	16	23,800	67.2	4
Walker	20	45,264	44.2	2
Walton	10	20,481	48.8	3
Ware	30	34,219	87.7	4
Warren	4	7,360	54.3	5
Washington	11	18,903	58.2	4
Wayne	8	17,921	44.6	4
Webster	0	3,247	----------	3
Wheeler	0	5,342	----------	5
White	4	6,935	57.7	5
Whitfield	24	42,109	57.0	3
Wilcox	4	7,905	50.6	5
Wilkes	7	10,961	63.9	4
Wilkinson	2	9,250	21.6	5
Worth	4	16,682	24.0	3
Georgia, total	3,434	3,943,116	87.1	----------
Hawaii:				
Hawaii	61	61,332	99.5	4
Honolulu	529	500,409	105.7	2
Kalawao	2	279	716.8	5
Kauai	13	28,176	46.1	4
Maui	31	42,576	72.8	4
Hawaii, total	636	632,772	100.5	----------
Idaho:				
Ada	120	93,460	128.4	4
Adams	2	2,978	67.2	5
Bannock	49	49,342	99.3	4
Bear Lake	7	7,148	97.9	4
Benewah	3	6,036	49.7	3
Bingham	14	28,218	49.6	4
Blaine	6	4,598	130.5	5
Boise	0	1,646	----------	5
Bonner	7	15,587	44.9	4
Bonneville	52	46,906	110.9	4
Boundary	3	5,809	51.6	5
Butte	2	3,498	57.2	5
Camas	1	917	109.1	5
Canyon	47	57,662	81.5	4
Caribou	3	5,976	50.2	5
Cassia	10	16,121	62.0	4
Clark	0	915	----------	5
Clearwater	4	8,548	46.8	5
Custer	1	2,996	33.4	5
Elmore	4	16,719	23.9	4
Franklin	3	8,457	35.5	4
Fremont	4	8,679	46.1	4
Gem	4	9,127	43.8	4
Gooding	7	9,544	73.3	4
Idaho	6	13,542	44.3	4
Jefferson	3	11,672	25.7	5
Jerome	6	11,712	51.2	4
Kootenai	18	29,556	60.9	3
Latah	20	21,170	94.5	4
Lemhi	5	5,816	86.0	4
Lewis	2	4,423	45.2	5
Lincoln	2	3,686	54.3	5
Madison	6	9,417	63.7	4
Minidoka	5	14,394	34.7	4
Nez Perce	32	27,066	118.2	4
Oneida	3	3,603	83.3	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Idaho—Continued				
Owyhee	1	6,375	15.7	5
Payette	6	12,363	48.5	4
Power	1	4,111	24.3	5
Shoshone	14	20,876	67.1	4
Teton	1	2,639	37.9	5
Twin Falls	51	41,842	121.9	4
Valley	6	3,663	163.8	5
Yellowstone National Park				5
Washington	5	8,378	59.7	4
Idaho, total	546	667,191	81.8	
Illinois:				
Adams	69	68,467	100.8	4
Alexander	11	16,061	68.5	4
Bond	9	14,060	64.0	3
Boone	13	20,326	64.0	3
Brown	3	6,210	48.3	5
Bureau	30	37,594	79.8	4
Calhoun	3	5,933	50.6	5
Carroll	14	19,507	71.8	4
Cass	11	14,539	75.7	3
Champaign	147	132,436	111.0	2
Christian	22	37,207	59.1	3
Clark	9	16,546	54.4	3
Clay	9	15,815	56.9	4
Clinton	11	24,029	45.8	3
Coles	37	42,860	86.3	4
Cook	8,182	5,129,725	159.5	1
Crawford	15	20,751	72.3	4
Cumberland	6	9,936	60.4	5
De Kalb	38	51,714	73.5	3
De Witt	12	17,253	69.6	3
Douglas	11	19,243	57.2	3
Du Page	252	313,459	80.4	1
Edgar	18	22,550	79.8	3
Edwards	6	7,940	75.6	5
Effingham	22	23,107	95.2	4
Fayette	12	21,946	54.7	4
Ford	16	16,606	96.4	3
Franklin	31	39,281	78.9	4
Fulton	32	41,954	76.3	3
Gallatin	5	7,638	65.5	5
Greene	10	17,460	57.3	4
Grundy	13	22,350	58.2	3
Hamilton	5	10,010	50.0	4
Hancock	17	24,574	69.2	4
Hardin	3	5,879	51.0	5
Henderson	3	8,237	36.4	5
Henry	35	49,317	71.0	3
Iroquois	24	33,562	71.5	4
Jackson	44	42,151	104.4	4
Jasper	3	11,346	26.4	4
Jefferson	21	32,315	65.0	4
Jersey	7	17,023	41.1	3
Jo Daviess	11	21,821	50.4	3
Johnson	2	6,928	28.9	5
Kane	239	208,246	114.8	1
Kankakee	82	92,063	89.1	3
Kendall	9	17,540	51.3	3
Knox	66	61,280	107.7	3
Lake	249	293,656	84.8	1
La Salle	96	110,800	86.6	4
Lawrence	12	18,540	64.7	4
Lee	35	38,749	90.3	4
Livingston	30	40,341	74.4	4
Logan	29	33,656	86.2	3
McDonough	22	28,928	76.1	4
McHenry	57	84,210	67.7	1
McLean	90	83,877	107.3	3
Macon	119	118,257	100.6	2
Macoupin	22	43,524	50.5	3
Madison	145	224,689	64.5	1
Marion	30	39,349	76.2	4
Marshall	11	13,334	82.5	3
Mason	16	15,193	105.3	3
Massac	8	14,341	55.8	5
Menard	7	9,248	75.7	3
Mercer	7	17,149	40.8	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Illinois—Continued				
Monroe	9	15,507	58.0	3
Montgomery	16	31,244	51.2	3
Morgan	44	36,571	120.3	3
Moultrie	9	13,635	66.0	3
Ogle	22	38,106	57.7	3
Peoria	252	189,044	133.3	2
Perry	16	19,184	83.4	4
Piatt	12	14,960	80.2	3
Pike	11	20,552	53.5	4
Pope	3	4,061	73.9	5
Pulaski	3	10,490	28.6	5
Putnam	2	4,570	43.8	5
Randolph	18	29,988	60.0	3
Richland	20	16,299	122.7	4
Rock Island	134	150,991	88.7	2
St. Clair	166	262,509	63.2	1
Saline	21	26,227	80.1	4
Sangamon	183	146,539	124.9	2
Schuyler	5	8,746	57.2	5
Scott	4	6,377	62.7	5
Shelby	15	23,404	64.1	3
Stark	5	8,152	61.3	3
Stephenson	46	46,207	99.6	3
Tazewell	50	99,789	50.1	2
Union	14	17,645	79.3	4
Vermilion	85	96,176	88.4	3
Wabash	9	14,047	64.1	4
Warren	12	21,587	55.6	4
Washington	6	13,569	44.2	3
Wayne	10	19,008	52.6	4
White	10	19,373	51.6	4
Whiteside	44	59,887	73.5	3
Will	155	191,617	80.9	1
Williamson	29	46,117	62.9	4
Winnebago	229	209,765	109.2	2
Woodford	12	24,579	48.8	3
Illinois, total	12,316	10,081,158	122.2	----
Indiana:				
Adams	14	24,643	56.8	3
Allen	253	232,196	109.0	2
Bartholomew	34	48,198	70.5	4
Benton	7	11,912	58.8	5
Blackford	11	14,792	74.4	3
Boone	22	27,543	79.9	3
Brown	2	7,024	28.5	5
Carroll	10	16,934	59.1	4
Cass	45	40,931	109.9	4
Clark	34	62,795	54.1	2
Clay	13	24,207	53.7	3
Clinton	19	30,765	61.8	4
Crawford	2	8,379	23.9	5
Daviess	17	26,636	63.8	4
Dearborn	16	28,674	55.8	3
Decatur	13	20,019	64.9	4
De Kalb	22	28,271	77.8	3
Delaware	96	110,938	86.5	2
Dubois	22	27,463	80.1	4
Elkhart	100	106,790	93.6	3
Fayette	14	24,454	57.3	4
Floyd	34	51,397	66.2	2
Fountain	12	18,706	64.2	4
Franklin	6	17,015	35.3	3
Fulton	11	16,957	64.9	4
Gibson	16	29,949	53.4	3
Grant	59	75,741	77.9	3
Greene	16	26,327	60.8	4
Hamilton	24	40,132	59.8	3
Hancock	19	26,665	71.3	3
Harrison	11	19,207	57.3	3
Hendricks	23	40,896	56.2	3
Henry	42	48,899	85.9	3
Howard	54	69,509	77.7	4
Huntington	23	33,814	68.0	3
Jackson	18	30,556	58.9	4
Jasper	8	18,842	42.5	3
Jay	18	22,572	79.7	3
Jefferson	24	24,061	99.7	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Indiana—Continued				
Jennings	12	17,267	69.5	4
Johnson	27	43,704	61.8	3
Knox	41	41,561	98.7	4
Kosciusko	25	40,373	61.9	4
La Grange	8	17,380	46.0	5
Lake	385	513,269	75.0	2
La Porte	91	95,111	95.7	3
Lawrence	29	36,564	79.3	4
Madison	101	125,819	80.3	3
Marion	1,172	697,567	168.0	2
Marshall	22	32,443	67.8	3
Martin	2	10,608	18.9	4
Miami	20	38,000	52.6	4
Monroe	48	59,225	81.0	4
Montgomery	29	32,089	90.4	4
Morgan	18	33,875	53.1	3
Newton	5	11,502	43.5	3
Noble	18	28,162	63.9	3
Ohio	2	4,165	48.0	5
Orange	9	16,877	53.3	4
Owen	3	11,400	26.3	4
Parke	11	14,804	74.3	3
Perry	12	17,232	69.6	4
Pike	3	12,797	23.4	4
Porter	27	60,279	44.8	2
Posey	9	19,214	46.8	3
Pulaski	9	12,837	70.1	5
Putnam	16	24,927	64.2	4
Randolph	22	28,434	77.4	3
Ripley	8	20,641	38.8	4
Rush	13	20,393	63.7	4
St. Joseph	239	238,614	100.2	2
Scott	5	14,643	34.1	3
Shelby	20	34,093	58.7	3
Spencer	7	16,074	43.5	5
Starke	7	17,911	39.1	3
Steuben	13	17,184	75.7	4
Sullivan	12	21,721	55.2	3
Switzerland	2	7,092	28.2	5
Tippecanoe	101	89,122	113.3	4
Tipton	11	15,856	69.4	4
Union	4	6,457	61.9	3
Vanderburgh	214	165,794	129.1	2
Vermillion	8	17,683	45.2	3
Vigo	107	108,458	98.7	2
Wabash	23	32,605	70.5	4
Warren	3	8,545	35.1	5
Warrick	11	23,577	46.7	3
Washington	7	17,819	39.3	3
Wayne	80	74,039	108.1	4
Wells	32	21,220	150.8	3
White	16	19,709	81.2	4
Whitley	16	20,954	76.4	3
Indiana, total	4,319	4,662,498	92.6	------
Iowa:				
Adair	5	10,893	45.9	5
Adams	3	7,468	40.2	5
Allamakee	9	15,982	56.3	4
Appanoose	13	16,015	81.2	4
Audubon	6	10,919	55.0	4
Benton	14	23,422	59.8	3
Black Hawk	114	122,482	93.1	2
Boone	15	28,037	53.5	3
Bremer	14	21,108	66.3	3
Buchanan	18	22,293	80.7	3
Buena Vista	14	21,189	66.1	4
Butler	7	17,467	40.1	3
Calhoun	12	15,923	75.4	5
Carroll	20	23,431	85.4	4
Cass	12	17,919	67.0	3
Cedar	10	17,791	56.2	3
Cerro Gordo	64	49,894	128.3	4
Cherokee	30	18,598	161.3	3
Chickasaw	11	15,034	73.2	5
Clarke	6	8,222	73.0	4
Clay	11	18,504	59.4	4
Clayton	13	21,962	59.2	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Iowa—Continued				
Clinton	47	55,060	85.4	3
Crawford	7	18,569	37.7	4
Dallas	18	24,123	74.6	3
Davis	11	9,199	119.6	4
Decatur	8	10,539	75.9	5
Delaware	9	18,483	48.7	3
Des Moines	46	44,605	103.1	4
Dickinson	10	12,574	79.5	5
Dubuque	73	80,048	91.2	2
Emmet	15	14,871	100.9	4
Fayette	22	28,581	77.0	3
Floyd	18	21,102	85.3	4
Franklin	7	15,472	45.2	4
Fremont	7	10,282	68.1	5
Greene	14	14,379	97.4	4
Grundy	8	14,132	56.6	3
Guthrie	7	13,607	51.4	5
Hamilton	14	20,032	69.9	4
Hancock	6	14,604	41.1	5
Hardin	19	22,533	84.3	4
Harrison	9	17,600	51.1	3
Henry	17	18,187	93.5	4
Howard	8	12,734	62.8	4
Humboldt	9	13,156	68.4	4
Ida	6	10,269	58.4	3
Iowa	12	16,396	73.2	3
Jackson	11	20,754	53.0	3
Jasper	20	35,282	56.7	3
Jefferson	12	15,818	75.9	4
Johnson	370	53,663	689.5	3
Jones	15	20,693	72.5	3
Keokuk	7	15,492	45.2	5
Kossuth	11	25,314	43.5	4
Lee	37	44,207	83.7	4
Linn	142	136,899	103.7	2
Louisa	5	10,290	48.6	5
Lucas	6	10,923	54.9	4
Lyon	6	14,468	41.5	3
Madison	6	12,295	48.8	3
Mahaska	19	23,602	80.5	4
Marion	14	25,886	54.1	3
Marshall	36	37,984	94.8	4
Mills	6	13,050	46.0	3
Mitchell	11	14,043	78.3	4
Monona	10	13,916	71.9	3
Monroe	5	10,463	47.8	4
Montgomery	11	14,467	76.0	3
Muscatine	25	33,840	73.9	3
O'Brien	13	18,840	69.0	4
Osceola	4	10,064	39.7	4
Page	23	21,023	109.4	4
Palo Alto	11	14,736	74.6	5
Plymouth	11	23,906	46.0	3
Pocahontas	10	14,234	70.3	5
Polk	326	266,315	122.4	2
Pottawattamie	77	83,102	92.7	2
Powesheik	11	19,300	57.0	4
Ringgold	2	7,910	25.3	5
Sac	8	17,007	47.0	4
Scott	97	119,067	81.5	2
Shelby	8	15,825	50.6	3
Sioux	11	26,375	41.7	4
Story	46	49,327	93.3	3
Tama	12	21,413	56.0	3
Taylor	3	10,288	29.2	5
Union	13	13,712	94.8	4
Van Buren	3	9,778	30.7	5
Wapello	52	46,126	112.7	4
Warren	6	20,829	28.8	3
Washington	13	19,406	67.0	4
Wayne	6	9,800	61.2	5
Webster	54	47,810	112.9	4
Winnebago	10	13,099	76.3	4
Winneshiek	10	21,651	46.2	4
Woodbury	124	107,849	115.0	2
Worth	5	10,259	48.7	5
Wright	18	19,447	92.6	4
Iowa, total	2,620	2,757,537	95.0	----

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Kansas:				
Allen	13	16,369	79.4	4
Anderson	7	9,035	77.5	4
Atchison	16	20,898	76.6	3
Barber	7	8,713	80.3	4
Barton	25	32,368	77.2	4
Bourbon	16	16,090	99.4	4
Brown	10	13,229	75.6	4
Butler	23	38,395	59.9	3
Chase	2	3,921	51.0	5
Chautauqua	3	5,956	50.4	5
Cherokee	11	22,279	49.4	4
Cheyenne	6	4,708	127.4	5
Clark	3	3,396	88.3	5
Clay	8	10,675	74.9	4
Cloud	20	14,407	138.8	4
Coffey	4	8,403	47.6	5
Comanche	2	3,271	61.1	5
Cowley	40	37,861	105.6	3
Crawford	35	37,032	94.5	4
Decatur	4	5,778	69.2	5
Dickinson	15	21,572	69.5	4
Doniphan	5	9,574	52.2	3
Douglas	46	43,720	105.2	3
Edwards	3	5,118	58.6	5
Elk	4	5,048	79.2	5
Ellis	24	21,270	112.8	4
Ellsworth	7	7,677	91.2	5
Finney	11	16,093	68.4	4
Ford	18	20,938	86.0	4
Franklin	15	19,548	76.7	3
Geary	13	28,779	45.2	4
Gove	4	4,107	97.4	5
Graham	3	5,586	53.7	5
Grant	2	5,269	38.0	4
Gray	1	4,380	22.8	5
Greeley	2	2,087	95.8	5
Greenwood	6	11,253	53.3	4
Hamilton	2	3,144	63.6	5
Harper	8	9,541	83.8	4
Harvey	49	25,865	189.4	3
Haskell	2	2,990	66.9	5
Hodgeman	1	3,115	32.1	5
Jackson	3	10,309	29.1	3
Jefferson	4	11,252	35.5	3
Jewell	4	7,217	55.4	5
Johnson	88	143,792	61.2	1
Kearny	1	3,108	32.2	5
Kingman	6	9,958	60.3	3
Kiowa	2	4,626	43.2	5
Labette	23	26,805	85.8	4
Lane	1	3,060	32.7	5
Leavenworth	26	48,524	53.6	3
Lincoln	3	5,556	54.0	5
Linn	1	8,274	12.1	5
Logan	3	4,036	74.3	5
Lyon	25	26,928	92.8	4
McPherson	17	24,285	70.0	4
Marion	12	15,143	79.2	5
Marshall	11	15,598	70.5	4
Meade	4	5,505	72.7	5
Miami	18	19,884	90.5	3
Mitchell	10	8,866	112.8	4
Montgomery	33	45,007	73.3	4
Morris	4	7,392	54.1	4
Morton	4	3,354	119.3	5
Nemaha	12	12,897	93.0	5
Neosho	14	19,455	72.0	4
Ness	3	5,470	54.8	5
Norton	12	8,035	149.3	4
Osage	7	12,886	54.3	3
Osborne	6	7,506	79.9	5
Ottawa	2	6,779	29.5	5
Pawnee	17	10,254	165.8	4
Phillips	6	8,709	68.9	4
Pottawatomie	7	11,957	58.5	3
Pratt	8	12,122	66.0	4
Rawlins	4	5,279	75.8	5
Reno	45	59,055	76.2	3
Republic	7	9,768	71.7	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Kansas—Continued				
Rice	11	13,909	79.1	4
Riley	32	41,914	76.3	4
Rooks	4	9,734	41.1	4
Rush	3	6,160	48.7	5
Russell	6	11,348	52.9	4
Saline	48	54,715	87.7	4
Scott	3	5,228	57.4	4
Sedgwick	345	343,231	100.5	2
Seward	10	15,930	62.8	4
Shawnee	276	141,286	195.3	2
Sheridan	2	4,267	46.9	5
Sherman	5	6,682	74.8	4
Smith	7	7,776	90.0	5
Stafford	3	7,451	40.3	5
Stanton	0	2,108	----------	5
Stevens	3	4,400	68.2	4
Sumner	15	25,316	59.3	3
Thomas	7	7,358	95.1	4
Trego	5	5,473	91.4	4
Wabaunsee	3	6,648	45.1	3
Wallace	1	2,069	48.3	5
Washington	7	10,739	65.2	5
Wichita	1	2,765	36.2	5
Wilson	8	13,077	61.2	4
Woodson	4	5,423	73.8	5
Wyandotte	331	185,495	178.4	1
Kansas, total	2,089	2,178,611	95.9	--------
Kentucky:				
Adair	5	14,699	34.0	5
Allen	7	12,269	57.1	4
Anderson	5	8,618	58.0	4
Ballard	6	8,291	72.4	5
Barren	22	28,303	77.7	4
Bath	3	9,114	32.9	5
Bell	33	35,336	93.4	4
Boone	10	21,940	45.6	3
Bourbon	18	18,178	99.0	3
Boyd	48	52,163	92.0	2
Boyle	23	21,257	108.2	4
Bracken	5	7,422	67.4	5
Breathitt	3	15,490	19.4	5
Breckinridge	4	14,734	27.1	5
Bullitt	6	15,726	38.2	3
Butler	2	9,586	20.9	5
Caldwell	5	13,073	38.2	4
Calloway	13	20,972	62.0	4
Campbell	59	86,803	68.0	1
Carlisle	2	5,608	35.7	5
Carroll	5	7,978	62.7	4
Carter	7	20,817	33.6	3
Casey	5	14,327	34.9	5
Christian	30	56,904	52.7	4
Clark	17	21,075	80.7	3
Clay	4	20,748	19.3	5
Clinton	2	8,886	22.5	5
Crittenden	2	8,648	23.1	5
Cumberland	3	7,835	38.3	5
Daviess	66	70,588	93.5	3
Edmonson	3	8,085	37.1	5
Elliott	1	6,330	15.8	5
Estill	5	12,466	40.1	4
Fayette	209	131,906	158.4	2
Fleming	6	10,890	55.1	5
Floyd	21	41,642	50.4	4
Franklin	24	29,421	81.6	4
Fulton	10	11,256	88.8	4
Gallatin	1	3,867	25.9	5
Garrard	3	9,747	30.8	4
Grant	4	9,489	42.2	3
Graves	18	30,021	60.0	4
Grayson	7	15,834	44.2	4
Green	3	11,249	26.7	5
Greenup	8	29,238	27.4	3
Hancock	2	5,330	37.5	5
Hardin	30	67,789	44.3	4
Harlan	64	51,107	125.2	4
Harrison	10	13,704	73.0	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Kentucky—Continued				
Hart	7	14,119	49.6	5
Henderson	22	33,519	65.6	2
Henry	7	10,987	63.7	5
Hickman	2	6,747	29.6	5
Hopkins	33	38,458	85.8	4
Jackson	1	10,677	9.4	5
Jefferson	929	610,947	152.1	2
Jessamine	7	13,625	51.4	3
Johnson	13	19,748	65.8	4
Kenton	101	120,700	83.7	1
Knott	3	17,362	17.3	5
Knox	7	25,258	27.7	4
Larue	4	10,346	38.7	5
Laurel	10	24,901	40.2	4
Lawrence	6	12,134	49.4	3
Lee	3	7,420	40.4	5
Leslie	2	10,941	18.3	5
Letcher	22	30,102	73.1	4
Lewis	4	13,115	30.5	5
Lincoln	7	16,503	42.4	5
Livingston	5	7,029	71.1	5
Logan	10	20,896	47.9	4
Lyon	3	5,924	50.6	5
McCracken	59	57,306	103.0	4
McCreary	4	12,463	32.1	5
McLean	3	9,355	32.1	3
Madison	26	33,482	77.7	3
Magoffin	2	11,156	17.9	5
Marion	10	16,887	59.2	4
Marshall	7	16,736	41.8	4
Martin	1	10,201	9.8	3
Mason	15	18,454	81.3	4
Meade	2	18,938	10.6	5
Menifee	1	4,276	23.4	5
Mercer	12	14,596	82.2	4
Metcalfe	3	8,367	35.9	5
Monroe	5	11,799	42.4	5
Montgomery	9	13,461	66.9	4
Morgan	5	11,056	45.2	5
Muhlenberg	10	27,791	36.0	4
Nelson	10	22,168	45.1	4
Nicholas	4	6,677	59.9	5
Ohio	8	17,725	45.1	5
Oldham	8	13,388	59.8	3
Owen	4	8,237	48.6	5
Osdley	3	5,369	55.9	5
Pendleton	4	9,968	40.1	3
Perry	30	34,961	85.8	4
Pike	38	68,264	55.7	4
Powell	2	6,674	30.0	5
Pulaski	26	34,403	75.6	4
Robertson	1	2,443	40.9	5
Rockcastle	5	12,334	40.5	5
Rowan	5	12,808	39.0	4
Russell	5	11,076	45.1	5
Scott	9	15,376	58.5	3
Shelby	10	18,493	54.1	3
Simpson	5	11,548	43.3	4
Spencer	5	5,680	88.0	3
Taylor	9	16,285	55.3	4
Todd	5	11,364	44.0	5
Trigg	4	8,870	45.1	5
Trimble	1	5,102	19.6	3
Union	8	14,537	55.0	3
Warren	43	45,491	94.5	4
Washington	4	11,168	35.8	5
Wayne	7	14,700	47.6	4
Webster	6	14,244	42.1	3
Whitley	24	25,815	93.0	4
Wolfe	3	6,534	45.9	5
Woodford	10	11,913	83.9	3
Kentucky, total	2,537	3,038,156	83.5	.....
Louisiana:				
Acadia	33	49,931	66.1	4
Allen	14	19,867	70.5	4
Ascension	6	27,927	21.5	3
Assumption	7	17,991	38.9	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Louisiana—Continued				
Avoyelles	17	37,606	45.2	4
Beauregard	7	19,191	36.5	3
Bienville	7	16,726	41.9	3
Bossier	18	57,622	31.2	2
Caddo	327	223,859	146.1	2
Calcasieu	110	145,475	75.6	2
Caldwell	3	9,004	33.3	3
Cameron	5	6,909	72.4	3
Catahoula	4	11,421	35.0	5
Claiborne	12	19,407	61.8	4
Concordia	7	20,467	34.2	4
De Soto	9	24,248	37.1	3
East Baton Rouge	261	230,058	113.4	2
East Carroll	8	14,433	55.4	4
East Feliciana	15	20,198	74.3	3
Evangeline	13	31,639	41.1	4
Franklin	12	26,088	46.0	4
Grant	3	13,330	22.5	5
Iberia	37	51,657	71.6	4
Iberville	11	29,939	36.7	3
Jackson	11	15,828	69.5	3
Jefferson	89	208,769	42.6	2
Jefferson Davis	21	29,825	70.4	3
Lafayette	101	84,656	119.3	4
Lafourche	37	55,381	66.8	3
La Salle	8	13,011	61.5	5
Lincoln	17	28,535	59.6	3
Livingston	5	26,974	18.5	3
Madison	5	16,444	30.4	4
Morehouse	17	33,709	50.4	3
Natchitoches	20	35,653	56.1	4
Orleans	1,678	627,525	267.4	2
Ouachita	88	101,663	86.6	2
Plaquemines	7	22,545	31.0	3
Pointe Coupee	5	22,488	22.2	4
Rapides	126	111,351	113.2	4
Red River	4	9,978	40.1	3
Richland	9	23,824	37.8	3
Sabine	8	18,564	43.1	4
St. Bernard	7	32,186	21.7	2
St. Charles	10	21,219	47.1	3
St. Helena	0	9,162	----------	3
St. James	10	18,369	54.4	4
St. John the Baptist	6	18,439	32.5	4
St. Landry	40	81,493	49.1	4
St. Martin	11	29,063	37.8	4
St. Mary	20	48,833	41.0	4
St. Tammany	29	38,643	75.0	3
Tangipahoa	37	59,434	62.3	4
Tensas	4	11,796	33.9	5
Terrebonne	25	60,771	41.1	4
Union	10	17,624	56.7	3
Vermilion	22	38,855	56.6	4
Vernon	7	18,301	38.2	4
Washington	24	44,015	54.5	4
Webster	18	39,701	45.3	3
West Baton Rouge	4	14,796	27.0	3
West Carroll	3	14,177	21.2	5
West Feliciana	2	12,395	16.1	5
Winn	5	16,034	31.2	4
Louisiana, total	3,496	3,257,022	107.3	----------
Maine:				
Androscoggin	95	86,312	110.1	2
Aroostook	65	106,064	61.3	4
Cumberland	234	182,751	128.0	2
Franklin	15	20,069	74.7	3
Hancock	36	32,293	111.5	4
Kennebec	88	89,150	98.7	3
Knox	36	28,575	126.0	4
Lincoln	16	18,497	86.5	4
Oxford	31	44,345	69.9	3
Penobscot	114	126,346	90.2	4
Piscataquis	13	17,379	74.8	4
Sagadahoc	12	22,793	52.6	3
Somerset	25	39,749	62.9	4
Waldo	11	22,632	48.6	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Maine—Continued				
Washington	18	32,908	54.7	4
York	60	99,402	60.4	3
Maine, total	869	969,265	89.7	
Maryland:				
Allegany	68	84,169	80.8	4
Anne Arundel	91	206,634	44.0	1
Baltimore	167	492,428	33.9	1
Baltimore City	2,458	939,024	261.8	1
Calvert	5	15,826	31.6	3
Caroline	12	19,462	61.7	5
Carroll	44	52,785	83.4	1
Cecil	32	48,408	66.1	3
Charles	10	32,572	30.7	3
Dorchester	24	29,666	80.9	4
Frederick	63	71,930	87.6	3
Garrett	10	20,420	49.0	5
Harford	54	76,722	70.4	3
Howard	14	36,152	38.7	1
Kent	16	15,481	103.4	3
Montgomery	545	340,928	159.9	1
Prince Georges	149	357,395	41.7	1
Queen Annes	9	16,569	54.3	5
St. Marys	18	38,915	46.3	4
Somerset	16	19,623	81.5	4
Talbot	32	21,578	148.3	4
Washington	83	91,219	91.0	4
Wicomico	59	49,050	120.3	4
Worcester	15	23,733	63.2	4
Maryland, total	3,994	3,100,689	128.8	
Massachusetts:				
Barnstable	89	70,286	126.6	4
Berkshire	178	142,135	125.2	2
Bristol	373	398,488	93.6	2
Dukes	6	5,829	102.9	5
Essex	631	568,831	110.9	1
Franklin	62	54,864	113.0	3
Hampden	531	429,353	123.7	2
Hampshire	100	103,229	96.9	2
Middlesex	1,441	1,238,742	116.3	1
Nantucket	7	3,559	196.7	4
Norfolk	864	510,256	169.3	1
Plymouth	205	248,449	82.5	2
Suffolk	3,495	791,329	441.7	1
Worcester	671	583,228	115.0	2
Massachusetts, total	8,653	5,148,578	168.1	
Michigan:				
Alcona	1	6,352	15.7	5
Alger	6	9,250	64.9	4
Allegan	28	57,729	48.5	3
Alpena	19	28,556	66.5	4
Antrim	5	10,373	48.2	5
Arenac	5	9,860	50.7	3
Baraga	3	7,151	42.0	5
Barry	13	31,738	41.0	3
Bay	82	107,042	76.6	2
Benzie	5	7,834	63.8	5
Berrien	100	149,865	66.7	3
Branch	28	34,903	80.2	3
Calhoun	119	138,858	85.7	3
Cass	12	36,932	32.5	3
Charlevoix	10	13,421	74.5	4
Cheboygan	5	14,550	34.4	4
Chippewa	19	32,655	58.2	4
Clare	5	11,647	42.9	5
Clinton	15	37,969	39.5	2
Crawford	5	4,971	100.6	5
Delta	20	34,298	58.3	4
Dickinson	20	23,917	83.6	4
Eaton	22	49,684	44.3	2
Emmet	22	15,904	138.3	4
Genesee	374	374,313	99.9	2
Gladwin	3	10,769	27.9	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Michigan—Coutinued				
Gogebic	15	24,370	61.6	4
Grand Traverse	71	33,490	212.0	4
Gratiot	22	37,012	59.4	3
Hillsdale	17	34,742	48.9	3
Houghton	19	35,654	53.3	4
Huron	17	34,006	50.0	4
Ingham	237	211,296	112.2	2
Ionia	22	43,132	51.0	3
Iosco	9	16,505	54.5	5
Iron	7	17,184	40.7	4
Isabella	26	35,348	73.6	4
Jackson	112	131,994	84.9	2
Kalamazoo	217	169,712	127.9	2
Kalkaska	3	4,382	68.5	5
Kent	459	363,187	126.4	2
Keweenaw	0	2,417	----------	5
Lake	2	5,338	37.5	5
Lapeer	23	41,926	54.9	3
Leelanau	6	9,321	64.4	5
Lenawee	58	77,789	74.6	3
Livingston	22	38,233	57.5	3
Luce	9	7,827	115.0	4
Mackinac	5	10,853	46.1	4
Macomb	132	405,804	32.5	1
Manistee	10	19,042	52.5	4
Marquette	47	56,154	83.7	4
Mason	18	21,929	82.1	4
Mecosta	10	21,051	47.5	4
Menominee	16	24,685	64.8	4
Midland	48	51,450	93.3	3
Missaukee	4	6,784	59.0	5
Monroe	42	101,120	41.5	3
Montcalm	21	35,795	58.7	3
Montmorency	3	4,424	67.8	5
Muskegon	113	149,943	75.4	2
Newaygo	14	24,160	57.9	3
Oakland	486	690,259	70.4	1
Oceana	8	16,547	48.3	3
Ogemaw	6	9,680	62.0	5
Ontonagon	5	10,584	47.2	5
Osceola	7	13,595	51.5	5
Oscoda	0	3,447	----------	5
Otsego	7	7,545	92.8	4
Ottawa	58	98,719	58.8	3
Presque Isle	8	13,117	61.0	4
Roscommon	2	7,200	27.8	5
Saginaw	168	190,752	88.1	2
St. Clair	67	107,201	62.5	3
St. Joseph	27	42,332	63.8	3
Sanilac	15	32,314	46.4	5
Schoolcraft	5	8,953	55.8	4
Shiawassee	30	53,446	56.1	3
Tuscola	20	43,305	46.2	3
Van Buren	28	48,395	57.9	3
Washtenaw	789	172,440	457.6	2
Wayne	3,777	2,666,297	141.7	1
Wexford	11	18,466	59.6	4
Michigan, total	8,326	7,823,194	106.4	----------
Minnesota:				
Aitkin	4	12,162	32.9	5
Anoka	17	85,916	19.8	1
Becker	15	23,959	62.6	3
Beltrami	12	23,425	51.2	4
Benton	4	17,287	23.1	4
Big Stone	7	8,954	78.2	4
Blue Earth	53	44,385	119.4	4
Brown	25	27,676	90.3	4
Carlton	19	27,932	68.0	3
Carver	14	21,358	65.5	3
Cass	10	16,720	59.8	5
Chippewa	11	16,320	67.4	4
Chisago	9	13,419	67.1	3
Clay	13	39,080	33.3	2
Clearwater	3	8,864	33.8	5
Cook	3	3,377	88.8	5
Cottonwood	12	16,166	74.2	4
Crow Wing	28	32,134	87.1	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Minnesota—Continued				
Dakota	39	78,303	49.8	1
Dodge	7	13,259	52.8	5
Douglas	17	21,313	79.8	4
Faribault	18	23,685	76.0	4
Fillmore	10	23,768	42.1	4
Freeborn	30	37,891	79.2	4
Goodhue	26	33,035	78.7	3
Grant	7	8,870	78.9	5
Hennepin	1,540	842,854	182.7	1
Houston	7	16,588	42.2	4
Hubbard	5	9,962	50.2	4
Isanti	11	13,530	81.3	3
Itasca	22	38,006	57.9	4
Jackson	10	15,501	64.5	4
Kanabec	6	9,007	66.6	5
Kandiyohi	34	29,987	113.4	4
Kittson	2	8,343	24.0	5
Koochiching	8	18,190	44.0	4
Lac Qui Parle	6	13,330	45.0	5
Lake	9	13,702	65.7	3
Lake of the Woods	2	4,304	46.5	5
Le Sueur	14	19,906	70.3	4
Lincoln	9	9,651	93.3	5
Lyon	14	22,655	61.8	4
McLeod	19	24,401	77.9	4
Mahnomen	2	6,341	31.5	5
Marshall	4	14,262	28.0	5
Martin	23	26,986	85.2	4
Meeker	15	18,887	79.4	4
Mille Lacs	11	14,560	75.5	5
Morrison	14	26,641	52.6	4
Mower	39	48,498	80.4	4
Murray	5	14,743	33.9	5
Nicollet	15	23,196	64.7	4
Nobles	18	23,365	77.0	4
Norman	3	11,253	26.7	3
Olmsted	806	65,532	1,229.9	4
Otter Tail	41	48,960	83.7	3
Pennington	11	12,468	88.2	4
Pine	7	17,004	41.2	3
Pipestone	6	13,605	44.1	3
Polk	27	36,182	74.6	4
Pope	7	11,914	58.8	4
Ramsey	558	422,525	132.1	1
Red Lake	1	5,830	17.2	5
Redwood	12	21,718	55.3	4
Renville	11	23,249	47.3	5
Rice	32	38,988	82.1	3
Rock	6	11,864	50.6	3
Roseau	7	12,154	57.6	5
St. Louis	264	231,588	114.0	2
Scott	7	21,909	32.0	3
Sherburne	4	12,861	31.1	3
Sibley	7	16,228	43.1	5
Stearns	63	80,345	78.4	4
Steele	18	25,029	71.9	4
Stevens	7	11,262	62.2	4
Swift	11	14,936	73.6	4
Todd	14	23,119	60.6	4
Traverse	3	7,503	40.0	5
Wabasha	12	17,007	70.6	4
Wadena	12	12,199	98.4	4
Waseca	8	16,041	49.9	4
Washington	23	52,432	43.9	1
Watonwan	9	14,460	62.2	4
Wilkin	5	10,650	46.9	3
Winona	30	40,937	73.3	4
Wright	14	29,935	46.8	3
Yellow Medicine	15	15,523	96.6	5
Minnesota, total	4,338	3,413,864	127.1	
Mississippi:				
Adams	41	37,730	108.7	4
Alcorn	20	25,282	79.1	4
Amite	4	15,573	25.7	5
Attala	11	21,335	51.6	4
Benton	2	7,723	25.9	5
Bolivar	27	54,464	49.6	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Mississippi—Continued				
Calhoun	7	15,941	43.9	5
Carroll	2	11,177	17.9	5
Chickasaw	13	16,891	77.0	4
Choctaw	3	8,423	35.6	5
Claiborne	6	10,845	55.3	3
Clarke	8	16,493	48.5	5
Clay	8	18,933	42.3	4
Coahoma	34	46,212	73.6	4
Copiah	12	27,051	44.4	3
Covington	9	13,637	66.0	5
De Soto	9	23,891	37.7	3
Forrest	50	52,722	94.8	4
Franklin	5	9,286	53.8	5
George	7	11,098	63.1	3
Greene	2	8,366	23.9	3
Grenada	15	18,409	81.5	4
Hancock	9	14,039	64.1	4
Harrison	92	119,489	77.0	4
Hinds	354	187,045	189.3	2
Holmes	13	27,096	48.0	4
Humphreys	9	19,093	47.1	4
Issaquena	0	3,576		5
Itawamba	6	15,080	39.8	5
Jackson	30	55,522	54.0	3
Jasper	9	16,909	53.2	5
Jefferson	5	10,142	49.3	5
Jefferson Davis	5	13,540	36.9	5
Jones	50	59,542	84.0	4
Kemper	4	12,277	32.6	5
Lafayette	16	21,355	74.9	4
Lamar	7	13,675	51.2	5
Lauderdale	65	67,119	96.8	4
Lawrence	4	10,215	39.2	5
Leake	7	18,660	37.5	5
Lee	34	40,589	83.8	4
LeFlore	32	47,142	67.9	4
Lincoln	14	26,759	52.3	4
Lowndes	24	46,639	51.5	4
Madison	14	32,904	42.5	3
Marion	16	23,293	68.7	4
Marshall	11	24,503	44.9	3
Monroe	22	33,953	64.8	4
Montgomery	10	13,320	75.1	4
Neshoba	10	20,927	47.8	4
Newton	12	19,517	61.5	4
Noxubee	7	16,826	41.6	5
Oktibbeha	13	26,175	49.7	4
Panola	12	28,791	41.7	4
Pearl River	14	22,411	62.5	4
Perry	4	8,745	45.7	5
Pike	23	35,063	65.6	4
Pontotoc	6	17,232	34.8	5
Prentiss	9	17,949	50.1	4
Quitman	9	21,019	42.8	4
Rankin	20	34,322	58.3	3
Scott	12	21,187	56.6	4
Sharkey	7	10,738	65.2	5
Simpson	14	20,454	68.4	3
Smith	5	14,303	35.0	5
Stone	5	7,013	71.3	5
Sunflower	19	45,750	41.5	4
Tallahatchie	12	24,081	49.8	4
Tate	6	18,138	33.1	4
Tippah	9	15,093	59.6	4
Tishomingo	9	13,889	64.8	5
Tunica	5	16,826	29.7	5
Union	6	18,904	31.7	4
Walthall	6	13,512	44.4	5
Warren	50	42,206	118.5	3
Washington	52	78,638	66.1	4
Wayne	8	16,258	49.2	4
Webster	6	10,580	56.7	5
Wilkinson	7	13,235	52.9	5
Winston	10	19,246	52.0	4
Yalobusha	7	12,502	56.0	5
Yazoo	12	31,653	37.9	3
Mississippi, total	1,563	2,178,141	71.8	

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Missouri:				
Adair	8	20,105	39.8	4
Andrew	6	11,062	54.2	3
Atchison	5	9,213	54.3	5
Audrain	19	26,079	72.9	4
Barry	9	18,921	47.6	4
Barton	6	11,113	54.0	4
Bates	8	15,905	50.3	4
Benton	2	8,737	22.9	5
Bollinger	1	9,167	10.9	5
Boone	129	55,202	233.7	4
Buchanan	88	90,581	97.2	2
Butler	34	34,656	98.1	4
Caldwell	5	8,830	56.6	5
Callaway	21	23,858	88.0	4
Camden	4	9,116	43.9	5
Cape Girardeau	47	42,020	111.9	4
Carroll	6	13,847	43.3	4
Carter	0	3,973	----------	5
Cass	8	29,702	26.9	3
Cedar	2	9,185	21.8	4
Chariton	6	12,720	47.2	5
Christian	1	12,359	8.1	3
Clark	2	8,725	22.9	5
Clay	47	87,474	53.7	1
Clinton	7	11,588	60.4	3
Cole	47	40,761	115.3	4
Cooper	11	15,448	71.2	4
Crawford	4	12,647	31.6	5
Dade	4	7,577	52.8	3
Dallas	3	9,314	32.2	3
Daviess	2	9,502	21.0	5
De Kalb	2	7,226	27.7	3
Dent	5	10,445	47.9	4
Douglas	1	9,653	10.4	5
Dunklin	20	39,139	51.1	4
Franklin	20	44,566	44.9	3
Gasconade	3	12,195	24.6	4
Gentry	6	8,793	68.2	5
Greene	148	126,276	117.2	2
Grundy	6	12,220	49.1	4
Harrison	6	11,603	51.7	4
Henry	9	19,226	46.8	4
Hickory	1	4,516	22.1	5
Holt	3	7,885	38.0	5
Howard	6	10,859	55.3	4
Howell	9	22,027	40.9	4
Iron	4	8,041	49.7	5
Jackson	925	622,732	148.5	1
Jasper	69	78,863	87.5	4
Jefferson	17	66,377	25.6	1
Johnson	10	28,981	34.5	3
Knox	1	6,558	15.2	5
Laclede	8	18,991	42.1	4
Lafayeete	13	25,274	51.4	3
Lawrence	17	23,260	73.1	3
Lewis	2	10,984	18.2	4
Lincoln	5	14,783	33.8	3
Linn	10	16,815	59.5	4
Livingston	9	15,771	57.1	4
McDonald	3	11,798	25.4	5
Macon	9	16,473	54.6	4
Madison	4	9,366	42.7	4
Maries	0	7,282	----------	5
Marion	25	29,522	84.7	4
Mercer	2	5,750	34.8	5
Miller	3	13,800	21.7	4
Mississippi	7	20,695	33.8	4
Moniteau	6	10,500	57.1	4
Monroe	3	10,688	28.1	5
Montgomery	5	11,097	45.1	5
Morgan	4	9,476	42.2	5
New Madrid	12	31,350	38.3	4
Newton	11	30,093	36.6	4
Nodaway	8	22,215	36.0	4
Oregon	1	9,845	10.2	5
Osage	0	10,867	----------	5
Ozark	2	6,744	29.7	5
Pemiscot	16	38,095	42.0	4
Perry	7	14,642	47.8	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Missouri—Continued				
Pettis	27	35,120	76.9	4
Phelps	18	25,396	70.9	4
Pike	9	16,706	53.9	4
Platte	7	23,350	30.0	3
Polk	6	13,753	43.6	3
Pulaski	6	46,567	12.9	5
Putnam	0	6,999	----------	5
Ralls	0	8,078	----------	5
Randolph	14	22,014	63.6	4
Ray	5	16,075	31.1	3
Reynolds	0	5,161	----------	5
Ripley	2	9,096	22.0	5
St. Charles	24	52,970	45.3	1
St. Clair	4	8,421	47.5	5
St. Francois	23	36,516	63.0	3
St. Louis	336	703,532	47.8	1
St. Louis city	2,081	750,026	277.5	1
Ste. Genevieve	4	12,116	33.0	3
Saline	22	25,148	87.5	4
Schuyler	1	5,052	19.8	5
Scotland	1	6,484	15.4	5
Scott	18	32,748	55.0	4
Shannon	1	7,087	14.1	5
Shelby	3	9,063	33.1	5
Stoddard	3	29,490	10.2	4
Stone	3	8,176	36.7	5
Sullivan	1	8,783	11.4	5
Taney	7	10,238	68.4	5
Texas	7	17,758	39.4	5
Vernon	15	20,540	73.0	4
Warren	4	8,750	45.7	3
Washington	3	14,346	20.9	3
Wayne	4	8,638	46.3	5
Webster	4	13,753	29.1	3
Worth	1	3,936	25.4	5
Wright	2	14,183	14.1	4
Missouri, total	4,671	4,319,813	108.1	----------
Montana:				
Beaverhead	5	7,194	69.5	4
Big Horn	2	10,007	20.0	3
Blaine	3	8,091	37.1	5
Broadwater	2	2,804	71.3	5
Carbon	5	8,317	60.1	3
Carter	1	2,493	40.1	5
Cascade	88	73,418	119.9	2
Chouteau	4	7,348	54.4	3
Custer	15	13,227	113.4	4
Daniels	3	3,755	79.9	5
Dawson	5	12,314	40.6	4
Deer Lodge	16	18,640	85.8	4
Fallon	3	3,997	75.1	5
Fergus	7	14,018	49.9	4
Flathead	37	32,965	112.2	4
Gallatin	31	26,045	119.0	4
Garfield	1	1,981	50.5	5
Glacier	6	11,565	51.9	4
Golden Valley	0	1,203	----------	3
Granite	2	3,014	66.4	5
Hill	11	18,653	59.0	4
Jefferson	4	4,297	93.1	5
Judith Basin	0	3,085	----------	3
Lake	8	13,104	61.1	5
Lewis and Clark	34	28,006	121.4	3
Liberty	1	2,624	38.1	5
Lincoln	6	12,537	47.9	4
McCone	1	3,321	30.1	5
Madison	3	5,211	57.6	5
Meagher	2	2,616	76.5	3
Mineral	1	3,037	32.9	5
Missoula	70	44,663	156.7	4
Musselshell	2	4,888	40.9	3
Park	9	13,168	68.3	4
Petroleum	0	894	----------	5
Phillips	3	6,027	49.8	5
Pondera	4	7,653	52.3	4
Powder River	1	2,485	40.2	5
Powell	7	7,002	100.0	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Montana—Continued				
Prairie	1	2,318	43.1	5
Ravalli	7	12,341	56.7	5
Richland	7	10,504	66.6	4
Roosevelt	7	11,731	59.7	4
Rosebud	3	6,187	48.5	5
Sanders	5	6,880	72.7	5
Sheridan	3	6,458	46.5	5
Silver Bow	48	46,454	103.3	4
Stillwater	3	5,526	54.3	3
Sweet Grass	2	3,290	60.8	5
Teton	3	7,295	41.1	3
Toole	5	7,904	63.3	4
Treasure	0	1,345	----	3
Valley	5	17,080	29.3	4
Wheatland	2	3,026	66.1	5
Wibaux	1	1,698	58.9	5
Yellowstone National Park	0	47	----	5
Yellowstone	98	79,016	124.0	2
Montana, total	603	674,767	89.4	----
Nebraska:				
Adams	37	28,944	127.8	4
Antelope	6	10,176	59.0	5
Arthur	0	680	----	5
Banner	0	1,269	----	5
Blaine	0	1,016	----	5
Boone	3	9,134	32.8	5
Box Butte	14	11,688	119.8	4
Boyd	2	4,513	44.3	5
Brown	3	4,436	67.6	5
Buffalo	24	26,236	91.5	4
Burt	7	10,192	68.7	5
Butler	5	10,312	48.5	3
Cass	9	17,821	50.5	3
Cedar	8	13,368	59.8	5
Chase	4	4,317	92.7	5
Cherry	3	8,218	36.5	4
Cheyenne	9	14,828	60.7	4
Clay	3	8,717	34.4	5
Colfax	5	9,595	52.1	4
Cuming	10	12,435	80.4	4
Custer	9	16,517	54.5	4
Dakota	3	12,168	24.7	3
Dawes	8	9,536	83.9	4
Dawson	18	19,405	92.8	4
Deuel	2	3,125	64.0	5
Dixon	3	8,106	37.0	5
Dodge	24	32,471	73.9	3
Douglas	598	343,490	174.1	2
Dundy	2	3,570	56.0	5
Fillmore	3	9,425	31.8	5
Franklin	4	5,449	73.4	5
Frontier	1	4,311	23.2	5
Furnas	8	7,711	103.7	5
Gage	21	26,818	78.3	3
Garden	3	3,472	86.4	5
Garfield	4	2,699	148.2	5
Gosper	0	2,489	----	5
Grant	1	1,009	99.1	5
Greeley	4	4,595	87.1	5
Hall	37	35,757	103.5	4
Hamilton	7	8,714	80.3	4
Harland	4	5,081	78.7	5
Hayes	0	1,919	----	5
Hitchcock	2	4,829	41.4	5
Holt	7	13,722	51.0	4
Hooker	3	1,130	265.5	5
Howard	3	6,541	45.9	5
Jefferson	8	11,620	68.8	4
Johnson	2	6,281	31.8	3
Kearney	6	6,580	91.2	5
Keith	4	7,958	50.3	4
Keya Paha	0	1,672	----	5
Kimball	4	7,975	50.2	4
Knox	9	13,300	67.7	5
Lancaster	202	155,272	130.1	2
Lincoln	26	28,491	91.3	4
Logan	0	1,108	----	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Nebraska—Continued				
Loup	0	1,097	----------	5
McPherson	0	735	----------	5
Madison	32	25,145	127.3	4
Merrick	5	8,363	59.8	5
Morrill	4	7,057	56.7	5
Nance	4	5,635	71.0	5
Nemaha	5	9,099	55.0	4
Nuckolls	6	8,217	73.0	4
Otoe	13	16,503	78.8	3
Pawnee	3	5,356	56.0	5
Perkins	2	4,189	47.7	5
Phelps	12	9,800	122.4	4
Pierce	6	8,722	68.8	5
Platte	11	23,992	45.8	4
Polk	4	7,210	55.5	5
Red Willow	11	12,940	85.0	4
Richardson	12	13,903	86.3	4
Rock	2	2,554	78.3	5
Saline	6	12,542	47.8	3
Sarpy	5	31,281	16.0	2
Saunders	9	17,270	52.1	3
Scotts Bluff	33	33,809	97.6	4
Seward	9	13,581	66.3	3
Sheridan	6	9,049	66.3	5
Sherman	3	5,382	55.7	5
Sioux	0	2,575	----------	5
Stanton	2	5,783	34.6	5
Thayer	8	9,118	87.7	5
Thomas	0	1,078	----------	5
Thurston	*3	7,237	41.5	5
Valley	6	6,590	91.0	5
Washington	6	12,103	49.6	3
Wayne	6	9,959	60.2	5
Webster	5	6,224	80.3	5
Wheeler	0	1,297	----------	5
York	10	13,724	79.4	4
Nebraska, total	1,441	1,411,330	102.1	--------
Nevada:				
Churchill	5	8,452	59.2	4
Clark	96	127,016	75.6	2
Douglas	1	3,481	28.7	5
Elko	11	12,011	91.6	4
Esmeralda	0	619	----------	5
Eureka	0	767	----------	5
Humboldt	3	5,708	52.6	4
Lander	1	1,566	63.9	5
Lincoln	1	2,431	41.1	3
Lyon	3	6,143	48.8	5
Mineral	2	6,329	31.6	4
Nye	3	4,374	68.6	5
Ormsby	10	8,063	124.0	3
Pershing	2	3,199	62.5	5
Storey	0	568	----------	3
Washoe	127	84,743	149.9	2
White Pine	6	9,808	61.2	4
Nevada, total	271	285,278	95.0	--------
New Hampshire:				
Belknap	41	28,912	141.8	4
Carroll	20	15,829	126.4	4
Cheshire	33	43,342	76.1	3
Coos	30	37,140	80.8	4
Grafton	185	48,857	378.7	4
Hillsborough	173	178,161	97.1	2
Merrimack	87	67,785	128.3	3
Rockingham	74	99,029	74.7	3
Strafford	40	59,799	66.9	4
Sullivan	19	28,067	67.7	3
New Hampshire, total	702	606,921	115.7	--------
New Jersey:				
Atlantic	192	160,880	119.3	2
Bergen	780	780,255	100.0	1
Burlington	131	224,499	58.4	1
Camden	410	392,035	104.6	1

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
New Jersey—Continued				
Cape May	45	48,555	92.7	3
Cumberland	95	106,850	88.9	3
Essex	1,631	923,545	176.6	1
Gloucester	74	134,840	54.9	1
Hudson	766	610,734	125.4	2
Hunterdon	53	54,107	98.0	3
Mercer	415	266,392	155.8	2
Middlesex	339	433,856	78.1	3
Monmouth	363	334,401	108.6	3
Morris	269	261,620	102.8	1
Ocean	85	108,241	78.5	3
Passaic	522	406,618	128.4	1
Salem	53	58,711	90.3	2
Somerset	136	143,913	94.5	3
Sussex	40	49,255	81.2	3
Union	631	504,255	125.1	1
Warren	46	63,220	72.8	2
New Jersey, total	7,076	6,066,782	116.6	
New Mexico:				
Bernalillo	297	262,199	113.3	2
Catron	1	2,773	36.1	5
Chaves	36	57,649	62.4	4
Colfax	11	13,806	79.7	4
Curry	17	32,691	52.0	4
De Baca	1	2,991	33.4	5
Dona Ana	2 3	59,948	38.4	3
Eddy	28	50,783	55.1	4
Grant	14	18,700	74.9	4
Guadalupe	2	5,610	35.7	5
Harding	0	1,874		5
Hidalgo	2	4,961	40.3	4
Lea	23	53,429	43.0	4
Lincoln	6	7,744	77.5	5
Los Alamos	22	13,037	168.8	4
Luna	3	9,839	30.5	4
McKinley	11	37,209	29.6	4
Mora	2	6,028	33.2	5
Otero	16	36,976	43.3	3
Quay	7	12,279	57.0	4
Rio Arriba	10	24,193	41.3	5
Roosevelt	8	16,198	49.4	4
Sandoval	1	14,201	7.0	3
San Juan	32	53,306	60.0	4
San Miguel	14	23,468	59.7	4
Santa Fe	48	44,970	106.7	3
Sierra	8	6,409	124.8	4
Socorro	4	10,168	39.3	4
Taos	5	15,934	31.4	5
Torrance	1	6,497	15.4	3
Union	4	6,068	65.9	4
Valencia	14	39,085	35.8	3
New Mexico, total	671	951,023	70.6	
New York:				
Albany	562	272,926	205.9	2
Allegany	34	43,978	77.3	4
Broome	279	212,661	131.2	2
Cattaraugus	88	80,187	109.7	3
Cayuga	77	73,942	104.1	3
Chautauqua	134	145,377	92.2	3
Chemung	108	98,706	109.4	4
Chenango	41	43,243	94.8	3
Clinton	60	72,722	82.5	4
Columbia	51	47,322	107.8	3
Cortland	39	41,113	94.9	3
Delaware	44	43,540	101.1	3
Dutchess	275	176,008	156.2	4
Erie	1,607	1,064,688	150.9	1
Essex	42	35,300	119.0	4
Franklin	47	44,742	105.0	4
Fulton	57	51,304	111.1	3
Genesee	50	53,994	92.6	3
Greene	26	31,372	82.9	3
Hamilton	6	4,267	140.6	3
Herkimer	49	66,370	73.8	2

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
New York—Continued				
Jefferson	94	87,835	107.0	3
Kings	4,295	2,627,319	163.5	1
Lewis	15	23,249	64.5	3
Livingston	48	44,053	109.0	3
Madison	48	54,635	87.9	2
Monroe	1,160	586,387	197.8	2
Montgomery	53	57,240	92.6	3
Nassau	1,829	1,300,171	140.7	1
New York	11,519	3,123,096	368.8	1
Niagara	200	242,269	82.6	1
Oneida	322	264,401	121.8	2
Onondaga	744	423,028	175.9	2
Ontario	89	68,070	130.7	3
Orange	219	183,734	119.2	3
Orleans	20	34,159	58.5	3
Otsego	96	51,942	184.8	3
Oswego	63	86,118	73.2	2
Putnam	27	31,722	85.1	3
Queens	2,317	1,809,578	128.0	1
Rensselaer	163	142,585	114.3	2
Richmond	237	221,991	106.8	1
Rockland	230	136,803	168.1	1
St. Lawrence	100	111,239	89.9	4
Saratoga	68	89,096	76.3	2
Schenectady	223	152,896	145.9	2
Schoharie	19	22,616	84.0	3
Schuyler	11	15,044	73.1	5
Seneca	29	31,984	90.7	4
Steuben	100	97,691	102.4	4
Suffolk	725	666,784	108.7	1
Sullivan	52	45,272	114.9	4
Tioga	24	37,802	63.5	3
Tompkins	94	66,164	142.1	4
Ulster	120	118,804	101.0	4
Warren	77	44,002	175.0	3
Washington	35	48,476	72.2	3
Wayne	61	67,989	89.7	3
Westchester	1,470	808,891	181.7	1
Wyoming	26	34,793	74.7	3
Yates	14	18,614	75.2	4
New York, total	30,712	16,782,304	183.0	----
New York City (5 counties)	18,368	7,781,984	236.0	----
Kings	4,295	2,627,319	----	----
Bronx	11,519	1,424,815	----	----
New York		1,698,281	----	----
Queens	2,317	1,809,578	----	----
Richmond	237	221,991	----	----
North Carolina:				
Alamance	67	85,674	78.2	3
Alexander	6	15,625	38.4	5
Alleghany	6	7,734	89.2	5
Anson	7	24,962	28.0	4
Ashe	10	19,768	50.6	5
Avery	10	12,009	83.3	5
Beaufort	18	36,014	50.0	4
Bertie	10	24,350	41.1	5
Bladen	11	28,881	38.1	5
Brunswick	5	20,278	24.7	5
Buncombe	170	130,074	130.7	2
Burke	43	52,701	81.6	4
Cabarrus	62	68,137	91.0	3
Caldwell	28	49,552	56.5	4
Camden	1	5,598	17.9	3
Carteret	21	30,940	67.9	4
Caswell	2	19,912	10.0	5
Catawba	53	73,191	72.4	4
Chatham	14	26,785	52.3	3
Cherokee	11	16,335	67.3	5
Chowan	8	11,729	68.2	4
Clay	1	5,526	18.1	5
Cleveland	46	66,048	69.6	4
Columbus	25	48,973	51.0	4
Craven	30	58,773	51.6	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
North Carolina—Continued				
Cumberland	65	148,418	43.8	4
Currituck	3	6,601	45.4	3
Dare	5	5,935	84.2	5
Davidson	38	79,493	47.8	3
Davie	6	16,728	35.9	3
Duplin	16	40,270	39.7	5
Durham	475	111,995	424.1	2
Edgecombe	15	54,226	27.7	4
Forsyth	349	189,428	184.2	2
Franklin	11	28,755	38.3	3
Gaston	74	127,074	58.2	3
Gates	2	9,254	21.6	5
Graham	4	6,432	62.2	5
Granville	32	33,110	96.6	3
Greene	4	16,741	23.9	5
Guilford	240	246,520	97.4	2
Halifax	29	58,956	49.2	4
Harnett	22	48,236	45.6	3
Haywood	33	39,711	83.1	3
Henderson	36	36,163	99.5	3
Hertford	17	22,718	74.8	4
Hoke	11	16,356	67.3	4
Hyde	2	5,765	34.7	5
Iredell	47	62,526	75.2	3
Jackson	12	17,780	67.5	5
Johnston	32	62,936	50.8	3
Jones	2	11,005	18.2	5
Lee	19	26,561	71.5	4
Lenoir	42	55,276	76.0	4
Lincoln	11	28,814	38.2	3
McDowell	12	26,742	48.2	3
Macon	12	14,935	80.3	5
Madison	10	17,217	58.1	3
Martin	9	27,139	33.2	4
Mecklenburg	310	272,111	113.9	2
Mitchell	6	13,906	43.1	4
Montgomery	7	18,408	38.0	5
Moore	31	36,733	84.4	4
Nash	56	61,002	91.8	4
New Hanover	82	71,742	114.3	4
Northampton	12	26,811	44.8	5
Onslow	20	82,706	24.2	4
Orange	300	42,970	698.2	3
Pamlico	4	9,850	40.6	5
Pasquotank	23	25,630	89.7	4
Pender	5	18,508	27.0	5
Perquimans	3	9,178	32.7	5
Person	12	26,394	45.5	3
Pitt	43	69,942	61.5	4
Polk	9	11,395	79.0	3
Randolph	30	61,497	48.8	3
Richmond	26	39,202	66.3	4
Robeson	50	89,102	56.1	4
Rockingham	42	69,629	60.3	3
Rowan	62	82,817	74.9	4
Rutherford	27	45,091	59.9	3
Sampson	19	48 013	39.6	4
Scotland	13	25,183	51.6	4
Stanly	28	40,873	68.5	4
Stokes	6	22,314	26.9	3
Surry	34	48,205	70.5	3
Swain	4	8,387	47.7	5
Transylvania	13	16,372	79.4	3
Tyrrell	1	4,520	22.1	5
Union	18	44,670	40.3	3
Vance	19	32,002	59.4	4
Wake	183	169,082	108.2	2
Warren	8	19,652	40.7	5
Washington	8	13,488	59.3	4
Watauga	10	17,529	57.0	4
Wayne	54	82,059	65.8	4
Wilkes	17	45,269	37.6	4
Wilson	42	57,716	72.8	4
Yadkin	9	22,804	39.5	3
Yancey	5	14,008	35.7	3
North Carolina, total	4,013	4,556,155	88.1	------

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
North Dakota:				
Adams	3	4,449	67.4	5
Barnes	8	16,719	47.8	3
Benson	4	9,435	42.4	5
Billings	0	1,513		5
Bottineau	5	11,315	44.2	4
Bowman	2	4,154	48.1	5
Burke	1	5,886	17.0	5
Burleigh	56	34,016	164.6	4
Cass	85	66,947	127.0	2
Cavalier	4	10,064	39.7	5
Dickey	7	8,147	85.9	5
Divide	3	5,566	53.9	5
Dunn	0	6,350		5
Eddy	3	4,936	60.8	5
Emmons	3	8,462	35.5	5
Foster	2	5,361	37.3	5
Golden Valley	1	3,100	32.3	5
Grand Forks	59	48,677	121.2	4
Grant	4	6,248	64.0	5
Griggs	1	5,023	19.9	5
Hettinger	2	6,317	31.7	5
Kidder	1	5,386	18.6	5
La Moure	3	8,705	34.5	5
Logan	2	5,369	37.3	5
McHenry	3	11,099	27.0	5
McIntosh	3	6,702	44.8	5
McKenzie	2	7,296	27.4	5
McLean	7	14,030	49.9	5
Mercer	4	6,805	58.8	5
Morton	6	20,992	28.6	4
Mountrail	4	10,077	39.7	5
Nelson	2	7,034	28.4	5
Oliver	0	2,610		5
Pembina	7	12,946	54.1	5
Pierce	5	7,394	67.6	4
Ramsey	9	13,443	66.9	4
Ransom	4	8,078	49.5	3
Renville	2	4,698	42.6	5
Richland	15	18,824	84.5	3
Rolette	4	10,641	37.6	5
Sargent	0	6,856		5
Sheridan	1	4,350	23.0	5
Sioux	0	3,662		5
Slope	0	1,893		5
Stark	16	18,451	86.7	4
Steele	1	4,719	21.2	3
Stutsman	27	25,137	107.4	4
Towner	3	5,624	53.3	5
Traill	6	10,583	56.7	3
Walsh	13	17,997	72.2	4
Ward	46	47,072	97.7	4
Wells	8	9,237	86.6	5
Williams	15	22,051	68.0	4
North Dakota, total	472	632,446	74.6	
Ohio:				
Adams	8	19,982	40.0	5
Allen	130	103,691	125.4	2
Ashland	26	38,771	67.1	3
Ashtabula	58	93,067	62.3	3
Athens	36	46,998	76.6	4
Auglaize	21	36,147	58.1	3
Belmont	56	83,864	66.8	2
Brown	14	25,178	55.6	4
Butler	167	199,076	83.9	2
Carroll	6	20,857	28.8	3
Champaign	18	29,714	60.6	3
Clark	129	131,440	98.1	2
Clermont	28	80,530	34.8	3
Clinton	20	30,004	66.7	3
Columbiana	68	107,004	63.5	3
Coshocton	21	32,224	65.2	4
Crawford	31	46,775	66.3	4
Cuyahoga	2,817	1,647,895	170.9	1
Darke	26	45,612	57.0	3
Defiance	18	31,508	57.1	3
Delaware	25	36,107	69.2	3
Erie	63	68,000	92.6	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Ohio—Continued				
Fairfield	49	63,912	76.7	3
Fayette	15	24,775	60.5	3
Franklin	1,155	682,962	169.1	2
Fulton	20	29,301	68.3	3
Gallia	34	26,120	130.2	3
Geauga	14	47,573	29.4	3
Greene	51	94,642	53.9	2
Guernsey	34	38,579	88.1	3
Hamilton	1,492	864,121	172.7	1
Hancock	44	53,686	82.0	3
Hardin	22	29,633	74.2	3
Harrison	10	17,995	55.6	3
Henry	16	25,392	63.0	3
Highland	18	29,716	60.6	4
Hocking	9	20,168	44.6	4
Holmes	7	21,591	32.4	3
Huron	35	47,326	74.0	3
Jackson	17	29,372	57.9	3
Jefferson	62	99,201	62.5	2
Knox	33	38,808	85.0	4
Lake	88	148,700	59.2	1
Lawrence	27	55,438	48.7	2
Licking	54	90,242	59.8	3
Logan	21	34,803	60.3	4
Lorain	151	217,500	69.4	2
Lucas	678	456,931	148.4	2
Mahoning	384	300,480	127.8	2
Madison	13	26,454	49.1	3
Marion	59	60,221	98.0	4
Medina	44	65,315	67.4	3
Meigs	7	22,159	31.6	4
Mercer	22	32,559	67.6	4
Miami	49	72,901	67.2	2
Monroe	5	15,268	32.7	3
Montgomery	542	527,080	102.8	2
Morgan	3	12,747	23.5	5
Morrow	9	19,405	46.4	4
Muskingum	67	79,159	84.6	4
Noble	3	10,982	27.3	3
Ottawa	22	35,323	62.3	3
Paulding	11	16,792	65.5	3
Perry	14	27,864	50.2	4
Pickaway	23	35,855	66.7	3
Pike	9	19,380	46.4	4
Portage	49	91,798	53.4	3
Preble	10	32,498	30.8	3
Putnam	14	28,331	49.4	3
Richland	105	117,761	89.2	4
Ross	47	61,215	76.8	4
Sandusky	35	56,486	62.0	4
Scioto	76	84,216	90.2	3
Seneca	51	59,326	86.0	4
Shelby	18	33,586	53.6	3
Stark	332	340,345	97.5	2
Summit	612	513,569	119.2	2
Trumbull	129	208,526	61.9	2
Tuscarawas	55	76,789	71.6	3
Union	18	22,853	78.8	3
Van Wert	17	28,840	58.9	3
Vinton	2	10,274	19.5	5
Warren	17	65,711	25.9	3
Washington	32	51,689	61.9	4
Wayne	56	75,497	74.2	3
Williams	23	29,968	76.7	4
Wood	41	72,596	56.5	3
Wyandot	10	21,648	46.2	4
Ohio, total	10,977	9,706,397	113.1	.....
Oklahoma:				
Adair	6	13,112	45.8	5
Alfalfa	6	8,445	71.0	5
Atoka	1	10,352	9.7	4
Beaver	4	6,965	57.4	5
Beckham	18	17,782	101.2	4
Blaine	9	12,077	74.5	3
Bryan	16	24,252	66.0	4
Caddo	14	28,621	48.9	3
Canadian	16	24,727	64.7	2

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Oklahoma—Continued				
Carter	28	39,044	70.7	4
Cherokee	8	17,762	45.0	4
Choctaw	8	15,637	51.2	4
Cimarron	2	4,496	44.5	5
Cleveland	55	47,600	115.5	2
Coal	2	5,546	36.1	5
Comanche	42	90,803	46.3	2
Cotton	3	8,031	37.4	3
Craig	10	16,303	61.3	5
Creek	18	40,495	44.4	2
Custer	19	21,040	90.3	4
Delaware	4	13,198	30.3	5
Dewey	2	6,051	33.1	5
Ellis	6	5,457	110.0	5
Garfield	54	52,975	101.9	4
Garvin	13	28,290	46.0	4
Grady	23	29,590	77.7	3
Grant	3	8,140	36.9	5
Greer	5	8,877	56.3	4
Harmon	4	5,852	68.4	4
Harper	2	5,956	33.6	5
Haskell	2	9,121	21.9	5
Hughes	9	15,144	59.4	4
Jackson	18	29,736	63.6	4
Jefferson	5	8,192	61.0	5
Johnston	1	8,517	11.7	5
Kay	46	51,042	90.1	4
Kingfisher	8	10,635	75.2	3
Kiowa	9	14,825	60.7	3
Latimer	4	7,738	51.7	5
Le Flore	16	29,106	55.0	3
Lincoln	9	18,783	52.7	3
Logan	13	18,662	69.7	3
Love	4	5,862	68.2	5
McClain	5	12,740	39.2	3
McCurtain	10	25,851	38.7	4
McIntosh	6	12,371	48.5	4
Major	2	7,808	25.6	5
Marshall	3	7,263	41.3	4
Mayes	8	20,073	39.9	4
Murray	11	10,622	103.6	4
Muskogee	68	61,866	109.9	5
Noble	6	10,376	57.8	4
Nowata	6	10,848	55.3	4
Okfuskee	6	11,706	51.3	3
Oklahoma	743	439,506	169.1	2
Okmulgee	24	36,945	65.0	3
Osage	15	32,441	46.2	2
Ottawa	14	28,301	49.5	4
Pawnee	7	10,884	64.3	3
Payne	30	44,231	67.8	3
Pittsburg	24	34,360	69.8	4
Pontotoc	30	28,089	106.8	4
Pottawatomie	26	41,486	62.7	3
Pushmataha	3	9,088	33.0	5
Roger Mills	1	5,090	19.6	5
Rogers	9	20,614	43.7	3
Seminole	18	28,066	64.1	4
Sequoyah	5	18,001	27.8	3
Stephens	19	37,990	50.0	3
Texas	9	14,162	63.6	4
Tillman	6	14,654	40.9	3
Tulsa	392	346,038	113.3	2
Wagoner	4	15,673	25.5	3
Washington	42	42,347	99.2	3
Washita	6	18,121	33.1	4
Woods	9	11,932	75.4	4
Woodward	15	13,902	107.9	4
Oklahoma, total	2,127	2,328,284	91.4	
Oregon:				
Baker	11	17,295	63.6	4
Benton	39	39,165	99.6	3
Clackamas	53	113,038	46.9	2
Clatsop	27	27,380	98.6	4
Columbia	8	22,379	35.7	3
Coos	46	54,955	83.7	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Oregon—Continued				
Crook	7	9,430	74.2	4
Curry	7	13,983	50.1	4
Deschutes	31	23,100	134.2	4
Douglas	40	68,458	58.4	3
Gilliam	2	3,069	65.2	5
Grant	4	7,726	51.8	5
Harney	5	6,744	74.1	4
Hood River	9	13,395	67.2	3
Jackson	78	73,962	105.5	4
Jefferson	3	7,130	42.1	5
Josephine	26	29,917	86.9	4
Klamath	42	47,475	88.5	4
Lake	7	7,158	97.8	4
Lane	166	162,890	101.9	2
Lincoln	14	24,635	56.8	4
Linn	38	58,867	64.6	3
Malheur	21	22,764	92.3	4
Marion	179	120,888	148.1	3
Morrow	4	4,871	82.1	5
Multnomah	1,106	522,813	211.5	2
Polk	9	26,523	33.9	4
Sherman	0	2,446	----------	5
Tillamook	13	18,955	68.6	3
Umatilla	40	44,352	90.2	4
Union	21	18,180	115.5	4
Wallowa	5	7,102	70.4	5
Wasco	21	20,205	103.9	4
Washington	35	92,237	37.9	2
Wheeler	0	2,722	----------	5
Yamhill	24	32,478	73.9	3
Oregon, total	2,141	1,768,687	121.1	--------
Pennsylvania:				
Adams	35	51,906	67.4	3
Allegheny	2,260	1,628,587	138.8	1
Armstrong	43	79,524	54.1	3
Beaver	142	206,948	68.6	1
Bedford	22	42,451	51.8	3
Berks	328	275,414	119.1	2
Blair	130	137,270	94.7	2
Bradford	95	54,925	173.0	4
Bucks	178	308,567	57.7	1
Butler	74	114,639	64.6	3
Cambria	195	203,283	95.9	2
Cameron	3	7,586	39.5	4
Carbon	41	52,889	77.5	3
Centre	63	78,580	80.2	3
Chester	196	210,608	93.1	1
Clarion	14	37,408	37.4	4
Clearfield	41	81,534	50.3	3
Clinton	24	37,619	63.8	4
Columbia	45	53,489	84.1	3
Crawford	71	77,956	91.1	3
Cumberland	87	124,816	69.7	2
Dauphin	350	220,255	158.9	2
Delaware	605	553,154	109.4	1
Elk	29	37,328	77.7	4
Erie	253	250,682	100.9	2
Fayette	108	169,340	63.8	3
Forest	3	4,485	66.9	5
Franklin	78	88,172	88.5	3
Fulton	3	10,597	28.3	5
Greene	31	39,424	78.6	3
Huntingdon	24	39,457	60.8	3
Indiana	41	75,366	54.4	3
Jefferson	33	46,792	70.5	4
Juniata	6	15,874	37.8	5
Lackawanna	262	234,531	111.7	2
Lancaster	271	278,359	97.4	2
Lawrence	81	112,965	71.7	3
Lebanon	77	90,853	84.8	3
Lehigh	261	227,536	114.7	2
Luzerne	359	346,972	103.5	2
Lycoming	128	109,367	117.0	4
McKean	43	54,517	78.9	4
Mercer	111	127,519	87.0	3
Mifflin	42	44,348	94.7	4
Monroe	42	39,567	106.1	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Pennsylvania—Continued				
Montgomery	826	516,682	159.9	1
Montour	85	16,730	508.1	4
Northampton	254	201,412	126.1	2
Northumberland	74	104,138	71.1	3
Perry	8	26,582	30.1	3
Philadelphia	4,644	2,002,512	231.9	1
Pike	6	9,158	65.5	5
Potter	11	16,483	66.7	4
Schuylkill	151	173,027	87.3	3
Snyder	19	25,922	73.3	4
Somerset	38	77,450	49.1	2
Sullivan	3	6,251	48.0	5
Susquehanna	14	33,137	42.2	3
Tioga	28	36,614	76.5	4
Union	19	25,646	74.1	4
Venango	45	65,295	68.9	4
Warren	68	45,582	149.2	3
Washington	165	217,271	75.9	1
Wayne	27	28,237	95.6	3
Westmoreland	247	352,629	70.0	1
Wyoming	13	16,813	82.7	3
York	200	238,336	83.9	2
Pennsylvania, total	14,273	11,319,366	126.1	
Rhode Island:				
Bristol	17	37,146	45.8	2
Kent	81	112,619	71.9	2
Newport	46	81,891	56.2	3
Providence	845	568,778	148.6	2
Washington	52	59,054	88.1	3
Rhode Island, total	1,041	859,488	121.1	
South Carolina:				
Abbeville	9	21,417	42.0	3
Aiken	46	81,038	56.8	2
Allendale	4	11,362	35.2	4
Anderson	79	98,478	80.2	3
Bamberg	11	16,274	67.6	4
Barnwell	12	17,659	68.0	3
Beaufort	17	44,187	38.5	4
Berkeley	8	38,196	20.9	3
Calhoun	5	12,256	40.8	3
Charleston	298	216,382	137.7	2
Cherokee	14	35,205	39.8	4
Chester	13	30,888	42.1	4
Chesterfield	10	33,717	29.7	4
Clarendon	5	29,490	17.0	4
Colleton	13	27,816	46.7	3
Darlington	23	52,928	43.5	4
Dillon	13	30,584	42.5	4
Dorchester	9	24,383	36.9	3
Edgefield	7	15,735	44.5	3
Fairfield	7	20,713	33.8	3
Florence	74	84,438	87.6	4
Georgetown	20	34,798	57.5	3
Greenville	234	209,776	111.5	2
Greenwood	36	44,346	81.2	4
Hampton	8	17,425	45.9	5
Horry	37	68,247	54.2	4
Jasper	3	12,237	24.5	3
Kershaw	22	33,585	65.5	3
Lancaster	14	39,352	35.6	3
Laurens	16	47,609	33.6	3
Lee	7	21,832	32.1	4
Lexington	17	60,726	28.0	2
McCormick	0	8,629		5
Marion	17	32,014	53.1	4
Marlboro	14	28,529	49.1	4
Newberry	18	29,416	61.2	3
Oconee	23	40,204	57.2	4
Orangeburg	46	68,559	67.1	3
Pickens	28	46,030	60.8	3
Richland	252	200,102	125.9	2
Saluda	2	14,554	13.7	3
Spartanburg	142	156,830	90.5	3
Sumter	42	74,941	56.0	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
South Carolina—Continued				
Union	12	30,015	40.0	4
Williamsburg	18	40,932	44.0	4
York	47	78,760	59.7	3
South Carolina, total	1,752	2,382,594	73.5	
South Dakota:				
Aurora	1	4,749	21.1	5
Beadle	18	21,682	83.0	4
Bennett	1	3,053	32.8	5
Bon Homme	4	9,229	43.3	5
Brookings	12	20,046	59.9	4
Brown	29	34,106	85.0	4
Brule	2	6,319	31.7	5
Buffalo	0	1,547		5
Butte	6	8,592	69.8	4
Campbell	1	3,531	28.3	5
Charles Mix	4	11,785	33.9	5
Clark	1	7,134	14.0	5
Clay	8	10,810	74.0	4
Codington	21	20,220	103.9	4
Corson	1	5,798	17.2	5
Custer	3	4,906	61.1	5
Davison	20	16,681	119.9	4
Day	8	10,516	76.1	5
Deuel	2	6,782	29.5	5
Dewey	0	5,257		5
Douglas	3	5,113	58.7	5
Edmunds	3	6,079	49.4	5
Fall River	7	10,688	65.5	4
Faulk	3	4,397	68.2	5
Grant	4	9,913	40.4	4
Gregory	3	7,399	40.5	5
Haakon	1	3,303	30.3	5
Hamlin	3	6,303	47.6	5
Hand	3	6,712	44.7	5
Hanson	1	4,584	21.8	5
Harding	1	2,371	42.2	5
Hughes	13	12,725	102.2	4
Hutchinson	7	11,085	63.1	5
Hyde	1	2,602	38.4	5
Jackson	1	1,985	50.4	5
Jerauld	2	4,048	49.4	5
Jones	1	2,066	48.4	5
Kingsbury	5	9,227	54.2	5
Lake	7	11,764	59.5	3
Lawrence	13	17,075	76.1	4
Lincoln	5	12,371	40.4	3
Lyman	2	4,428	45.2	5
McCook	3	8,268	36.3	3
McPherson	3	5,821	51.5	5
Marshall	4	6,663	60.0	5
Meade	4	12,044	33.2	4
Mellette	1	2,664	37.5	5
Miner	1	5,398	18.5	5
Minnehaha	87	86,575	100.5	2
Moody	3	8,810	34.1	3
Pennington	54	58,195	92.8	4
Perkins	4	5,977	66.9	5
Potter	3	4,926	60.9	5
Roberts	4	13,190	30.3	4
Sanborn	1	4,641	21.5	5
Shannon	1	6,000	16.7	5
Spink	8	11,706	68.3	4
Stanley	1	4,085	24.5	4
Sully	0	2,607		5
Todd	0	4,961		5
Tripp	3	8,761	34.2	4
Turner	7	11,159	62.7	3
Union	2	10,197	19.6	3
Walworth	5	8,097	61.8	4
Washabaugh	0	1,042		5
Yankton	28	17,551	159.5	4
Ziebach	0	2,495		5
South Dakota, total	458	680,514	67.3	

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Tennessee:				
Anderson	58	60,032	96.6	2
Bedford	16	23,150	69.1	4
Benton	5	10,662	46.9	4
Bledsoe	3	7,811	38.4	3
Blount	39	57,525	67.8	2
Bradley	26	38,324	67.8	3
Campbell	16	27,936	57.3	3
Cannon	3	8,537	35.1	5
Carroll	9	23,476	38.3	4
Carter	15	41,578	36.1	4
Cheatham	3	9,428	31.8	3
Chester	3	9,569	31.4	4
Claiborne	4	19,067	21.0	5
Clay	1	7,289	13.7	5
Cocke	9	23,390	38.5	4
Coffee	16	28,603	55.9	4
Crockett	8	14,594	54.8	5
Cumberland	13	19,135	67.9	4
Davidson	731	399,743	182.9	2
Decatur	3	8,324	36.0	5
De Kalb	4	10,774	37.1	5
Dickson	12	18,839	63.7	4
Dyer	21	29,537	71.1	4
Fayette	10	24,577	40.7	3
Fentress	2	13,288	15.1	5
Franklin	16	25,528	62.7	4
Gibson	25	44,699	55.9	4
Giles	13	22,410	58.0	4
Grainger	4	12,506	32.0	3
Greene	18	42,163	42.7	4
Grundy	2	11,512	17.4	5
Hamblen	21	33,092	63.5	4
Hamilton	304	237,905	127.8	2
Hancock	2	7,757	25.8	5
Hardeman	17	21,517	79.0	4
Hardin	8	17,397	46.0	4
Hawkins	12	30,468	39.4	4
Haywood	10	23,393	42.7	4
Henderson	5	16,115	31.0	4
Henry	18	22,275	80.8	4
Hickman	3	11,862	25.3	5
Houston	1	4,794	20.9	5
Humphreys	7	11,511	60.8	4
Jackson	7	9,233	75.8	5
Jefferson	13	21,493	60.5	3
Johnson	3	10,765	27.9	5
Knox	349	250,523	139.3	2
Lake	5	9,572	52.2	5
Lauderdale	11	21,844	50.4	4
Lawrence	11	28,049	39.2	4
Lewis	3	6,269	47.9	5
Lincoln	16	23,829	67.1	3
Loudon	8	23,757	33.7	3
McMinn	19	33,662	56.4	4
McNairy	8	18,085	44.2	5
Macon	4	12,197	32.8	5
Madison	60	60,655	98.9	4
Marion	10	21,036	47.5	3
Marshall	13	16,859	77.1	4
Maury	29	41,699	69.5	4
Meigs	2	5,160	38.8	3
Monroe	12	23,316	51.5	3
Montgomery	28	55,645	50.3	4
Moore	1	3,454	29.0	5
Morgan	5	14,304	35.0	3
Obion	22	26,957	81.6	4
Overton	6	14,661	40.9	4
Perry	2	5,273	37.9	5
Pickett	0	4,431	----------	5
Polk	8	12,160	65.8	5
Putnam	16	29,236	54.7	4
Rhea	6	15,863	37.8	3
Roane	18	39,133	46.0	3
Robertson	14	27,335	51.2	3
Rutherford	24	52,368	45.8	3
Scott	7	15,413	45.4	3
Sequatchie	2	5,915	33.8	3
Sevier	12	24,251	49.5	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Tennessee—Continued				
Shelby	1,002	627,019	159.8	2
Smith	6	12,059	49.8	5
Stewart	4	7,851	50.9	5
Sullivan	131	114,139	114.8	4
Sumner	15	36,217	41.4	3
Tipton	9	28,564	31.5	3
Trousdale	2	4,914	40.7	5
Unicoi	6	15,082	39.8	4
Union	1	8,498	11.8	3
Van Buren	1	3,671	27.2	5
Warren	11	23,102	47.6	4
Washington	72	64,832	111.1	4
Wayne	3	11,908	25.2	5
Weakley	12	24,227	49.5	4
White	7	15,577	44.9	4
Williamson	9	25,267	35.6	3
Wilson	14	27,668	50.6	3
Tennessee, total	3,575	3,567,089	100.2	----
Texas:				
Anderson	21	28,162	74.6	4
Andrews	7	13,450	52.0	3
Angelina	35	39,814	87.9	4
Aransas	1	7,006	14.3	4
Archer	0	6,110	----------	2
Armstrong	0	1,966	----------	3
Atascosa	7	18,828	37.2	3
Austin	8	13,777	58.1	5
Bailey	6	9,090	66.0	4
Bandera	4	3,892	102.8	3
Bastrop	9	16,925	53.2	3
Baylor	4	5,893	67.9	3
Bee	7	23,755	29.5	4
Bell	114	94,097	121.2	3
Bexar	590	687,151	85.9	2
Blanco	3	3,657	82.0	3
Borden	0	1,076	----------	5
Bosque	6	10,809	55.5	3
Bowie	52	59,971	86.7	2
Brazoria	46	76,204	60.4	3
Brazos	36	44,895	80.2	4
Brewster	6	6,434	93.3	4
Briscoe	0	3,577	----------	5
Brooks	4	8,609	46.5	4
Brown	24	24,728	97.1	4
Burleson	4	11,177	35.8	5
Burnet	11	9,265	118.7	3
Caldwell	9	17,222	52.3	3
Calhoun	8	16,592	48.2	4
Callahan	4	7,929	50.4	3
Cameron	114	151,098	75.4	2
Camp	3	7,849	38.2	4
Carson	1	7,781	12.9	3
Cass	13	23,496	55.3	3
Castro	6	8,923	67.2	3
Chambers	5	10,379	48.2	3
Cherokee	34	33,120	102.7	3
Childress	8	8,421	95.0	4
Clay	2	8,351	23.9	3
Cochran	2	6,417	31.2	4
Coke	4	3,589	111.5	3
Coleman	13	12,458	104.4	3
Collin	24	41,247	58.2	1
Collingsworth	4	6,276	63.7	4
Colorado	12	18,463	65.0	4
Comal	12	19,844	60.5	3
Comanche	9	11,865	75.9	3
Concho	1	3,672	27.2	3
Cooke	13	22,560	57.6	3
Coryell	7	23,961	29.2	3
Cottle	2	4,207	47.5	5
Crane	2	4,699	42.6	3
Crockett	3	4,209	71.3	4
Crosby	5	10,347	48.3	3
Culberson	1	2,794	35.8	5
Dallam	5	6,302	79.3	4
Dallas	1,384	951,527	145.5	1

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Texas—Continued				
Dawson	9	19,185	46.9	4
Deaf Smith	8	13,187	60.7	3
Delta	3	5,860	51.2	5
Denton	32	47,432	67.5	1
De Witt	10	20,683	48.3	4
Dickens	4	4,963	80.6	5
Dimmit	6	10,095	59.4	3
Donley	2	4,449	45.0	5
Duval	5	13,398	37.3	3
Eastland	20	19,526	102.4	4
Ector	59	90,995	64.8	2
Edwards	1	2,317	43.2	5
Ellis	28	43,395	64.5	1
El Paso	228	314,070	72.6	2
Erath	9	16,236	55.4	4
Falls	24	21,263	112.9	3
Fannin	12	23,880	50.3	3
Fayette	15	20,384	73.6	4
Fisher	5	7,865	63.6	3
Floyd	6	12,369	48.5	3
Foard	2	3,125	64.0	5
Fort Bend	16	40,527	39.5	3
Franklin	2	5,101	39.2	5
Freestone	7	12,525	55.9	4
Frio	4	10,112	39.6	4
Gaines	6	12,267	48.9	4
Galveston	353	140,364	251.5	2
Garza	5	6,611	75.6	3
Gillespie	7	10,048	69.7	4
Glasscock	0	1,118	----------	3
Goliad	3	5,429	55.3	5
Gonzales	10	17,845	56.0	4
Gray	23	31,535	72.9	4
Grayson	61	73,043	83.5	3
Gregg	87	69,436	125.3	3
Grimes	7	12,709	55.1	4
Guadalupe	13	29,017	44.8	3
Hale	34	36,798	92.4	3
Hall	5	7,322	68.3	4
Hamilton	9	8,488	106.0	4
Hansford	4	6,208	64.4	4
Hardeman	6	8,275	72.5	4
Hardin	12	24,629	48.7	3
Harris	1,678	1,243,158	135.0	1
Harrison	32	45,594	70.2	3
Hartley	0	2,171	----------	3
Haskell	8	11,174	71.6	3
Hays	15	19,934	75.2	3
Hemphill	2	3,185	62.8	5
Henderson	11	21,788	50.5	3
Hidalgo	93	180,904	51.4	3
Hill	16	23,650	67.7	3
Hockley	10	22,340	44.8	3
Hood	2	5,443	36.7	3
Hopkins	8	18,594	43.0	4
Houston	12	19,376	61.9	4
Howard	33	40,139	82.2	4
Hudspeth	1	3,343	29.9	3
Hunt	24	39,399	60.9	3
Hutchinson	19	34,419	55.2	3
Irion	1	1,183	84.5	3
Jack	5	7,418	67.4	3
Jackson	7	14,040	49.9	4
Jasper	8	22,100	36.2	3
Jeff Davis	1	1,582	63.2	5
Jefferson	256	245,659	104.2	2
Jim Hogg	2	5,022	39.8	3
Jim Wells	15	34,548	43.4	3
Johnson	23	34,720	66.2	2
Jones	11	19,299	57.0	2
Karnes	7	14,995	46.7	4
Kaufman	25	29,931	83.5	3
Kendall	3	5,889	50.9	3
Kenedy	0	884	----------	5
Kent	1	1,727	57.9	5
Kerr	20	16,800	119.0	4
Kimble	3	3,943	76.1	5
King	0	640	----------	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Texas—Continued				
Kinney	1	2,452	40.8	5
Kleberg	14	30,052	46.6	3
Knox	6	7,857	76.4	5
Lamar	37	34,234	108.1	4
Lamb	12	21,896	54.8	3
Lampasas	4	9,418	42.5	4
La Salle	1	5,972	16.7	3
Lavaca	12	20,174	59.5	4
Lee	4	8,949	44.7	3
Leon	4	9,951	40.2	5
Liberty	18	31,595	57.0	3
Limestone	12	20,413	58.8	3
Lipscomb	0	3,406	----------	5
Live Oak	3	7,846	38.2	5
Llano	4	5,240	76.3	4
Loving	0	226	----------	5
Lubbock	143	156,271	91.5	2
Lynn	3	10,914	27.5	3
McCulloch	8	8,815	90.8	4
McLennan	129	150,091	85.9	2
McMullen	0	1,116	----------	5
Madison	4	6,749	59.3	5
Marion	4	8,049	49.7	3
Martin	1	5,068	19.7	3
Mason	2	3,780	52.9	5
Matagorda	18	25,744	69.9	4
Maverick	4	14,508	27.6	4
Medina	7	18,904	37.0	3
Menard	2	2,964	67.5	3
Midland	54	67,717	79.7	2
Milam	12	22,263	53.9	4
Mills	2	4,467	44.8	5
Mitchell	10	11,255	88.8	4
Montague	9	14,893	60.4	4
Montgomery	14	26,839	52.2	3
Moore	8	14,773	54.2	3
Morris	10	12,576	79.5	3
Motley	2	2,870	69.7	5
Nacogdoches	16	28,046	57.0	4
Navarro	36	34,423	104.6	3
Newton	3	10,372	28.9	3
Nolan	13	18,963	68.6	3
Nueces	226	221,573	102.0	2
Ochiltree	4	9,380	42.6	4
Oldham	1	1,928	51.9	3
Orange	29	60,357	48.0	2
Palo Pinto	14	20,516	68.2	4
Panola	8	16,870	47.4	3
Parker	10	22,880	43.7	3
Parmer	6	9,583	62.6	5
Pecos	8	11,957	66.9	4
Polk	8	13,861	57.7	4
Potter	117	115,580	101.2	2
Presidio	2	5,460	36.6	4
Rains	0	2,993	----------	5
Randall	8	33,913	23.6	2
Reagan	2	3,782	52.9	4
Real	0	2,079	----------	5
Red River	9	15,682	57.4	3
Reeves	11	17,644	62.3	4
Refugio	6	10,975	54.7	4
Roberts	0	1,075	----------	5
Robertson	9	16,157	55.7	4
Rockwall	2	5,878	34.0	3
Runnels	10	15,016	66.6	3
Rusk	16	36,421	43.9	3
Sabine	5	7,302	68.5	5
San Augustine	3	7,722	38.9	4
San Jacinto	1	6,153	16.3	5
San Patricio	21	45,021	46.6	3
San Saba	3	6,381	47.0	4
Schleicher	2	2,791	71.7	3
Scurry	12	20,369	58.9	4
Shackelford	2	3,990	50.1	3
Shelby	9	20,479	43.9	4
Sherman	1	2,605	38.4	5
Smith	96	86,350	111.2	2
Somervell	2	2,577	77.6	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Texas—Continued				
Starr	4	17,137	23.3	4
Stephens	7	8,885	78.8	4
Sterling	1	1,177	85.0	3
Stonewall	1	3,017	33.1	3
Sutton	2	3,738	53.5	4
Swisher	5	10,607	47.1	3
Tarrant	522	538,495	96.9	2
Taylor	90	101,078	89.0	2
Terrell	1	2,600	38.5	5
Terry	7	16,286	43.0	3
Throckmorton	3	2,767	108.4	3
Titus	7	16,785	41.7	4
Tom Green	84	64,630	130.0	2
Travis	283	212,136	133.4	2
Trinity	5	7,539	66.3	5
Tyler	6	10,666	56.3	5
Upshur	6	19,793	30.3	3
Upton	4	6,239	64.1	3
Uvalde	10	16,814	59.5	4
Val Verde	12	24,461	49.1	4
Van Zandt	10	19,091	52.4	3
Victoria	47	46,475	101.1	4
Walker	10	21,475	46.6	4
Waller	4	12,071	33.1	3
Ward	7	14,917	46.9	3
Washington	15	19,145	78.3	4
Webb	30	64,791	46.3	2
Wharton	34	38,152	89.1	4
Wheeler	9	7,947	113.3	4
Wichita	122	123,528	98.8	2
Wilbarger	13	17,748	73.2	3
Willacy	10	20,084	49.8	3
Williamson	21	35,044	59.9	3
Wilson	5	13,267	37.7	3
Winkler	12	13,652	87.9	3
Wise	10	17,012	58.8	3
Wood	10	17,653	56.6	3
Yoakum	5	8,032	62.3	4
Young	17	17,254	98.5	3
Zapata	0	4,393	----------	3
Zavala	5	12,696	39.4	4
Texas, total	8,994	9,579,677	93.9	--------
Utah:				
Beaver	3	4,331	69.3	5
Box Elder	14*	25,061	55.9	3
Cache	31	35,788	86.6	3
Carbon	22	21,135	104.1	3
Daggett	0	1,164	----------	5
Davis	25	64,760	38.6	3
Duchesne	2	7,179	27.9	5
Emery	3	5,546	54.1	5
Garfield	2	3,577	55.9	5
Grand	3	6,345	47.3	4
Iron	8	10,795	74.1	4
Juab	3	4,597	65.3	3
Kane	4	2,667	150.0	5
Millard	5	7,866	63.6	5
Morgan	2	2,837	70.5	3
Piut	0	1,436	----------	5
Rich	0	1,685	----------	5
Salt Lake	700	383,035	182.8	2
San Juan	2	9,040	22.1	5
Sanpete	6	11,053	54.3	3
Sevier	7	10,565	66.3	4
Summit	2	5,673	35.3	3
Tooele	6	17,868	33.6	3
Uintah	5	11,582	43.2	4
Utah	97	106,991	90.7	2
Wasatch	3	5,308	56.5	3
Washington	4	10,271	38.9	4
Wayne	0	1,728	----------	5
Weber	134	110,744	121.0	2
Utah, total	1,093	890,627	122.7	--------

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Vermont:				
Addison	17	20,076	84.7	4
Bennington	30	25,088	119.6	3
Caledonia	22	22,786	96.6	4
Chittenden	203	74,425	272.8	4
Essex	2	6,083	32.9	5
Franklin	24	29,474	81.4	4
Grand Isle	2	2,927	68.3	5
Lamoille	11	11,027	99.8	5
Orange	15	16,014	93.7	5
Orleans	11	20,143	54.6	4
Rutland	45	46,719	96.3	4
Washington	50	42,860	116.7	4
Windham	38	29,776	127.6	4
Windsor	47	42,483	110.6	4
Vermont, total	517	389,881	132.6	----
Virginia:				
Accomack	16	30,635	52.3	5
Albemarle [1]	294	60,396	486.8	4
Alleghany [2]	35	28,458	123.0	4
Amelia	3	7,815	49.9	3
Amherst	10	22,953	43.6	2
Appomattox	3	9,148	32.8	3
Arlington [3]	293	254,424	115.2	1
Augusta [4]	87	75,289	115.6	4
Bath	5	5,335	93.7	5
Bedford	17	31,028	54.8	3
Bland	1	5,982	16.7	5
Botetourt	5	16,715	29.9	3
Brunswick	6	17,779	33.7	5
Buchanan	10	36,724	27.2	5
Buckingham	5	10,877	46.0	5
Campbell [5]	113	87,748	128.8	2
Caroline	8	12,725	62.9	5
Carroll	25	28,432	87.9	4
Charles City	1	5,492	18.2	3
Charlotte	6	13,368	44.9	3
Chesterfield [6]	10	80,784	12.4	2
Clarke	7	7,942	99.5	5
Craig	1	3,356	29.8	3
Culpeper	11	15,088	72.9	5
Cumberland	1	6,360	15.7	5
Dickenson	10	20,211	49.5	5
Dinwiddie [7]	74	58,933	125.6	3
Essex	4	6,690	59.8	5
Fairfax [8]	139	285,194	48.7	1
Fauquier	19	24,066	78.9	4
Floyd	4	10,462	38.2	3
Fluvanna	5	7,227	69.2	5
Franklin	8	25,925	30.9	3
Frederick [9]	54	37,051	145.7	4
Giles	12	17,219	70.0	4
Gloucester	8	11,919	67.1	5
Goochland	2	9,206	21.7	3
Grayson	4	17,390	23.0	5
Greene	1	4,715	21.2	5
Greensville	10	16,155	61.9	4
Halifax	26	39,611	67.9	3
Hanover	12	27,550	43.6	3
Henrico [10]	749	337,297	222.1	2
Henry [11]	36	59,133	60.9	4
Highland	3	3,221	93.1	5
Isle of Wight	5	17,164	29.1	3
James City [12]	29	18,371	157.9	3
King and Queen	0	5,889	----	5
King George	1	7,243	13.8	5
King William	6	7,563	91.2	5
Lancaster	8	9,174	87.2	5
Lee	11	25,824	42.6	5
Loudoun	15	24,549	61.1	3
Louisa	8	12,959	61.7	5
Lunenburg	5	12,523	39.9	5
Madison	3	8,187	36.6	5
Mathews	7	7,121	98.3	5
Mecklenburg	22	31,428	70.0	4
Middlesex	4	6,319	63.3	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Virginia—Continued				
Montgomery [13]	46	42,294	108.8	3
Nansemond [14]	31	43,975	70.5	3
Nelson	5	12,752	39.2	3
New Kent	2	4,504	44.4	3
Norfolk	418	494,292	84.6	2
Northampton [15]	18	16,966	106.1	5
Northumberland	7	10,185	68.7	5
Nottoway	13	15,141	85.9	4
Orange	10	12,900	77.5	4
Page	10	15,572	64.2	4
Patrick	4	15,282	26.2	5
Pittsylvania [16]	79	104,873	75.3	3
Powhatan	1	6,747	14.8	3
Prince Edward	17	14,121	120.4	4
Prince George [17]	17	38,165	44.5	3
Princess Anne [18]	29	84,215	34.4	2
Prince William	16	50,164	31.9	3
Pulaski	20	27,258	73.4	4
Rappahannock	2	5,368	37.3	5
Richmond	3	6,375	47.1	5
Roanoke [19]	238	158,803	149.9	2
Rockbridge [20]	23	30,339	75.8	3
Rockingham [21]	45	52,401	85.9	4
Russell	9	26,290	34.2	5
Scott	10	25,813	38.7	5
Shenandoah	17	21,825	77.9	5
Smyth	27	31,066	86.9	4
Southampton	19	27,195	69.9	4
Spotsylvania [22]	35	27,458	127.5	4
Stafford	1	16,876	5.9	5
Surry	2	6,220	32.2	5
Sussex	6	12,411	48.3	5
Tazewell	35	44,791	78.1	4
Warren	11	14,655	75.1	4
Washington [23]	32	55,220	58.0	4
Westmoreland	8	11,042	72.3	5
Wise [24]	38	48,575	78.2	4
Wythe	15	21,975	68.3	4
York [25]	161	224,503	71.7	2
Virginia, total	3,757	3,966,949	94.7	----
Washington:				
Adams	7	9,929	70.5	4
Asotin	8	12,909	62.0	4
Benton	49	62,070	78.9	4
Chelan	57	40,744	139.9	4
Clallam	22	30,022	73.3	4
Clark	68	93,809	72.5	2
Columbia	3	4,569	65.7	4
Cowlitz	44	57,801	76.1	3
Douglas	5	14,890	33.6	5
Ferry	1	3,889	25.7	5
Franklin	13	23,342	55.7	4
Garfield	3	2,976	100.8	5
Grant	24	46,477	51.6	4
Grays Harbor	34	54,465	62.4	4
Island	10	19,638	50.9	4
Jefferson	7	9,639	72.6	4
King	1,657	935,014	177.2	1
Kitsap	70	84,176	83.2	3
Kittitas	13	20,467	63.5	4
Klickitat	8	13,455	59.5	4
Lewis	27	41,858	64.5	3
Lincoln	7	10,919	64.1	3
Mason	9	16,251	55.4	4
Okanogan	15	25,520	58.8	4
Pacific	9	14,674	61.3	4
Pend Oreille	5	6,914	72.3	3
Pierce	328	321,590	102.0	2
San Juan	2	2,872	69.6	5
Skagit	48	51,350	93.5	3
Skamania	3	5,207	57.6	3
Snohomish	119	172,199	69.1	1
Spokane	366	278,333	131.5	2
Stevens	11	17,884	61.5	3
Thurston	53	55,049	96.3	3

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Washington—Continued				
Wahkiakum	3	3,426	87.6	5
Walla Walla	43	42,195	101.9	4
Whatcom	74	70,317	105.2	4
Whitman	29	31,263	92.8	3
Yakima	117	145,112	80.6	4
Washington, total	3,371	2,853,214	118.1	
West Virginia:				
Barbour	15	15,474	96.9	5
Berkeley	36	33,791	106.5	4
Boone	21	28,764	73.0	3
Braxton	6	15,152	39.6	5
Brooke	7	28,940	24.2	2
Cabell	148	108,202	136.8	2
Calhoun	2	7,948	25.2	5
Clay	3	11,942	25.1	3
Doddridge	1	6,970	14.3	5
Fayette	30	61,731	48.6	3
Gilmer	2	8,050	24.8	5
Grant	8	8,304	96.3	5
Greenbrier	29	34,446	84.2	5
Hampshire	6	11,705	51.3	5
Hancock	27	39,615	68.2	2
Hardy	4	9,308	43.0	5
Harrison	62	77,856	79.6	4
Jackson	10	18,541	53.9	3
Jefferson	9	18,665	48.2	4
Kanawha	294	252,925	116.2	2
Lewis	10	19,711	50.7	4
Lincoln	4	20,267	19.7	3
Logan	37	61,570	60.1	4
McDowell	48	71,359	67.3	4
Marion	61	63,717	95.7	4
Marshall	16	38,041	42.1	2
Mason	13	24,459	53.2	3
Mercer	75	68,206	110.0	4
Mineral	12	22,354	53.7	4
Mingo	39	39,742	98.1	3
Monongalia	54	55,617	97.1	4
Monroe	7	11,584	60.4	5
Morgan	5	8,376	59.7	5
Nicholas	12	25,414	47.2	3
Ohio	122	68,437	178.3	2
Pendleton	4	8,093	49.4	5
Pleasants	2	7,124	28.1	5
Pocahontas	7	10,136	69.1	5
Preston	12	27,233	44.1	5
Putnam	3	23,561	12.7	3
Raleigh	104	77,826	133.6	3
Randolph	30	26,349	113.9	4
Ritchie	4	10,877	36.8	5
Roane	10	15,720	63.6	3
Summers	11	15,640	70.3	4
Taylor	8	15,010	53.3	4
Tucker	4	7,750	51.6	5
Tyler	4	10,026	39.9	5
Upshur	10	18,292	54.7	4
Wayne	7	38,977	18.0	2
Webster	6	13,719	43.7	5
Wetzel	12	19,347	62.0	3
Wirt	1	4,391	22.8	5
Wood	70	78,331	89.4	4
Wyoming	14	34,836	40.2	4
West Virginia, total	1,558	1,860,421	83.7	
Wisconsin:				
Adams	1	7,566	13.2	5
Ashland	15	17,375	86.3	4
Barron	20	34,270	58.4	4
Bayfield	4	11,910	33.6	3
Brown	107	125,082	85.5	2
Buffalo	8	14,202	56.3	5
Burnett	4	9,214	43.4	3
Calumet	8	22,268	35.9	3
Chippewa	27	45,096	59.9	4
Clark	14	31,527	44.4	4

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Wisconsin—Continued				
Columbia	28	36,708	76.3	3
Crawford	8	16,351	48.9	4
Dane	571	222,095	257.1	2
Dodge	35	63,170	55.4	3
Door	12	20,685	58.0	3
Douglas	26	45,008	57.8	2
Dunn	13	26,156	49.7	4
Eau Claire	65	58,300	111.5	4
Florence	1	3,437	29.1	5
Fond du Lac	71	75,085	94.6	4
Forest	4	7,542	53.0	5
Grant	30	44,419	67.5	3
Green	35	25,851	135.4	3
Green Lake	12	15,418	77.8	4
Iowa	11	19,631	56.0	3
Iron	3	7,830	38.3	4
Jackson	7	15,151	46.2	4
Jefferson	37	50,094	73.9	3
Juneau	9	17,490	51.5	4
Kenosha	63	100,615	62.6	2
Kewaunee	11	18,282	60.2	3
La Crosse	91	72,465	125.6	4
Lafayette	10	18,142	55.1	3
Langlade	16	19,916	80.3	4
Lincoln	17	22,338	76.1	4
Manitowoc	52	75,215	69.1	3
Marathon	64	88,874	72.0	4
Marinette	17	34,660	49.0	4
Marquette	3	8,516	35.2	5
Milwaukee	1,427	1,036,041	137.7	1
Monroe	15	31,241	48.0	4
Oconto	10	25,110	39.8	3
Oneida	22	22,112	99.5	4
Outagamie	80	101,794	78.6	3
Ozaukee	20	38,441	52.0	3
Pepin	4	7,332	54.6	5
Pierce	10	22,503	44.4	3
Polk	21	24,968	84.1	3
Portage	28	36,964	75.7	4
Price	6	14,370	41.8	4
Racine	118	141,781	83.2	2
Richland	11	17,684	62.2	4
Rock	103	113,913	90.4	3
Rusk	6	14,794	40.6	4
St. Croix	19	29,164	65.1	3
Sauk	24	36,179	66.3	3
Sawyer	6	9,475	63.3	5
Shawano	18	34,351	52.4	3
Sheboygan	73	86,484	84.4	4
Taylor	5	17,843	28.0	4
Trempealeau	15	23,377	64.2	5
Vernon	15	25,663	58.4	4
Vilas	5	9,332	53.6	5
Walworth	38	52,368	72.6	3
Washburn	7	10,301	68.0	3
Washington	29	46,119	62.9	3
Waukesha	100	158,249	63.2	1
Waupaca	29	35,340	82.1	4
Waushara	7	13,497	51.9	5
Winnebago	90	107,928	83.4	4
Wood	66	59,105	111.7	4
Wisconsin, total	3,957	3,951,777	100.1	----
Wyoming:				
Albany	17	21,290	79.8	4
Big Horn	8	11,898	67.2	5
Campbell	3	5,861	51.2	4
Carbon	12	14,937	80.3	4
Converse	3	6,366	47.1	4
Crook	1	4,691	21.3	5
Fremont	*15	26,168	57.3	4
Goshen	10	11,941	83.7	4
Hot Springs	6	6,365	94.3	4
Johnson	3	5,475	54.8	4
Laramie	58	60,149	96.4	4
Lincoln	6	9,018	66.5	5

TABLE 2.—*Number of active non-Federal physicians (M.D.) and population in each county within State, 1960*—Continued

State and counties	1960 active non-Federal M.D.'s	1960 population	M.D.'s per 100,000 population	County group, 1961*
Wyoming—Continued				
Natrona	48	49,623	96.7	4
Niobrara	3	3,750	80.0	5
Park	15	16,874	88.9	4
Platte	4	7,195	55.6	5
Sheridan	19	18,989	100.1	4
Sublette	2	3,778	52.9	5
Sweetwater	11	17,920	61.4	4
Teton	2	3,062	65.3	4
Uinta	7	7,484	93.5	5
Washakie	4	8,883	45.0	4
Weston	4	7,929	50.4	4
Yellowstone National Park	1	420	238.1	5
Wyoming, total	262	330,066	79.4	--------

*Group 1: Greater metropolitan.
Group 2: Lesser metropolitan.
Group 3: Adjacent semirural or rural.
Group 4: Isolated semirural.
Group 5: Isolated rural.

NOTE.—The following independent cities are included in contiguous counties:

[1] Charlottesville.
[2] Clifton Forge.
[3] Alexandria.
[4] Staunton and Waynesboro.
[5] Lynchburg.
[6] Colonial Heights.
[7] Petersburg.
[8] Falls Church.
[9] Winchester.
[10] Richmond.
[11] Martinsville.
[12] Williamsburg.
[13] Radford.
[14] Suffolk.
[15] Norfolk, Portsmouth, and South Norfolk.
[16] Danville.
[17] Hopewell.
[18] Virginia Beach.
[19] Roanoke.
[20] Buena Vista.
[21] Harrisburg.
[22] Fredricksburg.
[23] Bristol.
[24] Norton.
[25] Hampton, Newport News, Warwick City, and Warwick County.

Mr. ROBERTS. Without objection, I would like to insert in the record at this point a statement of Hon. Jess Lanier, mayor of Bessemer, Ala., on behalf of the Alabama League of Municipalities.

(The statement follows:)

STATEMENT BY JESS LANIER, MAYOR OF BESSEMER, PRESIDENT OF THE ALABAMA LEAGUE OF MUNICIPALITIES ON SHORTAGE OF DOCTORS

One problem that continually bothers mayors of Alabama towns and cities is the shortage of doctors. The Alabama Medical Association advises the League of Municipalities that 60 communities in the State are looking for physicians at the present time. Seven health officers are needed to staff county health departments. Distribution of doctors over the State is a problem—statewide we have 1 physician for every 1,377 persons. Nationally there is 1 physician for every 750 people. The medical association renders as one of its services the placement of doctors in towns and cities. Problems such as adequate facilities in small towns, communities too small to support a physician and geographical location to hospitals are but three of the many problems which medical association officials face in getting physicians to practice in Alabama, the medical association officials say.

Mr. ROBERTS. I note the presence of some of our colleagues who are interested in this legislation. We will now hear the gentleman from Rhode Island, the Honorable John E. Fogarty, who has introduced H.R. 3180. Mr. Fogarty.

STATEMENT OF HON. JOHN E. FOGARTY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF RHODE ISLAND

Mr. FOGARTY. Mr. Chairman and members of the committee: Almost exactly 1 year ago I had the honor of appearing before this distinguished committee to testify in behalf of another bill—H.R. 4999—also introduced by the gentleman from Arkansas, whose intent was basically the same as the intent of this measure: to improve this Nation's health security.

It is always a pleasure to come before this committee, whose legislative record for pioneering efforts in the health field go back over the years at least to the 81st Congress—to may certain knowledge—and which held hearings in the 84th Congress which resulted in providing Federal aid for the construction of health research facilities—a program which has been strikingly successful.

The bill before us today retains some of the provisions of H.R. 4999, but the emphasis has changed from grants for construction of medical facilities—although that is retained in the measure—to emphasis on health professions educational assistance. This bill, H.R. 12 deserves the closest scrutiny, for much experience and consideration has clearly gone into its making.

The bill H.R. 12 proposes a 10-year program designed to alleviate critical shortages of health personnel. It is now 5½ years since the first authoritative study—the Bayne-Jones report—made clear to everyone the urgent need for more personnel—especially in the fields of medicine and dentistry—if this country is to avoid a real decline in its health standards. Five and a half precious years have been lost, with no comprehensive response to this problem on the part of Congress. The measure before us is a sincere attempt to make such a response. Keenly aware of the challenge, this bill calls for a positive response in terms of strengthening the health professions through construction grants for new teaching facilities, through the provision of funds for their replacement, and through the establishment of a student loan program.

More specifically, the bill calls for—

(1) A 10-year program of grants for both new and replacement construction, which would not exceed $750 million total cost.

(2) A 10-year student loan program whose total cost would be about $72 million in the first 5 years plus an additional sum required to enable the students enrolled in the program to complete their education, the total cost probably not to exceed $100 million, most of which would be recovered.

(3) Authorization of the Surgeon General of the Public Health Service to provide technical assistance and consultative services to State or interstate planning programs established for the purpose of relieving shortages of training capacity in the fields covered by this bill. The sum of $5 million would be authorized for this purpose.

(4) Authorization of the Surgeon General—under special circumstances—to construct directly, or provide for the construction of needed facilities through contracts. A chief requirement

would be that these facilities would be of particular value or significance for the Nation or a region, and that because of the cost of these facilities or their use in research or the sciences related to health, their support would not otherwise be provided for under this measure.

I do not propose to discuss every aspect of each of these provisions. All of you have studied the bill, and each of us here today has his own ideas about its merits. If I may, I would like to discuss this measure in context with others which, although somewhat different in detail, nonetheless represent a significant range of reactions to the deepening crisis of a nationwide shortage of health personnel.

I recall that last year before this committee the president of the Association of American Medical Colleges stated the matter without mincing words. He said, "A number of authoritative studies, none of which has been seriously questioned, have established that to avoid a serious shortage of physicians in the late 1970's the number of medical students in the United States must be increased in the next 8 to 9 years by approximately 50 percent . . ." He went on to repeat what we have heard for three Congresses, now—that because of population growth and because of increasing demands for more service from physicians, we must—just to maintain the present physician ratio—just to remain where we are—we must in a decade or less increase by 50 percent facilities that required nearly 200 years of private and local effort to establish. He said, that in judgment of his association—a judgment unanimously supported by all of the existing medical schools of the United States—that an expansion of this magnitude could only be accomplished by the use of Federal funds on a matching basis.

Some of us in Congress have been saying this for a number of years. Some things have been done. We have mounted a research program which has made American medical research the finest in the world. Since 1956 we have had a health research facilities construction program which, at a cost of $230 million to the Federal Government, has contributed to the construction of new and remodeled facilities costing close to a billion dollars. We have a wide variety of Federal fellowship and loan programs, but we have—incredibly—somehow excluded from our programs students working for M.D. and D.D.S. degrees.

A number of Federal agencies—particularly the Office of Education, the Public Health Service, the Atomic Energy Commission, and the National Science Foundation—provide stipends to students up to $2,500 or so a year, plus dependents' allowances. Furthermore, none of these programs require repayment.

The loan provision in H.R. 12 is similar to that of the National Defense Education Act, which has been successful in helping undergraduate students, particularly those planning to go into the teaching profession. Against the background of a number of studies by individuals and groups who forecast that this country must have more professional health personnel within the next decade, it is inconceivable to me that we should not at the very least make similar provision for the students of medicine and dentistry at a time when we need 6,500 additional students entering these fields each year.

Why do we need loans to students of medicine and dentistry? We need them because in the past 10 years we have had a sharp increase in the number of college graduates but a sharp decrease in the number of applicants to medical and dental schools. Part of this decline in popularity in these fields is explainable in economic terms.

The cost of training is far greater in medicine than in any area of higher education—approximately $12,000, for 4 years, followed by internship where the pay is nominal, and residency where the pay is very, very small—yet no Federal funds are available to help these students fill the void in this Nation's scientific manpower pool. It is hard to imagine what the medical student must think when he sees the Ph. D. candidate in the basic and physical sciences—fields no less intellectually stimulating—receiving Federal fellowships. In addition, he faces a medical school curriculum so demanding that it is very unlikely he has the capacity to carry on part-time jobs without jeopardizing his studies. This adds up to a very discouraging prospect for promising young college freshmen who might like to study medicine.

Now looking closely at the loan provisions of H.R. 12, we find that a student loan fund would be established which would provide up to $2,000 for any student for any academic year, less any amount the student might be reciving from the MEND program. The individual schools would administer the program, and would be required to put up 10 percent of the funds lent. Loans would bear interest on unpaid balance at a rate of 3 percent, and would be repayable within 10 years, beginning 3 years after graduation. Up to 50 percent of such loans (at the rate of 10 percent a year) would be forgiven for practice in a shortage area, for active duty with the uniformed services or the Peace Corps, or for employment by a public or nonprofit agency.

I am not opposed to Federal loans to students of medicine, dentistry, osteopathy, as H.R. 12 would provide—I am not opposed, if we can do no better. But I believe we can do better. I believe that this proposal is not far-reaching enough. Are we helping the student, with this loan program, or merely adding to his debts? If today a third of all medical school gradutes are over $2,000 in debt when they finish medical school—and we know they are—are we not, under the provisions of H.R. 12, simply adding one more opportunity for the student to plunge several thousand dollars deeper into debt? I believe that there is a better way. In view of critical and growing need, I believe that the scholarship in the mechanism that should be used, in addition to the student loan.

I would therefore propose a scholarship system whereby a specially created State commission would select scholarship winners on the basis of ability and need, and review their performance annually. Such a proposal calling for $10 million per fiscal year would provide—on a State matching basis—for a maximum of 8,000 scholarships a year, of $2,500 each. This proposal assures a selective factor favoring the support of ability and need—not just need—thus encouraging the most talented of this Nation's youth. In addition, it does not call for a mortaging of the student's future by demanding repayment at some future time.

There is ample precedence for such support, I think, in the various Federal graduate fellowships and traineeships programs, none of which requires repayment.

My proposal is modest—modest in terms of dollars; but is ambitious in terms of tremendous potential for meeting on a realistic basis the problem now facing us in the dwindling supply of trained health personnel.

I would hope that H.R. 12 might be modified to substitute a scholarship program—not necessarily the one I propose—for the present loan proposal.

Finally, I want to touch on the 10-year program of matching grants for the construction of teaching facilities. Forty-five million dollars would be authorized annually for grants for the construction of new teaching facilities for the training of medical, dental, pharmaceutical, optometric, podiatric, nursing, osteopathic, and public health personnel. Fifteen million dollars would be authorized for grants for the construction of new teaching facilities for the training of dentists. Fifteen million dollars would be authorized for replacement or rehabilitation of existing teaching facilities in all these categories.

Matching grants for construction of new schools, and for major expansion of existing schools, would be made up to two-thirds of the cost of construction. Other grants would not exceed 50 percent of the cost of construction. Grants for the expansion of an existing school will be subject to the proviso that 50 percent more first year students (or not less than 50) will be enrolled over a 10-year period following the expansion of the training capacity. Grants to schools of public health may be up to 75 percent of the cost of construction.

As all of you know, Congress has given extensive support to medical research and to the building of hospitals and other medical care facilities. But the acquisition of knowledge is profitless unless that knowledge is applied to alleviate human suffering. When we do not train enough doctors and dentists to apply the knowledge we already have, we are helpless before the tragedy of unused knowledge.

The best example I can recall—an example that was brought before my committee—is in relation to cancer. I have heard expert testimony that we have the scientific knowledge needed to save half of the 450,000 persons in this country who each year develop cancer. We are only saving approximately one-third of these. In short, 75,000 persons each year are dying of cancer, unnecessarily, because we lack the physicians to conduct the thorough physical examinations required for early detection of cancer. To be sure, there should also be more public understanding of the need for periodic checkups, but this reluctance to see a physician is reinforced by the experience of sitting for hours—perhaps the better part of a day—in the doctor's office, waiting to get his professional services.

Not only are doctors and dentists trying to cope with an increasing population in America, but more and more of them are becoming researchers, teachers, administrators, and fewer and fewer doctors are practicing medicine.

Yet we must increase the number of youg people entering the fields of medicine and dentistry from the present 12,500 to 19,000 a year. To train them we must have new schools of medicine and dentistry.

The American Medical Association reported late last year that this country's 87 medical colleges had total expenditures of more than $336 million in 1960–61—an increase of 18 percent over 1959–60 and an increase of 82 percent over 1956–57. Steadily expanding programs

and higher cost of equipment and faculty are placing insuperable burden on our colleges and universities.

Now in Congress, we have supported construction for resource purposes since 1956, so that currently about three times as much money is allocated for the completion of research facilities, as for teaching facilities. Figures provided by the medical schools indicate that they are giving increasing attention to the need for construction and modernizing facilities for purposes other than research. Yet, it is estimated that only 19 percent of all new construction is primarily for educational purposes, according to the last available data.

Last Thursday, I introduced a bill calling for the construction of medical facilities, and at that time I said that I felt that the lack of these facilities poses the greatest single obstacle to the solution of our medical manpower problems.

Once again, Mr. Chairman, I would have to suggest that H.R. 12 is in error on the conservative side. My proposal calls for an appropriation of $50 million for each fiscal year beginning July 1, 1963, and for 4 succeeding years for grants to expand and improve existing schools of medicine, dentistry, and public health. Further, I propose Federal matching funds be permitted up to two-thirds in cases where institutional needs are strong but financial resources are not. I sincerely believe that the present measure H.R. 12 would be strengthened considerably if the language were modified along these lines.

Construction costs are rising, and the needs are increasing with each passing day. We in Congress have not provided the imaginative leadership the people have a right to expect from us, in these matters. If the United States awakes one day to find itself stricken by some new disease—some repetition of the World War I worldwide influenza epidemic—some more virulent invasion than Asian flu—and discovers that there are not nearly enough health personnel to go around, we, their representatives, will have no excuse for our repeated inaction in the face of repeated warnings.

In the last Congress, H.R. 4999 was endorsed by such eminent groups as the American Hospital Association, the American Medical Association, the American Dental Association, the American Public Health Association, the American Association of Dental Schools, the American Association of Medical Colleges, and the Association of Schools of Public Health. Yet it failed of passage in the last Congress—indeed, it did not even come before the House, for final vote, in the closing days of the 87th Congress.

I am gravely disturbed by the failure of Congress to act in the face of an impending national emergency. This leads me to ponder whether we are capable of taking action until it is too late, when the health standards are collapsing about us.

President Kennedy, in his state-of-the-Union address to Congress, recognized that all our miracles of medical research will count for little if we cannot reverse the growing nationwide shortage of nursing homes and modern urban hospital facilities. And he observed that this country must over the next 10 years increase the capacity of our medical schools by 50 percent and our dental schools by 100 percent just to maintain our present ratio of doctors and dentists.

But this matter is not a matter of partisan politics. It springs from the fact that our medical facilities must serve three interrelated

activities—teaching, medical service, and research—and that all three must be supported if the health needs of this Nation are to keep pace with its dynamic growth and ever-increasing demands. So grave is the need that it would seems that our colleagues in the House and Senate cannot fail to act upon the measures which have been so long delayed. The time for deliberation—the need for deliberation—has passed, but, regrettably, the legislation has not. Two Congresses have passed into history, but the specter of total breakdown in application of health knowledge looms ever larger. I urge everyone in this chamber to unite in an effort to get this Congress to act on these vital matters—we must not betray the American public; we cannot evade our responsibility.

Mr. ROBERTS. Thank you for your appearance and testimony, Mr. Fogarty.

Mr. FOGARTY. Thank you, Mr. Chairman.

Mr. ROBERTS. The next witness is our colleague from Florida, Hon. Charles E. Bennett, who has introduced H.R. 180. Mr. Bennett, we will be glad to hear you at this time.

STATEMENT OF HON. CHARLES E. BENNETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. BENNETT. Mr. Chairman, thank you for this opportunity to testify on the Health Professions Educational Assistance Act of 1963, which I was happy to join in introducing (H.R. 180). This committee, I believe, has done excellent work in pointing up the urgent need for increased numbers of doctors and health personnel in this country, so I will not add to the many statistics that have already demonstrated this ever-growing problem. I would, however, like to add that, in my work on the Armed Services Committee, it has been apparent for some time that this national problem also affects our military mission in that procurement of adequate doctors for the services has become very difficult. It was to alleviate this difficulty that I introduced H.R. 67 in the 84th Congress to provide for Armed Forces medical scholarships. However, if the capacity of medical schools is not increased, benefits from a scholarship program are very limited. The very security of our country therefore requires that we tackle the whole problem as soon as possible.

The approach of H.R. 12, the chairman's bill, H.R. 180, and other identical proposals is doubly helpful, I believe, in that the smaller, less affluent, medical schools can greatly increase their capacity. These schools in many cases may be persuaded to concentrate on preparing graduates for practice in rural and semirural areas where the need is most critical. However, it takes time to bring about an increase in doctors, even if we act quickly to provide Federal Assistance. The Association of American Medical Colleges points out that it takes 6 to 10 years to develop a medical school and 5 to 9 years after college to complete a medical education. In spite of this they warn that 3,500 additional physicians will be needed each year by 1975.

I want to commend the committee on their early attention to this urgent problem in this Congress. I am in hopes that our other colleagues will join also in securing this Federal assistance that should no longer be delayed.

Mr. ROBERTS. Are there any questions? If not, we thank you for your appearance and testimony, Mr. Bennett.

Mr. BENNETT. Thank you, Mr. Chairman.

Mr. ROBERTS. The next witness is our colleague from New Mexico, Hon. Joseph M. Montoya. Mr. Montoya.

STATEMENT OF HON. JOSEPH M. MONTOYA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Mr. MONTOYA. Thank you, Mr. Chairman, for this opportunity to present my statement in support of H.R. 12, the Health Professional Educational Assistance Act of 1963.

The need for this legislation is great, and the introduction of H.R. 12 in the 88th Congress and the hearings which your committee is holding is a recognition of this need.

If we are to reverse the declining percentage ratio between doctors, dentists, and patients, we must enact legislation granting assistance to colleges and universities as well as scholarships to worthy qualified young people wishing to enter these professions. The President, in his state-of-the-Union message, stated that over the next 10 years we must increase the capacity of our medical schools by 50 percent and our dental schools by 100 percent.

I earnestly believe that unless the facilities and the opportunities for medical, dental, and professional health personnel education are expanded to keep up with our population growth, the limited capacity of our professional schools will not provide the number of doctors, dentists, and nurses necessary to give our citizenry the medical and dental care they need to maintain health. We must insure that such treatment is made readily available to our people by educating enough physicians, dentists, and nurses to get the job done. The security and integrity of our Nation are more dependent upon our people's health than upon any other single factor. We cannot afford to neglect this obligation.

Many young people today are unable to enter the medical profession because their financial resources are limited. Those who do enter this profession have to devote a number of hours each week during the academic year to outside work in order to earn funds for their educational needs. This time should be spent in mastering the knowledge with which they are confronted in order that they may become well qualified as physicians, dentists, or nurses. The scholarship section of this bill is vitally important since we must increase the number of qualified applicants to schools of medicine, dentistry, and nursing.

In the State of New Mexico we have neither a medical school nor a dental college. This situation exists in a State with a population of over 1 million people. I think you can easily recognize the great need of my State for the establishment of schools of medicine and dentistry.

The University of New Mexico is taking the necessary steps to develop a School of Medicine, and should this bill be enacted, the university would be eligible for matching funds under the act. The University of New Mexico is among the first institutions to plan and develop a new medical school in response to the Surgeon General's recent clear expression of the Nation's need. The new school will be a resource for all the health agencies in the State, and its teaching

and research programs will be of national and conceivably international significance.

As you see, we have an immediate need throughout the Nation for the initiation of the programs outlined in H.R. 12, and it is my sincere hope that this legislation will be favorably acted upon. Thank you.

Mr. ROBERTS. Are there any questions? If not, we appreciate your testimony, Mr. Montoya.

Mr. MONTOYA. Thank you, Mr. Chairman.

Mr. ROBERTS. The next witness is our colleague, Hon. Jeffery Cohelan of California. Mr. Cohelan.

STATEMENT OF HON. JEFFERY COHELAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. COHELAN. Mr. Chairman, I appreciate this opportunity to indicate my strong support for H.R. 12—the Health Professional Educational Assistance Act—and urge that it be approved by the committee, and passed by the Congress without delay.

The need for this legislation—for the Federal Government to cooperate with the States and private medical institutions to increase the supply of trained health manpower—is well known to this committee. During the last few decades, we have made exciting discoveries and advances in medical science. Today, for example, we are able to prevent or cure diseases that were the scourge of previous generations. Today, by the techniques of modern surgery, we are able to save countless lives for which previously there was no hope.

Yet, none of this knowledge, none of these advances, and none of these skills can truly be profitable to us until we have an adequate supply of well-trained medical personnel. Today, unfortunately, that supply does not exist, and the carefully documented statements and studies which have been presented to this committee indicate clearly that the problem will grow more acute in the near future, unless prompt action is taken.

As the President indicated in his health message to Congress this year, and as this committee recognized last year in its report to accompany H.R. 4999, merely to maintain the present ratio of health personnel to an ever-expanding population will require a substantial expansion of our training facilities—an expansion which will, over the next 10 years, increase medical school admissions by 50 percent, double the number of dental graduates, and increase nursing personnel by 25 percent.

My own State of California presents, I believe, a good example of this problem. We now have a population of approximately 17½ million persons—a population which is swelled every day through out-of-State migration by 2,000. From this daily influx of 2,000 comes 80 percent of the new physicians which California licenses every year. Yet, despite this sizable number—a number which of course depletes the supply in other areas of our country—we are unable to maintain even the present ratio of physicians to population.

In California, to meet our own needs alone, we must, in the next decade, double the number of medical and dental students. Last fall, California's medical schools—both public and private—admitted 484 freshmen. By 1972, this figure must be in excess of 900 just to maintain the present ratio.

California is making a substantial and a determined effort on its own behalf to meet this requirement. This year, almost $500,000 of the State's budget has been earmarked for higher education, with a small, but a vital part for medical education. Two public bond issues have been proposed and accepted by the people to expand educational facilities. Steps are being taken to enlarge the State's two public medical schools and to inaugurate a third. The private schools are struggling against increasingly rising costs, to maintain their present student levels, and they have indicated their willingness to expand opportunities for admission if new funds can be found.

But these efforts by California alone will not be enough, particularly if we are to ease our present heavy drain on the health personnel of other States, and if the United States is to lessen its drain on the health manpower of other countries.

The Federal matching assistance provided in H.R. 12 would provide an urgently needed supplement to the demonstrated efforts of California. It would go far toward meeting our Nation's critical health manpower requirements, and in promoting the welfare of this and future generations of Americans.

Mr. ROBERTS. Are there any questions? If not, we thank you for your appearance, Mr. Cohelan.

Mr. COHELAN. Thank you, Mr. Chairman.

Mr. ROBERTS. Our next witness is Mr. Clinton Fair, who will appear in place of Mr. Andrew J. Biemiller, the Department of Legislation, AFL–CIO.

I believe he is to be accompanied by Miss Lisbeth Bamberger, assistant director of the AFL–CIO Department of Social Security.

STATEMENT OF CLINTON FAIR, LEGISLATIVE REPRESENTATIVE, AFL–CIO, ACCOMPANIED BY LISBETH BAMBERGER, ASSISTANT DIRECTOR, AFL–CIO DEPARTMENT OF SOCIAL SECURITY

Mr. FAIR. Mr. Chairman, my name is Clinton Fair, a legislative representative from the AFL–CIO. I am accompanied by Miss Lisbeth Bamberger, assistant director of our social security department.

I am sorry Mr. Biemiller cannot be present. He enjoys appearing before this committee, because he is specifically interested in the subject before you, but more than that, he has a number of friends on the committee.

We come before you today because there is a doctor shortage in America that is growing steadily worse—a doctor shortage that cannot be dealt with effectively unless the Congress of the United States enacts legislation now to provide Federal assistance to medical schools and medical students.

The problem is that simple and that urgent.

We shall not repeat the testimony we presented to this committee during the last session. It can be found on pages 433 to 438 of the published hearings.

It is clear from the committee's report that the majority of the members are as convinced as we are of the acute need for additional health personnel. It is clear that the majority of the members of this Committee came to the same conclusion we have reached—that this

need cannot be met without the Federal assistance as proposed in H.R. 12, introduced by the distinguished chairman of this committee.

Perhaps we can be of greatest assistant to this committee by avoiding the temptation of reviewing once more the massive evidence of the necessity for the passage of this legislation at the earliest possible time. Rather, let me simply assure you of the AFL–CIO's strong and firm support of your endeavors to secure prompt and favorable action on the bill before you now.

The doctor shortage is more than a phase of our 13½ million members. They, like other parents and family breadwinners in communities all over the country, are up against the problems created by the doctor shortage every day of their lives. Their convictions about this problem were forcefully expressed at the most recent AFL–CIO convention, when the delegates unanimously adopted a resolution reiterating the concern of our members with the physician shortage, and characterizing the training of additional health personnel as "among the most pressing of America's health needs."

I should like to make one specific comment on the provision in H.R. 12 for student loans. We believe a scholarship program would be preferable. We believe, further, that if a loan program with a forgiveness feature is to be substituted, authority should be provided for 100 percent forgiveness rather than only 50 percent. Otherwise, talented young people from the lower income groups will continue to be excluded from the possibility of medical training.

Provision for 100 percent forgiveness in some loans could be achieved by increasing the rate of forgiveness from 10 to 20 percent a year or by some other method the committee may find effective in encouraging trained personnel to serve in capacities where monetary remuneration has traditionally been relatively low, including service with a governmental or other nonprofit agency, or in geographical areas of need.

To return to the bill as a whole, the need for legislation to provide Federal assistance to medical, dental, and public health education is so compelling, so well-documented, and so immense that it is impossible to justify a single further day of hesitation or delay.

We therefore congratulate your committee on its prompt calling of these hearings, and we hope that not only this committee but the entire Congress will act with a sense of urgency to make sure that when this session of the 88th Congress is over, programs will be underway to deal with a problem which is so steadily increasing in severity.

Mr. Chairman, the chairman of this committee, I think, reliably reports a feeling in this country that sometimes we extend our programs too long.

But with regard to the construction part of the bill, may I give my experience as a legislative secretary to a Governor? If one of our State institutions, one of our universities, is to expand a facility, it takes a look at its own total program to see what it will do. For example, there will be preparation on the part of the medical school for its program of expansion. There will be the appearance before the board of regents, followed by the university's appearance before the budget director of the State. The sale of the same program must be made to the Governor who must then balance all of his capital

improvements in his State before making his legislative recommendation. It has been my experience that this takes approximately in capital improvements somewhere between 3 and 4 years to get the whole process going, and a balancing off of priorities before going to the State legislature.

I suggest this to you because there is a difference between an airport program, as I remember in our State legislature, and a medical facility. In the airport program it is true we watched to see what the Federal Government was going to do, but every State legislator, practically speaking, had a stake in the program. There was an airport or a small airport in his area, so that you had a statewide concern with it among the legislators. It was not a balancing off of capital improvements among educational facilities.

So I hope as the committee looks at this particular section it will select a long-enough period in the first step so as to insure the operation getting a fair trial. Then if the Congress decides to cut it off regularly and open it for discussion and for expansion, as the chairman suggests, then I am sure the State legislators will become used to the program and used to this happening and will comply more understandingly. But I do warn the committee of the very difficult problem of selling State legislators who are not sure what a Congress is going to do on a program. I hope you will extend the initial program as long as you can in the building construction area, as you are reasonably sure that the Congress will go along with you.

I wanted to make that comment because I know the chairman accurately reports the attitude in our country today.

Mr. ROBERTS. Thank you, Mr. Fair. Of course, that is a real problem we have. The experience I have had here with these programs is generally with a new program, though there is a problem of legislatures meeting, and there is a problem of lag. Generally speaking, I think a program for a moderate period of time means that Congress will keep a little closer look at it, and we have had, I think, very fine experience in that most all of our programs have been extended and, as the chairman pointed out, we did not have too much trouble in getting it extended.

But you have made, I think, a very fine point and one I am sure the committee will certainly take into consideration.

With reference to the forgiveness part of your statement, I think Mr. Younger and you have been reading each other's mail, so I will not have anything else to say at this point, but I am sure the gentleman from California would like to agree with it.

Mr. YOUNGER. Mr. Chairman, the only thing is the question of the scholarship. You call it a scholarship program, ours is a loan program, it is not a scholarship program, which is provided in the bill. You prefer the gift or the grant rather than the loan, and the bill provides only for loans.

Mr. FAIR. Right.

Mr. YOUNGER. This question was discussed last year and was thrown out, so I do not think there is any particular sentiment in the committee for grants or scholarships. The House has repeatedly turned that down in the National Defense Act, and I am sure they would not grant it in this.

I think there is merit, however, of course, in talking about this. The chairman still thinks we might arrive at some incentive which

would be of more importance than the 50-percent forgiveness, which we have in the bill at the present time. I just thought that should be given consideration.

I think if we find a change would improve the bill, I would not hesitate to see that we amend the bill. I do not think there is any difficulty in amending the bill. I do not think there is anything sacred in the bill we reported last year which the Rules Committee would not give a rule on. It came back to us, and we can do whatever we want with it now.

Mr. FAIR. I think Mr. Harris partly put his finger on that this morning, Mr. Younger, when he reported that the Rules Committee had felt there was duplication, and I think that was the point Mr. Harris very clearly in his introductory remarks brought out to all of us this morning.

I had attended those hearings and had the same feeling your chairman did. But this bill, I think this bill, makes it quite clear that there would not be—there is an overlapping, but not necessarily a duplication of Federal aids.

Mr. YOUNGER. We cannot help but have some duplication or overlapping when you have a man who must complete 4 years of college work before he can go to a medical school, and frequently the student does not determine that he wants to go to a medical school, maybe not until his junior or maybe his senior year.

Mr. FAIR. And he is not sure he is going to be accepted then.

Mr. YOUNGER. That is right. That is all, Mr. Chairman.

Mr. ROBERTS. The gentleman from Florida.

Mr. ROGERS of Florida. Thank you, Mr. Chairman.

I just wondered why there was any particular reason why you preferred a scholarship program over a loan program.

Miss BAMBERGER. Our thinking was similar to that which was in the minds of the administrttion when they proposed the scholarship program originally, and if I remember correctly a scholarship program was incorporated in the bill that Mr. Harris, the chairman of this committee, introduced originally, which was that the pressures on people after they get out of medical school to get into the most lucrative type of practice would be minimized by taking away from them the pressure of having to repay that loan.

I think you achieve part of this by saying that in the less lucrative types of practice you will forgive at least a part and, possibly, the whole, as you may be considering of that loan.

Mr. ROGERS of Florida. Well now, how, in just thinking about your scholarship program, how would you determine who was to get the scholarship, or would everyone get them?

Miss BAMBERGER. In precisely the same way that the loan provision is now to be administered, that is by the schools.

Mr. ROGERS of Florida. Yes. But I mean your criteria, would there be a need basis or would it be outstanding ability? I just wondered how you would go about starting a medical program.

Miss BAMBERGER. Well, your present bill leaves this determination up to each individual university, and we would certainly go along with doing that with scholarships or loans.

Mr. ROGERS of Florida. I see. It would not matter on that how it was administered, just so scholarships were given?

Miss BAMBERGER. Yes.

Mr. ROGERS of Florida. You have no strong feeling on whether it should be keyed to the need of a young man or woman?

Miss BAMBERGER. We have no feeling about making the arrangements for scholarships any differently from making them for the loans, that is, to let the school administer that program. It seems to be one that would be——

Mr. ROGERS of Florida. I see. I thought perhaps the reason you wanted scholarships was mainly to key it, perhaps, to those with need, but you have no strong feeling on that?

Miss BAMBERGER. Well, certainly the purpose of either a scholarship or a loan program is to make medical training possible for people who would not otherwise be able to afford it, and we would assume that either a loan or a scholarship program would be administered with that purpose in mind.

Mr. ROGERS of Florida. Also don't scholarships though, however, serve as kind of a reward? That was the point I was trying to make. Perhaps a distinguishing feature between a loan and a scholarship is that a scholarship would almost have to be tied into recognition of outstanding ability along with need, whereas a loan could, perhaps, be based on just need, and give a young person an oppourtunity and, perhaps, not be in as limited an approach.

Miss BAMBERGER. I would assume if you had a scholarship and loan program operating side by side you might want to make that distinction.

Mr. ROGERS of Florida. But you would not make the distinction if it were all scholarship?

Miss BAMBERGER. I am still quite satisfied.

Mr. ROGERS of Florida. I am not trying to pin you down, but just trying to get your thinking along these lines.

Miss BAMBERGER. We would be quite satisfied to leave this determination to the universities.

Mr. ROGERS of Florida. The legislation would leave it as to how it would be worked out that way. Thank you. Thank you, Mr. Chairman.

Mr. ROBERTS. The gentleman from Massachusetts.

Mr. KEITH. Miss Bamberger, you indicated in your testimony that, in your opinion, the physician's choice of a community in which to practice would be, at least in part, dependent on the loan repayment provisions. I would just like to say I think the nature of men in general, and doctors in particular, regardless of other situations, would be to try to make as much money as they can and, in spite of the repayment provisions, they would still choose the town or the kind of practice that would pay him the greatest income. He will have use for whatever income that he would be able to make. I do not think you will find any reshuffling into less lucrative positions, I think that is an optimistic judgment.

Miss BAMBERGER. I will admit to an optimistic view of the nature of man, Congressman.

Mr. KEITH. Thank you.

Mr. ROBERTS. The gentleman from Missouri.

Mr. HULL. No questions.

Mr. ROBERTS. The gentleman from Pennsylvania.

Mr. CURTIN. Thank you, Mr. Chairman.

Miss Bamberger, what is the thinking in your statement when you say that persons, if they could only have a 50-percent forgiveness rather than a 100-percent forgiveness of a loan, would still be excluded from the possibility of medical training?

Miss BAMBERGER. Well, if you take a young man or a young woman from the lower economic groups who are not now well represented among medical students, first of all, he is probably struggling through college and, possibly, incurring some debts on the way which he may have to repay, this additional amount of money—and I do not have the figure at my fingertips as to the amount of money that the 50-percent difference would represent—but it seems to me it would make a difference in this young man's appraisal of whether he can make it through medical school and whether he can make it through the kind of medical career that he wants.

Mr. CURTIN. You mean whether the student feels that he is going to be able to repay this loan after he gets out of medical school will be a consideration in his making application to such school?

Miss BAMBERGER. Right. This original indebtedness, it seems to me, is going to be a factor, looms as a factor, to people in the lower economic groups in making this determination.

Mr. CURTIN. Of course, the loan-forgiveness feature in this bill only applies to those doctors who go into areas where there is a need for them. It does not apply to every particular person who secures a loan.

Miss BAMBERGER. Certainly. What we are suggesting is the committee has recognized in writing in this 50-percent forgiveness feature that it might be helpful in opening a way to more people to go to medical school as well as in encouraging them to go into certain kinds of practice where there is now a shortage, and we are suggesting that you can simply increase this impetus by increasing the 50 percent to 100 percent.

Mr. CURTIN. My understanding of the forgiveness feature of loans was to get doctors into areas where we need them rather than to get more people into the medical profession in general; is that your understanding of it?

Miss BAMBERGER. I could not defend this with any figures, but I think there is reason to believe there would be an additional increment of people who could actually afford to go through medical school if you increased this forgiveness from 50 percent to 100 percent. I do not have the figures with which to prove it.

Mr. CURTIN. Thank you.

Mr. ROBERTS. The gentleman from North Carolina.

Mr. BROYHILL. No questions.

Mr. ROBERTS. Thank you very much, Mr. Fair and Miss Bamberger.

Mr. FAIR. Thank you, Mr. Roberts.

(The following letter was later received from Mr. Biemiller:)

AMERICAN FEDERATION OF LABOR AND
CONGRESS OF INDUSTRIAL ORGANIZATIONS,
Washington, D.C., February 15, 1963.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee, House Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: Since our appearance before your committee it has been brought to our attention that although employees engaged in the direct

Federal construction of regional facilities are already extended labor standards' protection under existing law, workers employed in federally assisted construction of such facilities would not be similarly protected. It is recommended and respectfully urged that this protection be extended to them.

As presently drafted, H.R. 12 does prescribe labor standards for construction authorized under the new sections 720 and 721 of the Public Health Service Act and also adds such provisions to section 705(c) of the act. We believe the inclusion of these provisions was of course most desirable and ask that the proposed language which is attached to cover workers in the federally assisted construction of regional facilities be added to the bill.

We appreciated the opportunity of appearing before your committee in support of H.R. 12 and hope this additional recommendation may meet with your approval.

Sincerely yours,

ANDREW J. BIEMILLER,
Director, Department of Legislation.

SUGGESTED LANGUAGE TO AMEND THE LABOR STANDARDS PROVISIONS OF H.R. 12

On page 7, strike out the language beginning with word "will" on line 12 and ending with the word "workweek" on line 15, and insert in lieu thereof the following: "will receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours Standards Act (Public Law 87-581)."

On page 26, make the same changes with respect to language beginning on line 5 and ending on line 8.

On page 28, at the end of section 712, add the following new paragraph:

"All laborers and mechanics employed by contractors or subcontractors on construction projects assisted under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a-276a-5), and shall receive overtime compensation in accordance with and subject to the Contract Work Hours Standards Act (Public Law 87-581); and the Secretary of Labor shall have with respect to the labor standards specified in this section the authority and functions set forth in Reorganization plan numbererd 14 of 1950 (15 F.R. 3176; 5 U.S.C. 133z-15) and section 2 of the act of June 13, 1934, as amended (40 U.S.C. 276c). The Surgeon General shall not approve any project involving the contribution of Federal funds without first obtaining adequate assurance that these labor standards will be maintained upon the construction work."

Mr. ROBERTS. This will conclude the list of witnesses for today and we will stand in adjournment until 10 o'clock tomorrow in the same hearing room.

(Whereupon, at 3:35 o'clock p.m., the committee recessed, to reconvene tomorrow, Wednesday, February 6, 1963, at 10 o'clock a.m.)

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE

WEDNESDAY, FEBRUARY 6, 1963

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE
AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to recess, at 10 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman) presiding.

The CHAIRMAN. The commitee will come to order.

As we continue hearings this morning on H.R. 12 and related bills, our first witness will be Dr. Russell Nelson, Johns Hopkins University Medical School, Baltimore, who will be representing the American Hospital Association.

Dr. Nelson, we are very glad to have you.

Dr. NELSON. Thank you, Mr. Chairman.

The CHAIRMAN. I believe you have with you an associate whom you might identify for the record, Doctor.

STATEMENT OF DR. RUSSELL A. NELSON, PRESIDENT, JOHNS HOPKINS HOSPITAL, BALTIMORE, ON BEHALF OF THE AMERICAN HOSPITAL ASSOCIATION ACCOMPANIED BY KENNETH WILLIAMSON ASSOCIATE DIRECTOR OF THE ASSOCIATION

Dr. NELSON. Mr. Chairman, I am Dr. Russell A. Nelson, president of the Johns Hopkins Hospital, Baltimore. I appear here today in behalf of the American Hospital Association. Accompanying me is Mr. Kenneth Williamson, associate director of the Association. You are familiar with the association, as representatives have appeared before the commitee through the years, and I will not dwell on any further identification of the association.

I am happy to endorse H.R. 12. I will not read the prepared testimony which is before you, but I would like to comment on some features of it briefly.

We think there is urgent need for assistance in construction of teaching facilities, both in schools and in hospitals, and we commend to you as early and favorable consideration of the construction portion of this bill, particularly. We know that it will take many years to fill the pipeline of added facilities to produce the increased number of graduates which we know are needed for the health care of Americans.

I would like to confine my remarks chiefly to the shortage of physicians, and point out one area that affects us in our hospitals daily, and that has to do with the shortage of interns and residents, the

young graduate physicians who are in for further training in hospitals and are so essential to the care of patients in hospitals.

You know the numbers involved. There are severe shortages which are only partially made up by the appointment of graduates of foreign medical schools. The United States, with all its vast educational resources, is an importer of medical manpower. This shortage of interns and residents does two very serious things to our hospital care:

It diminishes the quality of the care in some situations, and this is a serious mater of considerable concern to the profession. Secondly, it seriously decreases the efficiency of the doctor in his work in the hospital and, to some degree, limits the capacity that he has to take care of all the patient demands that come to doctors and hospitals.

In my own State of Maryland, which we think is a State with good educational resources and perhaps better than average medical resources, we face this shortage, too. There are 19 of our 40 hospitals in the State of Maryland approved for intership and residency training. Those hospitals last year had places for 315 interns and about three times that many residents. Last year for the 315 positions we got 125 American graduates. There are probably 50 to 75 foreign medical graduates obtained to fill in the vacancies, but, as you can see, there were one hundred or two hundred positions never filled.

Now, this reflects itself in the hospitals, particularly in the urban area of Baltimore, by inadequate doctor coverage of our emergency departments where patients seriously ill or injured may be forced to wait unnecessarily long times in order to get needed care. We are, also, constantly, I think, short of practicing physicians particularly in the rural and isolated areas in our State.

In our hospital in Baltimore we, monthly, I would say, get requests from communities to refer physicians there because they either have none or the physician that is there is old and soon to retire or cannot keep up the pace of his younger years. We also know that in our urban areas our doctors are so busy that emergency care at night and over weekends is difficult to get for the families in their homes and the patients and the people are coming to our hospital emergency departments where we, in turn, have our difficulties because of inadequate numbers of interns and residents.

Another point I would emphasize to you is in the area of public health officers. Again, in our State of Maryland we feel that we were leaders in establishing sound public health organization, and we have provision for a qualified physicial public health officer in each of our 23 counties and have had for a number of years those provisions. As of today five positions are vacant, even though funds from local and State sources are available to pay the salaries. There are 15 other important physician positions in our State health department that cannot be filled. This is at a time when we see the responsibility of a State health department for not only public health, but growing public medical care programs increasingly.

We do have in our teaching institutions sources of Federal funds for research facility construction. We do have sources of funds through the Hill-Burton program for the creation of bed facilities, outpatient facilities, and we do get some relief to teaching facility needs through these two programs, but some of us are concerned that

this is leading to imbalance in the programs within our institutions, with a greater tendency to emphasize research and clinical care and not enough emphasis upon the teaching of students.

Our students have trouble, and the provisions of this bill for loans would, I think, be helpful. I am sure you know how costly it is to go to medical school. There is no doubt that costs do keep some students from enrolling in medical schools. It costs $3,000 or $4,000 a year for a student in some of our private medical schools to attend. Tuitions are over $1,000, approaching $1,500, in some of our private schools. You know what living costs are. They are high. And I remind you that in medical schools there is a tendency to have 12-month operations or 11-month operations, not the academic year of 9 months. We do need loans to provide additional financial assistance to students.

There is a special need here, too, for interns and residents who are, in fact, graduate students in medicine. I remind you that these men and women are spending at least 4 years in graduate education. They are surviving on very low stipends, $2,000 to $3,000 per year, with two-thirds of them being married. I hope that some assistance can be given to this group of students.

I would like to close with a comment on a provision of the bill which does give us concern, and that is the provision to provide construction assistance for schools of nursing. We know that schools of nursing do need this assistance. Our nursing situation is serious, and I know that you and other groups in Congress will be studying this in detail later. But the bill before you provides construction assistance only to collegiate schools of nursing. These account for approximately 15 percent of the schools of nursing and 15 percent of the production of nurses. Eighty-five percent of our production of nurses comes from the hospital-sponsored school of nursing. These schools are approved by educational authorities in our States, can be identified as sound and proper educational groups, and we believe that the hospital schools should be included in the provisions of this act.

We know that Hill-Burton funds are available to hospitals in each of the States, but they are not adequate to meet the teaching facility needs of a school of nursing.

First, any financial assistance provided for such teaching facility have been incidental to the needs to expand or create hospital beds and other diagnostic and treatment facilities, and often suffer because of their incidental nature. And, furthermore, in a practical sense, the priorities directing the use of Hill-Burton funds in all of our States provide that the funds go for the provision of beds rather than teaching facilities. And, finally, Hill-Burton does not provide a 50 percent matching, on the average, for hospital construction.

For these and many other reasons, gentlemen, on behalf of our association, I urge that you favorably report H.R. 12.

Thank you, sir.

(The complete prepared statement of Dr. Russell A. Nelson follows:)

STATEMENT OF THE AMERICAN HOSPITAL ASSOCIATION TO THE HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE ON THE HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE ACT OF 1963 (H.R. 12)

Mr. Chairman, I am Dr. Russell A. Nelson. I am president of the Johns Hopkins Hospital, Baltimore. I appear here today in behalf of the American

Hospital Association. Accompanying me is Mr. Kenneth Williamson, associate director of the association. You are familiar with the association, as representatives have appeared before the committee through the years, and I will not dwell on any further identification of the association.

I am happy to endorse H.R. 12. I will address my remarks to the national need for an adequate number of physicians. Hospitals are deeply concerned with both the quantity and quality of medical education. There is a growing need for more and better physicians. To provide adequate numbers of good doctors, we must insure the availability of high quality medical education. The primary problem therefore is to modernize or replace many of the existing medical schools and also to provide new schools. The problems and the needs have not changed since representatives of this association appeared before committees of the Congress in the past except, perhaps, as they have been intensified.

I cannot emphasize too strongly that it will be at least 5 years after the start of a construction program before the first students graduate. I do hope that the Congress will not delay any longer in initiating the construction phase in particular.

The following is the situation as we in the hospital field see it:

1. The population is increasing and the proportion of physicians in relation to the population is decreasing.

2. The total number of approved internships and residencies has increased from 13,000 in 1940 to more than 30,000 this year. Hospitals are unable to fill a substantial percentage of available internships and residencies. We estimate one-fourth of these positions remain vacant. Last year, 7,138 students graduated from medical schools.

3. Shortages of interns and residents result in practicing physicians being able to treat fewer patients as an increased amount of their time must be spent in hospitals.

4. Desirable higher standards for acceptance of foreign medical graduates as residents reduces the number available from this source and aggravates the problem.

5. Increased financing of health services through voluntary health insurance and by Government results in increased demands by the public for medical care.

6. Medical research and medical education are brought together in the teaching hospital. It is in the hospital that much of our medical research is translated into patient care. Our future progress in health affairs must be closely related to research. Increasing numbers of well-trained physicians are essential if we are to take advantage of the opportunities which medical research offers.

7. Two examples of population groups which in particular require large and increasing amounts of medical care are the mentally ill and the aged. Great improvement is needed in the whole field of mental health care. There is now a substantial shortage in the number of psychiatrists. The needs of the mentally ill are not likely to be met without more doctors. Older persons require two to three times more care than younger age groups. The number of available doctors must increase just as the aged segment of our population has increased, if their health needs are to be met.

8. The need for increased numbers of doctors at all levels of Government has grown. Their services are needed in institutions operated by Government and in the whole field of public health.

The provision of health services to our Armed Forces necessitates a constant drain on available physician manpower.

9. World health has an important bearing upon international relations. Our ability to assist people in other parts of the world to meet their health needs is dependent upon the availability of adequate numbers of physicians.

We are particularly pleased that H.R. 12 recognizes the essentiality of teaching hospitals to the training of physicians so that the hospitals owned and operated by the 49 schools of medicine, as well as the 283 hospitals affiliated with medical schools, are given consideration in the program. The concerns of hospitals for medical education go beyond the medical student, since internships and residencies provided in hospitals are an integral part of the education of a physician.

This concludes my written statement. Thank you Mr. Chairman.

The CHAIRMAN. Doctor, thank you very much.

Mr. Williamson, did you have any further comment?

Mr. WILLIAMSON. No, thank you, Mr. Chairman.

The CHAIRMAN. Mr. Staggers, any questions?

Mr. STAGGERS. One brief one.

I would like to thank Dr. Nelson for a very frank and forthright statement. I would like to ask this:

The situation that you have given for Maryland, do you think that prevails across the Nation? Is this a typical State? I know you have a great deal of teaching facilities in your State, but perhaps, if it is bad there, it would be the same in other States, or worse.

Dr. NELSON. I do think we are better off, Mr. Staggers, than the average State, and the conditions that I describe might very well be worse in other States.

Mr. STAGGERS. Now, I want to ask you this:

Talking about foreign interns coming in and serving, do American students go to foreign medical schools, to any great degree, to get their medical training and then come back here?

Dr. NELSON. To some degree.

I think there are, let us say, about 7,000 graduates of American medical schools, most of whom are American citizens. I believe each year there would be 300 or 400 Americans that graduate from foreign medical schools.

Mr. STAGGERS. I might ask you this:

Is the trend for them to come back to America to practice or to practice abroad?

Dr. NELSON. No, to come back to America to practice, I think, sir.

Mr. STAGGERS. I know some in my area that have gone to other medical schools for reasons and circumstances that they had to, and I assume they are coming back to this land to practice.

Dr. NELSON. I think most of them do; yes, sir.

Mr. STAGGERS. In your statement there about the lack of interns, spaces for 315 and you had only 125, and you talk about the resident doctors, I did not get the amount of resident doctors whom you said were available to fill these spaces.

Dr. NELSON. I do not have that immediately available. I could get it for you, but I made an estimate that for each intern there would be three residents, on the average, and I would assume that the vacancy rate in the residents would be about the same as it is with the interns. I think that is about right.

Mr. STAGGERS. Thank you very kindly.

The CHAIRMAN. Mr. Springer?

Mr. SPRINGER. Dr. Nelson, I know that you are faced with the same thing that we are in many of the other States in rural areas as you are in Maryland.

With reference to the lack of doctors in the rural areas, do you have any suggestions as to how you can improve this situation?

Dr. NELSON. Well, first, I think it is a difficult decision for a young man to make. He must be a very dedicated individual to give up the many advantages of an urban practice for the numerous disadvantages of rural practice, both to himself and his family. And, as long as we are short of physicians, as we are, in the cities, the tendency, I believe, is going to be for new doctors to stay in the cities. So I would say let us have more doctors.

Mr. SPRINGER. I think you are right.

What bothers me a little bit, in every hospital that I know of in Chicago, where I am familiar with the situation, especially the Cook County Hospital recently where they ordered additions to bring them up to the level of approval, I noticed that you mentioned here in your statement—and I listened to you very carefully—there were so many internships that were not filled.

Then you took the foreign doctors coming in to fill part, but you still have how many residencies, not interns but residencies, that were not filled in Maryland?

Dr. NELSON. I just made an estimate.

Mr. SPRINGER. You said 130, roughly, interns?

Dr. NELSON. For 315 positions we had 125 filled by American graduates last year.

Mr. SPRINGER. Is that internships and residencies both?

Dr. NELSON. That is just internships, sir.

Mr. SPRINGER. How many residencies?

Dr. NELSON. I think you can multiply those figures by three to get the number of residents. Let us say that would be 900 residents totally, and I assume the vacancy rate would be about the same. It would be about 375 serving in the 900 residencies that are American graduates.

Mr. SPRINGER. So you are short how many?

Dr. NELSON. About 600, part of which is filled up, let us say maybe even half of it is filled up by graduates of foreign medical schools.

But, on the average, in the Nation a quarter of the positions are vacant. A quarter of the positions are filled by graduates of foreign medical schools, and there are 10,000 or more positions in the Nation for internships, and about 30,000 positions for residents.

Mr. SPRINGER. And you fill, roughly, half of those?

Dr. NELSON. From American graduates.

Mr. SPRINGER. With the foreign, you are then short how much?

Dr. NELSON. 25 percent.

Mr. SPRINGER. You are short, then, about 8,000 or 9,000, is that right?

Dr. NELSON. Yes.

Mr. SPRINGER. For all internships and residents?

Dr. NELSON. Yes, sir.

Mr. SPRINGER. The point that bothers me from your testimony, and I know from the hospital angle, what I am hoping is that all the doctors who come out of school will go into those residencies because they have a tendency to be permanent.

Dr. NELSON. No, it would be a problem of filling the pipeline, but it would be filling the residencies every year.

Mr. SPRINGER. Those do not become permanent?

Dr. NELSON. No, sir.

Mr. SPRINGER. How long is a residency?

Dr. NELSON. It would be 3 or 4 years, on the average, and then they go out into practice.

Mr. SPRINGER. An internship would be 1 or 2 years?

Dr. NELSON. One year.

Mr. SPRINGER. Do you think supply is the problem for the rural areas?

Dr. NELSON. I do not think that is the only problem, but I think it is a big part of it. The other problem is adequate facilities for the practice of medicine and surgery in the rural areas.

Mr. SPRINGER. I think there is something to that. In a town last year the people went out and subscribed $6,000 for equipment, but he only stayed one year because the Army grabbed him. He was a Cuban who had not had his military service.

We recognize all these problems, and we are still trying to get a solution for the rural problem. I am deeply interested in that, doctor. I am glad to have your figures about residency. This is an excellent statement, thank you.

Dr. NELSON. Thank you.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Texas. Doctor, you have made an excellent statement, and you have pinpointed these things, and I think that is very helpful.

Would you tell me, in your opinion—and if it is the thinking of the American Hospital Association, why, that is fine—why do you think this is a Federal responsibility?

Dr. NELSON. Well, the first point I would give is that approximately half of our medical schools are private medical schools and do not have access to State and local tax funds, and I personally believe we need tax funds in medical education.

Second, the concentration of our medical institutions is in the larger cities, and not every State and every community is producing graduates, and one State has to borrow from another State's educational plant, and it is hard to equalize that except by use of Federal funds.

Thirdly, the needs of the armed services have continued to increase.

Mr. ROGERS of Texas. Do you feel that if we moved into the area of providing Federal funds, that a Federal license ought also to be worked out where a doctor would not be confined to practice in the State in which he passed his medical board, but would be allowed to practice all over the United States?

Dr. NELSON. Mr. Rogers, I do not know that I want to get into the question of the Federal Government responsibility in licensure, but I would say this:

That there are troubles because State laws vary. I think it is getting better all the time. We have a national examination now that I think a large number of medical school graduates are taking which permits them to get licensed in nearly all of the States by just a simple registration process. That is the National Board for Medical Examination, as you know.

Mr. ROGERS of Texas. Yes.

Do you think that will solve that problem?

Dr. NELSON. I hope so, and I think there are evidences that it is in that direction, yes.

Mr. ROGERS of Texas. Now, doctor, I think, of course, this whole thing has been generated by the shortage of personnel to meet these needs. I notice in your statement that you say that this problem is the same now as it has been in the past when you testified, when your association testified, and has become more intensified, if anything.

Would you think that that was due to the fact that the people in the various States have sort of anticipated Federal help in this field and

have failed to move forward in their own responsibilities within the State?

Dr. NELSON. I do not know the answer to that question. I know in the State of Maryland, where we think we are a little better off than the average, in this respect, our State government is having an awful time financing what it has already got as responsibilities, and our private philanthropy is kind of up to its ears, too, in carrying what it is carrying.

Mr. ROGERS of Texas. And the exemption from taxes in many areas for contributions to this sort of thing has not answered your problem in this respect?

Dr. NELSON. Well, we do get private money, and it has been increasing somewhat, I think the figures would show. But, proportionately to what needs to be done, I think it is diminishing.

Mr. ROGERS of Texas. Now, I notice, also, from your statement where you say that the number of doctors is not increasing in the same ratio as the population; that is, that you have fewer doctors per 1,000 population now than you had in the past, or, at best, it is merely holding its own.

I talked to a doctor about this situation, and he said it was fine; that that is the way it ought to be; that the medical profession has made such great strides in protecting people's health; that one man could handle more patients now than he could before because people were healthier.

Is there anything to that philosophy?

Dr. NELSON. Well, I think doctors are handling more patients than they used to. We are healthier in some respects and we are not as healthy in other respects, I would observe.

Mr. ROGERS of Texas. Do you think the better health of the individual is one of the causes for the decrease in the number of doctors in relation to the population?

Dr. NELSON. No.

Mr. ROGERS of Texas. What do you think has caused that decrease, mostly?

Dr. NELSON. We have not been producing as many as the population has been growing, if I understand your question.

Mr. ROGERS of Texas. The student facilities have just not been adequate?

Dr. NELSON. Yes, sir.

Mr. ROGERS of Texas. And you feel that this thing can be answered by providing additional facilities for education?

Dr. NELSON. I think we must have additional facilities if we are going to get on the track to solving it. I do not think additional buildings, themselves, are going to solve it, by any means. If you include in your term "facility" all those things that a medical school needs to teach students, I would agree.

Mr. ROGERS of Texas. Some of the doctors have told me that the medical schools go wanting each year for students to fill places in these schools, but, accordingly to the Secretary yesterday and the Surgeon General, that might be true in one or two isolated places, but they tell me that it would not be true as an overall proposition.

What is your feeling?

Dr. NELSON. It is my opinion that it is not true in an overall situation, but I am sure you can get better testimony on that than mine.

Mr. ROGERS of Texas. Doctor, is there any controversy or divergence of opinion among the different hospital associations as to support for this legislation or this type of legislation?

Dr. NELSON. Mr. Rogers, I do not know what you mean by different associations.

Mr. ROGERS of Texas. I am presuming that there are different groups, the American Hospital Association, and I presume there are other groups. There seem to be in the dentists, the doctors and everything else, and I just supposed there were other groups in this.

Dr. NELSON. It is pretty hard to speak for all the hospitals.

Mr. ROGERS of Texas. Yes, I understand that.

Dr. NELSON. But our association, which has over 6,000 hospital members, is in support of this bill.

Mr. ROGERS of Texas. How many hospitals would you say are not in your association?

Dr. NELSON. Less than 1,000.

Mr. ROGERS of Texas. Less than 1,000.

Well, there would not be much room for other associations. The reason I ask these questions, doctor, is this:

I have had some people in the professions who have called this legislation socialism, and they have asked that it be defeated. But they added in small print that if it passed, they wanted a part of it.

I am just wondering if this opposition is serious or why it is generated. I suppose that it is not so in the hospitals.

Dr. NELSON. No, it is not so in the hospital field.

Mr. ROGERS of Texas. The hospital people whom I have talked to generally, they feel that Federal assistance in this area is absolutely necessary.

Dr. NELSON. Yes, sir.

Mr. ROGERS of Texas. Thank you very much, doctor, for your fine statement.

That is all, Mr. Chairman.

The CHAIRMAN. Mr. Sibal?

Mr. SIBAL. Doctor, just one question.

We have concentrated pretty much on the quantity of physicians. I do not want to embarrass you, and if this is an embarrassing question, I will understand, but would you feel that additional American graduates filling places in our medical structure in this country which are now essentially being filled by foreign graduates would improve the quality of medical performance?

Dr. NELSON. May I answer that by giving you a personal opinion about the foreign graduate and his capabilities. There are hundreds of foreign medical school graduates in this country who are excellent doctors, doing an excellent job. There are many that are substandard by our average educational standard. On the whole, it is my opinion that they are not as good practioners as the American school graduates, and I personally would like to see more American young men and women given the chance to go to medical school and get more of them practicing medicine in this country.

Mr. SIBAL. Would it be fair to say that at least in some instances the quality demanded by American medical schools of their students is higher than, in some instances, foreign schools?

Dr. NELSON. Yes; definitely.

Mr. SIBAL. Thank you.

The CHAIRMAN. Mr. Broyhill?

Mr. BROYHILL. I was interested in your comment on the nursing schools and the fact that this bill limits the grants to schools of nursing that are part of a college.

Dr. NELSON. Yes.

Mr. BROYHILL. Are the other nursing schools, in your opinion, those that are not part of a college, are they of the same quality and caliber of these schools, or can you make any determination of this sort?

I am thinking of private nursing schools which are connected, say, with a teaching hospital and not a college.

Dr. NELSON. If you will pardon me, I would like to say that the hospital that I am associated with has got what I think is the finest nursing school in the world, and it is a hospital school of nursing.

I know college schools of nursing that are extremely fine schools of nursing. There are some college schools that probably are not as good as some hospital schools, and vice versa.

As far as bedside nursing, the first-level nursing position, the registered nurse, I think a fully accredited hospital school of nursing is producing a graduate that is as effective as a college school.

Mr. BROYHILL. That is all the questions I have, Mr. Chairman.

The CHAIRMAN. Mr. Brotzman?

Mr. BROTZMAN. Doctor, I believe you testified that your organization or association is national in scope; is that not correct?

Dr. NELSON. Yes, sir.

Mr. BROTZMAN. But you testified more specifically as to ratios and shortages of doctors, I think, in the Baltimore area, as I understood your testimony?

Dr. NELSON. Yes; I did.

Mr. BROTZMAN. I am wondering, has your association, or any related association, made a study to demonstrate shortages on a national basis? In 2 days of testimony I have heard a great deal of testimony about isolated examples in one place or another, but what I am wondering is, if there is a study that has been made showing where, shall we say, medical attention is below the norm.

I assume there is some standard or some norm.

Dr. NELSON. Yes.

Mr. BROTZMAN. Do you know if any such study has ever been made?

Dr. NELSON. Yes.

I think the publication of the U.S. Public Health Service, I believe it is "Physicians for a Growing America," put out by a very competent committee 2 years ago, I believe, has many of the statistical points which I think you are searching for in its tables.

The questions of interns and residents, and their shortages, is published annually by the American Medical Association, and that organization or ours could give you a copy of the tables that show the shortages.

Mr. BROTZMAN. The point is, when you talk about filling up the pipeline, it does not necessarily insure that it is going to solve the problem that I understand this bill is striking at. Neither do I think the Federal Government can tell a doctor where he should go practice his particular profession. But it would be very helpful to me, I know, if I were able to see something on a national basis demonstrating this particular point. It would help me to assess the value of this particular piece of legislation.

Dr. NELSON. Mr. Brotzman, we will get you copies of these studies through our association offices if you cannot get them in any other way.

Mr. BROTZMAN. Would you do that?

Dr. NELSON. Yes, sir.

Mr. BROTZMAN. I have one more question.

From your testimony, and I notice in your statement, you say that you endorse this House bill No. 12.

Dr. NELSON. Yes, sir.

Mr. BROTZMAN. Now, when you make that statement, I assume you endorse it in its present form; is that correct?

Dr. NELSON. No, sir.

I urge that you include the hospital schools of nursing in that section.

Mr. BROTZMAN. I understand that one exception.

Now, there is one other feature here that I wanted to ask you about, that is, if your association had studied the need factor. Just turning to the bill for a moment, you will notice that this encompasses more than just doctors and nurses, and I think you also made some statement relative to public health personnel.

Dr. NELSON. I did.

Mr. BROTZMAN. Do you have an opinion relative to the need for these facilities for training pharmacists?

Dr. NELSON. No.

I am not well versed in that, but I can give you an opinion from the hospital field that there is nothing like the shortage of pharmacists as we are talking about in nurses and doctors. That is a personal opinion.

Mr. BROTZMAN. And how about optometrists?

Dr. NELSON. I have had very little experience with that.

Mr. BROTZMAN. Podiatrists?

Dr. NELSON. Very little experience with that.

Mr. BROTZMAN. So, then, your testimony as to the need factor, basically, pertains to doctors, nurses, and you had some testimony as to professional public health personnel; is that right?

Dr. NELSON. Yes, sir; it does.

Mr. BROTZMAN. Thank you.

The CHAIRMAN. Anything further, Mr. Brotzman?

Mr. BROTZMAN. That is all. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Long?

Mr. LONG. Dr. Nelson, those of us from rural areas are particularly concerned with the aggravated problem in such areas. Are you familiar with the provisions of this bill that would provide an incentive to doctors participating in the program either settling in areas of that type and practicing in areas of that type or participating in certain facets of the medical practice?

Dr. NELSON. I would have to examine that in detail, sir.

Mr. LONG. What it provides, speaking in general, is cancellation, at the rate of 10 percent per year, up to 50 percent of unpaid principal and interest in the event these doctors who have participated under the program take a particular course of action.

Dr. NELSON. Yes, I understand now. I am familiar with the provision.

Mr. LONG. This is designed to alleviate this problem, this very critical problem, in rural areas.

Dr. NELSON. Yes.

Mr. LONG. Do you feel that this is going to be effective?

Dr. NELSON. It is a hard judgment to make, whether a student would take a less desirable place, for a 10-percent rebate.

Well, it might help some. That is about the best answer I can give you. It might help some.

Mr. LONG. Your association, in making a determination they were in favor of this bill, was this done by committee?

Dr. NELSON. Yes.

We have a series of committees and councils heading up to the board of trustees of the association. They have not approved the specific wording of this testimony, but, arrival at a position of support, followed generally by the bill.

Mr. LONG. But, in general, the committees of your organization that looked into this matter and the board of your organization that looked into this matter do feel that both aspects of this legislation are legitimate areas for Federal activity and Federal participation?

Dr. NELSON. Yes, sir.

Mr. LONG. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Doctor, I think every member of the committee appreciates your statement as to the need for nursing personnel, and I would like to comment I do not know what is going to happen in this country with respect to nursing, as well as other things, if the cost continues to go up, which it is doing. In my judgment, that is primarily owing to the extreme shortage of nurses. It is not a reflection on anyone. It is just a fact.

It is like the impact on the economy which causes inflation. You get a shortage where demand exceeds the supply. This is what you experience. I do not know what the committee will do this year, but it decided last year that this was a problem that ought to be considered separately, generally speaking. There is a report coming out on this problem, and we are waiting for it.

So, unless the committee decides otherwise, it would be proper to suppose that we should have more information on it than is available at the present time.

Dr. NELSON. Mr. Chairman, could I express a hope that, when you separately consider nursing, that the hospital and collegiate nursing schools be considered together, and that construction of facilities be included in that consideration.

The CHAIRMAN. I am sure the entire problem will be considered. We did consider that in connection with the Hill-Burton program. We are going to have to extend it—that is, if the program is to be continued, it will have to be extended—sometime during this year

and certainly by next year, and that would be an excellent opportunity to discuss this entire problem.

But I did want to let you know that that is the situation as it now stands.

Let me, on behalf of the committee, thank you for your appearance here and for your testimony.

Dr. NELSON. Thank you for the opportunity, sir.

The CHAIRMAN. Dr. James P. Hollers.

Dr. Hollers, you are representing the American Dental Association and are from San Antonio, Tex. I believe you have with you Dr. John Brauer, chairman of the legislative committee of your national association, who is dean of the Dental School of the University of North Carolina.

We are very glad to have both of you gentlemen, and we will be glad to have your presentation.

STATEMENT OF DR. JAMES P. HOLLERS, PRESIDENT-ELECT, AMERICAN DENTAL ASSOCIATION, ACCOMPANIED BY DR. JOHN BRAUER, CHAIRMAN, COMMITTEE ON LEGISLATION, AMERICAN DENTAL ASSOCIATION, AND DEAN OF THE DENTAL SCHOOL OF THE UNIVERSITY OF NORTH CAROLINA, AND BERNARD J. CONWAY

Dr. HOLLERS. Mr. Chairman and members of the committee,

I am Dr. James P. Hollers, a private practitioner of San Antonio, Tex., and president-elect of the American Dental Association. The American Dental Association represents 85 percent of the 100,000 practicing dentists in this country.

With me is Dr. John C. Brauer, who is chairman of the Committee on Legislation of the American Association of Dental Schools and dean of the School of Dentistry at the University of North Carolina. I am also accompanied by Mr. Bernard J. Conway of Chicago, Ill., who is in charge of the American Dental Association's legal and legislative affairs.

We are here today to present the views of the American Dental Association and the American Association of Dental Schools on H.R. 12, the Health Professions Educational Assistance Act of 1963.

Last year representatives of the American Dental Association and the American Association of Dental Schools appeared separately before this committee to testify in support of H.R. 4999. This year, in the interest of conserving the valuable time of this committee, Dr. Brauer and I are appearing together and will present brief oral statements representing the views of both associations.

The committee last year compiled an extensive and comprehensive record on the need for legislation to assist in supplying the professional health personnel that will be needed to care for the people of this country in the future. We hope, and it is our understanding, that the facts and figures that were presented to the committee last year will be incorporated by reference into the record of these hearings and that such information will be used by the committee in its deliberations.

The American Dental Association and the American Association of Dental Schools support wholeheartedly the approach taken in H.R. 12.

The bill is aimed at relieving what is probably the most critical problem in the health field today—the impending shortage of health personnel.

It is believed that the bill's provisions for assistance in the form of matching grants for construction and remodeling of dental teaching facilities and for low-interest loans to dental students will provide a powerful stimulus toward accomplishing the ultimate objective of assuring the quantity and quality of dental care that our rapidly expanding and increasingly health-conscious American public demands and expects.

Look briefly at the scope of the dental health problem in this country today.

DENTAL DISEASE: ITS SCOPE AND SERIOUSNESS

Almost 160 million of the 185 million people in the United States have dental disease or face the certain prospect of suffering from tooth decay, periodontal (gum) disease, oral cancer, malocclusion or cleft lip and palate.

The best estimates are that 97 percent of the people have tooth decay; 23 million have periodontal disease; 21 million persons are without teeth; 16 million have malocclusion; 65,000 children under 18 have cleft palate, cleft lip, or both.

Twenty-three thousand persons develop oral cancer each year.

It is estimated that 85 million man-hours of industrial production are lost annually owing to oral disease.

The population of this country is increasing sharply. As it does, so does the size of its already burdensome health problem.

Something must be done now if we are to have any chance at all of maintaining even the status quo. Unless we have a substantial increase in the number of dental graduates—nearly doubling the present number—the present ratio of dentists to population will not be maintained in the year 1975.

Experts on population growth have predicted that by 1975 the population of the United States will be 235 million. At the same time, the segment of the population under 15 years of age will have increased 35 percent over its present proportion. To the dental profession, this is a disturbing, even alarming, fact. It suggests that a decade or so in the future, we may be less successful in controlling dental disease than we are today.

In the long run, dental disease can only be brought under reasonable control through preventive means; it can never be done completely through restorative techniques. Indeed, it is the obvious superiority of preventive care over restorative care that leads the dental profession to lay such great stress on proper oral hygiene in the home, proper diets, dental health education in the schools, regular checkups, and the implementation of such public health measures as fluoridation.

With today's ratio of dentists to population, it is difficult enough to practice preventive care to the degree every practitioner would desire. But what can we think when looking forward to a time when the population will have grown greatly while the number of dentists remains stable; when rising education levels will have brought an increased appreciation of the need for regular dental care; and when a larger percentage of the population is composed of youngsters below the age of 15?

Under such circumstances, the task of restoring already diseased tissues would be formidable. Indeed, I wonder if we could maintain the present level of dental health. And I fear that the practice of preventive dentistry would be severely limited.

TEACHING FACILITIES: A TOP PRIORITY

Obviously, the solution to the dental health problem is dependent upon a supply of professional dental personnel. The top priority in dental education is for construction or bricks-and-mortar money to build new facilities and to renovate existing obsolete dental teaching facilities. At present, we are graduating about 3,300 dental students per year. Based upon projected population estimates, we will need 6,200 graduates by 1975 in order to maintain the 1959 ratio of dentists to population.

A 1961 survey conducted by the American Dental Association and the American Association of Dental Schools[1] indicates that there are plans to initiate dental teaching facility construction involving about $70 million in the next 10 years. In the same survey, the schools reported that if matching funds were available, they would be able to fulfill their part in a building program of approximately $350 million.

The association believes that the matching-grants formulas as set forth in H.R. 12 are realistic and the full authorization for dental school construction and renovation would be fully utilized.

STUDENTS: THEIR FINANCIAL NEEDS

Next to the need for construction funds is the need to help students bear the financial burden of a dental education. The average cost to students of a 4-year dental education is about $15,000, and the existing sources of financial aid for students are relatively few.

The American Dental Association, through the fund for dental education, has granted within the last 3 years $200,000 for loans to dental students. There also is some help available under the National Defense Education Act. But it is much too little.

The fact is that because of the high cost of obtaining a dental education, the profession of dentistry remains closed to many qualified young people.

If the standards of health in this country are to continue to be improved, some way must be found to let such needy young people pursue careers in the health professions. The loan provisions of H.R. 12 would assist greatly at filling the gap that now exists.

H.R. 12 also should alleviate to some extent the problem of unrealistic distribution of health personnel. This would result from the provisions for canceling a portion of the loan of the graduates practicing in a shortage area. This incentive should be of substantial benefit to people who do not now have access to adequate health care without traveling unreasonable distances to receive it. In this connection, the construction grant program itself also should be of benefit, since experience has demonstrated that a substantial proportion of dental graduates tends to establish practices in the

[1] "Survey of Financial Aid for Dental Education," 1961, Council on Dental Education, American Dental Association; and American Association of Dental Schools.

States in which they were graduated. It is certain that a number of the States which do not now have dental schools will establish them if the Federal Government will share the costs of construction.

In the opinion of this association, the dental manpower problem is national in scope and requires a remedy of equal dimension. At the present time, there are 48 dental schools located in 26 States, the District of Columbia, and Puerto Rico. These 28 jurisdictions supply the dentists for their own populations in addition to dentists for the remaining 24 States. Thus, slightly more than half the States furnish dentists for the entire country.

It is our opinion that unless some assistance in forthcoming at the national level, no new private dental schools will be established and some of those now in existence will find it increasingly difficult to continue. The association believes this should not occur. An effort should be made to maintain privately endowed and operated schools in the dental education system.

I would like to emphasize to the committee that this association recognizes and appreciates the great demands on the Federal Treasury at this time. We would like to be able to tell this committee that the dental manpower problem can be solved with private, State, and local resources.

It is an undeniable fact, however, that the size of the problem is of such proportions that its solution requires national attention. We are firmly convinced that unless Federal funds are made available to help arrest the impending decline in dental manpower, there will not be enough dentists to provide the dental care the public needs and deserves. As the representative of a responsible health profession, it is the association's obligation to do everything possible to prevent this occurrence.

(The complete, prepared statement of Dr. Hollers follows:)

STATEMENT OF THE AMERICAN DENTAL ASSOCIATION ON H.R. 12, THE HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE ACT

Mr. Chairman, members of the committee, I am Dr. James P. Hollers, a private practitioner of San Antonio, Tex., and president-elect of the American Dental Association. The American Dental Association represents 85 percent of the 100,000 practicing dentists in the country.

With me is Dr. John C. Brauer, who is chairman of the Legislative Committee of the American Association of Dental Schools and dean of the School of Dentistry at the University of North Carolina. I am also accompanied by Mr. Bernard J. Conway of Chicago, Ill., who is in charge of the American Dental Association's legal and legislative affairs, and by Mr. Hal M. Christensen, the association's Washington counsel.

We are here today to present the views of the American Dental Association and the American Association of Dental Schools on H.R. 12, the Health Professions Educational Assistance Act of 1963.

Last year representatives of the American Dental Association and the American Association of Dental Schools appeared separately before this committee to testify in support of H.R. 4999. This year, in the interest of conserving the valuable time of this committee, Dr. Brauer and I are appearing together and will present brief oral statements representing the views of both associations.

The committee last year compiled an extensive and comprehensive record on the need for legislation to assist in supplying the professional health personnel that will be needed to care for the people of this country in the future. We hope and it is our understanding that the facts and figures that were presented to the committee last year will be incorporated by reference into the record of these hearings and that such information will be used by the committee in its deliberations.

The American Dental Association and the American Association of Dental Schools support wholeheartedly the approach taken in H.R. 12.

The bill is aimed at relieving what is probably the most critical problem in the health field today—the impending shortage of health personnel.

It is believed that the bill's provisions for assistance in the form of matching grants for construction and remodeling of dental teaching facilities and for low-interest loans to dental students will provide a powerful stimulus toward accomplishing the ultimate objective of assuring the quantity and quality of dental care that our rapidly expanding and increasingly health-conscious American public demands and expects.

We believe that what we are dealing with here is a basic national health problem. In our opinion, the importance of H.R. 12 can best be appreciated if its objectives are related to the health needs of the citizens of this country. The record is replete with information on the financial crises facing dental and medical schools and the high and increasing costs to students of obtaining education in these fields. But, the immediate financial difficulties facing prospective and existing dental and medical education institutions and students are important only because they keep us from achieving the major objective of taking care of the health needs of our people now and in the future.

Look briefly at the scope of the dental health problem in this country today.

DENTAL DISEASE: ITS SCOPE AND SERIOUSNESS

Almost 160 million of our 185 million people in the United States have dental disease or face the certain prospect of suffering from tooth decay, periodontal (gum) disease, oral cancer, malocclusion or cleft lip and palate.

The best estimates are that 97 million persons have tooth decay; 23 millions have periodontal disease; 21 million persons are without teeth; 16 million have malocclusion; 65,000 children under 18 have cleft palate, cleft lip, or both.

Twenty-three thousand persons develop oral cancer each year.

It is estimated that 85 million man-hours of industrial production are lost annually owing to oral disease.

The population of this country is increasing sharply. As it does, so does the size of its already burdensome health problem.

Something must be done now if we are to have any chance at all of maintaining even the status quo. Unless we have a substantial increase in the number of dental graduates—nearly doubling the present number—the present ratio of dentists to population will not be maintained in the year 1975.

The urgency of the situation is further indicated by the fact that even if this Congress should enact H.R. 12 today, it would require several years before the first medical or dental student could be trained to serve the public.

If the bill is not enacted in this Congress, population growth and demand for dental care will continue to outstrip the capacity to produce professional personnel. And this will be reflected by a deterioration in the availability of adequate dental health care for our people.

Experts on population growth have predicted that by 1975 the population of the United States will be 235 million. At the same time, the segment of the population under 15 years of age will have increased 35 percent over its present proportion. To the dental profession, this is a disturbing, even alarming fact. It suggests that a decade or so in the future, we may be less successful in controlling dental disease than we are today.

In the long run, dental disease can only be brought under reasonable control through preventive means; it can never be done completely through restorative technics. Indeed, it is the obvious superiority of preventive care over restorative care that leads the dental profession to lay such great stress on proper oral hygiene in the home, proper diets, dental health education in the schools, regular checkups, and the implementation of such public health measures as fluoridation.

The practice of preventive care presupposes three conditions: First, that there is a sufficient number of dentists; secondly, that there is an understanding upon the part of the public of the importance of dental health and its intimate relation to total health; and thirdly, that a person learns good dental habits and begins seeing the dentist early in life.

With today's ratio of dentists to population, it is difficult enough to practice preventive care to the degree every practitioner would desire. But what can we think when looking forward to a time when the population will have grown greatly while the number of dentists remains stable; when rising education

levels will have brought an increased appreciation of the need for regular dental care; and when a larger percentage of the population is composed of youngsters below the age of 15?

Under such circumstances, the task of restoring already diseased tissues would be formidable. Indeed, I wonder if we could maintain the present level of dental health. And I fear that the practice of preventive dentistry would be severely limited.

TEACHING FACILITIES: A TOP PRIORITY

The top priority in dental education is for construction or bricks-and-mortar money to build new facilities and to renovate existing obsolete dental teaching facilities. At present we are graduating about 3,300 dental students per year. Based upon projected population estimates, we will need 6,200 graduates by 1975 in order to maintain the 1959 ratio of dentists to population.

A 1961 survey conducted by the American Dental Association and the American Association of Dental Schools, indicates that there are plans to initiate dental teaching facility construction involving about $70 million in the next 10 years. In the same survey, the schools reported that if matching funds were available, they would be able to fulfill their part in a building program of approximately $350 million.

The association believes that the matching-grants formulas as set forth in H.R. 12 are realistic and the full authorization for dental school construction and renovation would be fully utilized.

The cost of building a new dental teaching facility is about $7 to $9 million. In this connection, it should be noted that in the last 2 years since this committee seriously began consideration of legislation such as H.R. 12, the estimated total construction cost of needed dental teaching facilities has increased by $84 million.

STUDENTS: THEIR FINANCIAL NEEDS

Next to the need for construction funds is the need to help students bear the financial burden of a dental education. The average cost to students of a 4-year dental education is about $15,000, and the existing sources of financial aid for students are relatively few.

Responding to the 1961 Survey on Financial Aid for Dental Education,* 14 schools said they had no uncommitted loan funds. Another 22 reported that the funds on hand amounted to less than $10,000.

The American Dental Association, through the fund for dental education, has granted within the last 3 years $200,000 for loans to dental students. There also is some help available under the National Defense Education Act. But it is much too little.

The fact is that because of the high cost of obtaining a dental education, the profession of dentistry remains closed to many qualified young people. In 1960 only about 12 percent of the Nation's families had an income of over $10,000, yet a third of the dental students came from such families. Sixty-three percent of the Nation's families have an income of $6,000 or less, but this group supplies only 33 percent of the dental students.

The education necessary to equip a person to practice dentistry is demanding, lengthy, and expensive. There unquestionably are many young people in this country who have the ability and desire to become capable members of the dental profession and are willing to make the effort and take the time necessary to do so. Lack of financial support should not be allowed to stand in their way. If the standards of health in this country are to continue to be improved, some way must be found to let such young people pursue careers in the health profesions. The loan provisions of H.R. 12 would assist greatly at filling the gap that now exists.

H.R. 12 also should alleviate to some extent the problem of unrealistic distribution of health personnel. This would result from the provision for canceling a portion of the loan if the graduate practices in a shortage area. This incentive should be of substantial benefit to people who do not now have access to receive it. In this connection, the construction grant program itself also should be of benefit since experience has demonstrated that a substantial proportion of dental graduates tend to establish practices in the States in which they were graduated. It is certain that a number of the States which do not

*Survey of Financial Aid for Dental Education, 1961, Council on Dental Education, American Dental Association; American Association of Dental Schools.

now have dental schools will establish them if the Federal Government will share the costs of construction.

In our opinion, the dental manpower problem is national in scope and requires a remedy of equal dimension. At the present time, there are 48 dental schools located in 26 States, the District of Columbia, and Puerto Rico. These 28 jurisdictions supply the dentists for their own populations in addition to dentists for the remaining 24 States. Thus, slightly more than half the States furnish dentists for the entire country.

There is also another national aspect to the dental manpower problems. The Federal Government itself is a large consumer of dental services. The Armed Forces and other Government agencies exert considerable and continuous pressures on available dental manpower. Among the professions, only dentistry and medicine are subjected to special draft call.

Both public and private schools are finding it difficult to meet costs. Funds from local and State governments and private sources are not available in sufficient amounts to provide the needed educational facilities. In this situation, it is believed the Federal Government has a vital interest and responsibility.

It is our opinion that unless some assistance is forthcoming at the national level, no new private dental schools will be established and some of those now in existence will find it increasingly difficult to continue. The association believes this should not occur. An effort should be made to maintain privately endowed and operated schools in the dental education system.

I would like to emphasize to the committee that this association recognizes and appreciates the great demands on the Federal Treasury at this time. We would like to be able to tell this committee that the dental manpower problem can be solved with private, State, and local resources.

It is an undeniable fact, however, that the size of the problem is of such proportions that its solution requires national attenton. We are firmly convinced that unless Federal funds are made available to help arrest the impending decline in dental manpower, there will not be enough dentists to provide the dental care the public needs and deserves. As the representative of a responsible health profession, it is the association's obligation to do everything possible to prevent this occurrence.

Representatives of the American Dental Association have testified before Congress in support of Federal grant-in-aid legislation for assisting dental schools six times since 1949. In that year the association's house of delegates adopted the following resolution:

"Resolved, that the American Dental Association approve the policy that Federal funds, with justification, might be appropriated in support of dental education programs, provided that such funds when appropriated should be accepted with the understanding that the Government shall not exercise any control over, or prescribe any requirements with respect to, the curriculum, teaching personnel or administration of any school or the admission of applicants thereto."

The bill, H.R. 12, is in keeping with the policy of the American Dental Association and early approval by this committee is recommended.

Dr. HOLLERS. It is now my privilege to present Dr. John C. Brauer, who will comment briefly for the American Association of Dental Schools.

The CHAIRMAN. Thank you.

Dr. BRAUER. Mr. Chairman and members of the committee:

I should like to make a few brief oral statements, and I should like to have permission, Mr. Chairman, to present a statement for the record in a day or so.

The CHAIRMAN. You may present your statement for the record. We would like to have it in by the first of the week—not later than the first of the week. I am going to keep this record open for 5 legislative days after we conclude these hearings this week, for that purpose.

Dr. Hollers, your complete statement will be included in the record, too, and I intended to say to Dr. Nelson, the previous witness, that his complete statement would go in the record. We grant that permis-

sion to those who want to summarize their statements, as has been done this morning. So you may have permission to file your statement.

Dr. BRAUER. Thank you.

The American Association of Dental Schools has long endorsed the basic principles in H.R. 12, and we look with a great deal of favor upon this legislation. I am speaking particularly this morning as a dean of a school at the University of North Carolina, and would like to indicate the problems that we have in our State, which, I think, fairly well express themselves in many other areas of the country.

In our particular State, we presently have 1 dentist to every 3,800 people. Nationally, there is approximately 1 dentist to every 1,900. And so we are a long way from the national ratio in our particular State, and there are other States that have comparable, or even less favorable, ratios.

Our North Carolina Dental Society, and our university administration have accepted the fact that we are to have, and should have, additional facilities, and in our planning for the past 3 years we have prepared architect's preliminary drawings to expand our facilities at the university by some 110,000 square feet. The figure that has been identified for this particular expansion is approximately $3.6 million.

Presently we have 50 per class in our particular school and it is our objective to increase this to 75. Now, with our present class enrollment, in the State of North Carolina, and with our present dentist-population ratio of 1 to 3,800, by 1975 we would anticipate a dentist population of 1 to 3,200. That is considering the number of graduates we have now, and the dentists from other parts of the country that are coming into the State.

Our primary objective in this State, and in many others with comparable ratios or with comparable problems, is to achieve somehow the relative national ratio, which is about 1 to 1,900. But in the foreseeable future, unless we had Federal appropriations or Federal support, we could not anticipate such expansion of dental personnel in the State of North Carolina. And I think this is basically true throughout the country.

We are a State-supported institution, as are about half of the dental schools in the country. The private universities have an even less favorable opportunity for the expansion of existing facilities or the development of new schools of dentistry.

Thus we look with great favor, and we would like to encourage strongly support of this legislation.

Very briefly, I should like also to refer to the student loans. Dr. Hollers has indicated the relative costs for the 4-year program in dentistry, which is approximately $15,000. There are very few families in the State of North Carolina or anywhere else in the country that can afford a $15,000 cash outlay. The number of loans that are available in our State, and which is also true throughout the country, are not adequate to encourage students to go ahead and seek a dental education.

Likewise, the number of scholarships that we have is too small. This, in great part, is why we do not have the number of students that we would like throughout the country.

What must also be considered, of course, is the competition from the other sciences—in mathematics, in physics, and in all those scientific

areas that relate to the space age. There are a considerable number of scholarships in those areas that are not available to dentistry.

For these reasons, then, we would like to express strong support for this provision.

I do feel that H.R. 12, as presented, would encourage an appreciable number of students to come from the rural areas. These men and women, we trust, would return to the rural areas, where they are needed.

Once again, I would like to say that the American Association of Dental Schools supports in its entirety the statement made here by Dr. Hollers of the American Dental Association, and we would encourage your support of H.R. 12.

Thank you.

(Dr. Brauer's prepared statement follows:)

STATEMENT OF THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS IN SUPPORT OF H.R. 12, THE HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE ACT OF 1963

I am Dr. John C. Brauer, Dean of the School of Dentistry of the University of North Carolina, a member of the executive council of the American Association of Dental Schools, and chairman of the association's committee on legislation. I am pleased to have this opportunity to appear before this committee in support of H.R. 12, for the association which I represent has a consistent record of support of legislation which would help in solving some of the serious dental manpower problems confronting the American people by providing critically needed financial support for the dental schools and dental students.

INTRODUCTION

Over the last decade and a half there has been a marked awakening within dental education and within the dental profession at large to the problem of providing the quantity and quality of dental health care that a rapidly expanding and increasingly health-conscious American population demands and expects. In a forthright attempt to meet the challenges of modern-day social progress, dental educators and dental practitioners, through their organizations, have spearheaded on a broad front the efforts to control dental diseases and extend the availability of dental care.

Over a very brief period, extremely significant achievement has been made. Dental research, concentrated in dental educational centers, has advanced at a heartening rate, bringing with it new perspectives in the fields of prevention and treatment of dental diseases and new and improved standards of dental teaching and dental education generally. Since as recently as 1956 when the national Congress first made a beginning toward providing financial support on a realistic basis, the dental research programs in the schools have multiplied many times over. Funds available for this purpose are at last beginning to approach an equation with the need and the seriousness of the dental disease problem. Although these programs are still in their infancy, the public already has received a rich return on the expenditures that have been made.

Yet, much more remains to be done both in dental research and in other critical areas that have been neglected. The manpower shortage, both in teaching and in dental practice, looms as the foremost obstacle to continued progress in dental health. The capacity to produce dental teachers, researchers, and practitioners continues to be outpaced by the explosive production of new generations of health-aware Americans. The acute need for additional personnel has been established. Study upon study by responsible Government and private groups has pointed up and documented the critical nature of the situation.

Again this year the President of the United States made reference to the critical health manpower problem facing our country in his Presidential Address. In thus focusing national attention on the need for increasing dental personnel, the President was echoing the forewarnings that have emanated in increasing volume from dental educators and the dental profession over the last several years.

The American Association of Dental Schools believes firmly that unless specific action is taken immediately and with vigorous purpose the size and the rate of growth of the problem will reach insurmountable proportions.

There must be prompt action to provide funds for additional and improved dental educational facilities. In addition, there must be provided increased financial support for dental schools and dental students to help meet the already high and steadily rising costs of educating dental personnel. Dental educators will continue to seek expanded support from all sources but, in the belief that the health of the American people is as surely a national asset as any segment of today's society, the association wishes to urge prompt approval of the programs presented in H.R. 12.

GRANTS FOR CONSTRUCTION OF DENTAL TEACHING FACILITIES

On the basis of all major studies of dental manpower projections, it is apparent that the number of dental graduates must be nearly doubled within the next 15 years if we expect to keep pace with the expanding population and the increase in demand for dental services. The accomplishment of this formidable objective will demand an immediate increase in the capacity of existing institutions and the construction of many new dental schools. It is certain that the degree of expansion needed cannot be achieved with the resources of local and State funds alone; there must be liberal assistance and encouragement from the Federal Government if we are to meet this impending national health emergency.

The American Association of Dental Schools is on record as favoring Federal legislation which would provide funds for use in the construction of dental teaching facilities. It is felt that the Federal support should be based on a matching formula which is realistically designed so that the Federal Government shall supply the major portion of such funds. As a further indication of the attitude of dental educators on this important potential Federal legislation, the association emphasizes that any legislation in this area should include provision for the rehabilitation of existing institutions as well as the construction and equipping of new or expanded dental education facilities.

We are pleased to see that H.R. 12 makes provision for the construction of expanded training facilities as well as the building of new dental schools. The association believes that the investment of Federal construction funds in those institutions which have, over the past 15 years, spent nearly $80 millon for the construction and equipping of their educational facilities is a sound investment. These schools, the 48 dental schools now in operation, have reported plans for $166 million in construction expenditures during the next 10 years, if Federal matching funds are made available. The expansion of existing facilities in this amount would provide for an additional 725 dental graduates a year by 1975 and would contribute considerably to meeting the projected manpower needs by that time.

In addition, the construction plans of existing dental schools during the next 10 years would provide training facilities for greatly increased enrollments of auxiliary personnel. The most recent survey of the dental schools indicates that the planned $166 million construction expenditure would permit the training of over 900 additional dental hygienists each year, would increase the production of chairside assistants by about 715 a year, and would add almost 300 more dental laboratory technicians annually. By performing duties for which they have been specially trained, these auxiliary personnel relieve the dentist of many tasks to which he would otherwise have to devote his time, thereby increasing the productivity of the dentist. Definite studies on the impact of dental auxiliaries on the productivity of the dentist are still in process, but it is known that the efficient use of a single chairside assistant can increase the treatment capacity of a dentist by about 50 percent. Thus, the training of an additional 715 dental assistants a year can be expected to reduce materially the number of new dental graduates needed by 1975.

The additional manpower which can be expected from the expansion of existing institutions, the increased productivity which will inevitably come from more effective and broader utilization of auxiliary personnel, and the reduction of the incidence of dental disease which can be anticipated from the constantly expanding research programs will still not, in the minds of responsible authorities, be sufficient to meet the dental care needs of the population in the years ahead. We must find the resources to construct additional dental schools and this construction must be started at the earliest possible time.

It is estimated that 3 to 4 years of planning time is required for the inauguration and construction of a new dental school. Add to this the 4 years required to educate the dental student and it is obvious that those plans which are started next year will not produce dental practitioners until 1970 or 1971. It is

increasingly urgent, therefore, that favorable consideration be given to construction grant legislation which has appeared in Congress during nearly every year of the past decade.

Recent studies made by the American Association of Dental Schools and the American Dental Association, in cooperation with the Division of Dental Public Health and Resources of the Public Health Service, suggest $6 to $8 million as a reasonable cost of constructing and equipping a school of dentistry today for an enrollment of about 100 students per class. The association has been acquainted with fairly definite plans for the construction of four new dental schools and it is highly probable that the availability of Federal construction grants would encourage action by at least four other universities which have given some thought to dental education during the past 4 or 5 years. On the basis of information presently available, it is estimated that 10 to 12 new dental schools might be established or started within the next 10 years, if legislation such as proposed in H.R. 12 is adopted.

In final comment on part B of H.R. 12, the association would like to endorse the plan to establish a National Advisory Council on Education for Health Professions. The experience which dental education has had with the excellent administrative mechanism in existence at the National Institutes of Health suggests that the careful selection and effective utilization of a National Advisory Council is one of the best means of assuring the proper relationship between the Federal Government and higher education.

I would also like to record the association's support of section 728 (Technical Assistance) and section 729 (Planning Grants for Health Education Programs) as essential parts of an effective construction grant program.

SUPPORT FOR DENTAL STUDENTS

During the past 3 years, national and local dental organizations have invested thousands of dollars in programs designed to attract a larger number of highly qualified students to the study of dentistry. Publications, films, exhibits, and guides for high school and college counselors have been produced and circulated throughout the country. Dental schools, dental societies, and individual members of the profession have increased their efforts to acquaint young students with the opportunities available in a career of health service to the public, I assure you gentlemen that these efforts will be continued and expanded, but we must face the fact that one of the greatest barriers to our recruitment efforts is the constantly increasing cost of an education in dentistry.

Dental education requires a minimum of 6 years of education beyond high school; 2 years of preprofessional study and 4 years of dental school. The average cost of preprofessional education is about $2,000 a year, according to data from the American Council on Education. Four years in dental school requires an average investment of about $15,000 and, following graduation, the student must anticipate an expenditure of about $8,000 for the establishment of a dental office. It is apparent, therefore, that the young scientist interested in dentistry must face the awesome burden of a $27,000 investment before he can accept his first patient. It is small wonder that a large portion of our bright, young students must forgo any thought of a dental education.

A review of the application and enrollment figures for dental schools for the past 5 years will help to illustrate the problem:

Year	Number of applicants	Number accepted	Applicants per acceptance
1961	5,841	3,605	1.6
1960	6,119	3,616	1.7
1959	6,498	3,573	1.8
1958	6,469	3,607	1.8
1957	7,286	3,600	2.0

It will be observed that the ratio of applicants to accepted students has decreased steadily during this period, to the point where it reached a 15-year low in 1961.

There is reason to believe that the number of applicants to dental school will increase for the coming year, at least partially as a result of the increased recruitment efforts referred to earlier in this statement. In addition, the associa-

tion is contemplating the establishment of a clearinghouse program designed to facilitate the admission of all applicants who are able to meet the qualifications of the dental schools. Dental educators are convinced, however, that the problem of recruitment will not be solved until ways are found to provide more extensive financial assistance for dental students.

About 2 years ago the dental profession demonstrated its awareness of the increasing seriousness of this problem by the creation of the American Dental Association Fund for dental education student loan program. Nearly $200,000 have been distributed to the dental schools through this program and assurance has been given that the dental profession will continue to support this activity. Dental students have received slightly over $1 million in loans from the National Defense Education Act of 1958 during the past year and additional private funds have been available in an amount sufficient to increase total loan and scholarship funds to slightly more than $3 million during 1961–62. As helpful as it has been, this level of financial assistance is inadequate. As an illustration of the inadequacy of the loan and scholarship support, it might be noted that this total amount would have provided just a little over $200 for each student enrolled in dental school during the past year.

There is no way to state precisely the number of students who might have considered the study of dentistry had not this formidable economic barrier existed. We do know, however, that the students who are enrolled incur a very substantial debt during their education. Forty percent of the freshman dental students have an average indebtedness of $2,450 and by their senior year nearly two-thirds of the students are in debt by an average of $4,750. As an additional facet of this problem, I would like to return to the observation that the survey information which we are able to obtain is necessarily based on those students who are enrolled in the dental schools. It is obvious that many of these students are in serious need of much greater financial assistance, but these statistics do not identify the excellent students and scientists who have been lost to dental education because of their inability to carry the heavy financial burden of preprofessional and professional education.

The committee is well aware of the great benefit which has been realized from the support which such agencies as the National Science Foundation, the National Institutes of Health and the Office of Education have given to graduate students in many of the scientific disciplines. The programs of these agencies are deservedly receiving increased support from Congress. It is our belief that graduate education in preparation for one of the health professions, which dental education surely is, needs and deserves Federal assistance in the form of student loans if we are to assure the level of dental education and research which we all want for the people of this country.

The American Association of Dental Schools is in full support of part C of H.R. 12 and urges the committee to give prompt and favorable consideration to this important legislation. With the additional financial support for students which would be made available by this legislation, we are confident that real progress can be made in attracting a larger number of qualified students into dental education.

CONCLUSION

In summary, the American Association of Dental Schools is fully in support of the programs proposed in H.R. 12. The critical needs toward which this bill is directed have had extensive study by professional, educational, and governmental agencies, with apparent agreement that prompt, affirmative action must be taken if the conutry is to avoid a crippling shortage of professional health personnel. We urge this committee to give H.R. 12 full support with the view to securing its approval during this session of Congress.

The CHAIRMAN. Thank you very much, gentlemen.

Mr. Roberts, do you have any questions?

Mr. ROBERTS. Just one or two, Mr. Chairman.

Doctor, I believe you said there are about 26 schools throughout the country, 26 dental schools.

Mr. HEMPHILL. 48 in 26 States.

Mr. ROBERTS. Anyway, it is in your statement, 48 in 26 States.

Do you feel that the greatest need is to expand existing schools, or do you think there is a great need for new schools?

Dr. BRAUER. I would think, Mr. Roberts, that we need both. We do have 48 schools. There are a few of these that are relatively new. Our particular school in North Carolina was established in 1950. But we do need to expand the facilities to get somewhere within the range of the population ratio of 1 to 1,800 to 1 to 1,900.

There are other schools throughout the country that need and can, effectively and economically, expand their facilities. But there are an appreciable number of States that do not have any schools of dentistry. I think there are about 26 or 27 States that do have schools, and these schools, both private and State, support the rest of the country's need for professional personnel.

Mr. ROBERTS. What about the problem of technicians in the dental field? Is that pretty well supplied, or is there a shortage there also?

Dr. BRAUER. There is an extreme shortage of qualified dental laboratory technicians. Presently, we have basically on-the-job training in most of the commercial dental laboratories, and we find some excellent technicians from this source, but it is not adequate. We need to formalize this training in schools and through whatever other formal education procedures we can have.

Mr. ROBERTS. What is the length of the training of the technician before she is qualified and licensed by State boards?

Dr. BRAUER. You are referring to the dental hygienist, I assume?

Mr. ROBERTS. Yes.

Dr. BRAUER. The dental hygienist's minimum training by State law is 2 academic years. We do have a 4-year program in some schools, but 2 years is the minimum recognized training.

Mr. ROBERTS. They get this training in the dental school or where do they go for it?

Dr. BRAUER. Most programs are in schools of dentistry. However, there are a few hygiene schools not connected with schools of dentistry. For example there are three such schools being activated in junior colleges that are not identified with a school of dentistry.

Primarily, though, they are in schools of dentistry.

Mr. ROBERTS. In Dr. Hollers' statement he brought out the fact that there is a very serious problem of dental disease, oral cancer, malocclusion, cleft palate, and so forth. We had a bill introduced last year by our chairman, I believe, that would have provided for some institutional research grants. Are you familiar with that bill? Do you know what I am talking about?

Dr. HOLLERS. No, sir.

Mr. Conway?

Mr. CONWAY. Perhaps, Mr. Roberts, you are referring to the bill that was introduced by the chairman to help the State dental divisions' public health activities, part of which money would have been for research and part of which would have been for some treatment programs. This bill was sponsored by Mr. Harris at the request of the American Dental Association.

Mr. ROBERTS. Of course, I will not ask you to comment on that bill at this time, other than this:

Do you feel that there is a great need for research in these fields which you have mentioned that is not being done today?

Mr. CONWAY. There is a very great need for additional research. Our National Institute of Dental Research is supporting a program of about $20 million a year. We feel that this could well be doubled

over the next few years. Institutions such as the dental schools and other research centers could adequately handle a program, we think, of twice that capacity in the next 5 to 10 years.

Mr. ROBERTS. One other question, Mr. Chairman, and I will be through.

Do we have much of these needs covered by health insurance as we do in the medical field?

Dr. HOLLERS. The insurance relating to dental treatment is just being developed now. It does not compare with the medical health insurance program in scope, but pilot programs are in the field today. This is one of the great needs, of course, for the dental profession. It is in its developmental stage, and we have great hopes for it.

Mr. ROBERTS. You have nothing like the coverage that you have in the medical insurance policies?

Dr. HOLLERS. No, just a few pilot programs.

Mr. ROBERTS. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. Thank you, Mr. Chairman.

In regard to your testimony, Dr. Hollers, on page 4 you state:

> Based upon the population estimates, we will need 6,200 graduates by 1975.

We are graduating 3,300 a year. In the next 12 years we will be graduating some 36,000. Do you mean you will need 6,200 graduates each year? Is that what you mean?

Dr. HOLLERS. What we mean, sir, is that we will need that number to maintain our present ratio of dentists per population on the projected population growth, and, of course, to cover the annual attrition within the profession.

Mr. YOUNGER. Your statement is not clear as to whether you need 6,200 graduates from now to 1975 or whether you need 6,200 each year. Which do you need?

Mr. CONWAY. Could I answer that question, Mr. Younger? If the dental schools were to increase their graduating classes by appropriate steps each year, by 1975 they could achieve a graduating class of 6,200.

Mr. YOUNGER. A year?

Mr. CONWAY. That is what is needed, 6,200 graduates a year by 1975. From then on we would expect that that would increase to some 7,000 to 7,500 in the next 5 to 10 years. This, hopefully, would be done by steps.

Mr. YOUNGER. Why do you take the year 1959 as the ideal ratio for dentists to population? What was the ratio at that time?

Mr. CONWAY. About 1 to 1,900. The last survey that the American Dental Association took of the dental profession to determine the ratios was in 1959. Perhaps we could supply later figures, if you so desire.

Mr. YOUNGER. Your ratio, then, would be 1 to 1,900 population?

Mr. CONWAY. That is right.

Mr. YOUNGER. Does the American Dental Association certify or approve dental schools?

Mr. CONWAY. The Council on Dental Education of the American Dental Association is the officially recognized body for accrediting schools of dentistry, schools of dental hygiene and other schools in the related auxiliary fields, such as the dental laboratory technician curriculum.

Mr. YOUNGER. Are there any schools operating that are not approved by the association?

Mr. CONWAY. None are operating that are not approved by the association.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Texas. Doctor, do I understand correctly, now, that it is the position of the American Dental Association that if this legislation was not passed, then there will be a reduction in the ratio of dentists to the population in the future?

Dr. HOLLERS. We feel that is correct. We are losing ground now and, unless we get some assistance from somewhere, we will continue to lose ground because of the expanding population.

Mr. ROGERS of Texas. Do you feel that that assistance must come from the Federal Government?

Dr. HOLLERS. Yes, sir, that has been proven. Dentistry is not comparable to medicine in funds available, as we all know. Dentistry is in great need of help from governmental sources. We have tried many different approaches to it, and we are just not meeting the problem.

Mr. ROGERS of Texas. Doctor, am I correct that the present ratio is 1 dentist to 1,900?

Dr. HOLLERS. That is the national level.

Mr. ROGERS of Texas. Approximately?

Dr. HOLLERS. That is right.

Mr. ROGERS of Texas. If we work out a situation to increase that to, say, 5 dentists per 1,900 people, would that, in turn, reduce the cost of dentistry to the patient?

Dr. HOLLERS. Well, let us say competition does have a tendency to do that, it is true. But, I could not make that as a positive statement.

Mr. ROGERS of Texas. Do you feel, doctor, that 1 to 1,900 is providing adequate tooth care and dental care for the people?

Dr. HOLLERS. No, sir. Less than 50 percent of our population even takes advantage of what they have today. But the programs that we have carried on to educate the people to the need of regular care is increasing the demand, even with the population that we have. But today we are only treating about 50 percent of the population.

Mr. ROGERS of Texas. Then you feel that there is a great opportunity or a fertile field for expansion?

Dr. HOLLERS. There is no question about it.

Mr. ROGERS of Texas. So that if you did have more dentists, there is plenty of work for them to do?

Dr. HOLLERS. That is right.

Mr. ROGERS of Texas. One reason I asked about the Federal situation, doctor, and I am sure you know it or have been told that I was the one who introduced the amendment last year to strike dentistry from the bill. The reason I did that is because the dentists in my area had told me that this bill was socialism and that they wanted no part of it.

Dr. HOLLERS. I am well acquainted with your area, Mr. Rogers. I was born in Canadian, Tex., and I know how they feel. They are grand people, and they are sincere people, but they are just not correct.

Mr. ROGERS of Texas. I want to get into that for just a second, Doctor. They formed another association, did they not?

Dr. HOLLERS. Yes; I know about it.

Mr. ROGERS of Texas. And I do not know whether that association is going to testify or not, but I know that my mail indicated that the people generally in that 18th District felt that the Federal Government should take no part in this. However, some of them told me if we passed a bill, be sure to include them. But I think that is probably human nature.

But is there a sharp devision of opinion, generally, among dentists on this matter?

Dr. HOLLERS. I would not say so. In our house of delegates, these same people that you refer to had a resolution to withdraw the endorsement of the American Dental Association of Federal aid to dental education.

We have 418 delegates in our house of delegates, the policymaking body of our organization, and there were 38 votes that supported them. The rest voted against them. So you can see that, of course, we do not have a small division.

Mr. ROGERS of Texas. How many votes, did you say?

Dr. HOLLERS. Thirty-eight for the resolution to withdraw the association's support for Federal aid to dental education, and about 380 to maintain it.

Mr. ROGERS of Texas. But you do feel, though, that the general feeling of the dentists in Texas is in support of this type of legislation?

Dr. HOLLERS. I do not think there is any question about it. The policymaking body for our national organization is our house of delegates, and this has been discussed very thoroughly by it over the past several years, since this question has been before the Congress, and support of Federal aid has been maintained.

Mr. ROGERS of Texas. Thank you, Doctor.

Thank you, Mr. Chairman.

The CHAIRMAN. Doctor, I believe I asked the same line of questions last year concerning dental costs, and Dr. Timmons' responses were, I think, similar to your responses today with reference to the effect it might have, or probable effect it would have, on cost.

He indicated that if we had more dentists, this would, very likely, keep dental costs from going up in the future. He did not say it would lower the costs, as I assume you did not want to say here a moment ago, but he strongly emphasized that if we had more dentists, it would keep costs from going up.

Would you agree with that?

Dr. HOLLERS. I would think so. It would be a natural thing, if there were more competition.

The CHAIRMAN. Mr. Glenn?

Mr. GLENN. No questions.

The CHAIRMAN. Mr. Jarman?

Mr. JARMAN. I think the only question I have would be in line with a question I asked yesterday, Doctor, concerning the funds necessary to operate new institutions.

At the present time I know it is difficult in so many parts of the country to adequately finance the operation of the facilities we now have. This proposal would, of course, enlarge institutions and build new ones. What is your thinking on how the problem of financing would be affected by increasing present facilities?

Dr. HOLLERS. Dr. Brauer is the educator, and I would like him to answer that question.

Dr. BRAUER. Mr. Chairman, our State legislature's budget bureau maintains an A budget and a B budget for my school. The A budget permits us to run or to operate at a certain level and with a certain program. In other words, with a certain number of faculty, staff, facilities, and so on. Now, if we were to increase our particular student body by 10 percent or 40 percent or 50 percent, our operating budget would automatically rise with our level of expansion in our particular State.

Now, I am sure that the private universities and some other State universities would find sources of operating funds if the facilities were available. But until facilities are available, we would not have any justification or reason for increasing the so-called budget operation.

I recognize this is a problem. It is a very real problem. But I think that it could be solved.

Certainly it could in our State.

Mr. JARMAN. I think that is all, Mr. Chairman.

The CHAIRMAN. Mr. Keith?

Mr. KEITH. Thank you, Mr. Chairman.

You made a statement to the effect that the dentists were particularly interested in developing an insurance plan to take care of major dental bills. You thought that that would perhaps solve some of your financial problems.

I would like to comment on that a bit. In the case of the medical and surgical insurance plans, you have a much different hazard. In the long run the nature and extent of these costs cannot be predicted, and there is a real insurance risk.

I think, on the other hand, in the case of dentistry that the average individual knows over a period of years what his costs will be and can anticipate them. There may be an extraordinary circumstance occasionally, but, generally speaking, a man either has poor teeth or good teeth. He has bills or does not have them. He can budget for them.

And I do not think that you really will find your solution in an insurance package. You may find it in a prepayment of dental bills on a monthly basis, but there really is not the same problem that exists in hospital and surgical insurance plans.

Dr. HOLLERS. The monthly payment plan is working very successfully and it makes dental services available to many people who could not obtain it in any other way. That has been very well established. What you say about the difficulty in regard to dental insurance is a problem because dental bills can accumulate over a period of years. If you are sick, why, you do not keep your appendix over a period of years.

A mouth on the other hand, can be in a very bad condition and a patient still tolerate it, even though it will be uncomfortable and unhealthy. It is a problem, but dental insurance is being developed, and certainly we are giving a lot of thought to it. Through it, we have the hope of making it possible for people to obtain dental services more easily and readily.

Of course, we have group dental care. Many organizations are providing group dental care for their employees, and we have what is known as dental service corporations that are developing group den-

tal care programs in many of the States. This is making dentistry available to many more people.

But, as you say, it is a difficult question.

Mr. KEITH. Group dental care would be a very wise and sound approach to the problem.

Dr. HOLLERS. Yes.

Mr. KEITH. But to call it insurance might be a misnomer.

Dr. HOLLERS. That is right. That is true, but insurance companies are quite interested. We have some organizations—in fact our own national organization has a dental insurance program for employees that is developing statistics, and there are several plans in effect that we have hopes for.

Mr. CONWAY. Mr. Keith, may I add one thing here? The American Dental Association is actually quite optimistic about the ability of the insurance companies and these dental service corporations to handle the program which Dr. Hollers identified as group health care.

It would be very difficult, if not impossible, to provide dental health insurance on an individual basis. But it is possible, and it is working out, to provide it on a group basis to employees; a significant number of employees and dependents are covered today.

Mr. KEITH. Thank you.

That is all, Mr. Chairman.

The CHAIRMAN. Doctor, I think one of the most successful insurance programs I have observed is burial group insurance. There is a certain amount of assurance in this program, but why could not your organization take a page from the book of such associations and try to organize people in order to satisfy a need which has been brought to our attention as imperative?

Now, 160 million people out of 185 million people in the country are having troubles. I believe that is even worse than the other health needs of the country. You understand what I mean as to the difference.

Now, if you could get everybody in the country that needs this, could not somebody propose a program on a sustaining basis similar to that I have referred to?

Dr. HOLLERS. Well, it is a question of education and a question of what comes first with the people. Many people have dental ailments, but in some cases perhaps they would rather have an automobile or a fur coat than have dental treatment. We have increased demand considerably in the last few years through our dental education programs. Indeed, if everyone in this country demanded complete dental care, why we could not begin to meet it with the number of dentists that we have today.

It is our hope that there will be an even greater demand, and, of course, we will need more dentists to take care of it.

Mr. CONWAY. Mr. Chairman, might I add one thing?

The American Dental Association believes that the insurance program that you are talking about is reflected in the preventive program which we have espoused and endorsed. In particular, we think that the best insurance today is for communities to fluoridate their water supply, so that the children will gain protection against dental decay which can be carried throughout their lifetime.

The CHAIRMAN. Mr. O'Brien?

Mr. O'BRIEN. Doctor, do I understand you stated that more than 90 million people in the United States do not seek dental treatment at all, more than half the population? Is that correct?

Dr. HOLLERS. In any one year.

Mr. O'BRIEN. Some, of course, I suppose, never seek it at all.

Dr. HOLLERS. That is right.

Mr. O'BRIEN. What is the reason for that? Is it cost?

Dr. HOLLERS. Not necessarily. We find that many people have a fear of the dental chair. We also find, of course, that cost is a factor. But many people who can afford it do not take advantage of it.

Mr. O'BRIEN. Then what you are suggesting is that after tapping every private source available, every State source available, you still lack the facilities and the manpower to take care of less than half the population of the United States?

Dr. HOLLERS. That is right.

Mr. O'BRIEN. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Broyhill?

Mr. BROYHILL. I do not have any questions other than to congratulate Dr. Hollers on his statement and to pay my respects to Dr. Brauer, a fellow North Carolinian, and maybe ask him, as a personal favor, do you have—I am certain you do have—some information on the dentists in North Carolina and a breakdown on the number per county? If so, I would like to get a copy of such information.

Dr. BRAUER. There are an appreciable number of counties in the State that do not have any dentists. There are many small towns throughout the State that are literally begging to have dentists come to that particular community.

We have all sorts of benefits that would be given to the dentists if they were to come to these smaller communities. But we have the same relative problem that medicine does that young men seek the larger communities.

I think this particular bill, H.R. 12, does have a provision that would encourage, and should encourage, more dentists to go to the smaller communities.

Mr. BROYHILL. Thank you.

No questions.

The CHAIRMAN. Mr. Kornegay?

Mr. KORNEGAY. Yes, Mr. Chairman.

I would like also to welcome my fellow North Carolinian here today. I am happy to have you here, Dr. Brauer, as well as you other gentlemen.

Dr. BRAUER. Thank you.

Mr. KORNEGAY. I would like to ask you this, Dr. Brauer:

You made the statement that it costs a student approximately $15,000 to get a dental education. How much does it cost the dental school to educate that student?

Dr. BRAUER. How much does it cost the dental school? The school bears about 70 percent of the cost presently, and the reason I have these figures fairly firmly in mind is that we have completed in the last several months a cost analysis of this question.

And so our State pays approximately 70 percent of the total overhead for the particular education of this student. It costs us about $3,300 a year in North Carolina, per year, for a particular student in school.

94933—63——13

Mr. KORNEGAY. It would cost something over $30,000 to fully educate a dental student; is that correct? In other words, the $15,000 is just 30 percent of the total cost of his education?

Dr. BRAUER. The $15,000 figure includes living costs. In other words, in our particular State, about 30 percent of the cost of education is taken care of by the student.

Mr. KORNEGAY. Only 30 percent?

Dr. BRAUER. Yes; and 70 percent by the State.

Mr. HULL. Would you yield?

Mr. KORNEGAY. Yes, I will be glad to.

Mr. HULL. What is the tuition down at the University of North Carolina?

Dr. BRAUER. For residents it is $600 a year; for nonresidents, $1,200.

Mr. HULL. Of course, that varies from State to State, I know.

Dr. BRAUER. That is right. We have certain schools, private schools, that have tuition rates up to $1,500 per year for residents or nonresidents.

Mr. HULL. Can those folks who want to attend school bad enough come up with that much money?

Dr. BRAUER. Very, very few families have such financial resources. So we are missing the opportunity for many of our finest minds to pursue dentistry or medicine, they go into other fields where there are scholarships or where there are substantial loans or other sources of money.

Mr. HULL. If the gentleman will yield further for just a moment, what is your out-of-State tuition?

Dr. BRAUER. $1,200.

Mr. HULL. Thank you.

Mr. YOUNGER. Will you yield for just one question?

Mr. KORNEGAY. Yes.

Mr. YOUNGER. How many applicants did you have for entrance to your school that you could not accept?

Dr. BRAUER. In our particular State, we have a general policy to admit residently only. However, over the past 10 years—and our school has been activated about that long—we have taken from other States roughly about 10 percent. These students come primarily from those States that do not have schools of dentistry, such as South Carolina and Florida. We have routinely not accepted applications from other areas of the country. Thus, to evaluate our school, compared to the national average, would not be exactly right for the reason that we reject applications of all out-of-State students except those that might come from Florida or South Carolina.

Our ratio has been a little over 2.3 or 2.4 applicants per student accepted on the restricted basis that we have been talking about. In other words, we take 90 percent North Carolinians and we restrict our number of applications. By and large, over the country, the overall average would run about 2.3, 2.4, 2.7, varying from year to year, per candidate.

Mr. YOUNGER. That is all.

Mr. KORNEGAY. Doctor, this leads up to my next question. That is, just very briefly and generally, what scholarships, if any, are available to a young person desiring to study dentistry in North Carolina?

Dr. BRAUER. The only scholarships in North Carolina are the Moorhead scholarships. I think we have one presently in the school. We have had three or four in the school, but they are very rare.

Mr. KORNEGAY. Then, I take it there are no specific scholarships for dentistry?

Dr. BRAUER. That is correct.

Mr. KORNEGAY. The Moorhead scholarship being a general scholarship?

Dr. BRAUER. That is right.

Mr. KORNEGAY. With the option on the part of the student to pursue whatever education he desires?

Dr. BRAUER. That is correct.

Mr. KORNEGAY. Let me ask you this, if you care to comment on it. My colleague, Mr. Rogers, asked the preceding witness a question about whether or not in recent years there had been any hesitation or foot dragging on the part of the State authorities in moving ahead in the field of medicine and dentistry because of the thinking that Federal funds would be available. Have you experienced any of that attitude in North Carolina?

Dr. BRAUER. We recognize that, with the very limited financial resources of the State and with the large demands of our many schools of higher education, it may be some years away—there is no way to identify a time schedule—before we might have additional facilities for medicine or for dentistry.

So we are looking with great favor upon a bill of this type to support us in our immediate building program.

Mr. KORNEGAY. But, at the same time, are we not doing what we can down there to advance the cause of dentistry and medicine?

Dr. BRAUER. Our State has been very favorable, in general, and has extended itself on our economic level. I think our State has been very fine in its support of higher education.

Mr. KORNEGAY. In fact, in the past 10 or 15 years we have built the medical center at Chapel Hill?

Dr. BRAUER. That is right.

Mr. KORNEGAY. A medical school, dental school, school of nursing, a fine hospital, school of public health?

Dr. BRAUER. Right.

Mr. KORNEGAY. Are there not plans to go ahead and enlarge it?

Dr. BRAUER. That is right.

Mr. KORNEGAY. And, like Mr. Rogers' folks, if this bill does go through, as I understand it, they would like to get a little bit of it?

Dr. BRAUER. Right.

Mr. KORNEGAY. I would like to commend you, Dr. Brauer, for the wonderful job you have done.

Dr. BRAUER. Thank you.

Mr. KORNEGAY. And say, although we have a young dental school, it certainly is coming to the forefront in a hurry, and this is due, in no small measure, to the leadership you have furnished.

Dr. BRAUER. Thank you.

Mr. KORNEGAY. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Brotzman?

Mr. BROTZMAN. Doctor, I have heard testimony to the effect that a desirable ratio is 1 dentist to 1,900 people; is that not correct?

Dr. HOLLERS. That is correct; that is the national average.

Mr. BROTZMAN. Is that the national average?

Dr. HOLLERS. That is the ratio nationally. In some States it is lower. In North Carolina, I believe, it is 1 to 3,800.

Mr. BROTZMAN. Now, my question, specifically, as I understand the significance of that, is this ratio you advocate maintaining, 1 to 1,900, or is that only the national average?

Dr. HOLLERS. That is the national ratio and the national average. We would like at least to maintain that, and if we do not get some help, we cannot do so.

Mr. BROTZMAN. One to 1,900 is the national ratio, the national average, ratiowise?

Dr. HOLLERS. Yes.

Mr. BROTZMAN. But it is not doing the job now?

Dr. HOLLERS. That is right.

Mr. BROTZMAN. Let me ask the question this way:

In a State that has 1 dentist per 1,900, is it doing the job?

Dr. HOLLERS. No.

We have some States that even have 1 to 500, and they are still not meeting the needs of the people.

Mr. BROTZMAN. Now, this gets right down to my specific question, and I am a little confused on this point.

I just read your testimony here relative to the dental disease problem, its scope and its seriousness. The thing I am trying to evaluate in my mind is how much of the problem is caused by lack of dentists and how much is caused by lack of people going to see their dentists? Do you understand my question?

Dr. HOLLERS. Yes, sir. I cannot answer it though because no one can say just exactly why this individual does or does not seek care and we have no pertinent statistics. If you would make a survey on it, they would say they have some reason or other.

For instance, I questioned some mothers as to why they do not take their children to the dentists. They say, "Well, they don't like to go."

Well, who does? And that is just about the situation.

Mr. CONWAY. Could I add something to that?

Mr. BROTZMAN. Yes.

Mr. CONWAY. We conducted surveys to explore this question of how you motivate people to see their dentists. Over the last 20 years, with a concentration on dental health education, we have increased from about 25 percent to 40 percent the number of people per year who see their dentists. We believe that with——

Mr. BROTZMAN. I am sorry; I did not hear that.

Mr. CONWAY. Over the last 20 to 25 years, we have increased from 25 percent to 40 percent the number of people who see their dentists during any one year. We believe that this has been the result of two things: a concentration upon dental health education and the achievement of a better economic standard.

If you increase dental health education, and the economic stature of the people increases, they tend to seek more dental care.

We believe we may well have an increase to 50 percent in the next 10 years; that is, 50 percent of the people will be seeking dental care annually, and it will grow from there.

Mr. BROTZMAN. Have you a national breakdown of the ratios in the various States of the Union?

Mr. CONWAY. Yes, sir; we can supply that for the record.

Mr. BROTZMAN. I would very much like to see that, if I could.

Mr. CONWAY. We will supply that for the record.

Mr. BROTZMAN. Thank you.

That is all, Mr. Chairman.

(The breakdown requested was submitted but, being too voluminous for the record, has been placed in the committee files.)

The CHAIRMAN. Mr. Hull?

Mr. HULL. No questions, Mr. Chairman.

The CHAIRMAN. Mr. Long?

Mr. LONG. No questions, Mr. Chairman.

The CHAIRMAN. Mr. Van Deerlin?

Dr. HOLLERS. May I comment for Mr. Long's benefit, I attended Tulane, and Tulane's dental school had to close a few years ago for a lack of funds.

Mr. LONG. Yes, sir; I know that. There is a very serious situation in the State of Louisiana, as you probably know, and also as Dr. Brauer knows. They have under consideration now a stepped-up program in this regard.

The CHAIRMAN. Mr. Van Deerlin?

Mr. VAN DEERLIN. Mr. Chairman, I hesitate to explore an area of possible controversy, but the subject of water fluoridation has been introduced. I would ask Dr. Hollers to assume that water fluoridation had been adopted universally in the water supplies of local municipalities and water districts, say, 10 years ago.

In your opinion, Doctor, would this have done anything to offset the rising need for dentists?

Dr. HOLLERS. Certainly. It has been proven beyond a doubt that it would prevent a considerable amount of decay.

Mr. VAN DEERLIN. Might there be a reasonable estimate as to the extent that this would have helped offset the need for dentists?

Dr. HOLLERS. It would have, but Mr. Conway can give you the statistics on water fluoridation.

Mr. CONWAY. We have not made such a survey. We have not tried to project that.

Mr. VAN DEERLIN. No; I should imagine that there is no basis for that.

Mr. CONWAY. Up to 65 percent of dental decay will be prevented if persons are exposed to water fluoridation from birth through age 15–16, and they will carry that protection through the rest of their lives.

Mr. VAN DEERLIN. How much of the average dentist's work time is devoted to care of decay and other work that he might not be doing, in your opinion, if we did have water fluoridation, as opposed to "elective" work—I know there is plenty of work for dentists beyond treatment of caries.

Mr. CONWAY. We could get this for you. We have some surveys from which we could extrapolate that information and present this for the record, if you so desire.

Dr. BRAUER. There is another element in your question, and it is an excellent question. It relates to the fact, as Dr. Hollers has indicated,

that if we did have fluoridation in any particular communal water supply, that we would have a reduction of approximately 65 percent. This still would leave 35 percent of the problem—I mean there still would be those who are subject to dental disease because of differences in vulnerability. Now, assuming that the 65 percent did have a freedom from dental caries, it means they would retain their teeth longer.

Then we get into the inevitable disease in a very high percentage of our population beyond the age of 20, which is periodontal disease.

So, we then get into a problem of removal of teeth, and we get into the problem of denture construction and all the other elements of service.

So, in reality, while we reduce the dental caries problem, we also increase with age other problems in dentistry.

So, the actual reduction in number of dentists needed, unless we have a total preventive program, might not be too great. Fluoridation is a fine and essential program for preventing dental caries, but we should have a far more expansive preventive program to really do the job.

Mr. VAN DEERLIN. Thank you.

Mr. LONG. Mr. Van Deerlin, would you yield?

Mr. VAN DEERLIN. Yes, Mr. Long.

Mr. LONG. Dr. Hollers, is the position that the American Dental Association has taken on the question of fluoridation, perhaps, the cause of the comparison between the American Dental Association and the other organization with the same initials?

Dr. HOLLERS. No, sir.

Mr. CONWAY. We have no evidence of that.

Mr. LONG. Thank you.

Mr. KEITH. Mr. Van Deerlin, would you yield again?

Mr. VAN DEERLIN. Yes.

Mr. KEITH. With reference to this same subject, it was mentioned by one member of the committee that toothpaste was an adequate substitute for fluoridation of the water supply. Would you comment on that?

Dr. HOLLERS. I would say it is not.

Mr. KEITH. Thank you.

The CHAIRMAN. Thank you very much, gentlemen, for your appearance here and your testimony today.

Dr. HOLLERS. Thank you for the privilege.

The CHAIRMAN. Dr. Ernest L. Stebbins.

Dr. Stebbins, I believe you are dean of The Johns Hopkins University School of Hygiene and Public Health.

STATEMENT OF ERNEST L. STEBBINS, M.D., DEAN, THE JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH, AND VICE PRESIDENT OF THE ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

Dr. STEBBINS. I am also vice president of the Association of Schools of Public Health, and it is in that capacity that I am testifying for the association.

The CHAIRMAN. Very well, Doctor, you may proceed.

Dr. STEBBINS. I would like first to very briefly discuss the problems of the schools of public health which we have presented before this committee and for which we have been very grateful for the opportunity, and, as you all know, as a result of previous legislation, there is some provision for scholarships, traineeships, for the graduate students in public health.

I would also like to mention the situation in the United States as far as graduate training in public health is concerned. There are 12 schools of public health in this country to supply the needs for all of the trained public health personnel at the postgraduate level.

These schools are located in various parts of the country. There are six schools that are privately endowed schools at Hopkins, Harvard, Yale, Columbia, Pittsburgh, and Tulane. There are six schools that are parts of State universities, California (two schools), Michigan, Minnesota, North Carolina, and Puerto Rico.

The Association of Schools of Public Health is made up of the membership of each one of these 12 schools, and the association has instructed me to indicate unanimous support of H.R. 12. We support this proposed legislation, not only because it provides a mechanism for improving the teaching of public health in the graduate schools of public health but, also, because it would increase, we believe, the number of physicians and dentists and other health personnel from which we draw our students.

You have heard of the shortage of physicians and of dentists. I would like to comment briefly on the shortage of public health personnel.

A number of years ago the Congress requested a study conducted by the Public Health Service of the needs for training, graduate training, in public health. The Public Health Service, in cooperation with the schools, carried out a study, with the schools and with public health agencies in the country, of the need for training of public health personnel.

At that time it was found that there were 2,500 budgeted, but unfilled, positions in the health departments throughout the country. It was estimated at that time by the conference that there was need for 6,000 additional public-health-trained personnel to take care of the increasing population, and it was also found that there were approximately 20,000 employees of health agencies that did not have the prescribed training and needed additional training.

As a result of the report of this conference, the Congress increased the number of traineeships which make it possible for physicians, dentists, and other health personnel to go to schools of public health, and this has been one of the most successful training programs that we know of.

It has been an important stimulus to young people to enter this field and to supply the needs of the country.

A further example of the shortage of personnel in this field was brought to my attention very recently when the Surgeon General of the U.S. Public Health Service asked for the opportunity to have members of his staff come and interview our students because of the extreme need for trained public health physicians in the U.S. Public Health Service.

Each year we have representatives from 10 to 15 States coming to the schools to interview students in training, and there are many

positions for each student that is now being trained. I might comment on the special situation of the schools of public health.

As you probably know, 95 percent of our graduates go into public service. By "public service," this is in the U.S. Public Health Service, the Army, the Navy, the Air Force, State health departments, city health departments and county health departments. For this reason, we feel that there is a special justification for Government support for these schools.

It has been pointed out that in some respects the schools of public health are comparable to the military academies in that they train people for service of the Government primarily. The costs of training are high. The tuition paid by the sponsoring agencies or by the student, in a recent study, was shown to be approximately 11 percent of the total cost of training the public health workers.

The increasing demand for public health personnel has put a special strain on the schools. The schools of public health have been, perhaps, less successful than other professional schools in obtaining private support, particularly for construction. Many of the schools are housed in the same facilities that they occupied 20, 30 or even 40 years ago. There has been a tendency for schools to expand their operations to meet the constantly increasing needs for trained personnel.

For example, in most of the schools they have had to establish new programs of training to meet new public health needs such as in the field of accident prevention, radiation hazards, air pollution control, chronic disease control, and a whole range of new public health activities that are demanded by the public and are new areas where skills and education are needed.

This has resulted in many of the schools having extreme overcrowding or the use of completely inadequate teaching facilities. In my own school we have whole departments of the school housed in substandard houses in the neighborhood of the school. We urgently need new teaching facilities, classrooms, laboratories, seminar rooms, if we are to provide adequate teaching for the students that we now have.

Every school of public health is operating at capacity. If the number of students is to be increased, new facilities will be required. The association has attempted to determine what the needs of the existing schools are and what would be the cost of creating additional schools.

The 12 schools have reported their urgent needs for space that would cost, as nearly as can be estimated, $42 million.

The Public Health Service has indicated that there should be at least three additional schools at a cost of approximately $6 million per school.

The existing schools have reported that if the facilities that they are planning for which funds are not now available, the $42 million in expanded facilities would result in a 60 percent increase in the enrollment of students in these schools. We believe that if H.R. 12 is enacted and implemented by appropriations, that it would be possible for the schools of public health to move ahead almost immediately in constructing these facilities and making it possible to greatly increase the enrollment in the schools, therefore, increasing the number of graduates and beginning to meet these unmet needs for training public health personnel.

(The complete prepared statement of Dr. Stebbins follows:)

TESTIMONY PRESENTED TO THE HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE ON H.R. 12 BY ERNEST L. STEBBINS, M.D. DEAN OF THE SCHOOL OF HYGIENE AND PUBLIC HEALTH OF THE JOHNS HOPKINS UNIVERSITY

I am Ernest L. Stebbins, dean of the School of Public Health and Hygiene of the Johns Hopkins University. My work as a practicing public health physician has included State health department positions in New York and Virginia and the health commissionership of the city of New York. At present I am vice president of the Association of Schools of Public Health. It is in the last-mentioned capacity that I appear today as spokesman for the 12 univeristy graduate schools of public health in this country. The president of our association, Dr. Hugh R. Leavell of Harvard, is presently in New Delhi as a public health consultant to the Indian Government, along with Dean Edward G. McGavran of the University of North Carolina School of Public Health and Dr. J. Fred Mayes of the U.S. Public Health Service.

The proposed "Health Professions Education Assistance Act of 1963," which has been introduced by Chariman Harris of this committee as H.R. 12, is strongly endorsed by the Association of Schools of Public Health. Our members were gratified that the forerunner of this measure, H.R. 4999, was thoroughly studied and favorably reported by this committee in the preceding Congress. We thank the chairman and the members of the committee for taking up this unfinished business so promptly in the current session. There is an urgent job to do and the health professions and institutions concerned share the committee's desire to get on with it.

The shortage of physicians and other members of the health professions is a serious national problem. Construction of teaching facilities to permit student enrollment increases in existing schools of medicine, public health, dentistry and other overcrowded educational institutions in the health field, as well as for new schools, is essential and long overdue. Financial assistance to medical and dental students in such form as the Congress may devise will make it possible for many who could not otherwise do so to take this very expensive professional training. Federal traineeships have been used effectively to enlist very promising candidates for graduate training in public health, under the Health Amendments Act (Public Law 84-911).

My colleagues and I in graduate public health education recognize the fact that questions of how and to what extent the Federal Government should assist in the training of young men and women to become medical doctors warrant careful study. We believe that assistance should be granted, and we are confident that the philosophical and practical considerations can be resolved. At the same time, we point out that Federal participation in graduate public health education is already an accepted practice that has had bipartisan congressional suport for several years and that of the present and previous administrations. The case is clear cut and noncontroversial. It is simply a matter of helping to provide the means whereby physicians, dentists, nurses, engineers and others, who already have obtained their basic professional education and degrees, can prepare themselves for public service. I emphasize that they are being trained for public service, not for private practice. They serve in State and local health departments and at national and international levels, as well as in voluntary health agencies and institutions which are essentially in the public service.

The objective of public health practitioners is to safeguard and improve the health of citizens on a mass basis by organizing and administering community-wide, statewide and even nationally encompassing programs of prevention of disease, accidents and other conditions that threaten whole populations. I do not need to persuade this committee, which has fostered so much constructive public health legislation, that prevention is the key to the health of the individual and of the Nation. It is, of course, the least expensive way to health, as many industries and agencies of Government have learned. Investments in keeping well people well—off the absentee list, off relief rolls, out of hospitals and in a state of self-sufficiency and well being—are repaid severalfold in actual dollar savings and in the earnings of increased productivity. It has been truly said that the cost of sickness is far greater than the price of health.

Just as the practicing physician is trained to diagnose illness in an individual patient and to prescribe and carry out treatment, so the public health officer as physician to the community, State, or Nation, must be able to measure accurately

the incidence of disease in the population under his care, to detect conditions hazardous to health and to lead the way in carrying out corrective measures on a wide scale. Among the many forms such measures may take are immunization programs, as in the case of polio, and campaigns for the early diagnosis of cancer and other dieases that can so often be halted if discovered in time. Whatever the procedure, it will involve the public.

The task of explaining the realities of illness and health to the public as a whole and of bringing the many segments of the population together for effective community action is one that requires special knowledge and special skills, as Members of the Congress can readily understand from their own experience in public affairs. The complexities of public administration, community organization and related subjects are not learned in schools of medicine, dentistry, nursing or engineering where the focus of necessity is on the mastery of basic physical and biological sciences. The need for additional training in the specialties of public health gave rise to the graduate schools of public health among which, incidentally, the school which I now direct at Johns Hopkins, was the first. There are five other schools in privately operated universities—Columbia, Harvard, Pittsburgh, Tulane, and Yale—and six schools in State universities—California-Berkeley, California-Los Angeles, Michigan, Minnesota, North Carolina, and Puerto Rico.

The function of the 12 schools of public health in the United States, as I have indicated, is to prepare physicians, engineers, nurses, and others who are basically trained already in their several professions, to organize and administer programs, and to do research and teaching aimed at the prevention of disease and accidents and the promotion of health among whole population groups—communities, States, and Nations. The schools receive students from all parts of the United States and from countries throughout the free world. Most of the students from abroad are sponsored entirely or in part by the U.S. Government.

The Federal Government and the 50 States are dependent upon the 12 schools of public health for graduate-trained personnel to operate public health services. While a very high proportion of the schools' graduates do enter the public service—as many as 95 percent according to the most recent survey—there is a severe personnel shortage in public health departments at all levels of government. The nature and extent of this shortage has been well documented, not only in hearings conducted by this committee and by a study conducted by the committee's staff but also by the findings of the First National Conference on Public Health Training which reported that "the data indicate a serious deficiency in the training of many currently employed personnel and document the areas of need for additional adequately qualified personnel to develop the specific health programs authorized by the Congress and other public bodies." The Conference reported well over 2,500 vacancies—that is, budgeted, but unfilled positions—in official health agencies alone due to lack of trained personnel, 6,100 additional professionally trained workers needed at this time due to population growth and new health hazards and the need for formal, specialized training of 20,000 professional health workers now employed. International health commitments of the Nation aggravate the shortage problem as U.S. Public Health experts are called upon, not for permanent duty abroad, but to serve as consultants in technical assistance programs and other public health undertakings, particularly in the developing countries of the free world.

Rather than to cite more shortage figures, which are available to the committee in its own records, I merely suggest that any member who wishes to gain a keener sense of this critical situation need only telephone the health officer in his State capital or home district. I know the answer will come back loud and clear and in specific terms. The shortage of adequately trained public health personnel is nationwide.

The principal reasons for the dearth of public health personnel with graduate training may be quickly stated. Underlying the need for public health physicians, of course, is the fact that insufficient numbers are coming out of medical schools from which some go on to specialized training, including the specialty of public health. Other reasons, which apply not only to physicians but to the other professional health experts who make up the public health team are: (1) the cost to the student of taking additional graduate work; (2) the cost to the universities providing graduate public health education; and (3) lack of adequate class room and other forms of teaching space and facilities in the existing schools.

The first factor—cost to the student—involves the individual who has already invested much time and money in college and professional school and must now

consider beginning to earn a living or putting that off another year or more in order to become a public health specialist. This, in addition to the actual outlay of funds for tuition and living expenses. By this stage in their life, the majority of physicians and other professional people are married and have family responsibilities. Thus the question: Can they afford graduate public health education? Fortunately, this question has been answered in large measure by the Federal Government through the provision of public health traineeships for qualified physicians, engineers, nurses and others who plan to enter the field of public health. The demand for this form of assistance has exceeded the availability of funds since the program was enacted in 1956 but this represents an eminently successful means of stimulating the interest of professional men and women in public health careers and has proved to be a powerful recruiting device.

The second factor—cost to universities of providing graduate public health education—stems from the necessarily expensive nature of this kind of instruction. Since the needs in public health work are many and varied and persons of widely different training are required, teaching must be done with small groups and a large number of courses is offered. The ratio of faculty members to students is therefore relatively high, in comparison, for example, to that in law schools where large classes are conducted and the curriculum is essentially the same for all students. The education of public health leaders in schools of public health averages more than $5,000 per student per year toward which tuition pays but 11 percent. Since their graduates are almost entirely public servants in relatively low income brackets, the schools cannot expect more than token amounts through alumni giving. The financial problem of both the private and the State-sponsored schools of public health was acute indeed before the Federal Government recognized the situation in 1958 and provided direct teaching funds to schools of public health through the Hill-Rhodes Act. Although the Hill-Rhodes grants constitute only partial reimbursement to the schools for the cost of training federally sponsored students, they have been of immense help to the schools, enabling them to reduce previous deficits both in dollars and in the form of unfilled faculty positions in fields of critical importance, such as radiobiology, cancer control, mental health and prevention of heart disease.

The third factor bearing heavily on the shortage of public health personnel is the need for additional teaching facilities. I could recite at great length the situation in the various schools where classrooms are overcrowded and obsolete, faculty offices and seminar meeting places are scattered widely in rented or borrowed quarters not designated for educational purposes and where the number of students admitted must be limited to those who can be accommodated in existing space. Here again, the documentation is complete and a matter of record and inquiry at any one of the 12 universities concerned will reveal that the problem of inadequate teaching space is very real.

All of the schools of public health are operating at full capacity and any increase in student enrollment will be dependent upon the provision of more teaching space. The problem of financing such construction is serious both for the private schools and for those conducted by States. The private schools find it possible to obtain matching funds on a 50/50 basis from private sources for facilities for research which is of interest to individuals, industries, or foundations. But these same private sources regard the training of future public health officials as a public responsibility and have consistently declined in recent years to contribute substantially to the construction of public health teaching facilities. In the case of the State schools, the problem is one of proportions of in-State and out-of-State students accommodated in the schools. Since only an average of 25 percent of the students in the State schools are residents of the State concerned or will work in the State where they were trained, State legislatures naturally draw the line on providing more than an equivalent share of the cost of teaching facilities.

Provision of Federal grants toward the cost of constructing teaching facilities in graduate schools of public health will offer both the State legislatures concerned and various private sources the strong incentive necessary to complete the necessary financing.

Now I come to what I believe is the most telling point of all in the case which I am privileged to present on behalf of the schools of public health regarding H.R. 12. These schools are not just generalizing about the needs for teaching facilities, construction funds nor the prospects of increased enrollment. They have figured their space and cost requirements. They are prepared to act immediately to expand their physical facilities and to admit more

students. Specifically, a compilation of data obtained from all of the 12 schools reveals a need for $42 million for construction of new teaching facilities in existing schools. The space thus added would permit an increase in student enrollment of more than 60 percent, according to the estimates by the schools themselves. In addition, the Public Health Service has estimated that at least $18 million is required for construction of new schools of public health. After years of striving in this direction, the schools of public health have found that it would be sheer impossibility for them to raise the required amounts without Federal assistance along the lines proposed in H.R. 12. The schools of public health mean business. They are eager to expand in order to provide more trained personnel to help meet the Nation's need. They will move swiftly to do so, if this legislation is adopted and Federal funds are made available to them as proposed.

The Nation's dependence on the 12 university gradute schools of public health in 10 States and Puerto Rico for the comprehensive professional training of public health specialists to serve at all levels of government and in the voluntary agencies has been clearly recognized by the Congress and particularly by this committee. The role of these schools has been likened to that of the service academies. They stand clear of controversy regarding the propriety of Federal support. Indeed, it might be said that, to the extent that they educate federally sponsored students at their own expense, they are subsidizing the Federal Government. They are grateful for the considerable assistance which the Congress has granted for traineeships, for research and teaching and for research facilities. They will welcome the logical extension of such assistance to teaching facilities through the passage and implementation of H.R. 12 and urge that in this way they be enabled to increase their professional contributions to the Federal Government and to the several States.

The CHAIRMAN. Thank you very much.

Mr. Rogers?

Mr. ROGERS of Texas. Doctor, do you feel that the lack of personnel that has come into the Public Health Service has been due primarily to the lack of facilities to train them, or has it been due to the lack of an adequate pay scale?

Dr. STEBBINS. I am sure both factors enter into it, but the experience with the traineeship program has led us to believe that, if you provide the facilities and the support, which is now provided, at least in part, for the student, that more and more will enter the field.

I am sure that the inadequate salaries of many physicians in public health is a deterrent to attracting them. We are competing for the physicians that graduate from the medical schools, the dentists that graduate from the dental school. They wish to go into some specialty, and if one of the clinical specialties provides more adequate remuneration than public health, it is understandable that more of them will go into the clinical specialties.

This is changing, and we see many more applicants for training in the specialty of public health than we did just a few years ago.

I think this is, in large measure, due to the traineeship program that the Congress authorized a number of years ago.

Mr. ROGERS of Texas. Thank you, Doctor, for your answer, and for your excellent statement.

That is all, Mr. Chairman.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. Dr. Stebbins, if I understand your statement correctly, you feel that H.R. 12, if passed, would increase the number of doctors available?

Dr. STEBBINS. Yes.

If this bill is passed, I have complete confidence that it would stimulate more young people to go into medicine and into dentistry and some of those would go on into public health.

Mr. YOUNGER. Several years ago we passed the National Defense Educational Act with the idea that we wanted to stimulate more youngsters to go into engineering and science of various types.

Dr. STEBBINS. Yes.

Mr. YOUNGER. The last figures that I saw, in regard to engineering, was that for the last 4 years we have had each year fewer students registered in the schools of engineering than we had the previous year, in spite of all of the encouragement in that bill.

I am in favor of this bill, but I am wondering if we are going to be confronted with the same results which apparently we achieved in the National Defense Education Act.

Dr. STEBBINS. I am also connected with the medical school at our university, and I know that a large proportion of the students in the medical school are in severe financial difficulty. We know that some students drop out each year because they cannot pay tuition and maintain themselves.

I am sure that this is true in many medical schools. I know that many young men tell me that they cannot look forward to going into medicine because of the high cost of the training and the long period of training.

I cannot but believe that this bill, if enacted, would stimulate many of these that are not now going into medicine and therefore, becoming available for training in public health, to go into medicine and dentistry.

Mr. YOUNGER. Do you think that if we increased the forgiveness to 100 percent of the loan, it would encourage more of the doctors to go into practice in the areas designated by the Surgeon General as needing physicians?

Dr. STEBBINS. Yes; I think that that is quite possible. Medical students can add and subtract, and they would recognize the financial advantage in going into the field, if there is forgiveness of the loan.

Mr. YOUNGER. That is the area where we really need doctors, the rural areas.

Dr. STEBBINS. Certainly the shortage of physicians and dentists is greatest in rural areas.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Long?

Mr. LONG. No questions, Mr. Chairman.

Dr. STEBBINS. Mr. Chairman, may I make one further statement?

I gave you the estimates of the needs as presented by the 12 schools of public health. This comes to $42 million to augment and provide the facilities for increasing the number of students by 60 percent.

In addition to that, here is estimated that at least $18 million would be needed for new schools.

One of our concerns is that the appropriation authorized by this bill might be insufficient to meet the needs of all of the schools that would be provided with support. There are 88 medical schools; there are 48 dental schools; there are many other schools that would be included in this, and if the needs of the schools of public health are to be met, we feel that either the amount of money should be increased or that there should be a categorization, the setting aside of a certain proportion of the funds to meet the needs of these schools.

We would hope that you would give some consideration to that possibility.

The CHAIRMAN. Doctor, thank you very much.

The committee is pleased to have had you back with us and to have heard your testimony.

Dr. STEBBINS. Thank you, sir.

The CHAIRMAN. The committee will recess until 2 o'clock.

(Whereupon, at 12:05 p.m., the committee adjourned, to reconvene at 2 p.m., the same day.)

AFTERNOON SESSION

Mr. ROBERTS (presiding). The committee will please come to order.

Our next witness will be Mr. Merlyn McLaughlin, American Osteopathic Association, Des Moines, Iowa.

STATEMENT OF MERLYN McLAUGHLIN, AMERICAN OSTEOPATHIC ASSOCIATION, ACCOMPANIED BY LAWRENCE L. GOURLEY, WASHINGTON COUNSEL FOR AMERICAN OSTEOPATHIC ASSOCIATION

Mr. MCLAUGHLIN. Mr. Chairman, members of the committee, my name is Merlyn McLaughlin. I have been in education since 1927 and in the college field since 1937, and hold a Ph. D. degree from the University of Colorado. Since 1959 I have been president of the College of Osteopathic Medicine and Surgery at Des Moines, Iowa, and I am currently president of the American Association of Osteopathic Colleges.

There are five colleges of osteopathy and surgery. All are nonprofit, tax-exempt institutions. All are accredited by the American Osteopathic Association, and all are members of the American Association of Osteopathic Colleges.

It is an honor to appear before this committee in support of the pending Health Professions Education Assistance Act of 1963, H.R. 12.

This bill offering a program of matching grants for construction of teaching facilities and a program of student loans will go far toward achieving the goal set in 1959 by the Surgeon General's Consultant Group on Medical Education that "the number of physicians graduated annually by schools of medicine and osteopathy must be increased from the present 7,400 a year to some 11,000 by 1975—an increase of 3,600 graduates."

The impact of the osteopathic colleges is truly national in scope. Their current student body is derived from 48 States and the District of Columbia. See appended chart marked "A."

First-year students in 1962 received their required preprofessional training in 176 undergraduate colleges in 36 States. See appended chart marked "B."

Their graduates are engaged in the legalized practice of their profession in each of the 50 States and the District of Columbia. In 38 States and the District of Columbia, osteopathic physicians (physicians, D.O.) practice under unlimited licenses. According to Health Manpower Source Book, section 14 (Public Health Service Publication No. 263), there were some 14,700 physicians (D.O.) in the United States in mid-1962. See appended chart marked "C" for physician-population ratios and type of practice.

Seventy percent of the entering freshmen hold baccalaureate or advanced degrees. Some others obtain B.A. or B.S. degrees after

completing the first year at osteopathic colleges under combined degree agreements with various undergraduate colleges and universities. The standard curriculum of an osteopathic college requires at least 5,000 hours of professional instruction distributed over 4 college years. The graduate then begins an internship of 12 to 24 months in a hospital approved for intern training by the American Osteopathic Association. After internship, an increasing number of graduates enter on 3-year terms of residency training in approved residency training hospitals, followed by 2 years of specialty practice preparatory to examination for certification by specialty boards in such specialties as internal medicine, surgery, radiology, obstetrics, gynecology, pediatrics, and pathology.

A survey in 1958 indicated that the osteopathic colleges spent $6.8 million for basic operation, only $1.4 million, or 21 percent, of which came from tuition and fees. Gifts and grants and deficit financing supplied the rest.

During the past 17 years the profession has contributed over $10 million to osteopathic education and research. Twenty-four State societies covering 80 percent of the profession annually contribute directly to a support-through-dues program. In 1962 the profession contributed over $840,000.

Much of our teaching activities are in overcrowded and obsolescent buildings. The osteopathic colleges cannot adequately meet their needs for construction of teaching facilities without additional assistance.

In recommending a 10-year program of Federal grants on a matching basis for the construction of medical teaching facilities, such as that proposed in H.R. 12, the Surgeon General's Consultant Group pointed out that only with such Federal stimulus will adequate funds become available for needed construction.

The success of the Hill-Burton program furnishes abundant evidence of the catalytic effect of the availability of Federal matching funds. Several osteopathic colleges have matched Hill-Burton funds for construction of a diagnostic and treatment facility, a teaching hospital, and a rehabilitation facility.

The 1962–63 enrollment for the 5 osteopathic colleges was 1,581, an increase of 20 over the 1961–62 enrollment.

One thousand two hundred and thirteen individual applicants applied for admission to the osteopathic colleges in 1962, of whom 438 were enrolled, which is 8 above the recommended freshman capacity.

While the 775 applicants who were not enrolled met minimum requirements, many were rejected on scholastic or motivation grounds, and undoubtedly many were rejected for lack of available space.

In his communication reported on page 273 of the hearings on H.R. 4999 last year, the president of the Kansas City College of Osteopathy and Surgery, Dr. J. M. Peach, said:

> We have increased the utilization of our classrooms and laboratories from the usual 3 to 4 clock hours per day for classroom and/or laboratory, to from 6 to 8 or 10 clock hours per day in classroom and laboratory utilization. We have reached the "bursting" point as it relates to our present physical facilities and are desperately in need of additional classrooms, laboratories, equipment, and personnel to maintain standards of education and training and also to provide educational opportunities for a large number of students.

The same thing is true of the institution I head. While facilities of the College of Osteopathic Medicine and Surgery at Des Moines are adequate for accepting 70 students per class, we have been averaging closer to 80 the past several years which, in spite of stepped-up utilization, has resulted in a crowded, unsatisfactory condition. Rejections have averaged from 30 to 50 qualified students per year because of lack of facilities. Last year, our freshman class was filled in May, and we were forced to reject 43 qualified applicants. It is anticipated the same condition will prevail this year.

Because the buildings housing our college activities are antiquated and obsolete and there is no land available within a reasonable distance, our board of trustees has secured from the Federal Government 86 acres of surplus land at Fort Des Moines, Iowa, for the building of a new campus. We plan to construct on that site new facilities to accommodate a class of at least 100 entering freshmen per year; a teaching hospital of 150 beds which can be expanded to 500 beds over a period of 10 years; and a teaching clinic to accommodate 100,000 patients per year as well as housing for students.

I have here letters from the Philadelphia College of Osteopathy, the Chicago College of Osteopathy, and the Kirksville College of Osteopathy and Surgery updating information on their current and prospective facilities filed with this committee and incorporated in last year's hearings.

Mr. Chairman, may I add these very important letters?

Mr. ROBERTS. Without objection.

(The letters referred to are as follows:)

CHICAGO COLLEGE OF OSTEOPATHY,
OFFICE OF THE DEAN,
Chicago, Ill., January 31, 1963.

Mr. LAWRENCE GOURLEY,
Washington, D.C.

DEAR MR. GOURLEY: It is a pleasure to send you an updated report from the Chicago College of Osteopathy indicating the developments on this campus of the past year.

The Hyde Park-Kenwood urban renewal program has made fantastic progress in the past year. We have acquired slightly more than three acres of land directly across from the hospital and clinic. We are developing this land into landscape grounds, parking lot and are allotting a portion for the construction of a five-floor basic science and research building.

The construction of the two new wings to our teaching hospital is ahead of contractual schedule. One wing will be opened on April 1 and the other on July 1, barring any unforeseen circumstances.

The entire neighborhood has taken on a new sense of pride and responsibility as the slums are removed and replaced by parks, playgrounds, a shopping center, private homes and some efficiency apartment buildings. We find that it is easier to "sell" a prospective student to live in this area and attend classes at this campus.

The situation reflects in the applicants statistics for this year. As of this date, we have received 123 applications for the 1963 freshman class. We have accepted 40 of these, rejected 26 and have 57 under consideration with definite action to take place within the next 60 days. At the same time last year, we had but 87 applications and had accepted about 20 students for the September class.

Things are looking up for us after several dismal years. There is a new attitude of security and stability permeating the faculty and staff as we all become more assured that our decision to stay in this neighborhood was a wise one. A new basic science building will allow us to increase our incoming classes to 100 students, a gain of approximately 30 percent. I do not foresee defficulty in filling classes of this size. The fact that our performance this year has improved,

coupled with the knowledge that the available premedical applicant pool will be increasing each year for the next decade enforces this statement.

Very truly yours,

R. A. KISTNER, D.O., M.D., *Dean.*

PHILADELPHIA COLLEGE OF OSTEOPATHY,
OFFICE OF THE PRESIDENT,
Philadelphia, Pa., February 1, 1963.

LAWRENCE L. GOURLEY, Esquire,
American Osteopathic Association,
Washington, D.C.

DEAR MR. GOURLEY: In response to your telegraphed inquiry of January 30, 1963, concerning current data about Philadelphia College of Osteopathy, may I call the following to your attention:

1. Because our present college classroom and laboratory facilities (built in 1929) were designed to accommodate a maximum of 75 students per class, it has been necessary for us to overload our facilities for years in order to take care of demand. We have done this because for a long time we have sensed the need for more physicians and, short of building a new plant, our only alternative was to overload. You are aware of the effect of overloading on the wear and tear on plant and equipment, as well as on the teaching program and the faculty.

2. Our basic, long-term plans have not changed in the last year. We still are planning our plant, faculty and hospital expansion in terms of a predoctoral enrollment of 150 per class and a postdoctoral enrollment of 150 full-time students (interns, residents, fellows and Ph. D. candidates), plus an unknown number of part-time, short-course students. (As I reported to you previously, with our current facilities the part-time enrollment has averaged about 300 for the past several years. What we can expect with expanded facilities is hard to estimate. Clearly, however, with expanded facilities making it possible to respond to the rapid developments in medicine with an even better program, enrollment is bound to rise.)

3. I think it important to emphasize that a very great majority of our graduates go into general practice. From the standpoint of public health and health service to the general public this is a point of paramount importance. Our plans call for a continuing and firm emphasis on education for general practice, hence it is clear that any increase in the number of graduates of Philadelphia College of Osteopathy brings more superior medical service to the area where it is most needed.

The Philadelphia County Medical Society made a study of the nature of the practices of both allopathic and osteopathic physicians. The report pointed out that there are about 4,000 allopathic physicians in this city, of whom 800 are general practitioners. There are about 400 osteopathic physicians, of whom 320 are general practitioners. The astounding fact reported was that the 320 osteopathic general practitioners provide about 45 percent of that service to the citizens of this city. A more convincing argument in support of our wishing to provide more osteopathic physicians would be difficult to find. Investment in the education of osteopathic physicians is the best way to insure increased direct high-level patient care in the area where it is most needed—general practice.

4. I wish also to inform you of a development not previously reported to you. We have reserved space on our new campus for a facility to provide care for the aging. We have gone into this program after careful study. Fundamentally, it seemed to us, any college providing education for physicians cannot any longer delay furnishing education and experience for student physicians in this important area. You can readily imagine the impact of such a facility on our curriculum.

5. We are now recruiting more full-time people for our faculty. We are doing this now in order to be ready for the opportunities an expanded campus will give us. Also we anticipate that because it is so much larger than in any previous generation, the present undergraduate college enrollment will produce a greatly expanded demand for medical education. We expect to be prepared for this. We must have, however, firm and greatly expanded support from both governmental and private sources.

94933—63——14

6. In my letter to you of February 5, 1962, I submitted a table of data on our enrollment. I am providing that table again with the information for 1961–62 added:

Applications considered	Accepted	Admitted (according to registrar's report)	Graduated or currently enrolled
1956–57—259	94	91	84
1957–58—239	90	84	79
1958–59—232	84	79	67
1959–60—220	87	66	64
1960–61—251	108	91	86
1961–62—275	108	95	92

Our attrition has been due preponderantly to finances. Academic inadequacy is present to only a minor degree. Our students depend heavily on the N.D.E.A. loans. But even with these, because of the financial demands of family and health problems, we still have withdrawals.

Please note that the current fourth-year class is our smallest. With the graduation of this class and the admission of another of about 100 in number our total enrollment for 1963–64, depending again on attrition, will be between 340 and 350. An increase for 1964–65 can be anticipated because the number of applicants is up again for 1962–63. As of January 31, 1962, we had 168 prescreened applicants. As of January 31, 1963, we have 210. This is a 25 percent increase in one year. You are aware of the anticipated increase in applications to undergraduate colleges—in the case of one State, Michigan—the age group from which applicants will come will in 1965 increase 40 percent in one year. While the average for the country will not be quite that high, it is clear that the combined force of an absolute increase in the number going to college, plus an accelerated rate of application to Philadelphia College of Osteopathy, drives us to but one conclusion—we must increase our facilities. The Federal Government—as well as State and local governments—has a role to play—an important, indeed essential role—ways and means must be provided for the expansion of teaching and clinical facilities. I should like to note also that the increase becomes doubly important as we are obliged to expand because of increasing population demands.

We are pleased to cooperate with you by submitting these data. We hope they will be helpful to you, and please be assured of our wish to assist in any way we can.

Yours very sincerely,

FREDERIC H. BARTH, *President.*

KIRKSVILLE COLLEGE OF OSTEOPATHY & SURGERY,
Kirksville, Mo., February 1, 1963.

LAWRENCE L. GOURLEY, Esquire,
Legal Counsel,
American Osteopathic Association,
Washington, D.C.

DEAR MR. GOURLEY: It is encouraging to know that on the first day of the new Congress, Chairman Harris of the House Commerce Committee, reintroduced the medical education aid bill, now H.R. 12. It is my understanding that the text is the same as the committee reported bill upon the same subject last year, namely, H.R. 4999 on which I had the opportunity to testify.

The situation at Kirksville remains essentially unchanged. We recently had Hill-Burton support for renovation withdrawn because one of our buildings was antiquated and not fireproof. The renovation of this space or a new building is a most important need for our diagnostic and treatment center for which there is no other available space in the hospital area.

We are engaged in the training of young men and women in the practice of osteopathic medicine, we fill each entering class, but often lose 10 percent or more due to poor scholarship which is so frequently associated with financial duress. So the loan provisions of the present proposals are very significant and we believe they would encourage more and better applicants and help them, with

greater security, to complete their education. Even the present, very helpful, National Defense Loan does not cover our tuition costs.

Our present enrollment problem involves some lowering of the standards of acceptance with less lowering of the standards of continuance in the college and therefore attrition of students at too high a rate.

	Applications considered	Applications accepted	Students admitted	Graduated
1957	302	177	100	60
1958	316	147	98	78
1959	303	164	95	86
1960	300	171	91	66
1961	359	172	100	85
1962	331	162	100	85

We are dedicated to the best training program that we can provide for our matriculants and our faculty are prepared to make many personal sacrifices to obtain our goals; we have organized our alumni into a group that places our college second in the Nation in the matter of annual giving. Our tuition fees do no support the expense item for our faculty. We regard ourselves as an institution devoted to public service and as such we do much charitable work in our locality, if we are to grow in service and education, Federal aid would seem to be essential, because we have tapped every other resource.

We continue to appreciate your efforts on our behalf for improved medical service and education.

Cordially and sincerely,

R. McFarlane Tilley, D.O.,
Dean and Acting President.

Mr. McLaughlin. We hope the student loan provisions of the bill also will prevail. We believe they will encourage more and better applicants and help them, with greater security, to complete their education. The loss of students by attrition in medical and in osteopathic colleges as reported on pages 167 and 277 of last year's hearings exceeded 10 percent.

Before closing, I should like to call attention to what may have been an oversight in legislative drafting.

H.R. 12 permits a hospital affiliated with a "school of medicine" (defined in sec. 724(4)) to apply for a construction grant. In order that a hospital affiliated with a "school of osteopathy" (also defined in sec. 724(4)) may be similarly eligible, we respectfully submit the following amendments:

Add "or school of osteopathy" after "medicine" in line 23, page 3, and line 6, page 13.

The Chicago College of Osteopathy has two affiliated teaching hospitals at Detroit—the Detroit Osteopathic Hospital, and the Art Centre Hospital.

The College of Osteopathic Medicine and Surgery at Des Moines has four affiliated teaching hospitals—Doctors Hospital, Columbus, Ohio; Flint Osteopathic Hospital, Flint, Mich.; Des Moines General Hospital, and the Wilden Osteopathic Hospital, Des Moines, Iowa.

The Kirksville (Mo.) College of Osteopathy and Surgery has four affiliated teaching hospitals—Normandy Osteopathic Hospital, St. Louis, Mo.; Still-Hildreth Osteopathic Hospital, Macon, Mo.; Laughlin Osteopathic Hospital and Clinic, Kirksville, Mo.; and State Hospital No. 1, Fulton, Mo.

The Kansas City (Mo.) College of Osteopathic and Surgery has two affiliated teaching hospitals—Oklahoma Osteopathic Hospital, at Tulsa, Okla.; Lakeside Hospital, Kansas City, Mo.

The requested amendments are in consonance with the pattern of the legislation in other respects. We hope for their adoption, and for the approval of the bill.

Mr. ROBERTS. Thank you very much, Mr. McLaughlin. I have just one or two questions.

I call your attention to the committee report of the hearings on H.R. 4999 at the top of page 4 of the report. As you look at it there, I will read it to you.

> Some evidence was adduced in the hearings that several of the existing schools of osteopathy were encountering difficulties in filling their classes with qualified applicants, let alone expanding their enrollment.

The question arises, is that a correct statement or an incorrect one, and if so, what are the facts?

Mr. MCLAUGHLIN. The majority of the schools are overcrowded, and all have more qualified applicants than they can accept at this time. Now, I should point out that some of the schools in the past have accepted applicants, but at enrollment time they did not show up. For that reason, they were low in their freshman class.

Mr. ROBERTS. Well, so that we can have this entirely clear, I would like to ask you to submit for the record figures for each school on the number of applicants, the number of students admitted in 1962, and 5 years preceding 1962, if you would be so kind as to supply that for the record.

Mr. MCLAUGHLIN. I would be glad to do that.

Mr. ROBERTS. I believe Chairman Harris stated that the record will be closed 5 days after the conclusion of the hearings this week. So I think that will give you sufficient time to supply us that material.

Chairman Harris?

The CHAIRMAN. I believe I have no questions.

Mr. SPRINGER. I have no questions.

Mr. ROBERTS. Mr. Kornegay?

Mr. KORNEGAY. No questions.

Mr. ROBERTS. Mr. Younger?

Mr. YOUNGER. Just one question. What is the average total cost to the student for this education?

Mr. MCLAUGHLIN. The tuition?

Mr. YOUNGER. No; the average cost. What would it cost a student?

Mr. MCLAUGHLIN. The total cost will run between $4,000 and $4,500 per year.

Mr. YOUNGER. That is all.

Mr. ROBERTS. Mr. Long?

Mr. LONG. Mr. McLaughlin, on page 3, you stated that some students were rejected on motivation grounds.

What are those?

Mr. MCLAUGHLIN. I should like to explain that each applicant comes in for an interview. We find that our attrition is much less and our doctors are much better if we examine motivation, or why do they want to become doctors.

A man who really wants to be of service to humanity and can prove that makes a good student and a good doctor. If he comes in and says "All I want to do is get through school so I can make money," that is not the type of motivation we are looking for.

Mr. LONG. I see. You gave some detail on the proposed action of your board of trustees and the construction of an additional facility—

Mr. MCLAUGHLIN. A new facility.

Mr. LONG. A new facility at Fort Des Moines, Iowa. Will this be built if this bill does not pass?

Mr. MCLAUGHLIN. We hope so. But we have considerable faith in this committee and in Congress to work with us to alleviate the medical shortage in the United States, and we are hoping for the best.

Mr. LONG. You do feel, though, that you could raise the necessary money to construct this facility without Federal participation?

Mr. MCLAUGHLIN. Let me say that I will do my best to do that. I think that we could, eventually, but the need is now.

Mr. LONG. Do you feel, Mr. McLaughlin, that this is a proper field for Federal activity and Federal participation?

Mr. MCLAUGHLIN. Yes, I do.

Mr. LONG. No further questions, Mr. Chairman.

Mr. ROBERTS. Mr. Broyhill?

Mr. BROYHILL. Do your students receive the same training in schools of osteopathics as they do in a medical college? Is this the same training? Can they get the same degree as a medical degree?

Mr. MCLAUGHLIN. Practically the same training, except that the osteopathic philosophy and the osteopathic principles are given them as an extra modality which they can use in health care.

Mr. BROYHILL. In other words, this is extra?

Mr. MCLAUGHLIN. In addition to. The philosophy goes all the way through, but that is right.

Mr. BROYHILL. And your graduates, then, can, say, come back to any other State and practice as a registered physician, is this correct?

Mr. MCLAUGHLIN. In many of the States, there is a joint board which examines both groups.

Mr. BROYHILL. No other questions.

Mr. ROBERTS. Mr. Brotzman?

Mr. BROTZMAN. Just to follow up a bit on this question by my colleague from North Carolina, you have a degree in some instances in osteopathy, which makes you a doctor of osteopathy, is that correct?

Mr. MCLAUGHLIN. The five colleges at the present time give the degree, doctor of osteopathy, right.

Mr. BROTZMAN. Do I understand that there is another degree or category called a physician, doctor of osteopathy, or is there some difference here in the categories that I fail to perceive?

Mr. MCLAUGHLIN. No. If I get your question right, our graduates are classified as physicians and surgeons, D.O., which means doctor of osteopathy, following their name, where the other might be physician and surgeon, M.D. Does that answer your question?

Mr. BROTZMAN. Yes.

Now, one more question to be sure I understand this. After an individual has passed your school, then he can go take a board in any State in the Union?

Mr. MCLAUGHLIN. Right.

Mr. BROTZMAN. And if he passes that particular board, he, of course, can start practicing in that particular State?

Mr. MCLAUGHLIN. Right.

Mr. KORNEGAY. Will the gentleman yield?

Mr. BROTZMAN. Yes.

Mr. KORNEGAY. Doctor, are there any requirements for internships or residencies as they have in the field of general medicine?

Mr. MCLAUGHLIN. I am sorry; I did not get that.

Mr. KORNEGAY. Does the science of osteopathy require internship or residency subsequent to graduation from the school before entering into the active practice?

Mr. GOURLEY. May I?

Mr. MCLAUGHLIN. Yes.

Mr. GOURLEY. Congressman, in 23 of the States doctors of osteopathy are required to show completion of internship in order to take the examination for State licensure. The same is true of doctors of medicine in the 30-odd States. All or more than 99 percent of the osteopathic graduates intern anyway, as do the medical graduates.

Mr. KORNEGAY. What is the length of that internship?

Mr. GOURLEY. I do not know of any State that requires more than 1 year. So far as residency is concerned, no State requires a residency for licensing an M.D. or a D.O., I believe.

Mr. KORNEGAY. That is in a specialized field that they go into the residency phase of their training?

Mr. GOURLEY. That is right.

Mr. BROTZMAN. May I just complete one question?

Mr. ROBERTS. Yes.

Mr. BROTZMAN. Could a physician, doctor of osteopathy, perform surgery, let us say, in a State where he was admitted to practice?

Mr. MCLAUGHLIN. In 38 States, provided he is qualified as a surgeon, yes, he has had his residency in surgery.

Mr. BROTZMAN. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Roberts, I would like to pursue that just one moment.

As an osteopath, he becomes a surgeon?

Mr. MCLAUGHLIN. After osteopathic graduation, he has 1 year of internship and 3 years of residency, plus 2 years of supervised work before he can be certified as a surgeon.

The CHAIRMAN. Then when he is certified as a surgeon, does he become an M.D.?

Mr. MCLAUGHLIN. No; he is an osteopathic surgeon.

The CHAIRMAN. I do not know whether I am acquainted with it enough to ask an intelligent question. What kind of osteopathic surgery does one submit himself to?

Mr. GOURLEY. Mr. Chairman in 38 States, an osteopathic applicant obtains an unlimited license.

The CHAIRMAN. What do you mean, an unlimited license? To do anything he wants to?

Mr. GOURLEY. Ethically, yes. So far as the healing art is concerned, he has the same scope of license as a doctor of medicine. In a number of States, they have the exact same license.

The CHAIRMAN. That is what we are trying to get. I think that is what Mr. Brotzman was getting at.

Mr. GOURLEY. Yes, sir.

The CHAIRMAN. Then he becomes not only a doctor of osteopathy, but also a doctor of medicine?

Mr. GOURLEY. There are two routes to become a physician. One can attend a medical school and become a physician, or one can attend an osteopathic school and become a physician.

The CHAIRMAN. What is your definition of a physician? I would like to have the technical description here. What is your definition of a physician?

Mr. GOURLEY. Well, that is broader than license to do surgery.

The CHAIRMAN. Well, let me ask you this, then, Doctor: If an osteopath becomes a surgeon, can he perform tonsilectomies?

Mr. GOURLEY. Major operative surgery, yes, sir.

The CHAIRMAN. Now, in the States where he is permitted to do that, does he have to pass the same board as an M.D. who comes from a medical school in order to become a surgeon in that field?

Mr. GOURLEY. In a number of States, they do exactly. In some States, they take a medical board where they have no representation. In others, they take an examination before a medical board where there are representatives of the osteopathic profession. In some States, there are no M.D.'s on the Board. But nevertheless, their examination has the same scope, Mr. Chairman, as in the case of the medical board.

The CHAIRMAN. I am merely asking for information, I hope you will understand that.

Mr. GOURLEY. Yes, sir.

The CHAIRMAN. I had always thought there were two entirely separate, conflicting philosophies between the healing approach of osteopaths and the approach of what we call the medical doctors, the M.D.'s.

Mr. GOURLEY. There is a distinction, that is right. But so far as surgery is concerned, there is no school of medicine on that. If it is surgery, it is surgery. They have the same training in that.

The CHAIRMAN. And some boards, then, will certificate an osteopath for surgery, just as they do a person who has gone through medical school and taken his required work for surgery?

Mr. GOURLEY. In 38 States.

The CHAIRMAN. Now, does an osteopath who is permitted to pursue that field have to take the same training in an accredited school of surgery as though he were from a medical school?

Mr. GOURLEY. He does. He takes an internship and he has an approved residency training of from 3 to 5 years.

The CHAIRMAN. That is very interesting. I am glad to know that. Do you know how many doctors of osteopathy there are?

Mr. GOURLEY. I think one of the appended charts shows there are about 14,700 osteopathic graduates in practice.

The CHAIRMAN. 14,700. Now, some of those are also M.D.'s, aren't they?

Mr. GOURLEY. There are more of them that are M.D.'s this year than there were this time last year.

The CHAIRMAN. Then, of course, the answer to my question is "Yes." Because if you had any last year, you have more this year.

Mr. GOURLEY. Yes.

The CHAIRMAN. What percentage of osteopaths can practice medicine, too, would you say?

Mr. GOURLEY. I think it is between 80 and 90 percent that have the full license to practice.

The CHAIRMAN. Well, that is a revelation. Have you been going through a merger during the last few years?

Mr. GOURLEY. There have been rumors.

The CHAIRMAN. One other question, Mr. Chairman, I would ask. We did explore this rather fully 2 years ago, or last year, whenever we had it.

I noticed in your statement, "A survey in 1958 indicated that the osteopathic colleges spent $6.8 million for basic operations, only $1.4 million, or 21 percent, of which came from tuition and fees. Gifts and grants and deficit financing supplied the rest."

Now, you have five schools, I believe?

Mr. MCLAUGHLIN. Right.

The CHAIRMAN. If you increase the facilities, where are you going to get the operating costs?

Mr. MCLAUGHLIN. I think likely from the same place we have been getting them, which is from gifts.

The CHAIRMAN. Like the Federal Government's deficit financing?

Mr. MCLAUGHLIN. I hope not too much of that, but our gifts have been increasing. Our support by our alumni is increasing gradually, each year. And there have been some tuition increases in the last 2 years. This 21 percent more nearly should be 25 at the present time, I would say.

The CHAIRMAN. This poses a question I don't think has been raised before, and I might as well raise it here now.

It is a matter we will have to do some research into—namely, the requirement that those who seek to participate in this program show that they can adequately operate facilities after they are provided.

Thank you very much.

Mr. ROBERTS. Thank you, Chairman Harris.

Thank you, gentlemen.

(Charts referred to in Merlyn McLaughlin's prepared statement are as follows:)

CHART A[1]

Geographic distribution of osteopathic students, 1962

State or country	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total students
Alabama	1	1	2			4
Arizona		1	2	4		7
Arkansas			2	1		3
California	4	1	10	9		24
Colorado	1	2	9	1		13
Connecticut	1	1		2	4	8
Delaware	1	1			3	5
District of Columbia		1			2	3
Florida	1	6	12	9	3	31
Georgia			3	1		4
Idaho				3		3
Illinois	31	4	4	14	1	54
Indiana	11		10	10		31
Iowa		25	4	9		38
Kansas		2	18	8		28
Kentucky	1		3	8		12
Louisiana			1	1		2
Maine			1	3		4
Maryland			3		3	6
Massachusetts	1	4		4	3	12
Michigan	121	100	35	49	2	307

[1] From Educational Supplement, AOA Journal, January 1963.

Geographic distribution of osteopathic students, 1962—Continued

State or country	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total students
Minnesota	2			1		3
Mississippi			2			2
Missouri		1	51	40		92
Montana	1			1	2	4
Nebraska			3	1		4
Nevada			1			1
New Hampshire				1		1
New Jersey	6	14	8	20	42	90
New Mexico		2	2	2		6
New York	17	31	29	45	44	166
North Carolina			2	1		3
North Dakota		1		1		2
Ohio	32	36	40	24	11	143
Oklahoma		6	35	9		50
Oregon			1	1		2
Pennsylvania	7	24	15	31	191	268
Rhode Island					9	9
South Carolina			1			1
South Dakota			2			2
Tennessee		1	2	2		5
Texas		5	54	19		78
Utah	1					1
Vermont		1				1
Virginia		1	2	1		4
Washington		3	3	7	1	14
West Virginia				4		4
Wisconsin	5	4		2		11
Wyoming			1			1
China		1	1			2
Greece				1		1
India		1				1
Iran		1	1	2		4
Israel				1		1
Japan			1	1		2
Puerto Rico				1		1
Other foreign countries	2	1	1			4
Total	247	283	377	355	319	1,581

CHART B[1]

Where osteopathic 1st-year students received undergraduate training, fall 1962

State and colleges	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total
Alabama: Auburn University	1					1
Total	1					1
Arizona: University of Arizona				2		2
Total				2		2
California:						
Los Angeles State College				1		1
Pacific Union College			1			1
San Francisco State College				1		1
University of San Francisco			1			1
University of Southern California				1		1
Total			2	3		5

[1] From Educational Supplement, AOA Journal, January 1963.

Where osteopathic 1st-year students received undergraduate training, fall 1962—Continued

State and colleges	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total
Colorado:						
Mesa County Junior College			1			1
University of Colorado	1		1			2
Total	1		2			3
Connecticut: University of Bridgeport		1				1
Total		1				1
Delaware: University of Delaware				1		1
Total				1		1
Florida:						
Florida Southern College				1		1
Florida State University			1	1		2
Orlando Junior College				1		1
University of Florida	1	1	1			3
University of Miami			1			1
University of Tampa			1			1
Total	1	1	4	3		9
Idaho:						
College of Idaho				1		1
Northwest Nazarene College				1		1
Total				2		2
Illinois:						
Bradley University				1		1
DePaul University		1				1
Greenville College			1			1
North Central College				1		1
Northwestern University	1	1				2
Olivet Nazarene College	1					1
Roosevelt University	3					3
Total	5	2	1	2		10
Indiana:						
Ball State Teachers College			1			1
Evansville College				2		2
Franklin College of Indiana	1					1
Huntington College		1				1
Indiana University	4			2		6
Manchester College	1		1			2
Oakland City College			1			1
University of Notre Dame				1		1
Wabash College			1			1
Total	6	1	4	5		16
Iowa:						
Drake University	1	4				5
Iowa State University		1				1
Iowa State Teachers College		1				1
Iowa Wesleyan College				1		1
State University of Iowa		1	1	1		3
University of Dubuque				2		2
Total	1	7	1	4		13
Kansas:						
Fort Hays Kansas State College			1			1
Kansas City Junior College			1			1
Kansas State University			1	2		3
Sacred Heart College				1		1
University of Kansas			3			3
Total			6	3		9

Where osteopathic 1st-year students received undergraduate training, fall 1962— Continued

State and colleges	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total
Kentucky: University of Kentucky				1		1
Total				1		1
Maine:						
Bowdoin College		1				1
Colby College				1		1
Total		1		1		2
Maryland: University of Maryland					1	1
Total					1	1
Massachusetts:						
Boston University	1					1
University of Massachusetts		1				1
Total	1	1				2
Michigan:						
Adrian College	1			1		2
Albion College		1				1
Central Michigan University				1		1
Detroit Institute of Technology		3	2	1		6
Eastern Michigan University	1		1			2
Ferris Institute	2	1		1		4
Flint Junior College				1		1
Kalamazoo College				2		2
Michigan State University	2			2		4
Olivet College	1		1	1		3
University of Detroit	1			1		2
University of Michigan	3	2	2	1		8
Wayne State University	19	9	3	4		35
Western Michigan University	2	1		1		4
Total	32	17	9	17		75
Minnesota:						
St. John's University					1	1
St. Olaf College	1					1
University of Minnesota	1			1		2
Total	2			1	1	4
Mississippi:						
Mississippi Southern College			1			1
Mississippi Vocational College			1			1
Total			2			2
Missouri:						
Northeast Missouri State Teachers College				11		11
Park College			1			1
St. Joseph Junion College			1			1
St. Louis College of Pharmacy and Allied Sciences				1		1
University of Kansas City			4			4
University of Missouri			1	1		2
Total			7	13		20
Nebraska: Union College			1			1
Total			1			1
New Hampshire: University of New Hampshire				1		1
Total				1		1

Where osteopathic 1st-year students received undergraduate training, fall 1962—Continued

State and colleges	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total
New Jersey:						
College of St. Elizabeth				1		1
Fairleigh Dickinson College				4	2	6
Rider College					1	1
Rutgers, The State University	1	1		3	2	7
Seton Hall University			1			1
Trenton Junior College		1				1
Upsala College	1			1		2
Total	2	2	1	9	5	19
New Mexico: Eastern New Mexico University		1				1
Total		1				1
New York:						
Brooklyn College	2	3	2	2	3	12
City College, The					1	1
Colgate University					1	1
Columbia University		2	2		1	5
Ithaca College			1			1
LeMoyne College				1		1
Long Island University		5	1		1	7
Manhattan College			1			1
New York University			2		1	3
St. Francis College			1			1
State University of New York				1		1
Syracuse University			1			1
Total	2	10	11	4	8	35
North Carolina: University of North Carolina			1			1
Total			1			1
Ohio:						
Ashland College			1	1		2
College of Steubenville			1	1		2
Kent State University		1		1		2
Kenyon College				2		2
Marietta College		3				3
Mount Union College		1				1
Ohio Northern University	1	2				3
Ohio State University	1	5	4	1	3	14
Ohio University	1					1
Otterbein College				1		1
University of Cincinnati	1					1
University of Dayton			1		2	3
University of Toledo		2	1			3
Western Reserve University		1	2			3
Youngstown University		1	2		1	4
Total	4	16	12	7	6	45
Oklahoma:						
Bethany-Nazarene College		2	1			3
Central State College			1			1
Northeastern State College			5			5
Northwestern State College		1				1
Oklahoma Baptist University		1	1			2
Oklahoma City University		1		1		2
Oklahoma State University of Agriculture and Applied Science			2	2		4
Southeastern State College			1			1
Southwestern State College			1			1
University of Oklahoma			1			1
University of Tulsa			1			1
Total		5	14	3		22

Where osteopathic 1st-year students received undergraduate training, fall 1962—Continued

State and colleges	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total
Pennsylvania:						
Albright College				1	2	3
Allegheny College					1	1
Drexel Institute of Technology					1	1
Duquesne University	1			1		2
Franklin and Marshall College		2			1	3
Gannon College			1		1	2
Geneva College				1		1
LaSalle College					7	7
Muhlenberg College				1		1
Pennsylvania Military College			1			1
Pennsylvania State University					1	1
Philadelphia College of Pharmacy and Science		1			17	18
St. Joseph's College			1		7	8
Temple University		4		1	20	25
University of Pennsylvania		1			6	7
University of Pittsburgh	1	1	2		1	5
University of Scranton					1	1
Ursinus College					1	1
Villanova University					1	1
Washington and Jefferson College					1	1
York Junior College					1	1
Total	2	9	5	5	70	91
Rhode Island: Brown University	1					1
Total	1					1
South Carolina:						
Allen University			1			1
The Citadel	1					1
Total	1		1			2
South Dakota: State University of South Dakota			1			1
Total			1			1
Tennessee:						
Belmont College				1		1
Carson-Newman College			1			1
East Tennessee State College				1		1
George Peabody College for Teachers			1			1
University of Tennessee					1	1
Total			2	2	1	5
Texas:						
Abilene Christian College			1	1		2
Agricultural and Mechanical College of Texas				3		3
Arlington State College			1			1
Baylor University				1		1
East Texas State College			1			1
Hardin-Simmons University				1		1
Howard Payne College				1		1
North Texas State University			1			1
Southwestern University				1		1
Stephen F. Austin State College			1			1
Texas Wesleyan College			1			1
Trinity University			1			1
University of Houston			1			1
University of Texas			5			5
West Texas State College			1			1
Total			14	8		22

Where osteopathic 1st-year students received undergraduate training, fall 1962—Continued

State and colleges	Chicago College of Osteopathy	College of Osteopathic Medicine and Surgery, Des Moines, Iowa	Kansas City College of Osteopathy and Surgery	Kirksville College of Osteopathy and Surgery	Philadelphia College of Osteopathy	Total
Washington:						
Central Washington College of Education				1		1
University of Pudget Sound				1	1	2
University of Washington				1	1	2
Total				2	2	4
Wisconsin:						
Lakeland College				1		1
St. Norbert College					1	1
Wisconsin State College		1				1
Total		1		1	1	3
Grand total	62	75	101	100	95	433

TABLE 17.—*Number of physicians (M.D. and D.O.) and physician-population ratios, 1931–62*

Item	48 States and District of Columbia			50 States, District of Columbia, Puerto Rico, and outlying areas	
	1931	1940	1949	1960	1962
Population, including Armed Forces abroad (in thousands, as of July 1)	124,149	132,122	149,188	183,239	189,209
Number of physicians	168,906	191,043	218,977	264,193	273,770
Physicians (M.D.) [1]	158,406	178,643	206,277	249,989	259,105
Physicians (D.O.) [2]	10,500	12,400	12,700	14,204	14,665
Physicians per 100,000 population	136.0	144.6	146.8	144.2	144.7
Physicians (M.D.)	127.6	135.2	138.3	136.4	136.9
Physicians (D.O.)	8.4	9.4	8.5	7.8	7.8

[1] Includes all interns and residents in training programs; see tables 1–3 for adjustment.
[2] Estimates for 1931–49 based on numbers surviving from all D.O.'s graduated from U.S. schools; later data based on individual physician punchcards provided by the American Osteopathic Association to the Public Health Service as of Dec. 31, 1959 and 1961.

TABLE 18.—*Type of practice of physicians (M.D. and D.O.), 1962*

Type of practice	Number of physicians			Percent of physicians		
	Total	M.D.	D.O.	Total	M.D.	D.O.
Estimated total	273,770	259,105	14,665	100.0	100.0	100.0
Private practice:						
Full-time specialists	100,845	99,595	1,250	36.8	38.4	8.5
Part-time specialists	14,851	12,682	2,169	5.4	4.9	14.8
General practitioners	64,548	57,789	6,759	23.6	22.3	46.1
Full-time manipulative therapy	1,192	0	1,192	.4	0	8.1
Other full-time practice [1]	39,521	38,989	532	14.5	15.1	3.6
Training programs [2]	38,625	37,810	815	14.1	14.6	5.6
Retired, not in practice	13,321	12,240	1,081	4.9	4.7	7.4
Practice not reported	867	0	867	.3	0	5.9

[1] Includes non-Federal physicians in hospital, teaching, administration, research, and preventive medicine and Federal physicians in all types of practice other than training programs.
[2] Includes all interns and residents in training programs; see tables 1–3 for adjustment.

TABLE 19.—*Type of specialty of physicians (M.D. and D.O.), 1962*

Type of specialty	Number of physicians			Percent of physicians		
	Total	M.D.	D.O.	Total	M.D.	D.O.
Estimated total	273,770	259,105	[1] 14,665	100.0	100.0	100.0
Full-time specialists:						
Medical specialties	42,003	41,710	293	15.4	16.1	2.0
Surgical specialties	59,607	58,813	794	21.8	22.7	5.4
Psychiatry and neurology	12,415	12,378	37	4.5	4.8	.2
Other specialties	17,063	16,937	126	6.2	6.5	.9
Part-time specialists	15,068	12,899	2,169	5.5	5.0	14.8
General practitioners [2]	112,234	104,128	8,106	41.0	40.2	55.3
Full-time manipulative therapy	1,192	0	1,192	.4	0	8.1
Retired, not in practice	13,321	12,240	1,081	4.9	4.7	7.4
Practice not reported	867	0	867	.3	0	5.9

[1] Specialists are those in private practice only.
[2] Includes all interns and residents in training programs.

TABLE 20.—*Number of full- and part-time specialists, by type of specialty, 1962*

Type of specialty	Full-time specialists			Part-time specialists		
	Total	M.D.	D.O.	Total	M.D.	D.O.
All specialists	131,088	[1] 129,838	[2] 1,250	15,068	[2] 12,899	[2] 2,169
Medical specialties	42,003	41,710	293	3,507	3,044	463
Dermatology	2,687	2,660	27	270	247	23
Internal medicine and subspecialties:						
Allergy	709	707	2	231	224	7
Cardiovascular disease	947	937	10	457	403	54
Gastroenterology	411	411	0	95	90	5
Internal medicine	25,532	25,324	208	1,241	958	283
Pulmonary diseases	1,164	1,164	0	251	249	2
Pediatrics	10,553	10,507	46	962	873	89
Surgical specialties	59,607	58,813	794	9,786	8,312	1,474
Anesthesiology	5,691	5,555	136	1,015	806	209
Colon and rectal surgery (proctology)	714	654	60	514	174	340
General surgery	18,913	18,679	234	4,886	4,456	430
Neurological surgery	1,228	1,222	6	14	13	1
Obstetrics and gynecology	11,766	11,680	86	2,219	1,873	346
Ophthalmology	11,043	6,248	172	653	236	105
Otolaryngology		4,623			312	
Orthopedic surgery	4,941	4,881	60	206	190	16
Plastic surgery	707	702	5	20	18	2
Thoracic surgery	926	922	4	12	12	0
Urology	3,678	3,647	31	247	222	25
Psychiatry and neurology	12,415	12,378	37	548	492	56
Psychiatry	11,466	11,440	26	486	443	43
Neurology	949	938	11	62	49	13
Other specialties	17,063	16,937	126	1,227	1,051	176
Administrative medicine	979	979	0	11	11	0
Pathology	4,520	4,501	19	88	79	9
Physical medicine and rehabilitation	644	632	12	121	59	62
Preventive medicine:						
Aviation medicine	510	510	0	75	75	0
General prevent medicine	304	304	0	8	8	0
Occupational medicine	1,758	1,751	7	633	589	44
Public health	1,850	1,850	0	24	24	0
Radiology	6,498	6,410	88	267	206	61

[1] Includes 99,595 in private practice and 30,243 in other forms of practice (except training programs).
[2] In clinical practice only.
*From Public Health Service Publication No. 263 (sec. 14).

Summary of application, admission, and enrollment data for each of the five schools of osteopathy for the 6-year period 1957–58 to 1962–63

[Format adapted from p. 134, hearings on H.R. 4999, January 1962]

	Applicants	First-year class	Percent applicants enrolled	Total enrolled (4 years)
1957–58:				
Chicago College of Osteopathy	260	73	28.0	239
College of Osteopathic Medicine and Surgery, Des Moines, Iowa	177	80	45.0	241
Kansas City College of Osteopathy and Surgery	255	106	41.5	381
Kirksville College of Osteopathy and Surgery	302	100	33.1	339
Philadelphia College of Osteopathy	259	91	35.1	353
Total	1,253	450		1,553
1958–59:				
Chicago College of Osteopathy	275	64	23.2	246
College of Osteopathic Medicine and Surgery, Des Moines, Iowa	187	74	39.5	258
Kansas City College of Osteopathy and Surgery	263	100	38.0	402
Kirksville College of Osteopathy and Surgery	316	98	31.0	348
Philadelphia College of Osteopathy	239	84	35.1	327
Total	1,280	420		1,581
1959–60:				
Chicago College of Osteopathy	234	71	30.3	248
College of Osteopathic Medicine and Surgery, Des Moines, Iowa	190	75	39.4	268
Kansas City College of Osteopathy and Surgery	264	101	38.2	403
Kirksville College of Osteopathy and Surgery	303	95	31.3	340
Philadelphia College of Osteopathy	232	79	34.0	297
Total	1,223	421		1,556
1960–61:				
Chicago College of Osteopathy	194	68	35.0	248
College of Osteopathic Medicine and Surgery, Des Moines, Iowa	161	70	44.8	282
Kansas City College of Osteopathy and Surgery	317	76	20.1	384
Kirksville College of Osteopathy and Surgery	300	91	30.3	352
Philadelphia College of Osteopathy	220	66	30.3	302
Total	1,192	371		1,568
1961–62:				
Chicago College of Osteopathy	219	66	30.0	247
College of Osteopathic Medicine and Surgery, Des Moines, Iowa	199	82	41.2	280
Kansas City College of Osteopathy and Surgery	281	103	36.6	375
Kirksville College of Osteopathy and Surgery	359	100	27.8	355
Philadelphia College of Osteopathy	251	91	36.2	304
Total	1,309	442		1,561
1962–63:				
Chicago College of Osteopathy	213	67	31.3	247
College of Osteopathic Medicine and Surgery, Des Moines, Iowa	220	75	34.0	283
Kansas City College of Osteopathy and Surgery	342	101	29.5	377
Kirksville College of Osteopathy and Surgery	331	100	30.0	355
Philadelphia College of Osteopathy	275	95	34.5	319
Total	1,381	438		1,581

Mr. ROBERTS. Mr. Richard Shipman of the National Farmers Union. Proceed, Mr. Shipman.

STATEMENT OF RICHARD C. SHIPMAN, ASSISTANT DIRECTOR, LEGISLATIVE SERVICE DIVISION, NATIONAL FARMERS UNION

Mr. SHIPMAN. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee:

My name is Richard C. Shipman. I am assistant director of the Legislative Service Division of the National Farmers Union.

We appreciate very much this opportunity to appear before the committee to express the point of view of the more than 250,000 farm families who are members of our organization.

The National Farmers Union wishes to express strong support for H.R. 12, The Health Professions Educational Assistance Act of 1963.

We do so because we recognize the serious need of the Nation as a whole for more doctors, dentists, and health specialists of all kinds. But more especially we wish to bring to the attention of the committee the even more critical shortage of professional people in the small towns of rural America where they could be of service to farm people.

The traveling country doctor who once served rural America is now long gone from the countryside. Today more typically, farm people—especially children—must depend upon the occasional services of the public health doctor and nurse or travel, sometimes great distances, to the nearest town or city.

This means, of course, that in many emergency cases of acute illness, where time and space spell the difference between life and death, that the scales are tipped heavily on the side of death for farm people because of the scarcity of doctors in rural areas.

In other words, the miracle men and the miracle drugs of modern medicine have little meaning for people who are denied their aid because of time and space.

I am sure this is no new problem which I bring before this committee but for the record I direct your attention to statistics from the Health Manpower Source Book of the U.S. Department of Health, Education and Welfare, table 2, which is attached to this statement.

This shows that there are 37 States which fall below the national average of 125.3 doctors per 100,000 of the civilian population.

The shortage is most acute in Southern, Midwestern, Great Plains, and Rocky Mountain States. South Dakota, for example, has only 70.7 doctors per 100,000 people. These are figures for the States as a whole. Now look at table 3, which shows that in the isolated areas of these States, the ratio falls below 50 physicians per 100,000 population. There are 881 counties which fall in this isolated rural category. Slightly better off are 1,107 isolated semirural counties with about 75 doctors per 100,000 population.

It is these two categories constituting about two-thirds of all the counties in America which are our most serious problem.

We believe that there are two main reasons why it is difficult to secure doctors for these rural areas. One is cultural background—the other is money.

Let us consider the first reason. There is an old saying that you can take the boy out of the country but you can't take the country out of the boy. This old saying has a kernel of truth which we believe the committee should consider and which is borne out in statistical evidence.

From the Journal of Medical Education we find that the place where the boy is brought up is the most significant factor in determining where he will practice after leaving medical school.

We refer you to table 1 attached. Therefore, the problem, it seems to us, resolves itself down to the question of how we get more farm boys and girls to study medicine.

Here we find the second hard fact that the vast majority of young men who study medicine come from families with incomes of over $10,000 per year. According to 1962 statistics, farm income is $1,430, per capita, or about 58.5 percent of nonfarm income which is $2,445. It is hard to see from these figures that few farm families can afford the long and expensive training necessary to make doctors out of their sons.

Now, Mr. Chairman, I come to my only criticism of this bill. If we are to really solve this problem of doctor shortage in rural areas in the best and in the long run the most economical way—if we are to really get more young men and women of rural background to study medicine we must give them a better opportunity than this bill offers. In my opinion, the forgiveness of 50 percent of loans for medical school education is hardly sufficient to attract very many along the almost impossible road they must travel.

We must, I think, bear in mind that for a young high school graduate to become a doctor means 10 or 12 difficult years of hard study even without any financial worries.

Add to this the fact that it will cost $20,000 for the privilege of doing this study and the obstacles will seem to be insurmountable to a young person brought up in the frugal atmosphere which surrounds the declining rural communities of America. He will ask himself, "How can I ever pay back that much money if I must practice in this depressed rural economy?"

I believe we should offer the hope that if he gets through the first 4 years of college for which he will undoubtedly be in debt, he will then be given a chance to have any future debt substantially paid by Federal aid if he goes on to study and practice medicine in an area of doctor shortage.

Therefore, I suggest that the bill should be amended to extend the forgiveness feature indefinitely, if the professional practice is continued in an area of shortage.

There are powerful forces at work in our country today tending to impoverish the rural community, leaving it economically and socially deprived. This is due in part to the constant movement of young people from the country to the city.

This fact alone, it seems to Farmers Union, is strong justification for Federal aid to medical education or any kind of education.

Mr. Chairman, in connection with the isolated rural and isolated semirural counties, it occurs to me that I have neglected to say that there are some 40 million people who live in these two categories of counties.

Mr. Chairman, may I close by saying that the agricultural technological revolution is forcing many of our young people out of farming. It seems to us both wise and fair, as well as in the national interest, to make it possible for these young people to get the kind of professional education that will allow them to go back to their childhood surroundings to serve the people of those areas as doctors and dentists which are so badly needed.

Thank you.

(Tables 1, 2, and 3 referred to in the prepared statement of Richard Shipman are as follows:)

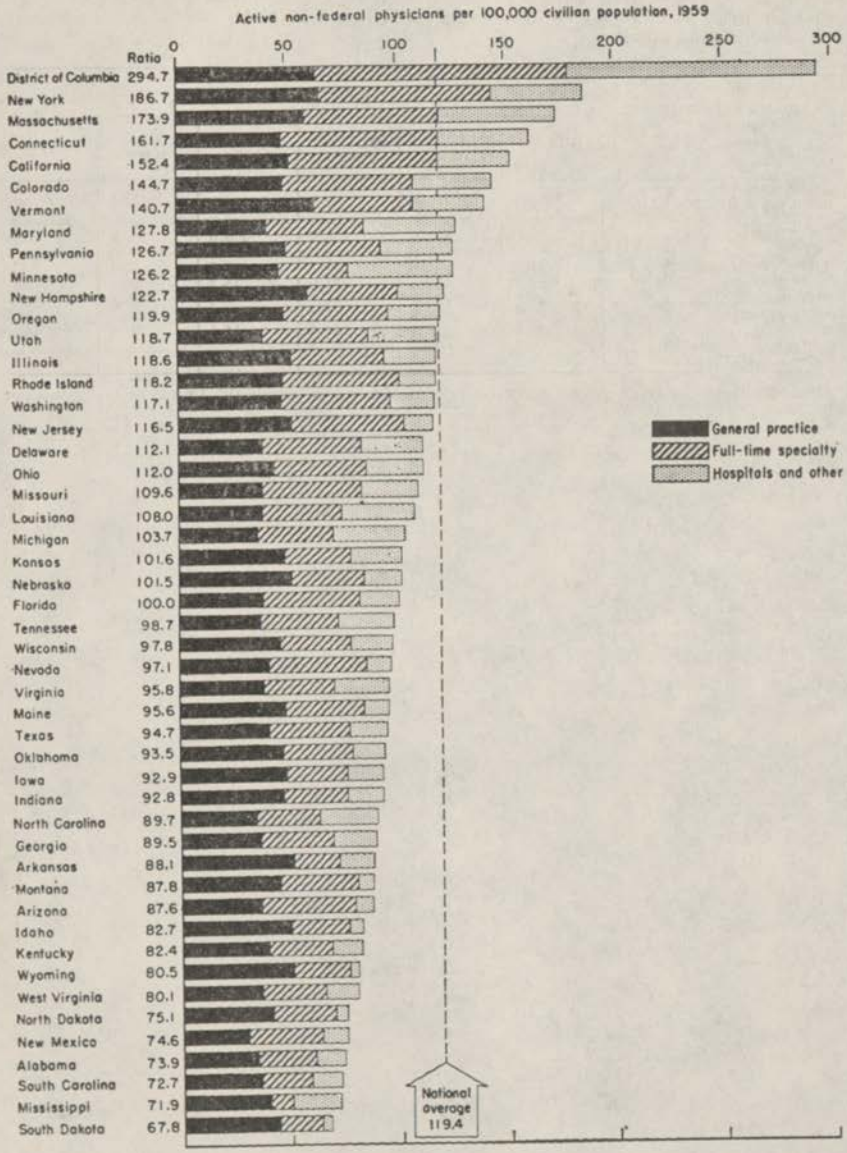
TABLE 1.—*Percent distribution of medical college graduates in private practice whose prior residence was in various size communities by size of community of practice: 1950 class*

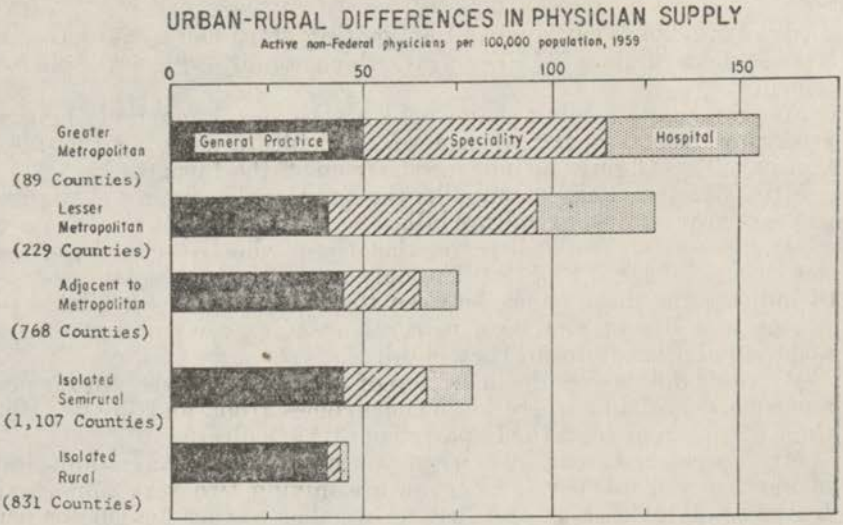
Size of community of practice	Size of community of prior residence					
	All sizes	500,000 and over	100,000 to 499,999	25,000 to 99,999	5,000 to 24,999	Under 5,000
Number of graduates	[1] 3,311	850	729	577	488	590
All sizes	100.0	100.0	100.0	100.0	100.0	100.0
500,000 and over	17.6	45.6	7.3	9.5	7.4	7.3
100,000 to 499,999	19.7	10.8	41.3	13.2	14.9	15.9
25,000 to 99,999	19.8	13.8	14.7	40.4	20.9	14.6
5,000 to 24,999	22.9	17.6	19.9	22.5	36.7	22.7
Under 5,000	19.6	11.8	16.4	14.4	20.0	39.5
Foreign or not reported	.4	.4	.4			

[1] Includes 77 graduates whose community of prior residence was outside the United States or was not reported.

PHYSICIAN-POPULATION RATIO IN EACH STATE

AND TYPE OF PRACTICE OF PHYSICIANS





Mr. ROBERTS. Thank you, Mr. Shipman. Especially do I want to thank you for the tables attached to your statement. I think they are very helpful in pointing up this problem the committee is concerned with with reference to areas of shortage, and rural areas generally.

Mr. SHIPMAN. Thank you.

Mr. ROBERTS. I think the committee will probably give quite a bit of serious consideration to that feature of the bill. I am not saying what the committee will do about it, but that is something that is up to everybody.

I do feel that there must be some more consideration given to this forgiveness feature, because I think you certainly speak some language I am familiar with with reference to the problem we have in these areas.

I thank you for your statement.

Mr. SHIPMAN. Thank you, sir.

Mr. ROBERTS. Mr. Younger?

Mr. YOUNGER. Thank you, Mr. Chairman.

Mr. SHIPMAN, in your statement on page 3, is there any significance in your reference as to families with incomes of over $10,000 per year, and then farm income of $1,430 per capita?

In one case, you use per capita and in the other you use families. What is the significance?

Mr. SHIPMAN. The only significance is that those are the figures that are available that I have been able to get in our research.

Mr. YOUNGER. Does this mean $1,430 per year with a family of five, which is the normal family, or per capita?

Mr. SHIPMAN. No; it is $1,430 per capita, as per individual.

Mr. YOUNGER. That is per capita. If you have five individuals in the family——

Mr. SHIPMAN. Then it would be five times that.

Mr. YOUNGER. That is what I am getting at, so you would have an income there of about $7,000 a year, which would seem very high for a farm.

Mr. SHIPMAN. I think that would not be so. I got these figures yesterday from the Department of Agriculture as being the 1962 figures. These figures include income from off-the-farm work.

Mr. YOUNGER. That sounds like the questionable figures they give us every year on the agriculture bill.

Mr. SHIPMAN. You will notice that those who live elsewhere, the per capita income is $2,445. The only purpose of the comparison is to indicate the discrepancy between the income that is available to people who live on the farm in rural areas, as compared to others and their ability to educate their children.

We could quible over the definition of a farmer and who is a farmer and who is not, and where his income comes from, and so on. But these figures came from the Department of Agriculture.

Mr. YOUNGER. In one case, when you use the family as a unit and in another you use per capita, you are mixing two very important features. It makes a lot of difference whether you are figuring on per capita or figuring on families.

I think what you must mean is the farm income, $1,430 per farm family.

Mr. SHIPMAN. In some States, it is less than that per farm family. It varies widely, of course, throughout the United States. And of course, an average figure always puts those of low income in a rather bad light, because there are many who must fall below the average.

I had figures which I contemplated using, which showed farm income per individual unit. They vary so widely that we could get an average figure there that would be misleading.

But I noticed in West Virginia, for instance, that farm income per farm was between $900 and $1,000, whereas in Montana, it was $3,400. In Arizona, it was $18,000. So it depends on what kind of a farm you have got and where you live and what kind of a crop you are raising and what your prices are.

And you know, there is a wide variation in farm income. Averages, I do not think, do justification, really, to some of the areas which are in really bad shape.

Mr. YOUNGER. You would not be bothered too much, then, about helping the farm boys from Arizona through college.

Mr. SHIPMAN. I suppose there are lots of things which enter into the average income in Arizona. I imagine there are some very large units there which probably are not family farms, which would make their figures run up to a rather high average. I noticed that California had a very high average income. We all know, of course, that there are very large, industrial-type units there. But those would not be much of an indication of the condition of the family which is living out on a family farm.

Mr. YOUNGER. One other question. On page 5, you recommend that we extend the forgiveness feature indefinitely. Is that a nonpayable loan that you are talking about?

Mr. SHIPMAN. No; what I mean is that under the bill as it is presently written, you will forgive up to 50 percent.

Mr. YOUNGER. Yes.

Mr. SHIPMAN. If they go back and practice in shortage areas. That is 10 percent per year. But at the end of 5 years, you would have been forgiven all that you would be allowed to be forgiven under the bill at present. I am proposing that if you stay on in shortage areas for 10 years, you could be forgiven all of it. I think it would encourage more doctors to stay in rural areas for 10 years if they could be forgiven all of that loan.

I am not sure that 5 years would establish him enough in a rural community so that he would stay there. But if we could encourage them to stay there longer, and especially in view of the fact that their income is undoubtedly going to be lower from the kind of patronage that they are going to have, we should be willing to subsidize them to that extent.

Mr. YOUNGER. You did not mean indefinitely in terms of time, but rather in terms of entirety?

Mr. SHIPMAN. Well, yes. That is, if they stayed 6 years, they would be forgiven 60 percent, or 7 years, 70 percent. That is the only reason for the indefinite part. At the end of 10 years, the whole thing would be forgiven.

Mr. ROBERTS. Mr. O'Brien, any questions?

Mr. O'BRIEN. No.

Mr. ROBERTS. The gentleman from South Carolina?

Mr. HEMPHILL. Thank you, Mr. Chairman.

I am just wondering what impact this legislation would have on the cost of medicine to people of low income. I am thinking about the specialists that charge you $25 or $50 a crack and whether or not, if we pass this, there would be any incentive to lower those fees to people whose income is limited?

Because if I read them correctly, only 12 percent of the American public has a family income of over $10,000 a year. Do you think that the fees might go down for the people?

Mr. SHIPMAN. I can only suppose it would, and this is really out of my area of competence. But it seems to me if we had more specialists, it seems reasonable their fees would be much lower. I realize that some of our highly trained specialists are a very scarce commodity, and they naturally go into the large metropolitan areas, where their specialty is in greater demand and they can demand greater fees.

Mr. HEMPHILL. But I think the lack of facilities is one of the reasons for the fact that they are few in number.

Mr. SHIPMAN. Yes, sir.

Mr. HEMPHILL. And as a result, they have to spend more time in preparedness, which means that they do not get into the moneymaking end of it until their contemporaries have already been out in the business world for 4, 5, 6, or 10 years.

But I am just hoping that the public will not only get the benefit of the additional service, which I am heartily in favor of, but that the public will get benefit from the fact that perhaps there will be more charity work in the specialty field, which is what I hoped for under what I was brought up to believe was the oath of Hippocrates. Perhaps I am a little naive there, but the American people are my responsibility.

Mr. SHIPMAN. I believe that that will take place. I believe that with growing numbers of specialists—I notice according to our tables

that the specialists are the ones who are in shorter supply in rural areas—and naturally, as you say, because of the lack of hospital facilities. We are very hopeful that we will have other legislation which will help us in that area. It is very difficult to maintain the kind of hospitals or clinics that will attract highly trained specialists in rural America.

Mr. HEMPHILL. Well, I live in a small city where the doctors operate on a personal basis and I never heard of them refusing a call. When they come to your house, they do not charge you too much. If your baby is sick, you do not have to take him to the hospital or put him in an ambulance. I am very fortunate, so I do not speak from a platform of criticism or unhappiness about it. I speak from a climate of much happiness. We have the finest doctors in the world in my hometown. They are country doctors, but they can cure you and they will come to see you and they are interested in you.

Mr. SHIPMAN. I think my comment on that would be that most doctors are so busy in the rural areas that they cannot take care of the patients who can come to their office, to say nothing about taking the time to travel out from farm to farm or ranch to ranch, the way they used to in the old days, by horse and buggy.

Mr. HEMPHILL. Well, now, I will accept that, sir, in good faith. I subscribe to your being here. But you know, it is a funny thing, whenever I want something done real good, I call on a busy man. I do not want a fellow that is not busy, because he is lazy or indifferent.

The doctors at home, they will go all night long, will not get any sleep for 2 or 3 days.

But I have heard of an area near here that to get a doctor to come to your home, you almost have to have him get in a wreck and you be on the wrecker and take him by your house on the way to the garage.

Mr. SHIPMAN. I think it is recognized that we are pretty fortunate around D.C. in having more doctors than anywhere else in the country.

I notice yet that over here in Falls Church, where I live, my family doctor works 3 nights a week as well as all day. Yet here we are in an area where there are supposed to be the most doctors. Imagine what it must be out in the country, where the number of doctors is only a sixth of what it is in D.C.

Mr. HEMPHILL. I would ask you one other question. When you made a statement, and I believe the gentleman from California asked you about the forgiveness feature—you are aware of the fact that last year, in considering this legislation, this committee, in what I believe was its wisdom, refused to go along with a grant idea from scholarships, taking the position, if I recollect correctly, that while it is hard to give incentives, that a man who has no idea of paying back in money or in service would not make much of a doctor anyhow.

You did not mean by your testimony to say that we should go back to the grant feature, I am sure.

Mr. SHIPMAN. I do not know just the distinction between the forgiveness and the grant, but we did support grants last year, yes. Now, it seems to me this forgiveness idea, with 10 percent a year, is a much better, perhaps, way of handling it. But we have favored grants to this type of education as well as others, in the form of scholarships, which would be regulated, of course, by the educational institution, as going only to needy students who would not be able to get an educa-

tion otherwise; recognizing that they come from areas of poverty and——

Mr. HEMPHILL. Well, of course, you know, the American greatness is based on work. We can out-produce anybody. We did it during the war. And the man that will not work a little bit, either give some service or make money to pay back, that is really not the American idea, except in foreign aid. We will not get off on that—of giving somebody something for nothing. I do not believe people who have the ambition, if they want to be real doctors or lawyers or whatever they are, would want a grant. If they are going to make the kind of doctors you want to see coming out to see the farm people, and I want to see coming out to see the people in my district, which I already have in my district, they would be people who would want to work.

Incentive is fine. Don't you think that is the best idea?

Mr. SHIPMAN. Oh, yes; I believe there should be incentives, sir. But I do not believe that the grant would be of a size that would hurt anybody's incentive.

I do not think anybody has had any idea of granting the entire cost of education, but to make it possible for those of lower means to be granted something, since they are going to make a contribution to society in the long run which would pay back the grant in service.

After all, public education, it seems to me, in based upon that philosophy. We grant all of our young people up to a high school education free, and that is, in a sense, a grant, to everybody. I see no fault in extending that principle a little further.

Mr. HEMPHILL. Well, I think the principle is all right, but I recollect that when I was a prosecuting attorney, I had a fellow once and they passed him, he was in the eighth grade and he had never passed a grade.

And he was a criminal and he was not worth a hoot, because he had never worked for anything.

I think there ought to be some provision in here for work, and I am not disagreeing with you. I would not ask you a question if I did not have respect for your opinion, sir.

I did want your opinion.

Thank you, Mr. Chairman.

The CHAIRMAN (now presiding). Mr. Kornegay?

Mr. KORNEGAY. Mr. Shipman, I appreciate your statement here today and I would like to know—you did not include it in your statement—if you have available the average annual income of physicians and dentists who are practicing in the small and remote areas.

Mr. SHIPMAN. No, I do not.

Mr. KORNEGAY. Do you know whether or not they are available?

Mr. SHIPMAN. I do not know whether that is available or not. I could inquire.

Mr. KORNEGAY. Well, I feel that it would probably be relevant in view of the forgiveness feature in the bill; that is to say, in determining whether or not the young person who had finished as a doctor or a dentist would be capable of repaying within the first 5 or 10 years of his practice the money that the Government has advanced.

Mr. SHIPMAN. It seems to me, sir, that in view of the fact of the low farm income in rural areas as compared to the rest of the Nation, and the fact that a good many of the patients would be farm people,

the ability to pay would naturally limit the income of the doctor as compared to those who are practicing in cities, where they would have people with higher income.

Mr. KORNEGAY. Well, I would certainly feel that is the case. Of course, it is different, I am sure, in different parts of the country, and that part I know about best, of course, is the part from which I come. Most of our doctors in the rural areas are very prosperous. They seem to be getting along very well financially, and I am inclined to agree with my colleagues from South Carolina.

If we can provide them with the vehicle whereby they can acquire the education and begin to do the service, they should be willing, when they get into their productive years, to pay back in money that which the Government had spent on them in equipping them to do this job.

Mr. SHIPMAN. I would certainly only favor the forgiveness feature if they were willing to go into the shortage areas, which, in a sense, are the hardship posts.

Mr. KORNEGAY. I would agree on that. That is, as I gather from the testimony, one of the more serious problems. The distribution of physicians throughout the country is really more serious than the actual shortage, as I understand it. Certainly, that was the intent of the committee last year in putting this provision into the bill, to encourage the physicians to go into rural and remote areas and serve the people that you represent here today, those that really need the help.

Mr. SHIPMAN. Thank you, sir.

Mr. KORNEGAY. Thank you very much.

The CHAIRMAN. Mr. Long?

Mr. LONG. Mr. Shipman, there is not really a true relationship between the ratio of doctors per 100,000 persons as there is between that and the ratio of doctors to number of patients, is there?

The same disproportionate figure does not follow, does it?

Mr. SHIPMAN. I cannot see why there would not be just as many patients in 100,000 rural people as there would be in 100,000 people anywhere else.

Mr. LONG. Let's take the area around the District of Columbia where the standard of living and the income per capita is much higher than any place else in the United States—certainly higher than the area I represent in the Congress. I believe the people in my area do not have an opportunity—they are not able to go to the doctors as much as the people in this area. While I recognize that perhaps if there were more doctors there, they might avail themselves more of them, I do not think that a correlation between these figures necessarily follows.

Mr. SHIPMAN. Well, I agree that people of low income would probably stay away from the doctor longer, feeling that they could not afford it. But that is another problem which we have to solve in some other ways, I believe.

But we certainly want to try to get farm income up to where it is equal to anybody else's. But that is beyond the purview of this bill.

Mr. LONG. I was not bringing it up to throw discredit upon the figures and the disproportionate number of doctors in certain areas as compared to other areas. I was requesting your views on this overall problem of farm people and people from low income areas ability to meet their medical needs.

I do not propose here to go into this broad general question, which is not what we are looking at today. I do thing that it does make these figures a little unrealistic when you have to consider that fact. I know from my own experience that this is true.

Mr. SHIPMAN. Well, I think we should provide equality of opportunity for any service which is of this kind, and then, of course, differences of income occur in all areas and low income is not confined to rural areas. Naturally, low income people in the city perhaps do not go to doctors as much as they should.

But I think the fact that doctors have been quite—what should I say—broad-minded in forgiving bills, they will serve anybody regardless of whether they are paid or not—that if we can make the doctor available, that is the largest part of the problem.

Mr. LONG. I agree with you.

That is all, Mr. Chairman.

The CHAIRMAN. Mr. Van Deerlin?

Mr. VAN DEERLIN. No questions.

The CHAIRMAN. Thank you very much.

Mr. SHIPMAN. Thank you, Mr. Chairman.

The CHAIRMAN. Dr. John Porterfield.

STATEMENT OF DR. JOHN PORTERFIELD, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIF.

The CHAIRMAN. I observe that you are from the University of California, Dr. Porterfield.

Dr. PORTERFIELD. That is correct, sir.

The CHAIRMAN. You may identify yourself for the record, if you like, and proceed.

Dr. PORTERFIELD. Thank you, very much, Mr. Chairman.

I am Dr. John D. Porterfield, presently coordinator of medical and health sciences for the University of California. I would like to admit that I do not have a prepared statement. I am under the understanding that tomorrow you will be hearing from representatives of the deans of the medical schools and the Association of American Medical Colleges. I do not propose to substitute for the (testimony) that you will hear from them.

But I would like to take advantage of this opportunity and appreciate the privilege to speak in supplementation with respect to some of the problems of the State of California.

In that respect, I have been asked to represent the deans of all the medical schools of that State, in addition to those of the University of California.

As I am sure is very widely known by now, the population of the State of California has reached something like the 17.5 million mark, and very careful estimates have put the figure of the population of the State at around 25 million by 1975.

This means that on the order of 1,000 people a day come into the State, in addition to the natural increase from births to residents of the State.

It takes up to a year, obviously, for these people to begin to pay taxes in the State and locally, and yet their need for services from the State and community begins immediately.

With respect to physicians, there are about 1,800 newly licensed each year who begin practice in the State of California. This is not quite enough to maintain the present ratio in the State of physicians to population. It is barely holding its own or dropping a little bit.

I must confess, in order to license this many a year, the State takes in 80 percent of these from other States and only 20 percent of those licensed each year received their education within the State.

Now, just to stay even in this role as a debtor State, the Coordinating Council for Higher Education in California has done some calculations with respect to the population forecasts and the number of physicians who will be needed in the future, and have determined that in order to continue to supply our share of the annual licensees would take, at the present time, about 600 freshman medical students admitted into the schools in the State each year.

Four years from now, that figure would need to be 825, and within 10 years, it would have to be 1,130.

Actually, the medical schools in the State of California this year admitted about 484 freshmen. It will, therefore, take an expansion of about 650 places in the freshman year within this next decade only to hold our own in continuing to provide the home-grown part of the annual need for physicians.

Now, with respect to solution, on which a considerable amount of study has been made in the State, it seems to be the general consensus that the private schools foresee relatively small possibility of contributing to this expansion. Private sources of funds are difficult to obtain. This, perhaps, is even more so in California, in that so much of the population being inmigrants, they continue to have affiliations in the States and towns from which they come and it is a slower and a little more difficult process to develop local affiliations and local interests from which to obtain private financial aid.

The private schools do anticipate some enlargement in their capacity to receive students, but nowhere come near to meeting the problem.

This means, then, that we will need in the State something on the order of four new medical schools under public auspices within the decade.

The University of California has this public responsibility. It is at the present time expanding its enrollment both at San Francisco and at Los Angeles, the two existing medical schools in the university. A third school has been authorized at San Diego, which we hope will begin admitting students within the next few years.

Beyond this, we have tentative plans for either one or two more schools beginning within this decade. This begins to approach the need in order to maintain our debtor State status, but no more. The major obstacle to achieving this goal is funds. Very, very rough figures suggest that this kind of expansion will require better than $100 million in capital investment.

Now, the State of California is putting almost a half billion dollars this year in operating and capital investment funds into higher education. This is not to mention at all the demands for other types of service than education, and only some part of this $500 million can be devoted to the health professions.

The tax base of the State, I am told, is fully extended, and beyond that, the State has passed in recent years two bond issues for

capital improvements, one last fall of $270 million, of which a major part went to the university. All of this will be used within 2 years, and it seems inevitable that another bond issue will have to be presented to the voters very soon thereafter if we are to keep the tentative schedule that we have developed.

The sum and substance of my statement, therefore, is, that California is one example in this country of a State that is doing all that it can with private and with State and local funds to meet the obligations that we foresee for the future of providing for a necessary type of professional personnel. But we will still fall short of meeting that need.

We have not even touched on and are just now studying some of the specifics of the needs for other types of profesional personnel such as dentists, nurses, and others.

The studies to date of preliminary figures would suggest that the problem here is of the same magnitude as it is with respect to physicians.

For the University of California then and for the deans of the medical schools of California, both public and private, I would like to add my endorsement of H.R. 12 and to urge its passage.

Thank you.

The CHAIRMAN. Mr. Younger of California. I will give you the first opportunity to question the witness.

Mr. YOUNGER. I welcome my colleague from the great State of California. We are glad to have you here.

I would like to go back to your figures on the number of doctors in California. You say there are only 1,800 doctors?

Dr. PORTERFIELD. No, sir, newly licensed each year who then begin practice within the State.

Mr. YOUNGER. How many doctors do we have in the State?

Dr. PORTERFIELD. If I remember correctly, and subject to correction, about 28,000 in 1961.

Mr. YOUNGER. 28,000? And that, prorated on population, would be how many per 100,000?

Dr. PORTERFIELD. Approximately 174.

Mr. YOUNGER. 174?

Dr. PORTERFIELD. Yes, sir.

Mr. YOUNGER. Per 100,000?

Dr. PORTERFIELD. Yes, sir, of civilian population.

Mr. YOUNGER. Do you agree that the ideal or, rather, the mark for which we are aiming is 119 per 100,000 of population?

Dr. PORTERFIELD. Well, I had not heard that figure, I'm sorry, sir.

Mr. YOUNGER. I thought it had been introduced in the testimony.

Mr. O'BRIEN. I think it was 1,900 per doctor, is the figure you have reference to.

Mr. YOUNGER. What?

Mr. O'BRIEN. 1,900 persons per doctor. That figure was in the testimony.

One doctor for every 1,900.

Mr. YOUNGER. Well, I thought we have some other testimony, of 119 per 100,000.

Mr. O'BRIEN. I see.

Mr. YOUNGER. But be that as it may, I know in our own county, San Mateo County has pretty near one doctor for each thousand.

Dr. PORTERFIELD. Mr. Younger, in partial answer to your question, I think this use of the ratio of the number of people to the number of physicians per 100,000 of population is a practical means of measurement rather than a precise one.

I had the privilege of being in the U.S. Public Health Service during the time of the writing of the Bane report, "Physicians for a Growing America," under the chairmanship of Mr. Frank Bane, and we spent a considerable amount of staff time in attempting to weigh the factors that will influence the provision of adequate amounts of medical care.

As has been said before here today, a physician may have more patients than he used to by the assistance of ancillary personnel, by the provision of hospital and outpatient facilities, and by the motorcar, by the greater utilization of office and hospital visits than home visits, and by more effective treatment.

On the other hand, people are living longer and are developing a greater prevalence of the more chronic and more difficult conditions.

The people of the United States come to expect and demand a greater level of service than they might have in previous years. Since more can be done, they are more anxious to get it done.

I may have missed some of the factors but when we added them all up it was impossible to demonstrate conclusively the direction in which the ratio should change.

It could be less without hurt or it should be more because there was more to do.

So for a lack of any other way to measure the problem we said that if we determine generally that the present ratio of physicians to people gives us a fairly decent level of care then at least let's strike for this as our goal until we can determine more precisely whether it should be higher or should be lower.

Mr. YOUNGER. And what was your goal?

Dr. PORTERFIELD. To maintain the present (that is, 1959) ratio in this country of 141 physicians per 100,000.

Mr. YOUNGER. That takes in your specialists as well, does it not?

Dr. PORTERFIELD. Yes, sir.

Mr. YOUNGER. That is all those licensed.

Dr. PORTERFIELD. Yes, sir.

Mr. YOUNGER. You mentioned about the difficulty of obtaining funds for private schools.

You are familiar with the new medical center at Stanford?

Dr. PORTERFIELD. Yes, sir.

Mr. YOUNGER. I understand it was furnished entirely by their own and private funds; that there are no public funds in there.

Is that true?

Dr. PORTERFIELD. I think they got NIH assistance for research facilities but, as far as the clinical facilities are concerned I think you are entirely right, yes, sir.

Mr. YOUNGER. How many medical schools are there in California?

Dr. PORTERFIELD. There are six at the present time.

The University of California has two; one at San Francisco and one at Los Angeles.

The private schools consist of Stamford, the University of Southern California, Loma Linda University and the California College of Medicine, formerly the College of Osteopathy.

Mr. YOUNGER. That is the one at San Francisco?

Dr. PORTERFIELD. No, sir, it is in Los Angeles.

Mr. YOUNGER. I had a letter the other day from the Physicians and Surgeons College in San Francisco.

Is that an accredited school?

Dr. PORTERFIELD. It is not at the present time a medical school with medical students.

It conducts a dental school at the present time. It does not have a medical school. It anticipates joining with Presbyterian Medical Center. The Presbyterian Medical Center carries on graduate medical training and clinical care and research in the city of San Francisco. PMC has been studying, I am told, for some time the possibility of developing a medical school. It would have to affiliate, I assume, with a university and it would also require a larger clinical facility than it presently has.

Mr. YOUNGER. In your opinion it would not be eligible under this bill?

Dr. PORTERFIELD. To the contrary, sir, I think it would be.

Mr. YOUNGER. It would be?

Dr. PORTERFIELD. Yes, sir.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. O'Brien, from New York.

Mr. O'BRIEN. The second most popular State. It is so recent it is still humiliating.

Doctor, may I ask, do the medical schools in California admit students from other States?

Dr. PORTERFIELD. Yes, sir; they do.

Mr. O'BRIEN. Do they have any idea what percetnage it is?

Dr. PORTERFIELD. The percentage runs at about 10 percent, sir.

Mr. O'BRIEN. And I assume that that is probably true of medical schools in other States?

Dr. PORTERFIELD. It depends. The private schools may admit on a regional or even a national basis.

Many of the public schools admit some percentage of out-of-State people. There are some few schools that restrict their admissions very rigidly to the residents of their own State.

Mr. O'BRIEN. Yes, and in no instance does the tuition paid by the student come close to paying the cost of giving them that education?

Dr. PORTERFIELD. That is correct, sir.

Mr. O'BRIEN. So, that extent then, the schools in California are contributing to the national health?

Dr. PORTERFIELD. To that degree; yes, sir.

Mr. O'BRIEN. Is it your considered belief, Doctor, that it is impossible under existing circumstances or in circumstances that might occur during the next 10 years, where a combination of private and State funds would meet the problem which is confronting us today?

Dr. PORTERFIELD. In my opinion I do not think that the goal can be achieved without Federal assistance.

The State of California, as I have said, has been studying means of meeting what they foresee as the future needs, and I suspect without much question that we will fall short of meeting the goals we would like to unless we can augment our own resources with some matching aid.

Mr. O'BRIEN. Do you think that if there is Federal assistance of the form contemplated in this bill that it will result in the reduction of private contributions or State contributions?

Dr. PORTERFIELD. I do not think so, sir; no.

Mr. O'BRIEN. Do you think it might result in acceleration?

Dr. PORTERFIELD. I would expect that effect rather than the other because we have seen in some other programs and in some other places where the ability to get a bargain, so to speak, to get some matching money, will bring out unexpected resources locally from private donors and gifts or from other resources.

Mr. O'BRIEN. It would be something like the man who offers to contribute $10,000 to a community fund if it be matched?

Dr. PORTERFIELD. Yes, sir.

Mr. O'BRIEN. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Kornegay?

Mr. KORNEGAY. Doctor, I was interested in this school in San Francisco that Mr. Younger mentioned, the College of Physicians and Surgeons, if that was the correct name, and I wonder if I might inquire as to why they are not operating the medical school?

Dr. PORTERFIELD. Well, I, unfortunately, have not been a resident of the State of California too long. So I am a little hazy here on the history.

Presbyterian Medical Center is what is left in San Francisco of the Stanford University Medical School when it moved from San Francisco down to the campus of Stanford in Palo Alto.

There were clinical facilities and there were physicians in practice in the community, and these stayed there and constitute the Presbyterian Medical Center at the present time.

They have retained their character, I gather, for a considerable length of time, many, many years.

And since these people have been educators in the medical field, they would very much like to continue to do this.

If they can find the resources, both financial and clinical and affiliations with hospitals and with a university that will permit them to do it, they would like to provide medical education.

I know that they are very active in working on this at the present time.

I have no opinion as to their ability to make it very soon. The College of Physicians and Surgeons is only a dental school.

Mr. YOUNGER. Will the gentleman yield for just one question?

Mr. KORNEGAY. Yes.

Mr. YOUNGER. Is the Stanford Hospital still in operation?

Dr. PORTERFIELD. Stanford Lane Hospital?

Mr. YOUNGER. Yes.

Dr. PORTERFIELD. Parts of it are; yes, sir.

Mr. YOUNGER. That is all.

The CHAIRMAN. Mr. Long?

Mr. LONG. No questions, Mr. Chairman.

The CHAIRMAN. Were you through, Mr. Kornegay?

Mr. KORNEGAY. Yes, sir.

The CHAIRMAN. Mr. Broyhill?

Mr. BROYHILL. No questions.

The CHAIRMAN. Well, now, we have a gentleman from San Diego. We want to give south California an opportunity also.

Mr. Van Deerlin?

Mr. VAN DEERLIN. Thank you, Mr. Chairman.

Do we have, Doctor, a difference in the payment system of tuition charged for resident students and out-of-State students?

Dr. PORTERFIELD. Yes, sir; there is a nominal difference between them.

Mr. VAN DEERLIN. You say "nominal."

There was testimony from North Carolina this morning of a 100-percent increase in the tuition charged out-of-State students, and I was wondering if this prevailed in California.

Dr. PORTERFIELD. Again, subject to correction, I think the figures are on the order of $200 a term for residents and $425 for nonresidents.

Mr. VAN DEERLIN. I see.

Dr. PORTERFIELD. It is on that order at least.

Mr. VAN DEERLIN. Thank you, Doctor.

Is it found that student recruitment rises in the area of a medical school?

Dr. PORTERFIELD. Yes; I would say this is so.

We have been told, and we certainly anticipate from conversations we have had in some places like San Diego and some of the more rural areas of California, that the establishment of a medical center and a medical school would arouse an interest that is not now present in people in college to want to get into the health professions.

I might say parenthetically that while I have no figures for San Diego at the present moment, I do know that we identified at the San Francisco Medical School about 25 qualified applicants whom we could not accept because of the limitation on our facilities, who were from rural central California for the most part.

There were others from some other places who were refused, but this leads us, in our tentative planning, to have as a very early move the development of a medical school as close to the rural area as we can and still be in an area where there is adequate clinical material.

Mr. VAN DEERLIN. Of course, I would want the record to show, Mr. Chairman, that in referring to "rural areas" the doctor is not referring to San Diego County.

To ask a purely parochial question:

Is there anything in this bill which would hasten the work of bringing that medical school to San Diego County?

Dr. PORTERFIELD. Well, frankly, yes, sir.

The projection of the program for the San Diego Medical School has been organized. Planning money has been appropriated.

The chancellor at the campus is now recruiting for the first person to come into this picture, the dean, and following him there will be others.

But to move from there to the construction of the basic science buildings, the classrooms, the laboratories, the hospital facilities that the university will need to have a complete medical school in operation,

is going to take a longer time and, obviously, a more difficult one if all funds must be obtained from State appropriations or State bond issues.

If we can match some of the dollars that we can put to this with some Federal assistance, we will be able to move forward with greater dispatch and see that the school reaches its full size in the fastest possible time.

Mr. VAN DEERLIN. Thank you very much.

Mr. KORNEGAY. Will the gentleman yield?

Mr. VAN DEERLIN. Yes.

Mr. KORNEGAY. Let me see if I understood correctly.

You referred to the tuition cost to students.

Were you referring to medical school or dental school students, Doctor?

Dr. PORTERFIELD. I think both, at the present time.

Mr. KORNEGAY. In other words, the tuition would be the same for dental or for medical school?

Dr. PORTERFIELD. Yes, sir.

Mr. KORNEGAY. I believe you used the word "term."

Do you mean by that "semester"?

Dr. PORTERFIELD. Semester; yes, sir.

Mr. KORNEGAY. So for the year it would be double the figures that you gave?

Dr. PORTERFIELD. Yes, sir.

Mr. KORNEGAY. Thank you.

The CHAIRMAN. Thank you very much, sir. We are very glad to have your testimony, Dr. Porterfield.

Dr. PORTERFIELD. Thank you.

The CHAIRMAN. Mr. Clinton R. Miller.

Mr. Miller, you are assistant to the president of the National Health Federation?

Mr. MILLER. Yes, sir.

STATEMENT OF CLINTON R. MILLER, ASSISTANT TO THE PRESIDENT, NATIONAL HEALTH FEDERATION, ACCOMPANIED BY CHARLES ORLANDO PRATT, GENERAL COUNSEL, WASHINGTON, D.C.

Mr. MILLER. Mr. Chairman, I am accompanied this morning by Mr. Charles Orlando Pratt, who is our Washington counsel of the National Health Federation.

The CHAIRMAN. You may proceed.

Mr. MILLER. Mr. Chairman, the National Health Federation is a national organization, composed of thousands of members who believe in freedom of choice in matters of health where the exercise of that freedom does not endanger the health or safety of another and thereby deny him an equal freedom.

We are primarily concerned with an apparent oversight in H.R. 12 which, if left uncorrected, could lead to a further monopoly in the healing arts than now exists.

It is only natural that in order to have freedom of choice in matters of health, we should watch jealously to see that all the healing arts

are fairly represented in any bill before Congress. When we take tax money from everyone in America and spend it to increase opportunities for training of the health professions, it is of the utmost importance that all of the healing professions be provided for in the language of the bill.

We respectfully request that this committee amend H.R. 12 so that we can be sure it will not prevent the Secretary of Health, Education, and Welfare from extending aid under the program to chiropractic and other drugless healing art colleges, otherwise qualified.

There are many approaches to health. A careful reading of H.R. 12 makes it apparent that no mention has been made of chiropractic, the major drugless healing art, or any other drugless healing art. There are many health professions, and it should not be necessary to mention them all in order to express the intent of Congress to be fair in distributing tax money which is collected from all citizens some of whom go to drugless in preference to allopathic doctors of their own free will and choice.

I am certain that it is not the intent of any Congressman to discriminate against the drugless health profession by this legislation. I am not so sure about the Department of Health, Education, and Welfare. The Food and Drug Administration which is an agency of HEW has clearly indicated in recent actions that it intends to impose a medical monopoly on the public. The joint AMA–FDA attacks upon the drugless professions have been so violent, and with such clear monopolistic intent, that it should be a major consideration whenever any health legislation is considered to be absolutely certain that every possible safeguard is written into the law to prevent the repetition of the present deplorable AMA control of an agency of the Federal Government to further its monopolistic aims.

The American Medical Association has openly solicited the help of the FDA, the Post Office Department, and the Federal Trade Commission to help it dissuade and discourage youngsters from enrolling in chiropractic schools. It has publicly stated its monopolistic intent to destroy chiropractic, the major drugless healing art, by the use of this specific attack at its competitors' schools.

With an ugly arrogance, the AMA has then predicted that chiropractic will dry up for want of nourishment to its roots—namely, matriculants in its schools. The current upward trend in these chiropractic colleges is encouraging proof of increasing attractiveness of this form of professional education. The current census report shows a 10-percent increase in the number of practicing chiropractors in the past decade.

It is important to remember here that the AMA has already been found guilty of criminal conspiracy to monopolize the practice of the healing arts. Their attempt now, to us agencies of the Federal Government to do that which they could not legally do as an association, should be anticipated and curbed by the appropriate language by this committee.

The National Health Federation respectfully request that this committee consider language somewhat as follows to amend H.R. 12:

On page 1, line 7, following "osteopathic," add the words, "chiropractic and other drugless healing professions." The following pages

should be amended to include appropriate language which spells out this intent—pages 3, 6, 8, 13, 14, 17, 18, and 19.

Section 725 on page 14 should be amended to have in the Public Health Service National Advisory Council on Education for Health Professions, a fair representation of homeopathy, chiropractic, and other drugless healing health professions. We respectfully suggest that there should be at least one of each who is particularly concerned with training in homeopathy, chiropractic, and other drugless healing arts. The council could be expanded from 16 to 19 members.

ACCREDITATION SHOULD BE REASONABLE AND FAIR

On page 3, line 20, add the words:

It is the intent of Congress that reasonable and fair standards for accreditation shall be set up by the Commissioner of Education to accredit chiropractic, and other drugless healing schools, and the Commissioner will take extra safeguards to prevent unfair accreditation requirements by which the standards of one recognized health profession are imposed on another.

It should be a major concern and consideration of Congress to curb monopolies. Monopolies in the health professions are as dangerous and destructive of freedom as in any other field, if not more so.

Thank you.

The CHAIRMAN. Is your position, Mr. Miller, which I infer from your statement on page 2, that the AMA—that is the American Medical Association, is it not?

Mr. MILLER. Yes, sir.

The CHAIRMAN. Is an agency of the Department of Health, Education, and Welfare?

Mr. MILLER. I believe I stated, Mr. Chairman, that the Food and Drug Administration, which is an agency of HEW, has clearly indicated in its recent actions that it intends to impose a medical monopoly on the public.

The Food and Drug Administration is, and now has removed all doubt about being an arm of the AMA by their public utterances.

Now, I have no way of knowing how directly the HEW is able to control or is aware of this activity of AMA.

The CHAIRMAN. Well, that is part of the whole program under HEW——

Mr. MILLER. That is right, and I think they should take the responsibility, but I realize that the present Secretary has been in a short time and is a very busy man and may not be aware of this.

The CHAIRMAN. Well, it is quite interesting to me that anyone would even imply that there was a measure of control of the agency by AMA.

If that is true, I want to be advised of it. I have heard expressions from certain sources which indicate to the contrary.

Mr. O'Brien?

Mr. O'BRIEN. Mr. Chairman, I would like to follow that point up just a little bit. You base your assertion in that respect that each has engaged in violent attacks upon the drugless profession.

Is that not substantially what you mean?

Mr. MILLER. That is correct.

Mr. O'BRIEN. Well, is it not possible for two members of this committee to agree upon the merits of a bill before us without either of the members controlling the other?

Is it not possible that the AMA and the FDA, whatever action they may have taken, and I am not defending it nor am I attacking it, may have done it independently one of the other?

And is it not an assumption on your part to say that that indicates control of the FDA by the AMA?

Mr. MILLER. Mr. O'Brien, I think if the attacks were made separately that I would have assumed a great deal.

Mr. O'BRIEN. There is a difference between control and agreement, is there not?

Mr. MILLER. As evidence, I would like to draw to your attention a blue book which blueprints the monopolistic intent and control of this Federal agency, the FDA, by the AMA.

This book is a record of the National Congress on Medical Quackery, which was held October 6 and 7, 1961, here in Washington, D.C.

Now, on the front of the booklet we have the seal of the Food and Drug Administration side by side with the seal of the American Medical Association.

This Congress was sponsored by the American Medical Association and the Food and Drug Administration, and this is a record of the actual public statements that were given at this time.

Now, contrary to the labeling on the cover, this was not a Congress on Medical Quackery, but it was a blueprint and a platform by which the American Medical Association and the Food and Drug Administration spokesmen were able to issue very damaging and libelous, in my opinion, statements against the drugless healing arts, and principally against the chiropractic.

This, I think, ties them in as closely as you can possibly get it. There was a great deal of effort by the sponsoring organizations here to limit the number of people who could go into this meeting.

There was no invitation to doctors of the drugless healing arts to come as speakers.

On page 63, Oliver Field, who is the director of the Department of Investigation of the American Medical Association in Chicago, states:

> The campaign then should be positive in that it should seek to dissuade and discourage youngsters from following a fraudulent course by enrolling in chiropractic schools——

Mr. O'BRIEN. Let's accept everything you said there.

Then, why could I not reach the conclusion that the FDA was controlling the AMA, if you are talking about control?

Mr. MILLER. I do not know of any history that would indicate that the FDA, per se, has ever had authority from Congress to prosecute any healing art.

The Food and Drug Administration was set up to make sure that our foods were safe, harmless, and not misbranded.

Now, if the Food and Drug Administration on its own initiative were to make an attack upon a drugless healing art, this would be so highly improper that we could attack it as such.

Whereas historically the American Medical Association has opposed monopolistic-wise any healing art that has a contrary philosophy or approach to health.

Now, I believe I can submit in my statement here the historical American Medical Association approach to the drugless healing arts, whereas the historical Food and Drug Administration approach, which started with Dr. Harvey Wiley, had no concern at all with the healing arts.

It was only concerned with the safety of foods and the protection against misbranding, and so forth.

Mr. O'BRIEN. You say the current census report shows a 10-percent increase in the number of practicing chiropractors in the past decade. Is that in line with the increasing number of people who want the services of chiropractors?

Mr. MILLER. I do not know that, Mr. Congressman. I would have no way of measuring the number of people who want chiropractors' services.

Mr. O'BRIEN. Then you have no way of knowing whether financial assistance from the Federal Government could be kept up with the demand?

Mr. MILLER. Your question is proper because here the only thing that we are concerned about is to make sure there is a provision within the law that when chiropractic or other drugless healing art colleges are "otherwise qualified," and that would include the need——

Mr. O'BRIEN. You want it in there in case there is?

Mr. MILLER. That is right. We make no brief here that the need exists. We simply want the admission of the drugless healing arts in the bill.

Mr. O'BRIEN. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Younger.

Mr. YOUNGER. Thank you, Mr. Chairman.

Mr. Miller, do you consider osteopathy a drugless healing art?

Mr. MILLER. Mr. Younger, I do not know. I am not fully acquainted with osteopathy. It was my understanding at one time that they were primarily drugless, and earlier today there was questioning about whether or not there was a merger.

Mr. PRATT. Mr. Chairman, I might answer that based on my information, that during the past year in the State of California the Medical Society of the State of California took into membership all doctors of osteopathy and arranged for them to practice medicine the same as doctors of medicine and took over all of the medical schools of the State of California where osteopathy is taught.

In most States of the Union the practice of osteopathy is equivalent to the practice of medicine.

In most States they practice medicine in addition to their specialized procedure. For example, in the State of Kansas the doctors of osteopathy are on the same level with doctors of medicine.

In the State of Kansas they have a healing arts board. The board consists of six members, two of the medical profession, M.D.'s, two of doctors of osteopathy, two of doctors of chiropractic, and throughout the country this is growing more and more.

The education of chiropractors is much different now than it was 25 years ago.

Osteopaths are not strictly drugless, to answer you precisely. More and more they are becoming medicine and they are being admitted to the medical societies in the States one by one.

Originally, they were different. They didn't believe so much in drugs. They believed in——

Mr. YOUNGER. But they are licensed in the States?

Mr. MILLER. They are licensed and they have the equivalent education in most medical schools.

Mr. YOUNGER. Now, in many States, and I am not sure that it applies in all States, chiropractors are licensed.

Is that true?

Mr. MILLER. I understand from hearings held in the Senate that in 46 States chiropractors are licensed and also in Puerto Rico and some of our territories.

Mr. YOUNGER. Are chiropractors in the bill?

Mr. MILLER. No; it is the omission of chiropractors as the major drugless healing art that is conspicuous by its omission.

Mr. YOUNGER. I have in mind where you recommended a broad amendment which would include all drugless healing arts, and there may be many of them that are not licensed in the States.

Do you mean that, that you would take in any type of drugless healing art even though it was not licensed by the various States?

Mr. MILLER. Perhaps it would be proper here to restrict this to licensed or properly duly licensed members of drugless healing professions.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Kornegay.

Mr. KORNEGAY. Mr. Miller, I would like to call your attention to your statement at the bottom of page 2:

> The American Medical Association has openly solicited the help of the FDA, the Post Office Department, and the Federal Trade Commission to help it dissuade and discourage youngsters from enrolling in chiropractic schools.

I take it the basis for that statement is the statement that you read out of the bluebook.

Now, just what part does the Post Office Department play in dissuasion and discouraging?

Mr. MILLER. Perhaps it would be best to answer that by Dr. Field's own words.

In his closing paragraph here he says:

> The Food and Drug Administration, the Post Office Department, the Federal Trade Commission, and the food and drug groups of many States of the Union cannot do the job alone.
>
> It takes a program which seeks to acquaint the public with the problem and swings into action quickly when there is a threat to the community or the Nation at large.
>
> This takes the help of all interested people, consumer groups, educational groups, religious organizations, and most of all, those responsible for the education of American youth.

Mr. KORNEGAY. Now, was that statement aimed at chiropractic schools?

Mr. MILLER. The subject of Mr. Field's talk here was the AMA's fight against the quack.

An then he, in the beginning of the talk, outlines an appeal to the Post Office Department to help get at the quack which he defines as the chiropractor in the middle of his talk, and then at the end of it, solicits the help of these, the Post Office Department, the Federal Trade Commission, and the Justice Department.

I would like to, if I might have permission, Mr. Chairman, submit this letter for the record inasmuch as—it is just a three-page letter from the Congress on quackery.

The CHAIRMAN. Let it be received.

Mr. MILLER. And I think the intent of Dr. Field would be made most clear here and how he appeals to the Post Office Department and the Federal Trade Commission and the Justice Department to help in this conspiracy.

Mr. YOUNGER. Will the gentleman yield for one question there?

Mr. KORNEGAY. Yes, Sir.

Mr. YOUNGER. Was that publication that you have there published by the Government Printing Office?

Mr. MILLER. I have been trying to find that out, Mr. Congressman, and I have not had a yes or a no answer.

The CHAIRMAN. I think we had better receive the letter for the file and then determine whether it should go in the record or not.

Mr. MILLER. It is available from Mr. Janson's office over at Food and Drug, but I also find it is available from the AMA.

I do not know who paid the cost for it. In fact, it would be interesting to find out who paid for these proceedings at the Sheraton-Park Hotel.

Mr. YOUNGER. If it was a Government-printed document, it would be so stated in the document.

Mr. MILLER. I fail to find any indication, and I have made a direct request of Food and Drug to find out who did finance this and received an evasive reply.

The CHAIRMAN. Anything further, Mr. Kornegay?

Mr. KORNEGAY. Just this statement:

I asked the question in order to find out just what part the Post Office could play in such an arrangement unless it was just a falure or refusal to deliver application blanks or something of that sort in an effort to enroll people.

I have nothing further, Mr. Chairman.

The CHAIRMAN. Mr. Long?

Mr. LONG. No questions?

The CHAIRMAN. Mr. Broyhill?

Mr. BROYHILL. Along that same line, Mr. Miller, on page 3 you said that the report of the AMA or that the AMA has been found guilty of criminal conspiracy to monopolize the practice of the healing arts.

Do you mean by this that they were actually found guilty in the courts or by their action, as you testified here?

Mr. MILLER. They were actually found guilty, as I understand it, in the courts.

Very little publicity was ever given to this.

I would like, Mr. Chairman, to submit for the record an editorial from the New Orleans Tribune——

The CHAIRMAN. Well, now, before the Chair lets all of this information go in the record as factual matter, I think we are going to have some records here to sustain the allegations that have been made—the best records for this kind of information, I would say, Mr. Miller.

And I do not believe it would be the proper thing to allow that kind of allocation in the record without a showing of facts.

Mr. MILLER. I am sorry, Mr. Chairman, I do not understand the impropriety of submitting this editorial to answer the question.

Mr. BROYHILL. I will withdraw my question then.

Mr. MILLER. I see.

The CHAIRMAN. Well, it is in the record that the AMA—is that who you were talking about?

Mr. MILLER. Yes.

The CHAIRMAN. Had been convicted in the courts, as you stated here.

Mr. MILLER. That is correct.

The CHAIRMAN. Now, the Chair is not going to permit that kind of statement to remain unless you show some proof or records where that happened as a fact.

We are not going to get into that kind of an argument here and have every Congressman and everybody coming in and saying "We deny all of these things" and get into such discussions here.

The Chair cannot permit that.

Mr. MILLER. Perhaps I can answer the question best this way:

In 1941 when group insurance was the question—it was over group insurance in the District of Columbia—and was it Thurman Arnold?

Mr. PRATT. He was the counsel.

Mr. MILLER. I think it was Thurman Arnold who was the Attorney General of the United States.

He won a conviction against the AMA for conspiracy to monopolize the healing arts, and it was sustained in an action by the Supreme Court of the United States.

And the editorial in the New Orleans Tribune simply commented upon the fact that they were not surprised, that the AMA had been acting as a monopoly and they had invited this determination by the courts.

The CHAIRMAN. Well, in the first place, Mr. Miller, Mr. Thurman Arnold has never been Attorney General, that I know of.

Mr. MILLER. I might have the wrong name.

Mr. PRATT. He had the right name but not the right title.

The CHAIRMAN. That could make a great deal of difference.

Mr. PRATT. He later became asosciate judge of the U.S. court of appeals and retired.

The CHAIRMAN. He was in charge of the Antitrust Division of the Department of Justice. To correct the record, there was or were antitrust proceedings undertaken, but no criminal proceeding, as you referred to a moment ago.

Mr. Long, do you have any questions?

Mr. LONG. No, sir.

The CHAIRMAN. Mr. Van Deerlin?

Mr. VAN DEERLIN. No, sir.

The CHAIRMAN. Thank you very much, sir.

Mr. MILLER. Thank you.

The CHAIRMAN. The next witness is Mr. Philip F. Jehle, Washington representative, National Association of Retail Druggists. Mr. Jehle, we will be glad to hear you at this time.

STATEMENT OF PHILIP F. JEHLE, WASHINGTON REPRESENTATIVE, NATIONAL ASSOCIATION OF RETAIL DRUGGISTS

Mr. JEHLE. I appear here this morning in behalf of the National Association of Retail Druggists, a small business association having a nationwide membership of 36,000 family pharmacists. As you know, the NARD speaks for its retail pharmacist members on all national legislative matters affecting their competitive and professional interests.

The NARD is deeply appreciative of this opportunity to testify in support of H.R. 12, which would increase the opportunities for training of professional health personnel. You may be assured that my testimony on this subject will be brief and to the point. I understand the practical problems involved in scheduling the many witnesses who desire to be heard on this very important measure.

In both principle and purpose, the NARD endorses H.R. 12. The Nation's retail pharmacists have no hesitancy in supporting efforts to relieve the serious manpower shortages existing in the health professions. In fact, such an undertaking deserves and, I am sure, enjoys the support of all American citizens interested in the maintenance of our high health care standards.

While generally supporting H.R. 12, however, the NARD wishes to call attention to an obvious shortcoming or, perhaps, oversight evidenced in the scope of the bill. I refer to the failure of the measure to include pharmacy students among those eligible for student loans. Although agreeing that student loans should be available to medical, dental, and public health students, the NARD respectfully urges that H.R. 12 be amended to offer loan benefits to all students in the health professions, including pharmacy, in which an appreciable personnel shortage is found.

Available statistics reveal that the supply of registered pharmacists has not kept pace with a growing America. In 1930, when there were only 88,000 registered pharmacists, the United States enjoyed a ratio of 69 pharmacists for every 100,000 persons in the population. Today, by comparison, there are only 67 pharmacists per 100,000 persons, although we have about 120,000 registered pharmacists in the country. But an even more serious manpower shortage is disclosed, if only the 116,000 pharmacists currently registered and actively engaged in the practice of pharmacy are considered. The ratio then drops to 64 to 100,000. (See table A.)

These statistics become even more meaningful when it is considered that, some 30 years age, almost all registered pharmacists were working in retail drugstores, while currently about 10 percent are employed in such related health areas as pharmaceutical research and development, pharmacy education, ethical drug promotion and distribution, hospital pharmacies, and Federal and State public health agencies, including military dispensaries. In other words, the failure to keep the supply of registered pharmacists in line with population growth since 1930 has been aggravated by the fact that at least 10 percent of today's pharmacists are not available for retail pharmacy work. Small wonder, then, that a vexing shortage of pharmacists for prescription counter duty is found to exist in retail drugstores across the country.

At the same time, it should be understood that the registered pharmacists active in the related health fields mentioned do not satisfy the numerical requirements for pharmacists in those areas, either. The demand for pharmacists in such areas far exceeds the available supply. Over the past 30 years, very little preparation of any kind was made to meet what have become the substantial needs for trained pharmacists in such associated fields of interest.

As one informed observer of the pharmaceutical scene has reported:

* * * the current shortage of pharmacists seems certain to become even more pronounced in the years ahead. * * * More than 160,000 registered pharmacists will be required 15 years from now to satisfy the needs stemming from continued population growth only, assuming that current ratio of availability of pharmacists can be termed adequate. Of this number, an estimated 10,000 will be needed in hospital pharmacies and another 2,000 to meet what are probably the minimum requirements for teaching and research. For the most part, the others will be engaged in retail pharmacy and allied health fields, as is the case today. (See table B.)

In planning to meet the needs for pharmacists in the future, attention must be given also to the rapidly developing trend in retail pharmacy toward the 8-hour day and the 5-day week. Even now, the smaller retail pharmacist is sorely pressed to provide his customers with professional pharmaceutical services throughout the 14–16 hours of his daily operations. Bear in mind that 40 percent of all drugstores operate with only one pharmacist and another 45 percent are serviced by only two. Once retail pharmacy generally adopts the 40-hour week enjoyed by the other health professions, a substantial increase in the supply of pharmacists will be required. The alternative would be a deterioration in the quality and convenience of pharmaceutical service.

These observations concerning current and future shortages in pharmacy manpower find confirmation, I believe, in the 1959 report of the Surgeon General's Consultant Group on Medical Education, entitled "Physicians for a Growing America." According to the Consultant Group—

shortages of trained people [exist] in practically every one of the many professional and technical careers in the health field. Intensive recruitment of young people for these many essential health services, including medicine, is imperative.

The desirability of coupling the problem of medicine with those in the related health professions was recognized by the Consultant Group.

* * * Physicians cannot carry their load of responsibility without competent and well-trained teammates and associates.

There is increasing recognition of interrelated responsibility of health workers with a variety of skills and educational preparations. One evidence of this is the development of university-based health centers with closely related schools of medicine, dentistry, nursing, and other health professions.

* * * In 1900, for every physician in practice there was one other professional health practitioner; today, there are four such persons for every physician.

After outlining our pharmacy manpower requirements, our task is to meet them. To achieve even our minimum goals in the supply of registered pharmacists will require much larger pharmacy school enrollments and graduations. That being the case, pharmacy school facilities will have to be substantially enlarged and teaching staffs correspondingly increased to take care of the additional students to

be enrolled, all without reducing the present high quality of pharmaceutical education. For success in this important undertaking, some Federal assistance will be required by the pharmacy schools just as with the medical and dental schools.

In view of these considerations, the NARD feels justified in asking that H.R. 12 be amended to make pharmacy students eligible for the scholarship funds that the bill would offer medical, dental, and public health students. Practical justice for American pharmacy would seem to require that the needs of the health professions be met in a comprehensive and nondiscriminatory manner.

(The tables referred to in Mr. Jehle's testimony follow:)

TABLE A

States	Population (thousands)	Pharmacists	Ratio of pharmacists per 100,000 population
Alabama	3,267	1,402	42.9
Alaska	226	74	32.7
Arizona	1,302	873	67.0
Arkansas	1,786	892	49.9
California	15,717	9,667	61.5
Colorado	1,754	1,796	102.3
Connecticut	2,535	2,086	82.2
Delaware	446	209	46.8
District of Columbia	764	900	117.8
Florida	4,952	3,494	70.5
Georgia	3,943	2,568	65.1
Hawaii	633	191	30.1
Idaho	667	467	69.9
Illinois	10,081	5,948	59.0
Indiana	4,662	2,986	64.0
Iowa	2,758	1,557	56.4
Kansas	2,179	1,347	61.8
Kentucky	3,038	1,215	39.9
Louisiana	3,257	2,198	67.4
Maine	969	440	45.3
Maryland	3,101	1,701	54.8
Massachusetts	5,149	4,500	87.4
Michigan	7,823	5,839	74.6
Minnesota	3,414	1,957	57.3
Mississippi	2,178	941	43.2
Missouri	4,320	3,081	71.3
Montana	675	354	58.3
Nebraska	1,411	980	69.4
Nevada	285	265	92.8
New Hampshire	607	356	58.6
New Jersey	6,067	3,567	58.7
New Mexico	951	557	58.5
New York	16,782	14,364	85.5
North Carolina	4,556	1,659	36.4
North Dakota	632	354	55.9
Ohio	9,706	5,656	58.2
Oklahoma	2,328	1,591	68.3
Oregon	1,769	1,435	81.1
Pennsylvania	11,319	9,400	83.0
Rhode Island	859	673	78.3
South Carolina	2,383	1,042	43.7
South Dakota	681	450	66.1
Tennessee	3,567	2,197	61.5
Texas	9,580	5,426	56.6
Utah	891	599	67.2
Vermont	390	182	46.6
Virginia	3,967	1,636	41.2
Washington	2,853	2,671	93.6
West Virginia	1,860	612	32.8
Wisconsin	3,952	2,299	58.1
Wyoming	330	280	84.8
National ratio of pharmacists 100,000 of population, 64.			

Source: Bulletin of the National Association of Boards of Pharmacy, vol. 12, No. 12. October, November, and December, 1961.

TABLE B.—*Pharmacists for a growing America* [1]

Year	Total U.S. population (thousands omitted) (a)	Need of pharmacists at present ratio of 67 per 100,000	Annual replacement need at 3.5 percent (b)	Actual replacement total (c)
1960	180,000	120,000	4,200	3,200
1965	196,000	131,000	4,600	----------
1970	214,000	143,000	5,000	----------
1975	240,000	161,000	----------	----------

[1] Submitted by Senator Hubert H. Humphrey to the Senate Labor and Public Welfare Committee during public hearings last year on S. 1072, a companion measure to H.R. 4999.

NOTES

(a) Based on series 2 figures from Bureau of Census.
(b) Factor of 3.5 percent supplied by the National Association of Boards of Pharmacy.
(c) Represents pharmacy school graduates.

The CHAIRMAN. Are there any questions? If not, Mr. Jehle, we appreciate your appearance and testimony.

Mr. JEHLE. Thank you, Mr. Chairman.

The CHAIRMAN. This will conclude the hearings today and the committee will adjourn until 10 in the morning.

(Whereupon, at 4 p.m., the committee recessed, to reconvene at 10 a.m., Thursday, February 7, 1963.)

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE

THURSDAY, FEBRUARY 7, 1963

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE
AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to recess, at 10 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman) presiding.

The CHAIRMAN. The committee will come to order.

This morning our first witness will be Dr. Gerald D. Dorman, member of the board of trustees of the American Medical Association.

Doctor, we are very glad to have you with us.

I observe that Dr. McKittrick, chairman of your council on medical education and hospitals, is here with you and will be with you during your presentation.

I also believe you have with you today Walter Wiggins, who is secretary of the council.

We are very glad to have both Dr. McKittrick and Dr. Wiggins here with you this morning.

I believe there are three chairs there. Will you be seated as you desire.

You may proceed.

STATEMENT OF DR. GERALD D. DORMAN, MEMBER OF THE BOARD OF TRUSTEES OF THE AMERICAN MEDICAL ASSOCIATION, ACCOMPANIED BY DR. LELAND S. McKITTRICK, CHAIRMAN, COUNCIL ON MEDICAL EDUCATION AND HOSPITALS, AND DR. WALTER S. WIGGINS, SECRETARY OF THE COUNCIL

Dr. DORMAN. Mr. Chairman and members of the committee, I am Dr. Gerald D. Dorman, of New York City. I am appearing here today as a member of the board of trustees of the American Medical Association. Accompanying me are Dr. Leland S. McKittrick, chairman of the American Medical Association's Council on Medical Education and Hospitals; and Dr. Walter S. Wiggins, secretary of the council.

The American Medical Association is a national association of approximately 200,000 physicians. The association, since its inception in 1847, has continuously worked toward increasing the number of qualified physicians. Since 1940, the association, in collaboration with the Association of American Medical Colleges, has aided interested organizations in the establishment of 12 new medical schools. Currently, commitments have been obtained for another five schools and we are in consultation with more than a dozen institutions or

organizations presently contemplating the establishment of new medical schools.

The American Medical Association has a serious interest of long standing in maintaining the high quality of medical education in the United States, without which there cannot be high-quality medical care. For over a century, the American Medical Association has been actively and effectively engaged in the improvement of medical education. It can now be said, with assurance, that medical education in this country is superior to that found anywhere else in the world. It is not a coincidence that improved standards of medical care in the last half century saw the elimination of substandard medical schools and "diploma mills" which had been turning out graduates in large numbers. This improvement in medical education is the direct result of the vigorous efforts of this association and other interested organizations.

Recognizing the problem in the field of medical education, the American Medical Association for the past several years has endorsed a limited Federal program of aid to medical schools.

In June of 1955, the American Medical Association supported the medical school construction provisions contained in H.R. 4743, 84th Congress, introduced by the late chairman of this committee, Mr. Priest of Tennessee.

In April of 1958, the association favored the construction provisions of H.R. 6874, 85th Congress, introduced by the committee's current chairman, Mr. Harris.

Again in June 1960, the association supported the construction provisions of H.R. 6906, 86th Congress, introduced by Mr. Fogarty of Rhode Island.

Just last year, I had the opportunity to appear before this committee speaking on behalf of the AMA, urging passage of that portion of H.R. 4999, 87th Congress, designed to authorize matching grants for the construction, replacement, or rehabilitation of medical schools, which was introduced by Mr. Harris.

I should like to take this opportunity on behalf of the American Medical Association to respectfully submit for your consideration our views on certain provisions of H.R. 12, 88th Congress, which is now pending before your committee.

It is our understanding that this bill would amend the Public Health Service Act to provide:

(1) Matching grants for the construction, replacement, or rehabilitation of medical, dental, and osteopathic schools, and for schools providing training in ancillary services.

(2) Appropriation of sums to establish a loan fund for medical, dental, and osteopathic students.

(3) Expansion of the research facilities construction program.

I shall limit my discussion to those sections of the bill providing for matching grants for the construction, replacement, or rehabilitation of medical schools.

If the high standards of medical education are to be maintained, increased attention must be given to the adequacy of physical facilities, the availability of qualified instructors, and the availability of teaching material and patients for the clinical phases of medical education. Any attempt to increase the number of medical students

without regard to these conditions will result in a lowering of the standards of medical education. At this time, priority should be given, in our opinion, to an increase and improvement in the physical facilities available for medical education.

We believe that there is need for assistance in the expansion, construction, and remodeling of the physical facilities of medical schools and, therefore, a one-time expenditure of Federal funds on a matching basis is justified, where maximum freedom of the school from Federal control is assured.

The support by the AMA of these provisions in H.R. 12, 88th Congress, is based on the action of our house of delegates taken initially in June 1951, and reaffirmed frequently since that time.

We would also urge that the National Advisory Council on Education for Health Professions, suggested in the bill, be composed of persons skilled in the broad aspects of engineering, education, finance, architecture, as well as those concerned with training in medicine, osteopathy, dentistry, or the other named ancillary services.

When I appeared before this committee on January 26, 1962, to present the comments of the American Medical Association on H.R. 4999, 87th Congress, the predecessor of H.R. 12, I referred briefly to the AMA's student loan program. At that time the program was still in the final planning stages, and Dr. McKittrick, Dr. Wiggins, and I, in response to the committee's questions, were able only to estimate the probable effect of the project. As of December 31, 1962, the program had been in effect only 10 months; however, we can now transform the estimates into actual data. We believe these initial results to be dramatic.

The American Medical Association Education and Research Foundation has prepared two brochures which may be of significant interest to the members of this committee. I ask that these, one entitled "Medical Education Loan Guarantee Program," and the other a "Progress Report Through December 31, 1962," be received and incorporated in the record of these proceedings.

The AMA's medical education loan guarantee program, designed to alleviate the financial difficulties of medical students and to encourage career decisions in favor of medicine, utilizes the principle of a security fund, functioning as a surety agency, to make available unsecured personal loans at a relatively low rate of interest to medical students, interns, and residents. Administrative costs are paid by the American Medical Association-Education and Research Foundation. The loans, which have been available since March of last year to medical students, interns, and residents, provide each borrower with as much as $10,000 over a 7-year borrowing period.

The growth and success of the AMA–ERF medical education loan guarantee program can be best described as phenomenal. In the 10 short months since it was initiated, nearly 1 in every 10 medical students in the country now has borrowed money under this program.

Through December 31, 1962, a total of 4,694 individuals (2,890 medical students, 672 interns, 1,132 residents) received 5,299 loans or $6,111,400 in principal amount. Ten percent of the borrowers applied for and received more than one loan. The borrowers are in training in 83 medical schools and 462 hospitals in 46 States and possessions.

94933 O—63——17

Through the end of last year, 6.8 percent of the loan applications received had to be rejected, for the most part because the applicants indicated that they needed funds for consumer items such as cars and furniture, and not for essential education and living expenses. No one has been refused because of lack of money in the guarantee fund. Although almost one-third of the borrowers come from families where the father is deceased, disabled, or retired, we find at the other end of the scale that a similar number have fathers who are executive, professional people, and owners of small businesses.

The guarantee fund consists of contributions from individual physicians, medical societies and private industry. Although the fund contains more than $1 million and its uncommitted balance at the end of the year was sufficient to permit the granting of an additional 1,200 loans, our efforts toward increasing the fund continue so that we may meet the anticipated volume of loan requests.

Each dollar that is contributed to the AMA–ERF program is worth 12½ times its value in loan power. Private banks have contracted with the American Medical Association-Education and Research Foundation to provide money for the loans. Under the agreement, the banks will extend $1,250 in credit for each $100 deposit in the fund.

This program has been adopted with the firm conviction that if it is implemented with wisdom and vigor, the quantity and quality of medical schools' applicants will be increased and enhanced. The performance of many medical students will be improved by the alleviation of their financial problems and the profession will thereby demonstrate a significant acknowledgment of medicine's obligation in this area. It is logical to assume that further improvement in medical care will ultimately result from this immediate positive action.

In summary, the American Medical Association, by its own action, has given clear recognition to the financial problems of medical students, interns, and residents. This AMA–ERF program indicates the extent to which private enterprise and efforts can solve important problems without the necessity of calling on the Federal Government for tax funds. We are firmly convinced that governmental assistance to medical education should give first priority to providing necessary, needed funds for medical school construction.

The American Medical Association wishes to thank you for giving us this opportunity to express the views of the physicians of America concerning certain provisions of this important legislation.

Dr. McKittrick, Dr. Wiggins, and I will now be most pleased to attempt to answer any questions that the committee may have.

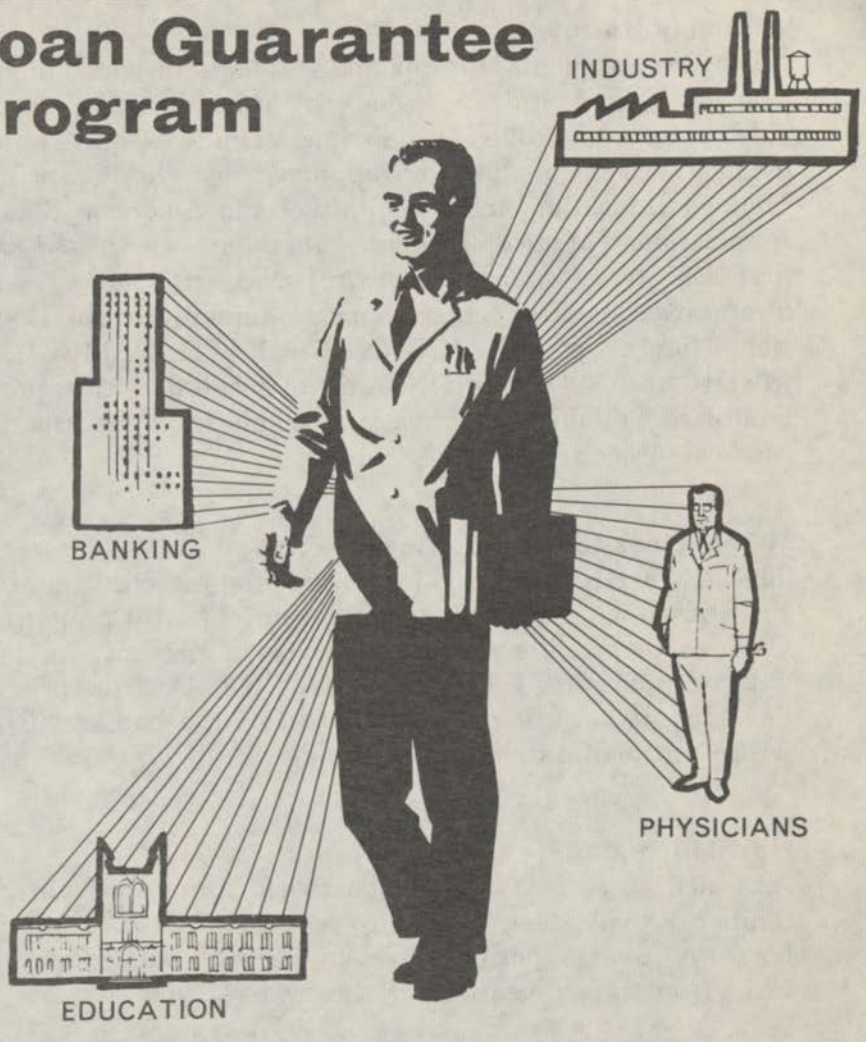
The CHAIRMAN. Thank you very much, Dr. Dorman, for your statement on behalf of the American Medical Association. Your request that the information you have submitted be included in the record, I think, is appropriate, and will be included at this point.

There may be a printing problem with reference to some of the charts, but we will see what we can do about it.

Dr. DORMAN. Thank you, Mr. Chairman.

(The booklets referred to follow:)

Medical Education Loan Guarantee Program



AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION

The goal of this program is to help eliminate the financial barrier to medicine for all who are qualified and accepted by an approved training institution. It is designed to provide a means of financing a substantial portion of the cost of a medical education. The Loan Program for medical students, interns and residents is the result of a cooperative effort by American medicine and private enterprise.

Who May Borrow?

All medical students, interns and residents in good standing who are United States citizens may use this loan plan provided they are enrolled in full-time training at an American medical school or hospital approved by the Council on Medical Education and Hospitals of the American Medical Association. *(Medical students must have completed their first semester or quarter of medical school to qualify.)* A list of approved medical schools appears annually in the Education Number of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. A list of hospitals with approved Graduate Training Programs is available from the American Medical Association.

Where Does the Money Come From?

The AMA-ERF has made arrangements with the Continental Illinois National Bank and Trust Company of Chicago to provide money for loans at present. All loans will be guaranteed by the AMA-ERF. As the program develops, it is anticipated that other large banks will join with Continental in supplying funds.

How Much May Be Borrowed?

As much as $1,500 may be borrowed annually from September 1 to August 31. Up to a total of $10,000 may be borrowed over a period of seven years. Total educational loans from *all* sources may not exceed $15,000.

How Often May Money Be Borrowed?

Applications from medical students should not be submitted more often than once each academic quarter or semester. Interns and residents should not submit applications more often than once every six months. The minimum amount that will be loaned is $400 and loans must be in even multiples of $100. An interim note will be executed for each individual loan.

How Is the Loan Repaid?

Interim notes mature on the first day of the fifth month following completion of training. For example, if a physician were to complete his residency on June 24, 1965, all of his interim notes would fall due on November 1, 1965. This obligation could be met by payment in full or by refinancing all interim notes into a single pay-out note which would be repaid in monthly installments over a period of up to ten years. The first installment for such a pay-out note would fall due on December 1, 1965.

How Are the Interest Rates Established?

The basis of the interest rates for interim notes and pay-out notes is the PRIME RATE of interest. The prime rate is the rate extended to highest-rated commercial borrowers for large, short-term loans. The agreement between AMA-ERF and the Bank specifies that the simple interest rate for *interim notes* shall be 1 percentage point greater than prime. The simple interest rate for *payout notes* is 2 percentage points greater than prime.

How Stable Are the Interest Rates?

The rates which are in effect at the time any given note is signed will be unchanged during the entire life of that loan. If a student borrows several times during his training period, some notes may carry different interest rates than others due to fluctuations in the prime rate. In an effort to stabilize the program, the rates will be established annually and will not be changed during the ensuing twelve-month period. Any change in rates will not be retroactive and will affect only future loans.

How Much Do Loans Cost During Training?

During the period of the interim note, the cost of the loan, according to the present agreement with the bank will be calculated at 5½% simple interest annually. *No payment of interest is made during the training period, and no compounding charge will be made by the bank for accrued interest.*

How Much Do Loans Cost During Repayment?
The actual dollar cost will depend on the length of time taken for repayment. The current agreement with the bank provides for a maximum ten-year payout period, with simple interest, 2 points above prime, computed on the unpaid principal balance monthly. A schedule of equal payments will amortize the loan, with varying proportions of the payment applied to principal and interest each month. In any month, additional payments of any amount may be made, without penalty, to reduce principal and shorten the payout period.

May Early Repayment Installments Be Made Smaller?
Yes. The borrower may choose a ten-year schedule of monthly installments, providing for repayment of the principal amount of the payout loan as follows: 3% over the first three years; 55% over the next five years; 18% the ninth year and the remaining 24% the tenth year. Each monthly installment will include interest on the existing unpaid balance. Because of the higher average unpaid balance, the total cost of this method will be greater than that of the equal-installment method. The borrower has the same privilege of prepayment under this plan as under the first.

Why Can't Most Students Borrow From the Bank Without AMA-ERF Sponsorship?

Because banks usually require negotiable collateral to secure a loan unless the applicant has stable employment, good income, well-established credit or acceptable co-signers. Most students in medical training do not have resources to borrow against and would not qualify for unsecured credit.

Does This Loan Cost Less Than the Usual Personal Bank Loan?
Yes, substantially less. One reason is that risk to the lender has been minimized because the AMA-ERF will guarantee each interim note and each pay-out note. The AMA-ERF

must maintain at all times a guarantee fund of at least 8% of all outstanding notes including principal and interest. A second reason is that a large volume of loans of the same type makes it possible to reduce the unit cost of record keeping. Both of these savings are passed on to the borrower.

What Special Flexibility Does the Borrower Have Within the AMA-ERF Plan?

The borrower may:

a) extend the term of his interim notes if he finds that a longer training period is necessary than originally expected.
b) reconvert his pay-out note to an interim note in order to suspend installment payments if he finds it desirable to leave practice and return to a full-time training status.
c) prepay his pay-out notes without penalty.
d) refinance his pay-out note with the AMA-ERF guarantee at a bank in the community where he establishes his practice.

What Are the Important Advantages of the AMA-ERF Loan Guarantee Plan?

a) It creates the opportunity to borrow up to approximately one-half the cost of a medical education for any student in good standing. The total number of students who can be assisted is limited only by the size of the guarantee fund.
b) It assists financing of medical education without subsidy of any kind.
c) It provides loans at low cost.
d) The length of time over which the student in medical education can borrow is designed to fit the period of time required to complete his educational plans. Furthermore, the repayment may be spread over a subsequent ten-year period so that installments are of reasonable size even for a maximum loan.
e) Contributions to the Guarantee Fund multiply to provide 12½ times their amount in student credit.

How is an Application Made?

Medical students may obtain application materials and additional information from the medical school Dean's office. Interns and residents should contact the Hospital Administrator. To apply it is necessary to:

a) Secure and complete two copies of the application. (AMA-ERF 102)
b) Secure and complete a copy of the interim note. (AMA-ERF 103)
c) Obtain certification of the application from the Dean, Program Director or Chief of Service, as applicable.
d) Mail all completed materials to the Continental Illinois National Bank at the address shown in the instructions on page 1 of the application.

PHYSICIANS have given generously to support this program as has the WOMAN'S AUXILIARY OF THE AMERICAN MEDICAL ASSOCIATION and the STUDENT AMERICAN MEDICAL ASSOCIATION. Special recognition is extended to MERCK SHARP & DOHME as the first representative from private industry to provide major financial support for the guarantee fund, and for its pioneering efforts in the application of loan funds to medical education.

The CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO has made an unusual effort to provide funds for loans at a minimum cost to the borrower.

The philosophy and counsel of UNITED STUDENT AID FUNDS, INC. has aided materially in the development of this program.

To all who have contributed financial support, their ideas and in other ways, and to those who will in the future add their support, we extend our appreciation.

Sponsored by American Medical Association
Education and Research Foundation
535 N. Dearborn, Chicago 10, Ill.

●American Medical Association

EDUCATION AND RESEARCH FOUNDATION

MEDICAL EDUCATION LOAN GUARANTEE PROGRAM

●PROGRESS REPORT
Through December 31, 1962

THE FIRST TEN MONTHS:

Nearly one of every 10 medical students in the country now has borrowed under AMA-ERF's Loan Guarantee Program.

Through Dec. 31, 1962, a total of 4,694 individuals (2,890 medical students, 672 interns and 1,132 residents) received 5,299 loans worth $6,111,400 in principal amount. Ten per cent of the borrowers applied for and received more than one loan. The borrowers are in training in 83 medical schools and 462 hospitals in 46 states and possessions.

The vast majority of them--97 per cent--are men. Seventy-two per cent are married, 25 per cent are single, and 3 per cent are divorced, separated or widowed.

Established in March 1962 to provide medical students and physicians in training with a ready resource to meet essential living and education costs, the program allows a maximum of $1,500 a year, and $10,000 over seven years, to be borrowed by an approved applicant, with no payment of either principal or interest required until five months after completion of training.

Applicants must be U.S. citizens in training and in good standing in an AMA-approved medical school or hospital. First year medical students must have completed their first quarter or semester to qualify. Each applicant must demonstrate, through a listing of present assets, debts, and estimated expenses and income, a clear need for loan funds.

Of the 5,823 loan applications received through the end of the year only 6.8 per cent had been rejected by the Continental Ill. Nat'l Bank & Trust Co. of Chicago, the institution currently making the loans under this program.

All approved loans are guaranteed by AMA-ERF. The bank has required the posting of $1 in a Guarantee Fund for every $12.50 it extends in credit.

CONTRIBUTIONS TO LOAN GUARANTEE FUND

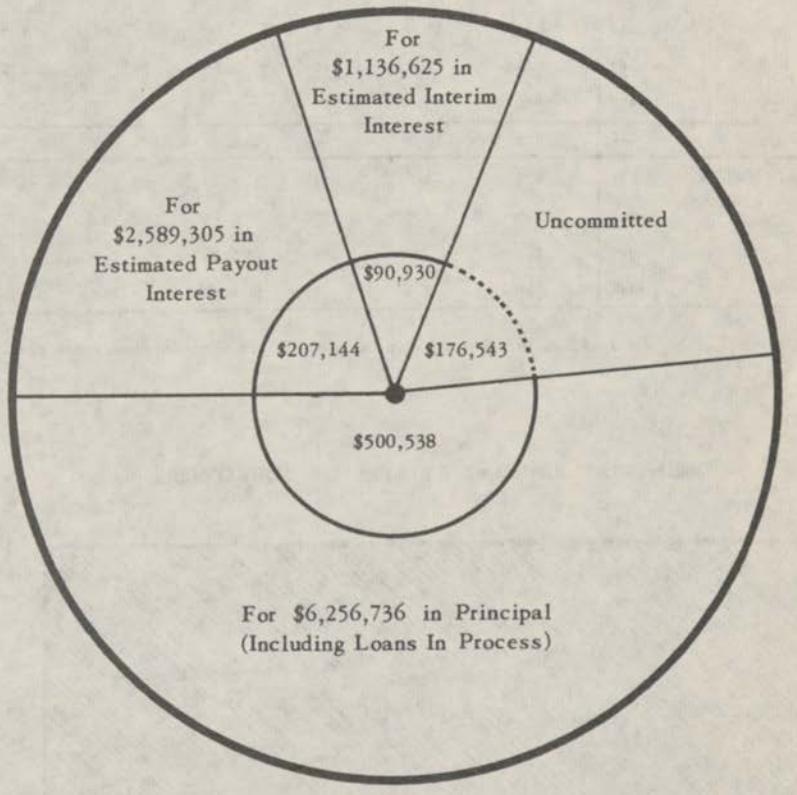
Contributions and pledges from physicians, foundations and private industry brought the total size of the Guarantee Fund to $975,165 as of December 31 1962.

Contributions of $1,000 and over include:

America's Physicians+	$460,490	George M. Fister, M.D.	2,500
Merck Sharp & Dohme*	200,000	Norwich Pharmacal Co.	2,500
Chas. Pfizer & Co., Inc.--Pfizer Laboratories and J. B. Roerig Divisions	100,000	Schering Foundation, Inc.	2,500
		Paul Revere Life Ins. Co.	2,000
American Home Products Corp.--Wyeth and Ayerst Laboratories Divisions	30,000	The American Society of Anesthesiologists, Inc.	1,000
		Leta N. Boswell, M.D.	1,000
Abbott Laboratories	25,000	Burroughs Wellcome & Co.	1,000
G. D. Searle Co.	25,000	Macoupin County (Ill.) Medical Society	1,000
Upjohn Co.	25,000	Mayo Association	1,000
E. R. Squibb & Sons	20,000	Minnesota Mutual Life Insurance Company	1,000
Hoffmann-La Roche, Inc.	20,000		
Continental Ill. Nat'l Bank and Trust Co. of Chicago	10,000	North American Clinical Dermatologic Society	1,000
Smith Kline & French Foundation	10,000	S. B. Penick Foundation	1,000
Student American Medical Ass'n.	10,000	W. Clement & Jessie V. Stone Foundation	1,000
Woman's Auxiliary, AMA	10,000		
CIBA Pharmaceutical Co.**	5,000	Wallace Laboratories	1,000
Mid-Columbia (Ore.) Medical Society	4,000	Warner-Lambert Pharmaceutical	1,000

\+ Includes $189,257 from AMA
* $100,000 of this amount is pledged for 1963
** Pledged for 1963

HOW THE GUARANTEE FUND IS COMMITTED



As shown above, loans already made, together with estimated interim and payout interest, have committed more than 80 per cent of the Guarantee Fund.

(During the interim period, before repayment begins, simple interest accrues at the rate of 5.5 per cent. During the pay back period, which extends up to a maximum of 10 years, 6.5 per cent simple interest is charged, computed monthly on the amount still outstanding.)

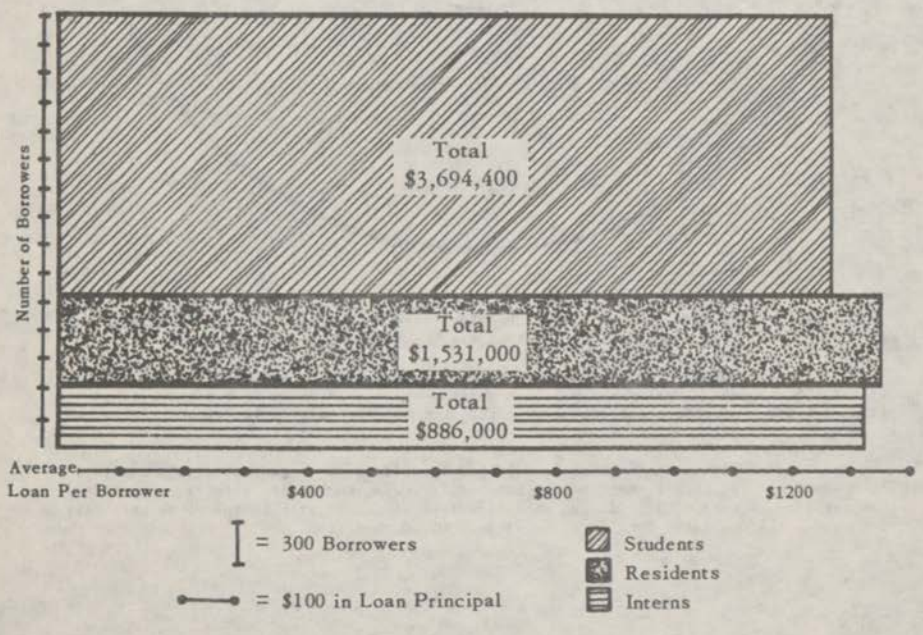
The Fund's uncommitted balance of $176,543 is sufficient to guarantee approximately 1,200 additional loans. If the present rate of borrowing continues, however, some 7,200 loans will be made in 1963. To make these loans possible, it will therefore be necessary to increase the Guarantee Fund by at least $1,000,000 this year.

BORROWERS AND LOANS BY TYPE OF BORROWER

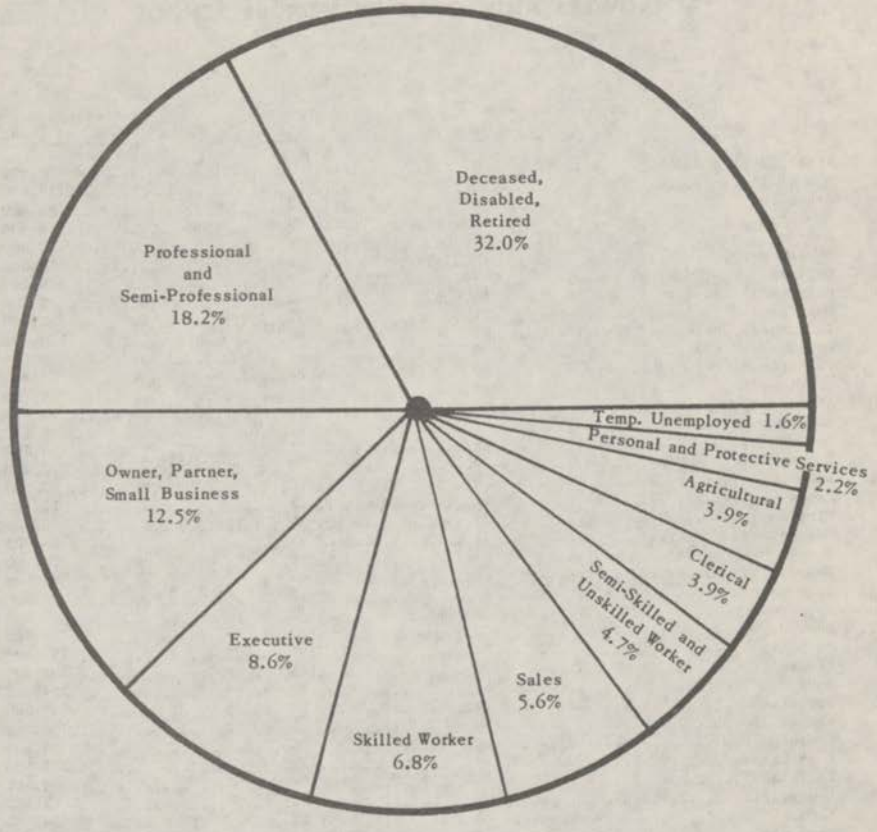
Category	Year	Number of Borrowers	% of All Borrowers	No. of Loans	Loans Per Borrower	Mean Loan	Mean Per Borrower
Medical Student	1st	291	6.3	321	1.11	$1,035	$1,145
	2nd	832	17.9	934	1.12	1,100	1,240
	3rd	829	17.8	946	1.14	1,130	1,290
	4th	935	20.1	1,094	1.17	1,155	1,300
Intern	---	672	13.8	751	1.12	1,180	1,320
Resident	1st	534	11.5	584	1.09	1,210	1,300
	2nd	323	7.0	377	1.14	1,245	1,450
	3rd	169	3.7	185	1.09	1,225	1,330
	*4th	90	1.9	96	1.07	1,250	1,330

* Includes two residents in 5th year of training and one in 6th year.

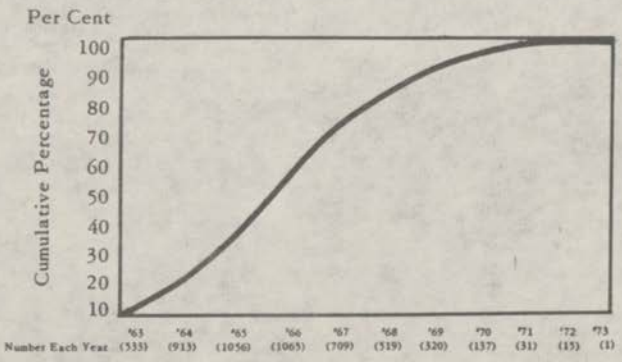
PRINCIPAL AMOUNT BY TYPE OF BORROWER



OCCUPATION OF BORROWERS' FATHERS



MATURING OF LOANS BY YEAR



Loans made in 1962 will mature at the rate shown on the accompanying graph. Repayment may be spread over a maximum of 10 years following maturity date. Nearly half of the loans will have entered the payout stage by the end of 1965, and more than two-thirds by the end of 1966.

BORROWERS AND LOANS BY MEDICAL SCHOOL

School	No. Borrowers	No. Loans	Principal Value of Loans
Albany (Union U.)	3	3	$ 3,600
Albert Einstein	10	11	14,600
Arkansas	70	74	84,000
Baylor	10	13	16,000
Boston	9	9	10,400
Bowman Gray	10	11	13,500
Buffalo	7	7	8,100
California (S. F.)	12	12	15,400
California (UCLA)	27	29	33,800
California College of Medicine	86	106	114,400
Chicago (U. of)	1	1	1,200
Chicago Medical	20	21	23,200
Cincinnati	14	16	18,700
Colorado	76	95	95,800
Columbia	1	1	1,500
Creighton	74	97	109,500
Dartmouth	3	3	3,900
Duke	9	13	13,500
Emory	11	11	12,400
Florida	32	38	42,400
Georgetown	41	45	55,800
George Washington	81	90	70,500
Georgia	60	66	84,000
Hahnemann	17	18	23,400
Harvard	1	1	1,500
Howard	100	100	125,700
Illinois	101	137	122,200
Indiana	103	115	133,200
Iowa	84	97	114,200
Jefferson	32	36	37,800
Kansas	6	6	6,600
Kentucky	31	36	38,800
Loma Linda	134	172	222,500
Louisiana	56	56	64,900
Louisville	49	52	65,500
Loyola	20	26	24,100
Marquette	59	63	79,500
Maryland	33	36	44,700
Meharry	94	97	123,800
Miami	50	58	71,100
Michigan	39	44	49,900
Minnesota	40	41	48,400
Mississippi	95	109	124,500
Missouri	18	19	16,800

School	No. Borrowers	No. Loans	Principal Value of Loans
Nebraska	10	10	$ 13,900
New York Medical College	2	2	2,500
New York State (N. Y.)	3	3	4,500
New York State (Syracuse)	4	4	3,900
New York U.	1	1	1,500
North Carolina	30	31	38,900
North Dakota	14	15	15,700
Northwestern	7	9	10,900
Ohio State	69	72	74,600
Oklahoma	68	76	82,600
Oregon	33	37	43,200
Pennsylvania	4	4	5,200
Pittsburgh	14	15	16,900
Puerto Rico	40	41	52,800
Rochester	1	1	500
St. Louis	95	106	128,900
Seton Hall	22	22	27,200
South Carolina	24	26	29,100
South Dakota	24	24	26,100
Southern California	39	45	55,200
Stanford	7	10	12,200
Temple	22	31	32,700
Tennessee	149	188	176,800
Texas (Dallas)	41	45	52,500
Texas (Galveston)	114	144	116,500
Tufts	3	3	3,200
Tulane	21	22	25,800
Utah	39	40	45,300
Vanderbilt	2	2	3,000
Vermont	14	15	16,000
Virginia (Medical College)	8	10	10,800
Virginia (U. of)	17	17	20,100
Washington (St. Louis)	5	8	8,900
Washington (U. of)	5	5	6,600
Wayne	38	40	47,400
West Virginia	44	46	52,700
Western Reserve	3	3	3,200
Wisconsin	9	12	15,000
Yale	11	11	13,600
TOTALS	2,890	3,298	$3,694,400

BORROWERS AND LOANS BY STATE

State	Interns			Residents			Totals (Incl. Med. Students)		
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
Alabama	8	8	$ 9,500	11	12	$ 15,600	19	20	$ 25,100
Arizona	10	11	10,200	4	8	11,000	14	19	21,200
Arkansas	4	4	5,300	2	2	1,600	76	80	90,900
California	108	124	142,200	108	124	157,900	521	622	753,600
Canal Zone	2	4	5,000	--	--	--	2	4	5,000
Colorado	19	22	22,700	35	41	45,300	130	158	163,800
Connecticut	7	7	7,500	16	17	19,500	34	35	40,600
Dist. of Col.	21	21	27,800	38	41	51,600	281	297	331,400
Florida	18	22	25,400	45	49	56,900	145	167	195,800
Georgia	17	18	20,500	39	42	50,800	127	137	167,700
Hawaii	2	3	2,700	3	3	4,300	5	6	7,000
Illinois	26	30	35,800	48	52	63,700	223	276	281,100
Indiana	18	19	22,700	21	23	23,600	142	157	179,500
Iowa	7	9	9,900	17	18	22,900	108	124	147,000
Kansas	1	1	1,000	10	11	13,000	17	19	22,100
Kentucky	4	4	4,300	7	7	8,300	91	99	116,900
Louisiana	15	19	26,200	43	49	60,400	135	177	177,300
Maryland	15	16	21,000	24	25	32,500	72	77	98,200
Massachusetts	10	10	11,800	33	35	40,400	56	58	67,300
Michigan	28	29	36,400	36	40	49,500	141	153	183,200
Minnesota	13	17	21,100	58	64	70,500	111	122	140,000
Mississippi	13	16	19,000	14	20	25,300	122	147	171,300
Missouri	26	28	30,400	33	36	43,500	177	197	282,500
Nebraska	3	3	3,200	4	4	6,000	93	116	135,600
New Hampshire	1	1	1,200	5	5	6,600	9	9	11,700
New Jersey	10	11	13,700	7	7	10,000	39	40	50,900
New Mexico	4	4	4,800	6	6	8,500	10	10	13,300
New York	66	72	88,500	101	114	144,400	199	219	273,600
North Carolina	4	5	5,500	16	17	23,100	70	78	95,700
North Dakota	--	--	--	--	--	--	14	15	15,700
Ohio	47	51	59,200	49	52	66,500	182	194	222,200
Oklahoma	13	13	13,300	20	22	27,000	101	111	122,900
Oregon	8	8	9,500	15	16	16,800	56	61	69,500
Pennsylvania	30	31	38,400	60	66	76,900	179	201	231,300
Puerto Rico	1	1	1,100	7	8	10,900	49	51	66,300
Rhode Island	1	1	1,500	4	4	5,500	5	5	7,000
South Carolina	3	3	3,400	8	8	11,700	35	37	44,200
South Dakota	--	--	--	1	1	1,500	25	25	27,600
Tennessee	16	19	22,500	27	28	32,600	288	335	360,200
Texas	31	39	44,400	68	73	94,100	265	310	325,000
Utah	17	18	21,200	17	19	21,800	73	77	88,300
Vermont	4	5	5,300	6	7	7,800	24	27	29,100
Virginia	6	6	7,700	27	30	37,400	58	63	76,000
Washington	10	11	15,200	13	17	17,600	28	33	39,400
West Virginia	2	2	2,800	7	7	9,300	53	55	64,800
Wisconsin	3	5	5,200	19	20	26,900	90	100	126,600
Totals	672	751	$886,000	1,132	1,250	$1,531,000	4,694	5,299	$6,111,400

(a) Number of Borrowers (b) Number of Loans (c) Principal Amount

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Texas. Dr. Dorman, I gather from your statement that you consider this, the American Medical Association considers this an education problem, primarily?

Dr. DORMAN. Financing of education; yes, sir.

Mr. ROGERS of Texas. I think the big issue that we are faced with here—and I think perhaps you will agree with me; if you do not, I want you to say so—is whether or not the Federal Government should participate in this aid to education program.

Dr. DORMAN. The number of medical schools that we will need in the future to provide the doctors to take care of the people is such as to require Government help in new construction. This is a one-time matter. It is not a recurring problem.

But we are faced with an expansion situation in which the funds are not readily available from any other source to meet the building needs that will give us enough medical schools to supply doctors for the expanding population over the next 10 to 15 years.

Now, this becomes more than just pure education. It becomes medical care of the people.

Mr. ROGERS of Texas. Yes, I understand, Doctor. But now what we are talking about—and the thing that has been confronting the American people—is whether or not the Federal Government ought to get into the education program, and I can appreciate the position of the American Medical Association in this.

But I do not think we ought to beg the question about it, because you cannot ride one horse in two directions at the same time.

Now, if this is an education problem which the American Medical Association considers it, I think the primary issue to be determined by this committee and this Congress is whether or not we are willing to open the door for Federal aid to education, whether it is in the medical field or the other fields.

I appreciate your statement about this being a one-time situation.

Now, is it the position that the American Medical Association: That, if this does not work to solve this educational problem, then the American Medical Association wants no further activity by the Federal Government in it?

Dr. DORMAN. Whether we like it or not, Congressman, we are into Federal help for education in the medical field, in the field of research grants, and I have been told by many of our deans that they would have a great deal of difficulty in having the medical schools maintain their high standards if the Federal funds in grants were removed. This is another area where we feel that we need the Federal help.

I have been on the mayor's committee on a new medical school in New York City. The city of New York would not be able to build a new medical school without substantial Federal help. It would be up to them to carry it, once the buildings were up. But for the bricks and mortar, there does not seem to be any substitute to the support that the Federal Government can give.

This is not for the continuing education in this case. This is just the plain buildings.

Mr. ROGERS of Texas. As I understand it, the position of the American Medical Association is that you are starting from the premise that

the Federal Government is going to take part in this program, and must take part in it, if it is to be solved.

Dr. DORMAN. We feel it is needed.

Mr. ROGERS of Texas. And the controversy, insofar as the American Medical Association, has to do with the application of the Federal funds which we are assuming are going to be furnished.

In other words, you take the position that it ought to be limited to construction and ought to be on a one-time basis to provide the facilities necessary to house and to provide the weapons and the instruments to fight this battle with, and the American Medical Association will take care of the students and the teachers.

Am I correct in that?

Dr. DORMAN. Yes, sir.

Mr. ROGERS of Texas. Doctor, what I am doing is searching for information, because, in my district, I have quite a number of doctors who are in deep controversy about this, and I am sure you understand and appreciate that.

Some of them brand it as socialism. Others say that they want no part of it at all; they do not want to be part of it. Some of them have told me they will quit the American Medical Association if they do not stop supporting this type of legislation.

My feeling is that we are going to be faced with this situation, insofar as Federal aid is concerned, not only in the medical field, but also in these other fields.

Now, do you have a position, or does the American Medical Association have a position with regard to Federal aid to education generally?

Dr. DORMAN. No, sir; we have not gone into Federal aid to education in other areas. We have supported the Hill-Burton construction of hospitals, and part of this bill does support building of hospitals where they are affiliated with medical schools as part of the educational problem, so that I feel that it would be incongruous to say yes, we will support Government building of Hill-Burton hospitals, but say no, when you get into a hospital affiliated with a medical school, or to say where you get into building the medical school that is needed, then we must back away.

Mr. ROGERS of Texas. Doctor, why is it that we have had a lack of keeping up, let us say, with the facility needs in the medical profession or in the hospitalization in the medical school field?

Has it been because the States have failed to meet their responsibilities in providing funds to build these?

Dr. DORMAN. Not entirely, Congressman.

There are a good many interlocking factors here. We have had people approach us saying, "We would like a medical school in this small town," and when you tell them that they will have to raise $21 million to $31 million in capital just to set up the medical school for the buildings, they back away very quickly, because they do not have that sort of money in that area. They could not even support the medical school, once it was built.

When someone comes to the AMA and says, "We would like to set up a medical school," our first question is, "Will you be able to support it and keep it going once it is built?"

Another problem that comes up is one that we face in New York City where we have six medical schools now. The question is: How many more could we support? As far as clinical material for teaching is concerned, we might be able to support 14 medical schools, but, again, we need the funds to build them.

The State of New York is not in a mood to put another eight medical schools in greater New York City, but, on the other hand, you cannot put them up in the reaches of St. Lawrence County, where we only have about four or five doctors, and you have a lot of beautiful, wild, hunting country and parkland, but few patients on which to practice. There are the questions of proper conditions and where you can get clinical material for teaching in the last 2 years.

It is not entirely a problem of one State not doing its share, because some of our Western States do not have the material to support even one medical school.

Mr. ROGERS of Texas. Doctor, you feel, though, that the student problem will be solved by the American Medical Association loan program; that you can take care of that situation, insofar as making the funds available for boys and girls who want to go into a medical school, you can make funds available to those people through the AMA–ERF fund?

Dr. DORMAN. So far we have been able to. We are still getting about 150 applications a week, and we think we are going to be able to carry this.

Mr. ROGERS of Texas. As I understand it, you do not feel that you can, under those circumstances, support the student loan program in H.R. 12?

Dr. DORMAN. There are other loans programs and other funds available to the students besides this AMA–ERF.

Mr. ROGERS of Texas. Yes, sir; so I understand.

Dr. DORMAN. And I have been told by some of the deans that I saw last weekend that, where there is an established loan fund in a school, the AMA program has eased the call on their funds. Now, in some of the new medical schools like Kentucky, they do not have a background of scholarships and funds available for their students. They have had to lean more heavily on the AMA loan program, and it might be well if they could lean also on something such as the loan fund in H.R. 12, because this would probably supplement what the AMA is doing.

Mr. ROGERS of Texas. I see.

Now, your positioin is that the American Medical Association is not objecting to, or opposing, that feature of the bill, but you are directing your affirmative support to the construction part of the bill?

Dr. DORMAN. That is correct.

We are not opposing the other, but we are strongly supporting the provision for the bricks and mortar, because without it we are going to fall behind. The time is getting more and more critical. We will not have doctors in practice from these proposed new schools for another 10 years.

Mr. ROGERS of Texas. Doctor, do you have a brick-and-mortar fund or a construction fund in the AMA similar to the student loan fund?

Dr. DORMAN. No, sir.

However, we do have contributions through the education foundation which goes to the school without strings. This can be used for bricks and mortar, but it is not a separate fund for that specific purpose.

Mr. ROGERS of Texas. I thank you, Doctor, for your statement. As I say, I have been in somewhat of a dilemma because I find myself trying to understand how people can come up and say, "We are against Federal aid to education, but we are for Federal aid to education."

It is sort of a conflict in many ways, and I am glad to get your views on it.

Thank you very much.

The CHAIRMAN. Mr. Springer?

Mr. SPRINGER. Doctor, in order that I may reduce this to the irreducible sentence or two, you are for bricks and mortar but not for scholarships, is that correct?

Dr. DORMAN. That is not quite correct, Mr. Springer.

Mr. SPRINGER. Not for scholarships?

Dr. DORMAN. We are not against scholarships at all. We take no position on that. But we certainly do not oppose it.

Mr. SPRINGER. You do not take any position on it?

Dr. DORMAN. No, sir; but take strong support of bricks and mortar.

Mr. SPRINGER. Are you saying, though, in your statement on pages 4, 5, and 6 that the AMA-ERF program is adequate?

Dr. DORMAN. No, sir. We say that it is filling a big need. We did not say that it was adequate. It was never designed to take the entire load. It was designed to assist in this area. It does not carry the full load, and I do not believe it ever could.

Mr. SPRINGER. It was my understanding that you had a reserve in this principal fund, though, is that correct?

Dr. DORMAN. That is correct.

Mr. SPRINGER. That has not been obligated?

Dr. DORMAN. That is correct.

Mr. SPRINGER. That has not been applied for by any medical student?

Dr. DORMAN. It would run out in about 90 days at the present rate of applications, so we have to keep replenishing it.

Mr. SPRINGER. Then is the program adequate to take care of those who do apply and are qualified?

Dr. DORMAN. So far, yes, sir.

Mr. SPRINGER. That is all. Thank you.

The CHAIRMAN. Mr. O'Brien?

Mr. O'BRIEN. I have no questions, Mr. Chairman.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. Doctor, with respect to the students who have applied to the Medical Association for loans, can you tell us how many of those students received funds under the National Defense Education Act during their academic work?

Dr. DORMAN. We do not have that figure, Congressman. I do not know.

Mr. YOUNGER. Does it make any difference to you whether the student is obligated for loans during the 4 years of his academic work?

Dr. DORMAN. Could I have Dr. Wiggins speak to that?

Mr. YOUNGER. Yes.

Dr. WIGGINS. It makes a difference, Mr. Younger, only in the sense that, as they review the application and make a value judgment as to whether they should or should not make the loan to the student. They are interested in his total indebtedness. There could be a point where the student's total indebtedness might mitigate against the AMA approving him for a loan under this program.

I do not believe that there has been one instance of that as yet, however, and it would only be in this sense: That they would be interested in other loans or scholarships. Other loans or scholarships certainly do not make him ineligible, of themselves.

Mr. YOUNGER. When does repayment of the loan begin?

Dr. WIGGINS. If the loan is made to the first-year student, the earliest that repayment is requested, although it may come any time the student wishes to do it, is 7 years later. If he has time in the Armed Services, there would be an additional period of grace.

Mr. YOUNGER. It would be extended during his period in the Armed Services?

Dr. WIGGINS. Yes, with the notion that that would allow him opportunity to be in the practice of medicine and earning money, so that he could repay. Then he has 10 years to repay.

Mr. YOUNGER. Do you have any set basis for repayment of the loan?

Dr. WIGGINS. It extends over a 10-year period. In essence, it works out that the student—the former student—at the time repayments are to begin, really renegotiates his loan so that all of the accumulated interest is put into a single loan. There is a different interest rate that pertains during the time he is actively earning money as a practicing physician.

Mr. YOUNGER. What are the various interest rates?

Dr. WIGGINS. The interest rate during the time that he is a student and during the 7-year period, by agreement, is ½ of 1 percent above the prime bank interest rate.

After that it is a matter of negotiation between the individual and the bank with which we have the contract for this program, or, preferably, his own bank in his own community where he will practice.

Mr. YOUNGER. And it could vary in various parts of the country, as bank rates do vary.

Doctor, one of the big problems that has been testified to throughout these hearings is how to get doctors located in those areas which are now short of medical assistance. What would you recommend as the best way to do that?

Dr. DORMAN. Congressman, there are so many reasons that a doctor may not settle in areas where there is need, that we have to attack the problem from a great many different points of view. We have the question of whether that area can support the doctor so that he can make a living. There is the question of facilities which he was trained to use. He may not have the laboratory facilities so that he can get the X-rays and the laboratory work he needs to make his diagnoses, to practice the type of medicine that he was trained to do. And there is the question of whether he can get together with his colleagues to continue his education, as it must be continued throughout his years.

Aside from these, we have the problem of many doctors marrying girls who want some sort of cultural entertainment. They like to be near a big city where there is music or theater or some other attraction of that sort.

There is the problem of the education of his children.

So that we have to attack the matter from a number of different points of view.

We have the Sears, Roebuck Foundation, which has been working on settling doctors in needed areas. They feel that the gross income for an area has to cover between $20,000 to $25,000 a year. That is not money in the doctor's pocket, but that has to be the income to support the office as well as what he has to live on. They have been very helpful in working with the AMA in getting people out into various areas.

Some of the States have scholarships which require that the doctor practice in a rural area in repayment if he accepts these funds.

Sometimes these work out; sometimes the doctors go out into the rural area, complete their bare obligation and then go back to a city, either to specialize or to practice in a central area. But the question of getting the doctors into rural areas also involves communications. If you have a car or a plane to get around, you can cover a much larger area than if you are in a locality where everybody must come into your office.

It is a problem that we have been attacking, for which we do not have any single, final answer.

Congressman, could I go back to your other question?

In this pamphlet, on the second page, the third paragraph down, it says how much can be borrowed. An individual can borrow up to $1,500 in any 1 year between September and August, up to a total of $10,000. The total indebtedness for all educational funds is $15,000. If he has drawn from another fund, he is limited to that extent.

Mr. YOUNGER. As you know, this bill provides that 50 percent of the loan is forgiven if the doctor goes into an area designated by the Surgeon General as one needing physicians.

Dr. DORMAN. Yes, sir.

Mr. YOUNGER. Do you think it would be of any value to increase that forgiveness to 100 percent if he were to practice for 10 years in such an area?

Dr. DORMAN. Because of the different factors I have mentioned I do not think that the difference of another 5 years, or the other 50 percent, would be a controlling factor in his decision. You might get a few that would do it on that basis, but I think that most of the ones who were going to take advantage of the forgiveness would take it under the present provision of the bill.

Mr. YOUNGER. Thank you, doctor, for a very fine statement.

The CHAIRMAN. Mr. Long?

Mr. LONG. No questions, Mr. Chairman.

The CHAIRMAN. Mr. Glenn?

Mr. GLENN. Doctor, who approves the applicants for the loans, the AMA or a branch of the AMA or the medical school or the hospital?

Dr. DORMAN. Could I have Dr. Wiggins answer that?

Dr. WIGGINS. It is done within the AMA. We are in contact with the student's school, with the dean's office of the school, to make certain that he is in good standing in the medical school. The decision as to whether the loan should be granted is made within a department of the AMA.

Mr. GLENN. Where is that department located?

Dr. WIGGINS. In Chicago, in the Chicago office.

Mr. GLENN. And that is for the whole United States?

Dr. WIGGINS. Yes, sir.

Mr. GLENN. And this form which is submitted by the applicant must contain sufficient information for the department or committee to see just what the young man has and all the other necessary factors which go into making a basis for you to arrive at a decision?

Dr. WIGGINS. In the statement that Dr. Dorman read, it was indicated that a little over 6 percent of the applicants had not been granted loans. This is a very low turndown rate. One reason given in the statement was that sometimes this was for such nonessential things as automobiles. There are occasions when loans are granted for the purchase of automobiles if the automobile is necessary to the student, in terms of getting from the medical school to a hospital that is a fair distance away, and there is no other way of getting there.

Mr. GLENN. Do you also require any recommendation or submission of facts from the dean of the medical school or the managers of the hospital?

Dr. WIGGINS. Primarily we solicit opinion, and we must have a statement that the student is in good academic standing. We solicit opinion about other points.

Mr. GLENN. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Devine?

Mr. DEVINE. Thank you, Mr. Chairman.

Dr. Dorman, you, of course, have no way of knowing how many of your 200,000 doctors in the American Medical Association support this legislation, do you?

Dr. DORMAN. Specifically, no. It is supported by their representatives in the house of delegates, and they are supposed to report all members. There are individual members, definitely, who would differ with any decision of the house.

Mr. DEVINE. You are reaching back clear to 1951 when your house of delegates made an expression that they would support, generally, this type of thing, Federal aid for medical school construction, is that correct, and it has been reaffirmed?

Dr. DORMAN. It has been reaffirmed, yes sir.

Mr. DEVINE. Now, the American Medical Association from time to time does take positions on legislation?

Dr. DORMAN. Yes, sir.

Mr. DEVINE. Have they taken a position through your house of delegates on Federal aid to education, generally?

Dr. DORMAN. No, sir.

Mr. DEVINE. Only as it relates to your profession?

Dr. DORMAN. That is right.

Mr. DEVINE. It does seem to me I read somewhere they have taken a position on medicare under social security, is that correct?

Dr. DORMAN. Medicare, they did, yes.

Mr. DEVINE. Would you agree, doctor, that those of us in the Congress have a responsibility, when we are appropriating public funds, to know what is going to happen to them, to have some control over them?

Dr. DORMAN. As a private taxpayer, I certainly hope so, Congressman.

Mr. DEVINE. You are also a private taxpayer, in addition to being a representative of the association today, is that correct?

Dr. DORMAN. And as a trustee of the association, I feel that any funds should have very adequate supervision.

Mr. DEVINE. And would we not be shirking our responsibilities as representatives of the people here in Congress if we did not have some control over the expenditure of public funds?

Dr. DORMAN. You certainly would.

Mr. DEVINE. I am glad our colleague from New York is present here.

You have said in your own State you find you do not have funds with which to construct additional medical facilities without Federal help, is that correct?

Dr. DORMAN. Not sufficient, yes, sir.

Mr. DEVINE. Now, you know what Federal money is, do you not?

Dr. DORMAN. Yes, sir.

Mr. DEVINE. And it does come from the taxpayers across America.

Dr. DORMAN. Yes, sir.

Mr. DEVINE. I know in my home State of Ohio for every dollar we get from Washington, the taxpayers of Ohio are paying $1.27, and I kind of have an idea that the taxpayers of New York pay more than that for every dollar they get. I do not know whether my colleague from New York knows the exact figure or not.

Mr. O'BRIEN. I do not, but it is substantial.

Mr. DEVINE. So actually your taxpayers in your State would be paying more for the dollars they get back from the Government under this program, would they not?

Dr. DORMAN. Yes, sir.

Mr. DEVINE. In the hearings a year ago, a year ago January, a representative of your organization—maybe you were the one that testified, I am not sure at this time—pointed out the fact that you had a program for construction around the country at various colleges including the University of Texas, the University of Connecticut, the University of New Mexico, Brown University up in Rhode Island, Rutgers in New Jersey, Michigan State up in East Lansing, and I think the University of California in San Diego.

Dr. DORMAN. Yes.

Mr. DEVINE. And, in addition to that, I think there were potential new medical schools being proposed in, I believe 14 other States, including my State of Ohio.

Dr. DORMAN. They were under consideration at that time, yes, sir.

Mr. DEVINE. Has there been any additional developments in that particular program since your testimony 13 months ago?

Dr. DORMAN. These were in various stages of planning. At present the number that have made final commitments has increased. There

are still others which are now under construction. There are some that previously considered it but have withdrawn.

Mr. DEVINE. They have withdrawn?

Dr. DORMAN. Some of them have. At least, they have stopped their planning for the present, yes sir.

Mr. DEVINE. Are you able to provide for the record either at this time or can you provide that?

Dr. DORMAN. I think Dr. Wiggins can give you that information.

Mr. DEVINE. Those States that have withdrawn?

Dr. WIGGINS. The one that was on the list that was submitted at the committee's request last time that promptly comes to mind is Maine—the State of Maine and the University of Maine.

Mr. DEVINE. You do not know whether any further action has been taken in this general field?

Dr. WIGGINS. I believe that their decision is that, at least for the time being, they are no longer going to seriously consider the construction of a school in Maine.

Mr. DEVINE. I might say, Doctor, that it is of concern to many of us that are generally opposed to further centralization of Government, for an organization such as yours that in one bit of legislation such as medicare resists it very violently on the basis of further centralization of Government and possible socialization of the medical profession, and, yet, you come in on another bill and want to get your hand in the Federal till because it does affect particularly your area.

I believe you testified that the AMA has taken no position on Federal aid to education generally?

Dr. DORMAN. That is right.

Mr. DEVINE. But they are taking a position on the construction features of this legislation?

Dr. DORMAN. Yes, sir.

Mr. DEVINE. Thank You.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Florida. No questions.

The CHAIRMAN. Mr. Keith?

Mr. KEITH. Mr. Chairman.

In event one of your borrowers dies, what happens to his indebtedness?

Dr. DORMAN. There is an insurance cover on death. If he defaults, the AMA pays the fund.

Mr. KEITH. If he defaults, does he pay the insurance premium?

Dr. DORMAN. No, sir, that is covered by the association.

Mr. KEITH. That is included in the loan interest?

Dr. DORMAN. That is right.

Mr. KEITH. But it is covered and his liability is eliminated in the event of his death?

Dr. DORMAN. Oh, yes, but we are responsible if he defaults on us.

Mr. KEITH. I understand.

Do you in any way screen your prospective doctors who are taking these courses with reference to their political philosophy?

Would you ask them, for example, how they felt on Medicare for the aged?

Dr. DORMAN. No, sir.

Mr. KEITH. Just because someone supported Medicare for the aged under social security, you would not deny him the opportunity for these loans?

Dr. DORMAN. No, sir.

Mr. KEITH. That is all, Mr. Chairman.

Dr. DORMAN. We do not know how he feels. We do not ask it.

Mr. KEITH. Thank you.

The CHAIRMAN. Mr. Brotzman?

Mr. BROTZMAN. Doctor, I am basically interested in clearing up one particular area, and I am directing your attention to the question of need, because I think it is my responsibility on this committee to make certain determinations in this area.

Now, first of all, turning to your testimony—and I am referring now to page 3—to paraphrase, I would understand that it is the position of your association that there is a need for assistance in the expansion, construction, and remodeling and so forth?

Dr. DORMAN. Yes, sir.

Mr. BROTZMAN. Now, as I read that particular sentence, I find sort of a qualification, which is "where maximum freedom of the school from Federal control is assured."

Now, you have had the opportunity to look at this particular piece of legislation?

Dr. DORMAN. Yes, sir.

Mr. BROTZMAN. Do you find any assurance in that particular law that would indicate to you that there would not be some Federal control asserted over this particular phase of the bill?

Dr. DORMAN. After reading it, I feel that there are safeguards.

Mr. BROTZMAN. You think there is adequate assurance so that it would be satisfactory to your association?

Dr. DORMAN. Yes.

Mr. BROTZMAN. I think you also testified a moment ago, in response to a question by my colleague from Ohio, that you felt that the Congress should have some sort of control if they are going to spend these vast amounts of money?

Dr. DORMAN. They are setting up an advisory committee on this. They will be reviewing the program periodically, I believe, which I believe does give them control on this matter.

Mr. BROTZMAN. But if I understand it, now, from your statement, this would not be unpalatable to you, this matter of control, is that right?

Dr. DORMAN. The matter of control, if you mean the control of where the funds are going, whether they are achieving the result for which you are designating them, is one matter which I feel you should control.

When you get into the question of, should you put in so many hours on surgery and so many hours on medicine and so many hours on political indoctrination, I think that this would be a very unfortunate area for Congress to try to control.

Mr. BROTZMAN. Let us refine your statement just a moment. I can see that is a black-white situation that you have given me.

Dr. DORMAN. That is right.

Mr. BROTZMAN. But, I think you said you would accept the amount of control necessary as to where a particular hospital or an educational facility should be located?

Dr. DORMAN. I do not think I said that.

Mr. BROTZMAN. Oh, you did not say that? Well, would that be acceptable to you, if there was the extent of control as to where it would be ultimately located?

Dr. DORMAN. I would hate to see Congress take that degree of control. I believe that there are other factors in the education of the doctors which would govern the placing of medical schools that are important. I think that you should leave it to some local advisory groups.

I do not care whether they are made up entirely of doctors, by any means. There are a lot of other things that come into this. But I do not think that Congress, itself, should retain the decision as to the location of a medical school. To positively locate would be unfortunate.

Mr. BROTZMAN. I think in your testimony, for example, you mentioned the Hill-Burton law, is that not correct?

Dr. DORMAN. That is correct.

Mr. BROTZMAN. I am not as familiar with that particular law as many of my colleagues on this committee, because I know they have worked with it more. But is the amount of control exerted under that particular bill acceptable to your association?

Dr. DORMAN. I would prefer a little less. I think that in some cases hospitals have been placed where they have not had enough medical support to give them their highest usefulness.

Mr. BROTZMAN. In other words, there is not maximum freedom of Federal control, even in that case, is that not correct?

Dr. DORMAN. No, sir, there is not.

Mr. BROTZMAN. All right.

Now, I think in response to my colleague's question from Texas, you made a statement that this would be a one-time situation?

Dr. DORMAN. For any one medical school, we would look on it as a one-time. This is important. We have to have help at this time, if we are going to get enough medical facilities in which to educate our people.

Mr. BROTZMAN. But you do not conceive that this is a one-time situation as to this particular problem, do you, because it is going to continue?

Dr. DORMAN. During the foreseeable future, yes, it probably is.

Mr. BROTZMAN. I only have one more question.

You testified as to the need in regards to Federal moneys for the construction program. I would like to direct your attention once more as to need in one other area.

Do you have an opinion as to whether or not a need exists for Federal moneys as regards loans to students?

Dr. DORMAN. On this specific item, we do not have any official position. There is need for loans to students. The question comes up whether this should be from Federal sources, and on this we have no specific position either for or against. We do not oppose it.

Mr. BROTZMAN. And I would understand that you would rather not give us your personal opinion in this particular area, or you are not authorized to do that?

Dr. DORMAN. I am not authorized.

If you want it as a purely personal thing, I could be reflected as speaking in an official position, I am afraid.

Mr. BROTZMAN. Yes.

Dr. DORMAN. We do not definitely oppose it.

Mr. BROTZMAN. I think that is all, Mr. Chairman. Thank you.

The CHAIRMAN. Doctor, first, I want the record to reflect what the facts are with reference to the Hill-Burton program. I know you are eminently familiar with the program; you must be. The medical profession is a very vital part of this program. If I understood correctly, you indicated in reply to Mr. Brotzman's questions that the Federal Government exercised probably a little too much control over the location of these facilities and so forth.

Dr. DORMAN. Only in some instances, Congressman. Much of this is on a local-decision basis.

The CHAIRMAN. Doctor, as a matter of fact, location of a facility is determined by the applicant, which is a local sponsor such as a nonprofit corporation, a city or county or a similar body, is that not right?

Dr. DORMAN. That is correct.

The CHAIRMAN. And that is done through application to the State agency, and the decision, plans, and everything are worked out between the local sponsor and the State agency under the law, is it not?

Dr. DORMAN. Yes, sir.

The CHAIRMAN. So, consequently, the Federal Government has nothing to do with determining the site location. After that has been done, then the application is presented to HEW—the Public Health Service—who either approves or disapproves. Now, do you know of any instance where the Federal agency has turned down an application or held it up because of the site location?

Dr. DORMAN. No, sir.

Mr. ROGERS of Florida. Would the gentleman yield for one question?

The CHAIRMAN. Oh, yes.

Mr. ROGERS of Florida. I do not think the impression should be given that under Hill-Burton the Federal Government would go into the operation of a hospital, because that certainly is not true, is it?

Dr. DORMAN. No, that is correct.

Mr. ROGERS of Florida. It does not try to operate in any way.

Dr. DORMAN. No, sir.

Mr. ROGERS of Florida. So there is no Federal control, as far as operating a hospital.

Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Doctor, we recognize the imperative necessity of providing adequate facilities for our institutions if we are going to meet the future health needs of the country. I do not think there is anyone who disagrees with this objective. Of course, it has already been stated here that the medical institutions and programs of this country are the best in providing the highest standards of health of any nation in history, is that not true?

Dr. DORMAN. That is true, yes, sir.

The CHAIRMAN. Now, in the past, these institutions have had substantial help in providing these needed services through contributions and philanthropic organizations, is that not true?

Dr. DORMAN. Yes, sir.

The CHAIRMAN. Do you have anything like the contributions now, or have you had in the past few years, which you had in years past?

Dr. DORMAN. Not in proportion, Congressman, because of the increased costs. Costs have gone up, but the contributions have not maintained an equal, proportionate increase.

The CHAIRMAN. Have high taxes had anything to do with it?

Dr. DORMAN. I believe they probably have.

The CHAIRMAN. Obviously, from reports I have received, high taxes have had substantial bearing on it. So, if the traditional way which has developed in this country of supporting these institutions is no longer heeded because of the action of the Federal Government, is it not the duty of the Federal Government to try to correct the imbalance in some way?

Dr. DORMAN. It would help greatly if it could, sir.

The CHAIRMAN. You mentioned—in response to questions—the programs you supported and those you opposed. Is it not a fact that the medical profession of the country supported rather vigorously the Kerr-Mills bill?

Dr. DORMAN. Yes, sir.

The CHAIRMAN. And you feel that that is the more appropriate way for the Federal Government to make contributions in that particular field, where the need is greatest?

Dr. DORMAN. Yes, sir.

The CHAIRMAN. And you do not feel that that program is necessarily leading you into socialized medicine?

Dr. DORMAN. No, sir.

We feel that there are some changes we would like to see in its application in certain areas.

The CHAIRMAN. From the reports I get in my State, there will have to be some changes, if it is going to be successful.

Dr. DORMAN. Yes, sir.

The CHAIRMAN. Now, nothing has been said regarding the charitable work performed by the medical profession. Is there any way of estimating the percentage of work performed by a physician which is considered, or actually is, charity?

Dr. DORMAN. We have those estimates. I do not have them with me, Mr. Harris, but we can get those for the record, if you would like them.

The CHAIRMAN. A well-known doctor in my own community and one whom I think is recognized as highly capable, has estimated his charitable contribution at about 20 percent of his practice. Would you say that is out of line?

Dr. DORMAN. No, sir, that is not out of line.

The CHAIRMAN. And, of course, individual doctors never go out and parade before the public what they are doing in this respect.

Dr. DORMAN. If they do, it is usually considered unethical, and they would be called to account by their colleagues.

The CHAIRMAN. And there is very little notice given to it by the communication media of the country, is that not true?

Dr. DORMAN. Yes, sir.

(The following information was later received with respect to the above colloquy:)

AMERICAN MEDICAL ASSOCIATION
Chicago, Ill., February 15, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. HARRIS: At the time of the hearings on H.R. 12, 88th Congress, you requested that the American Medical Association provide you with data reflecting the amount of medical care donated by the physicians of the United States to those who are unable to pay for doctors' services.

A survey on free medical care provided by physicians was undertaken by New Medical Materia magazine published by the Hearst Corp. in its October 1960 and its May 1961 issues. Copies of this magazine's reports are included with this letter for your information.

You will note that physicians in 48 States and the District of Columbia provided free medical care worth $657,535,000 during 1960. The total is 10.6 percent more than the $594,903,000 worth of medical care provided free by physicians in 1955.

The magazine's survey further showed: (1) The value of free care in 1960 averaged $3.71 for each citizen. (2) The average amount of free care given by the physician in general practice was $3,378, and by the medical specialist, $4,842. (3) The treatment of private patients without charge formed the greatest portion of the typical physician's free service (38.6 percent), with hospital ward service second (27.1 percent), and outpatient clinic service comprising 22.7 percent.

I certainly hope that the foregoing, together with enclosures, will be of assistance to the committee. This survey is but another documentation of the fact that physicians give free medical care and that they have invariably donated their professional services whenever and wherever they be needed.

Sincerely yours,

F. J. L. BLASINGAME, M.D.

DOCTORS' GIVEAWAYS ARE HUGE IN EVERY STATE

In its October 1960 issue, New Medical Materia presented a remarkable group of charts, showing that the Nation's doctors annually give away, a huge amount of their medical services—without compulsion or expectation of public applause. Based on a study drawn from a nationwide sampling of physicians, the data in these charts were widely quoted.

Because of a demand for a State-by-State breakdown, NMM repeated its study—but on a more intensive basis. A random sample of physicians was tapped in each of the 48 States in continental America as well as the District of Columbia to obtain the data given on these two pages.

Among the high points evident in the tables:

The value of services given away by the average general practitioner is greatest in Florida, $4,762.

Among specialists, the greatest average "giveaway" is $5,325 in Tennessee.

In 1960, the value of the free care given away by the Nation's physicians works out to $3.71 for every man, woman, and child in the country. This represents an increase of 2.5 percent over the $3.62 per person given away in 1955.

On the basis of free care per person living in the State, the No. 1 ranking goes to the District of Columbia, with New York in second place.

The total aggregate giveaway was biggest last year in New York—next biggest in California. The same States also ranked first and second in 1955.

The biggest percentage increase in statewide giveaway from 1955 to 1960 occurred in Florida, 25.5 percent. Ohio was second with 23.5 percent.

The largest portion of the typical physician's giveaway is that represented by treatment of private patients without charge. In Idaho, this accounted for 54 percent of the total giveaway—more than in any other State.

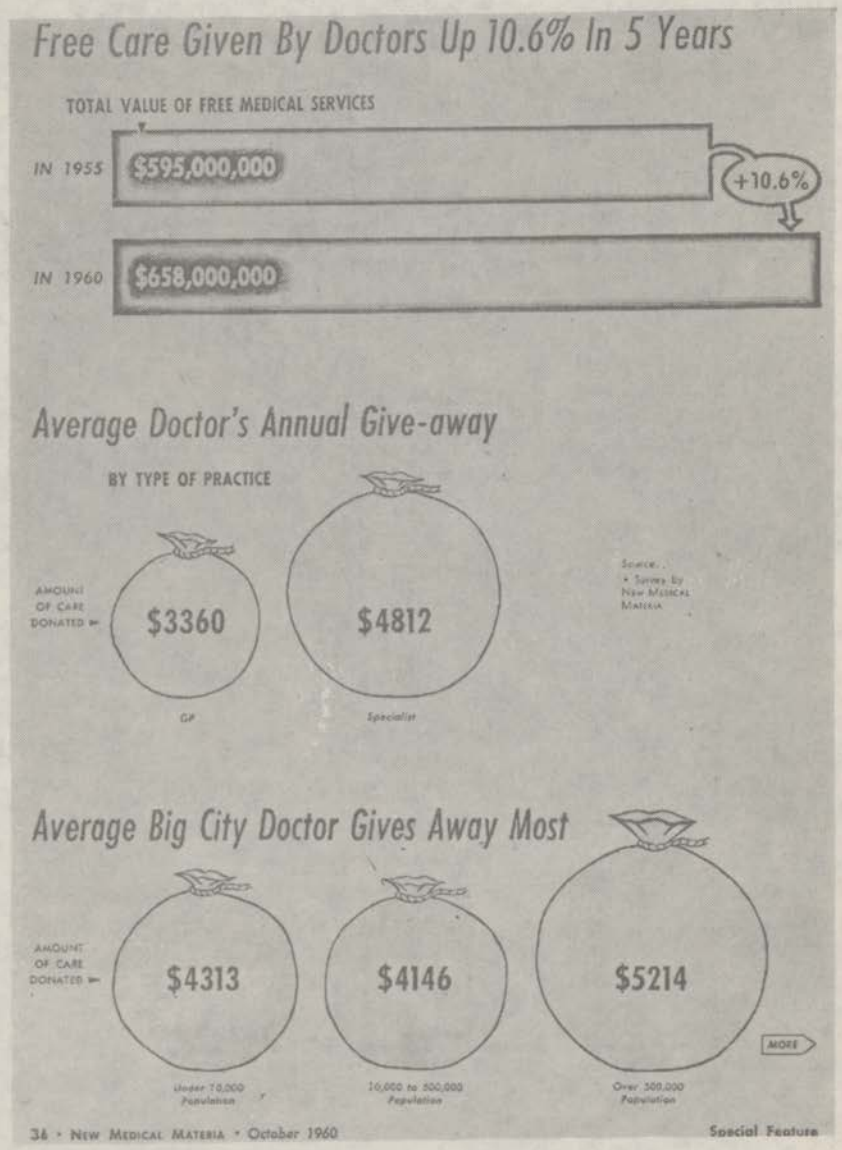
Unpaid hospital ward service accounted for 41.9 percent of total giveaway in Maine, the top State on this score. Next was Rhode Island, with 38.8 percent.

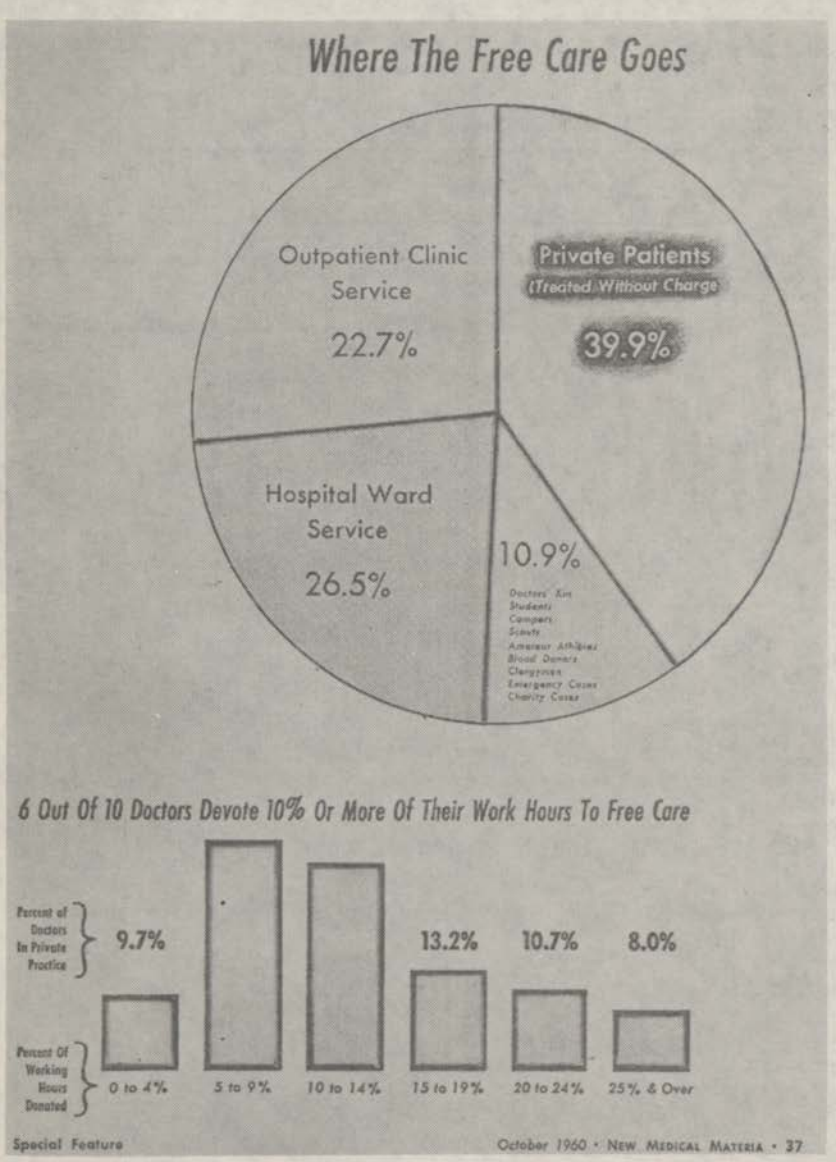
States	Apportioning free care time (percent)				Amount of free care given in 1960				Total 1955 giveaway	Percent change	Total 1960 give-away	Amount given per capita		
	Priv.[1]	Hosp.[2]	Out.[3]	A.O.[4]	By all groups	All specialists	Per group	Per specialist				1955	Percent change	1960
Alabama	38.9	31.2	19.7	10.2	$4,741,000	$4,234,000	$4,378	$5,016	$7,878,000	+13.9	$8,975,000	$2.60	+6.5	$2.77
Arizona	43.8	25.6	20.4	10.2	1,704,000	2,514,000	3,890	4,798	3,457,000	+22.0	4,218,000	3.53	−7.4	3.27
Arkansas	39.7	29.4	18.8	12.1	3,563,000	1,806,000	4,030	4,828	5,088,000	+5.5	5,369,000	2.84	+6.7	3.03
California	42.8	22.9	27.0	7.3	28,417,000	46,219,000	3,798	4,821	61,696,000	+21.0	74,636,000	4.73	+1.9	4.82
Colorado	40.6	25.5	22.6	11.3	2,999,000	4,412,000	3,684	4,493	6,315,000	+17.4	7,411,000	4.08	+4.2	4.25
Connecticut	27.3	36.3	29.1	7.3	3,332,000	8,296,000	2,831	4,900	10,352,000	+12.3	11,628,000	4.62	.0	4.62
Delaware	25.1	32.8	29.4	12.7	425,000	915,000	2,484	4,573	1,167,000	+14.8	1,340,000	3.02	+.3	3.03
District of Columbia	37.8	24.7	28.4	9.1	1,637,000	4,754,000	3,119	5,025	5,873,000	+8.8	6,391,000	6.89	+24.4	8.57
Florida	37.4	26.3	28.8	7.5	8,438,000	10,664,000	4,762	5,078	15,223,000	+25.5	19,102,000	4.41	−11.3	3.91
Georgia	39.9	32.7	21.6	5.8	6,075,000	6,262,000	4,444	4,942	11,404,000	+8.2	12,337,000	3.15	.0	3.15
Idaho	54.0	15.3	15.9	14.8	1,226,000	606,000	3,682	3,583	1,758,000	+4.2	1,832,000	2.89	−4.5	2.76
Illinois	35.7	21.2	27.7	15.4	16,588,000	21,157,000	3,125	4,941	34,502,000	+9.4	37,745,000	3.69	+2.2	3.77
Indiana	37.0	18.4	20.4	24.2	6,746,000	5,545,000	3,132	4,021	11,642,000	+5.6	12,291,000	2.69	−1.5	2.65
Iowa	40.7	22.5	24.6	12.2	4,296,000	3,126,000	3,143	4,075	7,273,000	+2.0	7,422,000	2.70	+.4	2.71
Kansas	36.5	24.8	21.9	16.8	3,644,000	2,709,000	3,562	4,300	6,144,000	+3.4	6,353,000	2.98	−2.0	2.92
Kentucky	37.3	27.4	21.1	14.2	4,059,000	3,941,000	3,305	4,540	7,396,000	+8.2	8,000,000	2.46	+7.7	2.65
Louisiana	38.9	28.2	19.4	13.5	5,030,000	5,568,000	4,188	4,833	9,422,000	+12.5	10,598,000	3.22	+1.9	3.28
Maine	30.2	41.9	21.2	6.7	1,568,000	1,618,000	3,438	4,858	2,924,000	+9.0	3,186,000	3.23	+2.5	3.31
Maryland	32.3	30.6	28.0	9.1	3,510,000	6,016,000	2,893	4,617	8,686,000	+9.7	9,526,000	3.25	−4.6	3.10
Massachusetts	29.6	35.7	28.6	6.1	9,494,000	14,492,000	3,227	4,868	23,353,000	+2.7	23,986,000	4.66	+.6	4.69
Michigan	47.6	19.1	28.3	5.0	8,865,000	12,394,000	3,117	4,540	18,266,000	+16.4	21,259,000	2.52	+8.3	2.73
Minnesota	34.8	23.8	31.6	9.8	5,291,000	5,141,000	3,336	4,743	9,532,000	+9.4	10,432,000	3.00	+2.7	3.08
Mississippi	37.5	28.4	20.3	13.8	3,718,000	1,898,000	4,206	4,794	5,165,000	+8.7	5,616,000	2.45	+5.7	2.49
Missouri	34.6	26.9	25.5	13.0	5,659,000	8,676,000	3,487	4,257	13,652,000	+.6	13,735,000	3.31	−3.3	3.20
Montana	46.9	15.8	15.9	21.4	973,000	1,001,000	3,179	4,103	1,766,000	+11.8	1,974,000	2.79	+5.7	2.95
Nebraska	40.6	24.0	23.1	12.3	2,493,000	1,964,000	3,338	4,134	4,336,000	+2.8	4,457,000	3.14	+1.0	3.17
Nevada	42.1	25.8	21.3	10.8	420,000	553,000	3,857	4,457	812,000	+19.8	973,000	3.61	−4.5	3.45
New Hampshire	38.4	30.9	17.4	13.3	928,000	637,000	2,674	2,579	1,505,000	+4.0	1,565,000	2.70	−3.7	2.60

See footnotes at end of table.

States	Apportioning free care time (percent)				Amount of free care given in 1960				Total 1955 giveaway	Percent change	Total 1960 give-away	Amount given per capita		
	Priv.[1]	Hosp.[2]	Out.[3]	A.O.[4]	By all groups	All specialists	Per group	Per specialist				1955	Percent change	1960
New Jersey	25.6	34.9	34.5	5.0	$8,896,000	$14,421,000	$2,892	$4,788	$21,422,000	+8.8	$23,317,000	3.95	−2.3	3.86
New Mexico	46.6	28.0	13.6	11.8	945,000	1,456,000	3,719	5,057	2,027,000	+18.5	2,401,000	2.55	−.4	2.54
New York	27.8	37.2	25.5	9.5	30,722,000	64,735,000	2,832	5,046	92,668,000	+3.0	95,457,000	5.75	−.3	5.73
North Carolina	38.9	28.6	20.4	12.1	5,924,000	6,180,000	3,872	4,893	11,105,000	+9.0	12,104,000	2.59	+3.1	2.67
North Dakota	53.6	14.9	20.1	11.4	799,000	521,000	2,992	2,946	1,222,000	+8.0	1,320,000	1.90	+10.5	2.10
Ohio	30.9	29.9	22.7	16.5	13,044,000	23,839,000	3,054	4,952	29,861,000	+23.5	36,883,000	3.33	+14.7	3.82
Oklahoma	38.2	28.4	20.8	12.6	3,944,000	3,449,000	3,800	4,777	6,439,000	+14.8	7,393,000	2.97	+8.1	3.21
Oregon	43.1	18.9	21.5	16.5	3,307,000	3,688,000	3,836	4,417	6,303,000	+11.0	6,995,000	3.78	+5.3	3.98
Pennsylvania	28.4	37.3	24.3	10.0	17,017,000	24,952,000	2,998	5,048	40,783,000	+2.9	41,969,000	3.65	+2.2	3.73
Rhode Island	25.9	38.8	27.5	7.8	1,130,000	2,126,000	2,776	4,641	3,172,000	+2.6	3,256,000	3.75	+3.2	3.87
South Carolina	33.0	37.0	17.1	12.9	3,751,000	2,699,000	4,455	5,064	5,779,000	+11.6	6,450,000	2.53	+7.9	2.73
South Dakota	46.5	22.6	19.2	11.7	940,000	519,000	3,133	4,022	1,410,000	+3.5	1,459,000	2.08	+3.8	2.16
Tennessee	45.1	27.3	16.6	11.0	5,685,000	6,598,000	4,417	5,325	11,394,000	+7.8	12,283,000	3.33	+4.2	3.47
Texas	36.6	28.1	22.3	13.0	14,367,000	16,922,000	3,821	4,888	26,853,000	+16.5	31,289,000	3.14	+5.1	3.30
Utah	39.4	23.8	25.4	11.4	1,383,000	2,042,000	3,985	4,908	3,073,000	+11.5	3,425,000	3.93	−1.8	3.86
Vermont	45.9	30.5	16.9	6.7	571,000	753,000	2,438	4,480	1,220,000	+8.5	1,324,000	3.23	+5.9	3.42
Virginia	40.6	28.7	20.4	10.3	4,786,000	4,626,000	3,180	3,752	8,422,000	+11.8	9,412,000	2.35	+2.6	2.41
Washington	48.2	17.0	19.1	15.7	5,165,000	6,058,000	3,931	4,358	9,584,000	+17.1	11,223,000	3.73	+6.4	3.97
West Virginia	34.7	31.8	22.3	11.2	2,156,000	2,546,000	2,994	4,515	4,104,000	+14.6	4,702,000	2.05	+23.9	2.54
Wisconsin	39.4	19.4	25.2	16.0	5,842,000	5,766,000	3,151	4,422	10,652,000	+9.0	11,608,000	2.88	+2.4	2.95
Wyoming	45.5	20.5	20.4	13.6	566,000	342,000	3,537	4,122	823,000	+10.3	908,000	2.69	+3.0	2.77
	38.6	27.1	22.7	11.6	276,779,000	380,756,000	3,378	4,842	594,903,000	+10.6	657,535,000	3.62	+2.5	3.71

[1] Private patients treated without charge.
[2] Hospital ward service.
[3] Outpatient clinic service.
[4] All others: Doctors' kin, students, campers, amateur athletes, clergymen, emergency cases, charity cases.

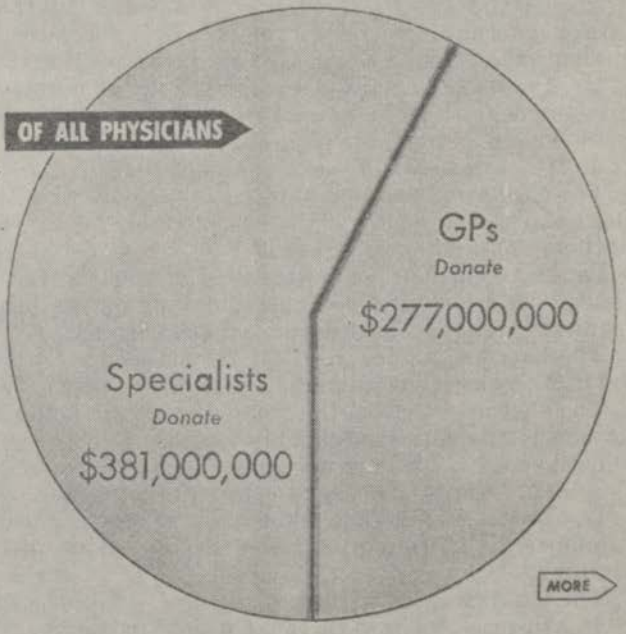

Free Care Given By Doctors Up 10.6% In 5 Years
TOTAL VALUE OF FREE MEDICAL SERVICES
IN 1955
$595,000,000
+10.6%
IN 1960
$658,000,000
Average Doctor's Annual Give-away
BY TYPE OF PRACTICE
AMOUNT OF CARE DONATED
$3360
$4812
GP
Specialist
Source:
• Survey By New Medical Materia
Average Big City Doctor Gives Away Most
AMOUNT OF CARE DONATED
$4313
$4146
$5214
MORE
Under 10,000 Population
10,000 to 500,000 Population
Over 500,000 Population
36 • New Medical Materia • October 1960
Special Feature


Where The Free Care Goes
Outpatient Clinic Service
22.7%
Private Patients
(Treated Without Charge
39.9%
Hospital Ward Service
26.5%
10.9%
Doctors' Kin
Students
Campers
Scouts
Amateur Athletes
Blood Donors
Clergymen
Emergency Cases
Charity Cases
6 Out Of 10 Doctors Devote 10% Or More Of Their Work Hours To Free Care
Percent of Doctors In Private Practice
Percent Of Working Hours Donated
9.7%
13.2%
10.7%
8.0%
0 to 4%
5 to 9%
10 to 14%
15 to 19%
20 to 24%
25% & Over
Special Feature
October 1960 • New Medical Materia • 37

A HUGE GIFT TO THE PUBLIC

The current debate regarding medical care for the aged seems to ignore the physician. The fact that the nation's doctors annually give away a huge amount of their medical services is usually overlooked. What this amount comes to — as well as a number of other aspects of the free care that is donated by physicians — is revealed by New Medical Materia's latest study. The charts on this and the next two pages give the details.

U. S. Doctors In Private Practice Donate $658,000,000 Worth Of Free Medical Care



The CHAIRMAN. Now, with reference to your student loan program—and I want to commend the American Medical Association emphatically and forthrightly here today for its recognition of the need and its efforts to help meet it. It was never intended to be completely adequate to meet the needs, but only to help in filling the gap. Since these are public institutions, many of them, and nonprofit institutions, the application of a medical student is made to whom?

Dr. DORMAN. It is made to the AMA through the deans.

The CHAIRMAN. Through the dean of a particular school?

Dr. DORMAN. Of his school. We have to be sure that the individual is a bona fide student in good standing.

The CHAIRMAN. Who decides whether a particular application will be approved or disapproved?

Dr. DORMAN. Final decision is in the AMA headquarters office.

The CHAIRMAN. And you make that decision on the basis of the information submitted to you by the institution?

Dr. DORMAN. On information, primarily supplied by the student, but we inquire further of the institution.

The CHAIRMAN. In other words, you make your own private investigation of each individual application?

Dr. DORMAN. If there is any question: yes, sir.

The CHAIRMAN. Now, in the various States, are there procedures set up for determining who will be or will not be accepted as a medical student other than the registrar of the institution or the dean?

Dr. DORMAN. Certain of the State laws or regulations require definite premedical requisites. In order to qualify, the student has to pass certain premedical subjects, but the decision of accepting him is up to the dean of the medical school.

The CHAIRMAN. Suppose, for example, you were to get 100 applications and you have only 50 places available. Who would decide which of those 100 would be approved?

Dr. DORMAN. The committee on admissions at the school. Usually, this is the dean of admissions, and four or five other people on the medical faculty. The decision is theirs entirely.

The CHAIRMAN. The medical faculty of that particular school?

Dr. DORMAN. The admissions committee of the faculty; yes, sir.

The CHAIRMAN. Does the school have a screening committee that is not associated with the school in any way?

Dr. DORMAN. I believe not, sir.

The CHAIRMAN. Not that you know of?

Dr. DORMAN. Not that I know of. There are premedical advisory committees. A foreign student has to show adequate premedical training.

The CHAIRMAN. Are these procedures established by the individual States themselves, or is there a national pattern?

Dr. DORMAN. I believe that each State has its own requirements. Since the States license the individual physician, they have reserved unto themselves the right to make the regulations for education requirements for their license.

The CHAIRMAN. In other words, under the existing procedure, a State has the prerogative and is autonomous in establishing minimum standards for entrance to its medical schools, and this is done wholly within that State for its institutions.

Dr. DORMAN. Not quite, sir.

They have the right to set up their educational requirements. However, the AMA has published standards of education necessary to qualify a man for practice. We work with the American Association of American Colleges on this. We have established specialty boards which set standards of education and training for physicians who wish to go into specialties. There is an overall "control." But the individual licensing is by the States themselves.

The CHAIRMAN. You mean there is an overall control of the financing which the AMA provides to a given student?

Dr. DORMAN. Well, I think we are getting into financing and the educational requirements, sir, which are two different problems.

The CHAIRMAN. Do you mean to tell this committee that the AMA has any control whatsoever over the educational requirements of a given medical school?

Dr. DORMAN. No, sir.

We demand that the medical school have certain minimum standards, but the individual medical schools vary as to what they stress. They have to maintain their independence in order to be active, good educational institutions. We do not control that.

But there is some control as to who is coming into a medical school, based on standards accepted by each separate State, because the State is the licensing organization. At the end of the medical school the licensing is by the State, not by the medical school.

The CHAIRMAN. But those standards must meet national accreditation criteria?

Dr. DORMAN. More or less; yes, sir.

The CHAIRMAN. Like the National Association of Universities and Colleges, or whatever that organization is?

Dr. DORMAN. That type of thing.

The CHAIRMAN. I wanted to get that in the record.

Mr. ROGERS of Texas. Would the gentleman yield for one question?

The CHAIRMAN. Yes.

Mr. ROGERS of Texas. Doctor, what is the office of the American Medical Association in regard to the activities of the educational institutions?

Dr. DORMAN. We have our Council on Medical Education and Hospitals, the chairman and the secretary of which are present, which coordinates this type of activity.

Mr. ROGERS of Texas. Is that an advisory capacity group or do you have any methods or weapons by which you can enforce your beliefs and feelings?

Dr. DORMAN. Could I have the secretary speak to this?

Mr. ROGERS of Texas. Yes. I think the record ought to be clear on this.

Dr. WIGGINS. Accreditation, sir, is a voluntary process. We demand nothing of anyone. If a medical school seeks to be accredited, this is a function of our council in collaboration——

Mr. ROGERS of Texas. Accredited with who, Doctor, with the AMA?

Dr. WIGGINS. Accredited with the AMA and the Association of American Medical Colleges. It is a voluntary, nonlegal——

Mr. ROGERS of Texas. I understand that it is voluntary, but what you are saying is that if they do not meet the requirements set up by the American Medical Association, then they cannot be accredited?

Dr. WIGGINS. This is a joint function of the Council on Medical Education and Hospitals of the AMA and the Association of American Medical Colleges, representing all of the medical colleges themselves. The standards against which accreditation is performed is established by these two groups.

Mr. ROGERS of Texas. Where does the American Medical Association get its authority to make any such requirements?

Dr. WIGGINS. The American Medical Association was formed primarily because of a concern with, and a dedication to, raising the standards of medical education in the United States.

Mr. ROGERS of Texas. I understand that.

Dr. WIGGINS. This is largely done through its accreditation function.

Mr. ROGERS of Texas. You are saying, in effect, that they do not have to be accredited; that it is voluntary. That is like telling a man he does not have to work; he can starve to death. You do not have to be affiliated with this group, but if they are not, they are not affiliated with anyone.

Dr. WIGGINS. No, sir.

Whatever legal status has been given to accreditation has come about by legislative bodies, I presume because they felt there was some value for public protection in it.

Mr. ROGERS of Texas. That is the next question.

What I am trying to get at is where the authority of the American Medical Association finds its source.

Do I understand you that the State legislatures have passed laws in which they have adopted the requirements set up by the American Medical Association?

Dr. WIGGINS. No, sir. But by either legislative act, or by rule or regulation of the licensing body within the State which is governed by a legislative act, all States in the United States require applicants for examination for licensure if he has attended medical school in the United States, to have attended an accredited medical school.

Mr. ROGERS of Texas. Let us carry that on further.

Unless it meets the AMA requirements, it is not an accredited school?

Dr. WIGGINS. Well, there are degrees. We attempt to be flexible.

Mr. ROGERS of Texas. Surely.

Dr. WIGGINS. In the implementation of the standards against which accreditation measurements are made—and I would like to emphasize again that this is a joint venture participated in by every medical

school in the United States. They help establish the standards against which they are measured——

Mr. ROGERS of Texas. But what I am thinking of and what I am trying to get at is this:

Where the American Medical Association fits into this thing from authority gained by law.

Now, as I understand it—and this may be overly brief, but I just want to clear the point up—do I understand that the Americal Medical Association sets up certain standards, and that a school, in order to be accredited, must meet those standards, and, in order for a boy to get a license in the medical field in the State, he must show that he has completed an accredited school?

Dr. WIGGINS. Yes. If he has gone to medical school in the United States.

Mr. ROGERS of Texas. Therefore, unless he meets the requirements of the AMA, he cannot become a doctor; can he?

Dr. WIGGINS. He cannot practice within that State.

Mr. ROGERS of Texas. Thank you, sir.

Dr. WIGGINS. But that is because of the State's own action, not the AMA's action.

Mr. ROGERS of Texas. Yes, I understand, but it is the State's own action in conformity with what the AMA has set up, as I understand you. As I understood you, the legislatures have adopted the minimum standards set up by the AMA as the minimum standards necessary for their schools to be accredited.

Dr. WIGGINS. Yes, sir; but I would presume that the legislatures did that because they thought this was good for the people of their State.

Mr. ROGERS of Texas. Well, I know.

Dr. WIGGINS. Not because it was good for the AMA.

Mr. YOUNGER. Will the gentleman yield?

Mr. ROGERS of Texas. I will be happy to.

Mr. YOUNGER. Is it not true that the AMA is only one factor, as has been testified to here several times? The schools, themselves, through their own boards, are just as much a factor as the AMA is.

Of course, the heads of your medical schools are doctors, but that applies to your academic work. The heads of other schools are Ph. D.'s and you might say that all the Ph. D.'s set the board standards for admission to colleges. You can blame that on them.

Mr. ROGERS of Texas. I am not trying to blame it on anybody, if the gentleman from California will permit me to say so. I am seeking information trying to get this thing clear so that the Congress can know what to do.

Mr. YOUNGER. One further question.

Is this not the same way you lawyers operate?

Mr. ROGERS of Texas. Well, I do not know about that. We are not talking about lawyers yet. They have not sought Federal aid to education for lawyers yet.

If we are going to make a deal here, the lawyers might want to get in on it.

One further question.

Doctor, is there a central office that is operated by all of the medical schools which coordinates the applications of medical students all over this country?

Dr. WIGGINS. I am not certain that I know what you mean by "coordinate."

Mr. ROGERS of Texas. I mean, is there a central office where, if a boy in Florida, a boy in California, and a boy in Michigan all apply to get into a medical school, that the information as to that individual can be had from a central office?

Dr. WIGGINS. In terms of qualifications of that individual?

Mr. ROGERS of Texas. Well, I mean in terms of anything——

Dr. WIGGINS. There is an office that would know their names.

Mr. ROGERS of Texas. The name?

Dr. WIGGINS. But the decision and value judgments regarding——

Mr. ROGERS of Texas. Let us stay with the name, now, for just a minute. The name of that individual is sent to a central office; is that correct? Now, who operates that central office?

Dr. WIGGINS. Our colleagues who are here, the Association of American Medical Colleges.

Mr. ROGERS of Texas. And where is it located?

Dr. WIGGINS. Evanston, Ill.

Mr. ROGERS of Texas. Now, why do they need a central office for a determination of this sort of thing?

Dr. WIGGINS. I am not certain that I understand you, Mr. Rogers. There is no determination involved in this. The central office in regard to the applicants for medical school operates solely in terms of keeping information. It makes no decisions.

Mr. ROGERS of Texas. But why is that boy's name sent there before he is admitted to medical school?

Dr. WIGGINS. If it were not done this way, Mr. Rogers, we would not know how many applicants there are at any given time for medical schools in the United States.

Mr. ROGERS of Texas. Now, Doctor, that may be all right on a statistical basis, but is this not a centralization operation? Doctors in my area write me continually against centralized government, and I am just wondering if it is being practiced in this profession.

Mr. O'BRIEN. Will the gentleman yield?

Mr. ROGERS of Texas. I will be happy to yield.

Mr. O'BRIEN. Is it not true that one boy might apply to five or six colleges?

Dr. DORMAN. He usually does.

Mr. O'BRIEN. Would not that information be useful to each of those colleges? Supposing they all accept him. Five other youngsters are going to be out.

Dr. WIGGINS. Mr. O'Brien, as I understand it, there are to appear as witnesses before your committee representatives of the Association of American Medical Colleges, and I personally feel a little hesitant about being too detailed as to what exactly is done with this.

I know that the material, the information is kept, and it is solely for purposes of information.

Mr. ROGERS of Texas. Let me ask this final question, then, Doctor. The American Medical Association has nothing to do with this operation, as I understand you?

Dr. WIGGINS. We are very much interested in it.

Mr. ROGERS of Texas. That is not my question. My question is: You do not have anything to do with this operation? You are interested in the laws that are passed by Congress every day, too. I am talking about this particular central office operation as to who applies to medical schools from all parts of the United States.

As I understand you, this is merely a statistical situation. The American Medical Association has nothing to do with it whatever?

Dr. WIGGINS. That is right, sir.

Mr. ROGERS of Texas. That is all, Mr. Chairman.

Mr. LONG. Mr. Chairman?

The CHAIRMAN. Doctor, thank you very much. You know, I was trying to develop all of this information, and I want to thank Mr. Rogers, Mr. Younger, Mr. O'Brien, and the other members for developing it for me.

Yes, Mr. Long?

Mr. LONG. Mr. Chairman, if there is no objection, I would like to request that Dr. Wiggins supply the committee, and that we make a part of the record, the application blank that is used by the AMA–ERF, which is known as form 102. I think it would make a logical adjunct to the brochure.

Mr. YOUNGER. All of that material has been admitted.

Mr. LONG. But the application, itself, that accompanies this, is what I would like to have a chance to look at.

The CHAIRMAN. Doctor, you may supply this information.

Dr. DORMAN. Thank you, sir.

The CHAIRMAN. I assume you can.

Dr. DORMAN. Yes, sir.

(The American Medical Association submitted the following forms for the record:)

LAST FIRST MIDDLE

AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION

Loan Guarantee Program

This Loan Program is for medical students who have completed their first semester or quarter, interns and residents. It is the result of a cooperative effort by American medicine and private enterprise.

PHYSICIANS have given generously to support this program as has the WOMAN'S AUXILIARY OF THE AMERICAN MEDICAL ASSOCIATION and the STUDENT AMERICAN MEDICAL ASSOCIATION.

Special recognition is extended to MERCK SHARP & DOHME as the first representative from private industry to provide major financial support for the guarantee fund, and for its pioneering efforts in the application of loan funds to medical education.

The CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO has made an unusual effort to provide funds for loans at a minimum cost to the borrower.

The philosophy and counsel of UNITED STUDENT AID FUNDS, INC. has aided materially in the development of this program.

To all who have contributed in financial support, ideas and other ways, and to those who will contribute in the future, we extend our appreciation.

INTERIM LOAN APPLICATION

Instructions

1. Complete two copies of this application. Use a typewriter or print in dark ink. (If a typewriter is used, the second copy may be a carbon.) Print your name in upper right hand corner of this page on both copies.

2. Do not leave any items unanswered. If a particular item does not apply to you, write NONE in the blank.

3. If insufficient space is provided for any item, use a blank piece of paper as a supplement, identifying each response by the section and item number, e.g., Description of Present Debts is Section IV, item 4.

4. Note that the Statement of Estimated Expenses and Resources is for the period of time during which you expect to use the proceeds of this loan, e.g., a semester, six months, a year, etc. It is unlikely that you will have an entry in every space. (For example, for a budget period from January to June, it is probable that there would be no vacation earnings. Any proceeds from vacation earnings of the previous summer would now be listed as savings.) The budget is for you *and your dependents*, if any.

5. The DEFICIT in item 6 of Section IV is the basis for your loan request but you may borrow a smaller amount. Remember that the following limits apply to the AMA-ERF Loan Guarantee Program:

- Maximum amount that can be borrowed in a 12-month period from September 1 to August 31, is $1,500.
- Minimum loan for any one interim note is $400.
- Principal amount for any interim note must be an increment of $100.
- More than one application may be used to borrow up to the $1,500 maximum but applications from medical students should not be submitted more often than once each academic quarter or semester. Interns and residents should not submit applications more often than once every six months.

6. Enter the dollar amount you wish to borrow in Section V and the date it is needed.

7. After completing this application, your next step will be to complete an interim note (AMA-ERF 103). Obtain one copy and then *complete the four blanks in the first paragraph.*

- The *maturity date* is the first day of the fifth month following the month you will complete your medical training including internship and any residency training in your plans.
- The *principal sum* is the amount you wish to borrow.
- The *current interest rates* (interim and pay-out) will be available from the official in your school or hospital who maintains the supply of AMA-ERF loan application materials. (The Dean's office for medical students. The Hospital Administrator for interns and residents.)

8. Sign the interim note in the space provided at the bottom and fill in your home address. If you are married, your spouse should co-sign the interim note. Read the note in order that you may be familiar with its terms and conditions.

9. Secure the certification of the Dean's Office or your professional supervisor, i.e., the Program Director, or Chief of Service. The certification goes in Section VI of this application.

10. Forward both copies of this application and one copy of the interim note to:

Medical Education Loan Program
Continental Illinois National Bank & Trust Company of Chicago
Lock Box H
Chicago 90, Illinois

11. When this loan has been granted, a check payable to the applicant will be mailed to the training official who certified this application.

I. PERSONAL

1. Name _____ (Last / First / Middle) 2. Age _____ 3. Birthdate _____ (Mo. / Day / Yr.)

4. Home Address _____ (Street / City / State) 5. Phone _____

6. Address while at school _____ (Street / City / State) 7. Phone _____

8. U. S. Citizen: Yes ☐ ☐ No

9. Marital Status: ☐ Widowed ☐ Single ☐ Divorced ☐ Married ☐ Separated

10. Number of Dependents (including self and spouse) _____

11. Sex: Male ☐ ☐ Female

12. If married, is your spouse enrolled in medical training? Yes ☐ No ☐

13. Veteran: Yes ☐ ☐ No

14. Give two personal references (other than family):

_____ (Name / Street / City / State)

_____ (Name / Street / City / State)

II. FAMILY *(All items in Section II refer to the parent or guardian)*

1. Name of Parent or Guardian _____ (Last / First / Middle) 2. Relationship to Applicant _____

3. Address _____ (Street / City / State) 4. Phone _____

5. Employer _____ 6. Years with Firm _____

7. Position Held (Job Title) _____ 8. Number of Dependents (Including applicant) _____

III. EDUCATIONAL

1. I am now ☐ a Medical Student ☐ an Intern ☐ a Resident

2. Year of Training in Status Checked in item III-1. ☐ First ☐ Second ☐ Third ☐ Fourth

3. If you are a first year medical student, have you completed your first quarter or semester? ☐ Yes ☐ No
You must have completed your first quarter or semester of medical school to qualify.

4. Name of Present School or Hospital _____

5. Address _____ (Street / City / State)

6. I expect to complete my medical training, including internship and any residency training: _____ / _____ (Month / Year)

7. Have you previously applied for an AMA-ERF Loan? ☐ Yes ☐ No
If yes, have your training plans changed so as to alter the "completion of training" date given on previous application(s)? ☐ Yes ☐ No

Note: If the maturity date on the interim note accompanying this application, or on any previous AMA-ERF interim notes executed by the applicant, does not conform to that determinable by use of the "completion of training" date given in Item No. 6 above, the Bank will, if it grants the loan, conform any and all such maturity dates, pursuant to a provision in the MISCELLANEOUS section of the interim note.

8. I plan to enter the following branch of medicine, or specialty: _____

9. Previous College (including medical schools)

Name _____ City _____ Degree _____ Year Conferred _____

Name _____ City _____ Degree _____ Year Conferred _____

IV. FINANCIAL *(All items in Section IV refer to the Applicant)*

1. Present Assets (omit cents): Home Equity $ _____ Automobile $ _____

Bank Account (checking and savings) $ _____

Other Assets (itemize) _____

2. Explain possible use of these assets for financing your education. (If needed, attach separate sheet) _____

3. Make and Year of car(s) I own and drive for personal use: _____

FINANCIAL (Continued)

4. Present Debts of $100 or More (Including Previous AMA-ERF Loans)

Creditor's Name and Address	Purpose of Loan	Date Incurred	Unpaid Balance	Monthly Payment	Due Date

5. Applicant's Projected Estimated Expenses and Resources for the period this loan is to cover (not to exceed 12 months.)

From _____ 19____ to _____ 19____.

EXPENSES		RESOURCES		
Tuition and Fees	$_____	Earnings:	School Year	$_____
Books & Supplies	_____		Vacation	_____
Food	_____		Spouse	_____
Room or Housing	_____	Savings:		_____
Transportation	_____	Gifts:	Family	_____
Clothing	_____		Scholarship	_____
Medical/Dental	_____	Loans:	Family	_____
Others (specify)	_____		Other loans	_____
	_____			
	_____	Other:		_____
Total Expenses	$_____	Total Resources		$_____

6. DEFICIT = _____ (Expenses) – _____ (Resources) or $_____

V. LOAN REQUEST

Based on the statements contained in this application, I hereby apply for an educational loan under the terms of the AMA-ERF Loan Guarantee Program. The amount I wish to borrow at this time (in multiples of $100 but not to exceed the deficit shown above) is $_____. I enclose an interim note that has been completed and executed by me and my spouse, if any. I authorize the Continental Bank to fill in the date and any other blanks on the interim note, and to correct any entries made by me in such blanks. I further authorize the Continental Bank to forward a check for the proceeds of this loan to the person certifying this application in Part VI.

I certify that the information given herein, which you are authorized to verify, is true and correct, and I agree to notify the Continental Bank of any material change in the facts. This application shall remain the property of the Continental Bank whether approved, not approved, or withdrawn, both before and after the loan is paid.

Date _____ Mr., Mrs., Miss _____
(Signature of Applicant)

VI. CERTIFICATION

I certify that the applicant whose true signature appears above is enrolled as stated in this application. He is in GOOD STANDING. To the best of my knowledge, the statements in this application are accurate and fairly represent the situation of the applicant. I agree that if the proceeds of the loan applied for are received by me I will promptly deliver such proceeds to the applicant. *(Please print or type name and title.)*

Date _____ _____ _____
(Name) (Title)

Signature _____

In recognition of contributions received to support the AMA-ERF Loan Guarantee Program, the major contributors (through December 1, 1962) are listed below:

America's Physicians	$455,000
Merck Sharp & Dohme	200,000
Chas. Pfizer & Co., Inc.—Pfizer Laboratories and J. B. Roerig Divisions	100,000
American Home Products Corp.—Wyeth Laboratories and Ayerst Laboratories Divisions	30,000
Abbott Laboratories	25,000
G. D. Searle Co.	25,000
Upjohn Co.	25,000
E. R. Squibb & Sons	20,000
Continental Illinois National Bank and Trust Co. of Chicago	10,000
Hoffmann—La Roche Inc.	10,000
Smith Kline & French Foundation	10,000
Student American Medical Association	10,000
Woman's Auxiliary of the American Medical Association	10,000
CIBA Pharmaceutical Co.	5,000
Mid-Columbia Medical Society	4,000
Paul Revere Life Insurance Co.	2,000
Burroughs Wellcome & Co.	1,000
Mayo Association	1,000
Minnesota Mutual Life Insurance Co.	1,000
North American Clinical Dermatologic Society	1,000
S. B. Penick Foundation	1,000
Wallace Laboratories	1,000
Warner-Lambert Pharmaceutical Co.	1,000

No._____

AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION LOAN GUARANTEE PLAN

INTERIM NOTE

_____, 19____
(To Be Completed by the Bank)
Chicago, Illinois

On _____, 19____, *(maturity date)* for value received, the undersigned promise(s) to pay to the order of Continental Illinois National Bank and Trust Company of Chicago (herein called the "Bank"), at its office in Chicago, Illinois, the principal sum of $_____, with interest thereon from the date hereof until maturity at the rate of _____% per annum simple interest, and with interest thereon at the rate of 7% per annum after maturity until paid. If this Note is refinanced by the holder hereof by a Payout Loan, as hereinafter provided, evidenced by a Payout Note, the interest for that portion of the Payout Loan refinancing this Note will be computed, as hereinafter provided, at a simple interest rate of _____% per annum to maturity and 7% per annum thereafter until paid.

This Note evidences a loan made to the Borrower pursuant to the Loan Guarantee Plan (herein called the "Plan") of American Medical Association Education and Research Foundation (herein called the "Foundation").

Definitions. When used herein, the following terms shall have the following meanings:

"*Borrower*" shall mean the person signing this Note as Borrower.

"*Interim Notes*" shall mean this Note and all other notes (other than a Payout Note hereinafter referred to) evidencing any loan to the Borrower pursuant to the Plan, and "*Interim Note*" shall mean this Note or any such other note.

"*Association*" shall mean the American Medical Association.

"*Approved educational institution*" shall mean at any time any public or private medical school listed in the latest published Annual Report on Medical Education by the Council on Medical Education and Hospitals of

the Association, or any hospital listed in the Consolidated List of Hospitals with approved graduate training programs included in the latest published Annual Report on Graduate Medical Education in the United States by the Council on Medical Education and Hospitals of the Association.

"*Student*" shall mean a U. S. citizen (i) who at the time is enrolled and in good standing as a regular full-time student in an approved educational institution and is in the process of meeting the educational requirements of such institution leading to the awarding of the degree of Doctor of Medicine, or (ii) upon whom the degree of Doctor of Medicine has been conferred and who at the time is enrolled and in good standing in a program of graduate medical education as an intern or resident at an approved educational institution and is making progress toward completion of such program at a rate normally expected of persons enrolled in such program.

"*Note Default*" shall mean the occurrence of any event which constitutes, or which with the lapse of time or notice and lapse of time would constitute, an Event of Default under the terms of any note evidencing any loan to the Borrower pursuant to the Plan.

"*Plan Agreement*" shall mean any agreement, now or hereafter in effect, between the Bank and the Foundation respecting the Plan, the procedures thereunder, or the obligations of the Foundation in connection therewith.

"*Plan Default*" shall mean default in the performance of any obligation of the Foundation under the Plan Agreement or the occurrence of any event which constitutes, or which with the lapse of time or notice and lapse of time would constitute, an Event of Default under the terms of the Plan Agreement.

The masculine pronoun shall include the feminine.

Right of Prepayment. This Note shall be subject to prepayment at any time, without premium, upon payment in full of the principal hereof and unpaid accrued interest hereon to the date of prepayment; provided, however, that if less than all outstanding Interim Notes of the Borrower are being prepaid, the Interim Notes of the Borrower shall be prepaid in the order of their dates.

Rights of Extension and of Refinancing by a Payout Note. If at any time the maturity date of this Note shall be prior to the first day of the fifth month next following the month in which the Borrower then expects to complete his studies and training at approved educational institutions, he shall have the right, subject to the conditions hereinafter mentioned, to obtain an extension of the maturity date of this Note and of all other of his outstanding Interim Notes to the first day of such fifth month, except that such maturity date may not be extended to later than seven years and five months after the first day of the calendar month coinciding with or next following the date of the earliest dated of his outstanding Interim Notes.

The Borrower shall also have the right, subject to the conditions hereinafter mentioned, to obtain a Payout Loan for the purpose of refinancing all or any part of his outstanding Interim Notes, by making application therefor and executing an appropriate Payout Note at least 15 days prior to the maturity of this Note. A Payout Loan may be in any amount selected by the Borrower up to a maximum amount equal to the unpaid principal and unpaid accrued interest on his outstanding Interim Notes, computed as of the date of his Payout Note.

If less than the maximum amount of any Payout Loan is being obtained by the Borrower, payment is required to be made of any portion of the maximum amount of Payout Loan not being obtained, which payment will be applied to payment of his outstanding Interim Notes in the order of their dates, such application to be made first to unpaid accrued interest and thereafter to principal.

The Payout Note shall be dated not later than the maturity date of the outstanding Interim Notes being refinanced, shall be in the principal amount hereinafter provided for, and shall be payable (subject to acceleration in case of an Event of Default thereunder) in monthly payments (on such date of each month as shall be selected by the holder hereof), commencing with the month immediately following the date of such Note, according to either of the following methods which the Borrower may select: (i) not more than 120 equal or substantially equal consecutive monthly payments, except that no monthly payment shall be less than $30; or (ii) not more than 120 consecutive monthly payments at not less than the following rates: 36 equal monthly payments aggregating 3% of the original principal amount of such Note plus interest on the unpaid principal balance; 60 equal succeeding monthly payments aggregating 55% of the original principal amount of such Note plus interest on the unpaid principal balance; 12 equal succeeding monthly payments aggregating 18% of the original principal amount of such Note plus interest on the unpaid principal balance; and 12 equal succeeding monthly payments aggregating 24% of the original principal amount of such Note plus interest on the unpaid principal balance; except that no monthly payment shall be less than $30. The principal amount of such Payout Note shall be the amount of the Payout Loan, and such Payout Note shall provide for the payment of interest on the principal balance thereof from time to time remaining unpaid at the rate per annum which is specified for such Payout Loan in the first paragraph hereof. In case different interest rates for a Payout Loan are provided for in the Interim Notes being refinanced, the rate per annum to maturity payable on the Payout Note shall be the weighted average (adjusted to the nearest 1/10 of 1%) of all such interest rates. If the Borrower has, prior to the execution of this Note, executed any Interim Note providing for its refinancing by a Payout Loan at an add-on rate of interest to be included in the face amount of the Payout Note, the making of the loan evidenced hereby shall constitute an agreement between the undersigned and the Bank that any such prior Interim Note is amended to provide that it shall, if refinanced by a Payout Loan, be refinanced at a rate of simple interest per annum to maturity which is 1% greater than the rate of interest payable prior to maturity on such Interim Note, and with interest after maturity at the rate of 7% per annum until paid; and that in all other respects the provisions of this paragraph shall apply to the Payout Note evidencing such Payout Loan.

The holder hereof agrees to execute an Extension Agreement providing for an extension of the foregoing character, or to make a Payout Loan of the foregoing character, if the following conditions are met: (a) application for such extension or such Payout Loan is made in compliance with the procedures provided in the Plan Agreement; (b) such Extension Agreement or such Payout Note is guaranteed by the Foundation by its proper signing of the same under the heading "Guaranteed"; (c) no Note Default or Plan Default exists or will exist after giving effect to such extension or such Payout Loan; and (d) the execution by such holder of such Extension Agreement or the making by it of such Payout Loan will not violate any applicable requirement of law.

Events of Default. If one or more of the following Events of Default occur: (a) the Borrower dies or is judicially declared incompetent; (b) the Borrower becomes insolvent or admits in writing his inability to pay his debts as they mature, or makes an assignment for the benefit of his creditors, or any bankruptcy, debt arrangement, readjustment of debt, receivership or other proceeding under any bankruptcy or insolvency law is commenced either by or against the Borrower, or any trustee or receiver is appointed for the Borrower or any of his property; (c) any judgment is obtained against the Borrower and for 30 days remains unsatisfied or unstayed on appeal; (d) any information furnished by the Borrower in connection with his application for the loan evidenced hereby, or for any other loan to the Borrower pursuant to the Plan, or for the extension of the maturity date of this Note, is incorrect in any material respect as of the date furnished; (e) the Borrower defaults in the performance of any obligation to be performed by him hereunder and such default continues for seven days after written notice thereof mailed by the holder hereof to the Borrower; (f) the Borrower ceases for five or more months to be a student at the approved educational institution at which he is shown as a student in his application for the loan evidenced hereby or at an approved educational institution at which he becomes a student in accordance with the following clauses (i), (ii) or (iii), unless (i) within 30 days after he ceases to be such a student, he becomes a student in another approved educational institution, or (ii) he ceases to be such a student by reason of graduation and he is enrolled for graduate studies at the next following regularly scheduled semester at an approved educational institution, or (iii) within five months after he ceases to be such a student, he becomes a student in a program of graduate medical education as an intern or resident at an approved educational institution; or (g) the Borrower defaults in the payment when due of any payment of principal of or interest on any other note evidencing any loan to him pursuant to the Plan; then, at the option of the holder hereof, this Note shall immediately mature and become due and payable, without demand or notice of any kind.

Agreements of Borrower. The Borrower agrees (a) to use the proceeds of the loan evidenced by this Note solely to pay expenses connected with his attendance at the approved educational institution at which he is shown as a student in his application for such loan, and (b) to send written notice to the Bank (or if the Borrower shall have received written notice of the name and address of a subsequent holder, then to such subsequent holder) of any changes from time to time occurring in his enrollment status at an approved educational institution or in his home address.

Miscellaneous. The undersigned, if more than one, shall be jointly and severally liable hereunder and the term "undersigned" shall, unless the context otherwise clearly requires, mean the Borrower and any one or more of the undersigned.

If the maturity date appearing on this Note, or on any outstanding Interim Note previously executed by the Borrower, is not the first day of the fifth month next following the month specified for the completion of the Borrower's studies and training at approved medical institutions in the Borrower's application for the loan hereunder, the making of the loan evidenced hereby shall constitute an agreement between the undersigned and

the Bank that the maturity date of this Note and of any such previously executed Interim Note shall be changed to the first day of such fifth month, subject to any further change in such maturity date as may occur by reason of any Interim Loan hereafter applied for by and made to the Borrower or by reason of any Extension Agreement hereafter executed; provided, however, that in no event shall the maturity date of any Interim Note of the Borrower be later than seven years and five months after the first day of the calendar month coinciding with or next following the date of the earliest dated of the Borrower's outstanding Interim Notes. If the maturity date appearing on this Note or on any previously executed Interim Note of the Borrower is changed in accordance with the foregoing provision, the Bank is hereby authorized, but not required, to make the appropriate correction on any such Note.

If this Note falls due on a Saturday, Sunday or legal holiday in Illinois, it shall be payable on the next succeeding business day and such additional time shall be included in the computation of interest.

To secure the payment of this Note, the holder hereof shall have a lien upon and recourse to any property belonging to any of the undersigned which now or hereafter is in the possession or control of such holder.

Any notice required or permitted to be given to the Borrower shall be effective if sent by first class mail and addressed to the Borrower's home address as indicated hereon, or to such other address as the Borrower shall have designated by notice in writing received by the holder hereof. Notice to the Borrower shall constitute notice to all of the undersigned, and no other of the undersigned shall be entitled to any other or further notice.

No delay on the part of the holder hereof in exercising any power or right shall operate as a waiver thereof. All powers and rights of the holder hereof are cumulative and no single or partial exercise of any power or right shall preclude other or further exercise thereof or the exercise of any other power or right.

Each of the undersigned waives presentment, demand, notice of dishonor, protest, and all other notices whatsoever, and agrees that the holder hereof may from time to time extend or renew this Note for any period (whether or not longer than the original period of this Note) and grant any releases, compromises or indulgences with respect to this Note or any extension or renewal thereof or any security therefor or to any party liable thereunder or hereunder, all without notice to or consent of any of the undersigned and without affecting the liability of the undersigned hereunder; and each of the undersigned further agrees to reimburse the holder hereof for all expenses, including reasonable attorneys' fees and legal expenses, incurred by such holder in seeking to collect or enforce any obligations or liabilities of any of the undersigned hereunder.

The Bank is hereby authorized, without notice to the undersigned, to date this Note as of the date when the loan evidenced hereby is made and to insert the appropriate maturity date (including the correction of any such date which may have been inserted by any of the undersigned), and is further authorized to fill in any other blanks which have not been filled in or have been incorrectly completed by any of the undersigned.

The loan evidenced hereby has been made, and this Note has been delivered, at Chicago, Illinois, and shall be governed by the laws of the State of Illinois.

_____ _____ (Borrower)
(Print or Type Name) *(Signature)*

_____
(Home Address of Borrower)

_____
(City) *(Zone)* *(State)*

_____ _____
(Print or Type Name) *(Signature of co-maker spouse, if any)*

GUARANTEED:

AMERICAN MEDICAL ASSOCIATION
EDUCATION AND RESEARCH FOUNDATION

By_____

Countersigned_____

Dated _____, 19____

AMERICAN MEDICAL ASSOCIATION
EDUCATION AND RESEARCH FOUNDATION
Loan Guarantee Program
PAYOUT LOAN APPLICATION

LAST FIRST MIDDLE

Instructions:

1. Enclosed is a schedule indicating the principal amount and accrued interest that you will owe at maturity on your outstanding interim note(s), and the monthly payments required to refinance the total amount owing, at the rate of interest specified, on the basis of equal monthly payments over different periods of time (e.g. 12, 24, 36 months, etc.), with a minimum monthly payment of $30.00. *If the schedule does not conform with your own record of your unpaid interim note(s), please notify the bank at once so that corrected information, if necessary, may be prepared and sent to you.*

2. Also enclosed is a payout note (AMA-ERF 105), dated as of the maturity date of your interim note(s), and showing the total amount to be refinanced, the interest rate, and the date of the first payment. Unless you wish at this time to pay off one or more of your outstanding interim note(s), or prefer the variable payment plan described in 8 below, select one of the equal repayment options shown on the enclosed schedule and carefully insert the number of installments and the monthly installment amount in the appropriate blanks on the payout note.

3. Sign the payout note and clearly print your name in the spaces provided at the bottom, and fill in your home address. If you are married, your spouse should co-sign the payout note and clearly print her (his) name in the spaces provided for that purpose. *Read* the note in order that you may be familiar with its terms and conditions.

4. After completing the payout note, complete two copies of this application. Use a typewriter or print in dark ink. (If a typewriter is used, the second copy may be a carbon.) *Print your name in the upper right hand corner of both copies.* **Do not leave any items unanswered. If a particular item does not apply to you, write NONE in the blank.**

5. Forward the payout note and both copies of this application to:

Medical Education Loan Program
Continental Illinois National Bank & Trust Company of Chicago
Lock Box H
Chicago 90, Illinois

6. When the loan has been granted, a coupon book and further instructions will be sent to you.

7. You may wish to pay in full one or more of your interim notes, beginning with the earliest dated interim note(s) shown on the attached schedule. In that case, please forward your check to the address shown in No. 5 above and *retain the applications and payout note without completing them.*

Be sure to indicate on your check and on any correspondence the identification number appearing on the enclosed payout note. The bank will apply the funds remitted by you and send you details concerning the adjusted refinancing options, as well as a new payout note, unless, of course, you have paid off in full your entire indebtedness.

8. If the principal and accrued interest that you will owe at maturity is of a sufficient amount to warrant a ten-year variable payment plan, this option will be so noted on the enclosed schedule. You may then elect, in place of the equal payment plan, this variable payment plan under which only 3% of the amount being refinanced, plus interest, is paid during the first three years.

Under the variable payment plan your monthly payments for the first three years will be lower (by approximately one-half) than the payments for an equivalent loan on a 120 equal installment basis; but after three years the amount of your monthly installments will be increased substantially, and will become larger than on an equal installment basis, further increasing progressively in amount in later years.

Furthermore, the total interest charge payable over the period of the loan for the variable payment plan is approximately 25% greater than that for the equal payment plan because, while the interest rate is the same, a larger principal balance, on which interest is computed, will be outstanding for a longer period than under the equal payment plan. Under either plan, you retain the right of prepayment without premium or penalty.

If you wish to select the variable payment plan, please notify the bank and *retain the applications and payout note without completing them.* The bank will make the necessary calculations and send you a special payout note properly completed. Please be sure to indicate on any correspondence the identification number appearing on the enclosed payout note.

To: Continental Illinois National Bank and Trust Company of Chicago

I. PERSONAL

1. Name_____ (Last / First / Middle)
2. Home Address_____
3. Phone_____ 4. Sex ☐ M or ☐ F
5. Number of Dependents (include self, spouse and children)_____
6. Birthdate_____ (Mo. / Date / Year)
7. Do You ☐ Rent ☐ Own Home
8. Veteran ☐ Yes or ☐ No
9. Marital Status: ☐ Married ☐ Single ☐ Widowed ☐ Divorced ☐ Separated
10. Spouse's Name_____

II. PROFESSIONAL DATA

1. Type of Practice or Employment: ☐ Private Practice ☐ With Established Associate
☐ Federal Government ☐ State or Municipality
☐ Private Industry ☐ Other (describe)_____

2. Address of Practice_____ (Street / City / State) 3. Phone_____

4. Name of Employer, or Associate, if any_____

5. Address of Employer_____ (Street / City / State) 6. Phone_____

7. Estimated Gross Income from Practice or Employment Per Year $_____

8. Other Gross Income Per Year $_____ 9. Office Operating Expense Per Year $_____

10. Hospitals Where You Have Applied or Have Been Approved For Staff Membership:
*(Indicate with * if you have been approved)*

_____ Name / Address

_____ Name / Address

_____ Name / Address

III. FINANCIAL

1. List all debts other than house, car and AMA-ERF Loans: (If space insufficient attach separate schedule)

Creditor's Name and Address	Purpose of Loan	Date Incurred	Unpaid Balance	Monthly Payment	Due Date

2. Real Estate: _____
Type Address

Gross Value $_____ Current Mortgage Balance $_____
Mortgage Holder and Address _____

3. Auto: Make_____ Model_____ Year_____ Lien Amount $_____
Monthly Payment $_____
Lien Holder_____
Name Address

4. Life Insurance: Face Value $_____ Cash Value $_____ Beneficiary_____
Company:_____ Amt. Policy Loan: $_____

5. Other Assets: Checking Account $_____ at _____
Savings Account $_____ at _____
Market Value of Securities $_____

IV. LOAN REQUEST On the basis of the statements contained in this application, I hereby apply for a payout loan to refinance all of the unpaid interim loan(s) I have received under the terms of the AMA-ERF Loan Guarantee Program. The amount I wish to refinance (which includes both principal and accrued interest on my outstanding interim note(s) is $_____. I enclose a payout note for that amount that has been completed and executed by me and my spouse, if any. I authorize you to fill in any blanks on the payout note and to make any necessary corrections. I certify that the information given herein, which you are authorized to verify, is true and correct, and I agree to notify you of any material change in the facts. This application shall remain your property whether or not the loan is made and both before and after the loan is made, as the case may be.

Date_____ Mr., Mrs., Miss_____
(Signature of Applicant)

No._____

AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION LOAN GUARANTEE PLAN

PAYOUT NOTE
(EQUAL PAYMENTS)

_____, 19____
Chicago, Illinois

For value received, the undersigned promise(s) to pay to the order of Continental Illinois National Bank and Trust Company of Chicago (herein called the "Bank") at its office in Chicago, Illinois, the principal sum of _____Dollars ($_____), with interest from the date hereof at the rate of _____per cent per annum on the principal amount hereof from time to time remaining unpaid, such principal and interest being payable in_____successive equal monthly installments each of $_____ (except the final installment which may be slightly more or less and which shall be the balance of principal and interest due on this Note), commencing on the_____day of_____, 19_____, and on the same date of each month until paid. All payments made hereunder shall be applied first to payment of interest, computed monthly on the unpaid principal balance hereof, and thereafter to payment of principal. The undersigned also promise(s) to pay interest on the unpaid principal balance hereof, after such entire balance becomes due as herein provided, at the rate of seven per cent per annum.

This Note evidences a loan made to the Borrower to refinance in whole or in part prior loans made to the Borrower pursuant to the Loan Guarantee Plan (herein called the "Plan") of American Medical Association Education and Research Foundation (herein called the "Foundation") and accrued interest thereon. The term "Borrower" when used herein shall mean the person signing this Note as Borrower. The masculine pronoun when used herein shall include the feminine pronoun.

Right of Prepayment. This Note shall be subject to prepayment, without premium, on any monthly installment date; provided, however, that prepayment of less than the entire unpaid balance hereof shall be applied upon the monthly payments hereunder in the inverse order of their due dates.

Events of Default. If one or more of the following Events of Default occur: (a) the Borrower dies or is judicially declared incompetent; (b) the Borrower becomes insolvent or admits in writing his inability to pay his debts as they mature, or makes an assignment for the benefit of his creditors, or any bankruptcy, debt arrangement, readjustment of debt, receivership or other proceeding under any bankruptcy or insolvency law is commenced either by or against the Borrower, or any trustee or receiver is appointed for the Borrower or any of his property; (c) any judgment is obtained against the Borrower and for 30 days remains unsatisfied or unstayed on appeal; (d) any information furnished by the Borrower in connection with his application for the loan evidenced hereby, or for any previous loan to the Borrower pursuant to the Plan, or for the extension of the maturity date of any such previous loan, is incorrect in any material respect as of the date furnished; or (e) the Borrower defaults in the payment when due of any monthly installment hereunder; then, at the option of the holder hereof, the entire unpaid principal balance of this Note shall immediately become due and payable, without demand or notice of any kind.

Agreements of Borrower. The Borrower agrees to send written notice to the Bank (or if the Borrower shall have received written notice of the name and address of a subsequent holder, then to such subsequent holder) of any changes from time to time occurring in his home address.

Miscellaneous. The undersigned, if more than one, shall be jointly and severally liable hereunder and the term "undersigned" shall, unless the context otherwise clearly requires, mean the Borrower and any one or more of the undersigned.

If any monthly payment hereunder falls due on a Saturday, Sunday or legal holiday in Illinois, it shall be payable on the next succeeding business day and such additional time shall be included in the computation of interest.

To secure the payment of this Note, the holder hereof shall have a lien upon and recourse to any property belonging to any of the undersigned which now or hereafter is in the possession or control of such holder.

Any notice required or permitted to be given to the Borrower shall be effective if sent by first class mail and addressed to the Borrower's home address as indicated hereon, or to such other address as the Borrower shall have designated by notice in writing received by the holder hereof. Notice to the Borrower shall constitute notice to all of the undersigned, and no other of the undersigned shall be entitled to any other or further notice.

No delay on the part of the holder hereof in exercising any power or right shall operate as a waiver thereof. All powers and rights of the holder hereof are cumulative and no single or partial exercise of any power or right shall preclude other or further exercise thereof or the exercise of any other power or right.

Each of the undersigned waives presentment, demand, notice of dishonor, protest, and all other notices whatsoever, and agrees that the holder hereof may from time to time extend or renew this Note for any period (whether or not longer than the original period of this Note) and grant any releases, compromises or indulgences with respect to this Note or any extension or renewal thereof or any security therefor or to any party liable thereunder or hereunder, all without notice to or consent of any of the undersigned and without affecting the liability of the undersigned hereunder; and each of the undersigned further agrees to reimburse the holder hereof for all expenses, including reasonable attorneys' fees and legal expenses, incurred by such holder in seeking to collect or enforce any obligations or liabilities of any of the undersigned hereunder.

The Bank is hereby authorized, without notice to the undersigned, to date this Note as of the date when the loan evidenced hereby is made, and to insert the date of any monthly installment (including the correction of any such date which may have been inserted by any of the undersigned), and is further authorized to fill in any other blanks which have not been filled in or have been incorrectly completed by any of the undersigned.

The loan evidenced hereby has been made, and this Note has been delivered, at Chicago, Illinois, and shall be governed by the laws of the State of Illinois.

_____ (Borrower)
(Signature)

_____
(Print or Type Name)

_____
(Home Address of Borrower)

_____
(City) (Zone) (State)

_____
(Signature of co-maker spouse, if any)

_____
(Print or Type Name)

GUARANTEED:

AMERICAN MEDICAL ASSOCIATION
EDUCATION AND RESEARCH FOUNDATION

By_____

Countersigned_____

Dated _____, 19____.

Mr. DEVINE. Mr. Chairman, may I ask one question?

The CHAIRMAN. Mr. Devine?

Mr. DEVINE. Doctor, yesterday the Secretary of Health, Education, and Welfare, as well as the Surgeon General, testified that recently the quality of applicants to medical schools had gone down. Would you say that was a correct statement?

Dr. DORMAN. Could I have Dr. Wiggins answer that?

Mr. DEVINE. Whoever can answer it. And, if that is a true statement, to what do you attribute this?

Dr. WIGGINS. Mr. Devine, as we have collected this sort of information over years and years and tabulated it, there are peaks and valleys. It is never perfectly constant. There has been a very significant decline between what existed in 1950 to 1953, roughly, as opposed to what exists now.

In 1950 to 1953, our medical schools, however, had far more applicants because of the postwar situation and so forth.

Mr. DEVINE. You are talking about quantity. I am talking about quality.

Dr. WIGGINS. Well, there was a difference both in terms of quantity and quality, so far as we can measure quality, in terms of their college records, for instance. There was a distinct difference.

Mr. DEVINE. Are you talking about grades when you talk about quality?

Dr. WIGGINS. Yes, sir; insofar as they can be measured by college grades. The measurement of this kind of quality, as I am sure you know, is difficult.

Mr. DEVINE. Are there any standards other than grades that you are using?

Dr. WIGGINS. Yes, sir. The medical college admissions tests are now taken by almost all medical students and a record of this has been maintained over the years.

Mr. DEVINE. Would you say that was an accurate statement, then, by the Surgeon General, that the quality recently has been down?

Dr. WIGGINS. As opposed to the few years early in the decade of the 1950's. But when looked at over about a 30-year period, it is down a little bit, but I do not think, if one figured it out statistically, that it would be a statistically significant difference of the average for some 20 or 30 years.

Mr. DEVINE. I take it you would not be in complete agreement with that statement, then; is that correct? That there is not any significant difference in quality today than there has been in the last 10 years?

Dr. WIGGINS. It is certainly significantly different over what it was 10 years ago.

Mr. DEVINE. Thirty years, then?

Dr. WIGGINS. Over the last 30 years, it is not significantly different now.

Mr. DEVINE. On a graph it would fluctuate over the years, but it has remained reasonably constant; is that correct?

Dr. WIGGINS. Yes.

Mr. DEVINE. That is all, Mr. Chairman; thank you.

The CHAIRMAN. Mr. Roberts, do you have any questions?

Mr. ROBERTS. No, Mr. Chairman.

The CHAIRMAN. Dr. Dorman, let me thank you on behalf of the committee for your appearance here, together with Dr. McKittrick and Dr. Wiggins, who appeared here with you, and we are very pleased to have your presentation.

Dr. DORMAN. Thank you very much, Mr. Harris.

The CHAIRMAN. Dr. Charles W. Bliven, executive secretary, American Association of Colleges of Pharmacy. Dr. Bliven.

STATEMENT OF DR. CHARLES W. BLIVEN, EXECUTIVE SECRETARY, AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

Dr. BLIVEN. Mr. Chairman, I am, indeed, grateful for the privilege of appearing before you.

The CHAIRMAN. You may proceed.

Dr. BLIVEN. I have a prepared statment which has been given to Mr. Williamson.

My name is Charles W. Bliven. I am executive secretary of the American Association of Colleges of Pharmacy and present the statement in this capacity. Before assuming this office I served for 14 years as dean of the School of Pharmacy of the George Washington University, Washington, D.C.

I appear before you in behalf of the membership of the American Association of Colleges of Pharmacy, which consists of 77 schools and colleges of pharmacy. Seventy-five of our member schools are located in 44 States and the District of Columbia. All of them are nationally accredited. Approximately 1,100 teachers are engaged in the instruction of some 10,600 undergraduate and 1,140 graduate students enrolled in our schools.

The curriculum leading to the undergraduate professional degree has required 4 years since 1932 and a minimum of 5 years since September 1960. Two of our member schools offer only a 6-year curriculum, and two others offer this longer program on an optional basis. In the 5-year program a minimum of 3 years of work in the professional subjects are required in addition to a 2-year basic science program. In the 6-year curriculum at least 4 years are mandatory beyond the 2 years of science.

The objective of the American Association of Colleges of Pharmacy is the promotion of education and research within the member institution. Our association is a nonprofit organization.

I appear before you in support of H.R. 12 which would increase the opportunities for training health science personnel. The American Pharmaceutical Association will submit for inclusion in the record a statement in support of this legislation and a representative of the National Association of Retail Druggists will give a supporting statement during these hearings.

H.R. 12 would make schools of pharmacy eligible for grants for the construction of teaching facilities. While this support would materially assist the pharmaceutical segment of the health professions to maintain and improve our professional service in the years ahead, we ask that students of pharmacy in the last 3 years of their program, the minimum professional curriculum, be included in the student loan provision of the bill.

Our member colleges have the responsibility of graduating an adequate number of pharmacists at both the undergraduate and graduate levels to meet not only the replacement needs of the profession but also the demands of our rapidly expanding area of the health sciences. A rather constant pharmacist-to-population ratio of 67 per 100,000 has existed from at least 1920 until recently. If this ratio is used in the projection of manpower needs, schools of pharmacy will need to produce annually, during the period 1965-70, twice as many graduates as are currently being graduated; during 1970-75, the average annual number of graduates must be increased by 15 percent over 1965-70 if the ratio is to be maintained.

The 67 per 100,000 ratio based on a population of 180 million would require 120,000 pharmacists; however, the current number of pharmacists engaged in the profession is closer to 117,000 providing a pharmacist-to-population ratio of 65 per 100,000.

Approximately 90 percent of our professional personnel are practicing in the community pharmacies throughout the country. The remaining 10 percent are engaged in the many other areas of the profession: in the pharmacies of our hospitals; in the control, research, or product development laboratories of the manufacturing plants; as medical service representatives to the physicians; in our educational program; in Government; and in the Armed Forces. The schools of pharmacy are making every effort to respond to the demands for personnel from all of these public health areas. To aid in determining the existent and future needs of the profession the Public Health Service, with the cooperation of 15 pharmaceutical organizations, has undertaken a professional manpower study.

The educational program in pharmacy provides our graduates with an excellent background in the basic sciences as well as in the professional courses. For this reason, allied health fields are utilizing an increasing number of our graduates.

To provide an adequate number of pharmacists for the profession and for the allied health fields, our schools and colleges of pharmacy need financial assistance beyond that currently available. During the period 1958–61, 16 new buildings have been erected for schools of pharmacy and at least 28 acquired additional space. During the period 1947-61 about 36 schools, approximately half of our total number, have acquired new buildings. Thus, while many of our schools have good physical facilities, others must seek funds from outside sources to provide this essential.

I might insert parenthetically here that about one-third of our schools are private schools.

The greatest need exists for modernization and rehabilitation of existing structures and expansion of some of them to meeting area needs. However, there does not appear to be a need for the origin of new schools within the next few years.

We realize, however, that quantity as exemplified by square feet and numbers of students is not, in itself, sufficient to meet our public health responsibilities; quality of students and staff are equally essential to the education of tomorrow's pharmacist. All of these needs have high priority in the thinking and planning of our college administrators.

There is an increasing need for financial aid to students in order that pharmacy can continue to supply the essential number of well-qualified graduates. Inclusion of the last three classes of students of pharmacy in the loan provisions of H.R. 12 would aid in meeting this responsibility. The increased possibility of financial aid offered through these provisions would have a salutary effect on the number of students undertaking the study of pharmacy. Should the effect on the number of applicants be sufficiently great, the quality of the student population and, thus, of the graduates would be enhanced.

An increased number of well-qualified students is essential not only in the undergraduate curriculum but also in the graduate programs where our future teachers and research personnel are trained. The excellent graduate programs developed by many of our schools are a vital part of the educational program for pharmacy and the facilities for such advanced training must be expanded in the years ahead.

A survey conducted in September 1962, after the school year had begun showed that there was a shortage of 70 teachers in the 75 continental schools; 38 schools lacked 2 or more teachers. The need for the academic year 1963–64 is approximately 120 teachers. With less than 100 doctor of philosophy graduates likely by September 1963 (there were 87 graduates in 1961–62) and with about one-half of this number taking positions in industry, a shortage of teachers will prevail again next year, and the immediate years ahead.

Federal assistance in the form of health research facility grants and research grants from the National Institutes of Health have had a pronounced beneficial effect on our graduate program and, hence, on the number of teachers for our schools and research personnel for the pharmaceutical industry. Through 1960 our member schools received grants estimated at $2 million from NIH for the construction of research facilities. A recent survey indicates that for the period 1963–65, 47 schools will require for new research facilities, remodeling, and for equipment funds in excess of $20 million, based on total cost of construction.

During the period July 1, 1961–July 31, 1962, schools of pharmacy had available research funds amounting to at least $2.5 million; about one-half of which was being used for research on cancer, mental health, and cadiovascular diseases.

The figures on research facility grants and on research funds indicate the increased interest and activity of pharmacy schools in fundamental and applied research in our branch of the health sciences. In the 9-year period, 1951–60, the number of projects in pharmacy schools receiving NIH support has increased more than 20 times; the dollar value of the projects has increased more than 30 times.[1]

The administrators of our member colleges are grateful for Federal support in the construction of research facilities and in research projects. The inclusion of our schools in the provisions of H.R. 12, including the loan provision, will be another important step in assisting pharmacy in meeting the personnel demands essential to care for the health needs of our increasing population.

---

[1] Allen, Ernest M., Am. J. Pharm. Ed. 25, 211 (1961).

I might add at this point, as we increase the number of physicians, we are going to have an increasing number of prescriptions annually, and, therefore, our demands for pharmacists are going to increase accordingly.

That concludes my statement, Mr. Chairman.

There are three tables which are a part of this official statement.

(The tables referred to follow:)

TABLE A.—*Undergraduate enrollment in U.S. schools of pharmacy, 1958–62*

Year	Last year	Second from last year	Third from last year	Total
1958–59	3,901	3,880	4,492	12,273
1959–60	3,645	3,872	4,982	12,499
1960–61	3,691	4,075	5,823	13,589
1961–62	3,906	4,784	[1] 2,137	10,827
1962–63	4,484	[1] 2,004	4,145	10,633

[1] The small enrollment in this class is the result of the transition from the 4- to the 5-year program in 1960 by those schools not already on the longer program.

TABLE B.—*Graduates from undergraduate curriculums of U.S. schools of pharmacy, 1958–62*

Year	Graduates	Year	Graduates
1958	3,683	1961	3,438
1959	3,686	1962	3,699
1960	3,497	1963	[1] 4,350

[1] Estimated.

TABLE C.—*Average annual number of pharmacists, and requirements for replacements, new entrants, and total need for pharmacists for 5-year periods, 1960–75* [1] [2]

Period	Average annual number of pharmacists [3]	Requirements		
		Replacements [4]	New entrants	Total
1960–65	122,200	4,300	2,200	6,500
1965–70	133,400	4,700	2,400	7,100
1970–75	146,000	5,100	3,000	8,100

[1] Submitted by Senator Hubert Humphrey to Senate Labor and Public Welfare Committee during hearings on S. 1072 of 87th Cong.
[2] Based on population increase as being linear.
[3] Based on 1960 pharmacist-to-population ratio of 67: 100,000.
[4] Calculated at 3.5 percent of number of pharmacists.

Mr. ROBERTS. You say you have a rather constant pharmacists-to-population ratio of 67 to 100,000 civilians, and that that has existed, I believe you said, since at least 1920 until recently. How are pharmacists supplied to the Armed Forces, the armed services?

Dr. BLIVEN. Many of them volunteer, of course, and through the draft.

Mr. ROBERTS. Do the services have any type of training for pharmacists?

Dr. BLIVEN. Yes, sir, they do, and it consists of training, depending upon the urgency, of course, that may take as long as 6 months or 9

months, but I think these are exceptional. I think that the courses offered for pharmacists are many times shorter than this.

Mr. ROBERTS. I mean can they start from the base of high school education and obtain some type of certificate entitling them to become a pharmacist while they are in the service? Is there any such system as that?

Dr. BLIVEN. I think that is correct, starting with high school education. In other words, selected individuals are given this special training, and then serve in the hospitals and dispensaries of the armed services. They have no recognition in civilian life, however, because of that training.

Mr. ROBERTS. Could they come out and then take a board examination or do any of the States recognize that type of training and might certificate them on the basis of their service schooling and training?

Dr. BLIVEN. At the present time, and to my knowledge, no.

Mr. ROBERTS. Do you have or recognize any problem in the supply of pharmacists in areas of shortage, I mean in rural areas, for instance? Is that any problem in the small rural areas, as far as you know?

Dr. BLIVEN. In the Southern States we have the lower pharmacist-to-population ratio. I do not know whether any hardships have been worked because of that ratio.

Mr. ROBERTS. Well, that is pretty well true of the doctors and dentists all along the line, is it not?

Dr. BLIVEN. That is right.

Mr. ROBERTS. Could that be because of the low per capita income of those sections, or is there any reason for it that you know of?

Dr. BLIVEN. I think perhaps it is because a certain level of annual income is required for operation of the pharmacy, community pharmacy, and unless that anticipated income is available within a given community, the outlet for the drugs just will not be made available in that area.

Mr. ROBERTS. It is probably true that they tend to go to centers where there are larger numbers of M.D.'s and D.O.'s.

Dr. BLIVEN. That is correct.

A survey would include the number of physicians in an area before you established your community pharmacy.

Mr. ROBERTS. I believe you stated that you see no need for the origin of new schools of pharmacy?

Dr. BLIVEN. That is right.

Mr. ROBERTS. I suppose you contemplate, then, that there would have to be, of course, expansion in schools that are already in existence?

Dr. BLIVEN. In some areas, yes, sir.

Mr. ROBERTS. That is all I have.

The gentleman from Ohio?

Mr. DEVINE. I have no questions.

Mr. ROBERTS. The gentleman from New York?

Mr. O'BRIEN. Yes, Mr. Chairman.

H.R. 12 presently provides for student loans to schools of medicine, osteopathy and dentistry.

What are the requirements for entrance into schools of medicine? Must a student be a college graduate?

Dr. BLIVEN. In schools of pharmacy?

Mr. O'BRIEN. No, medicine—medicine, osteopathy.

Dr. BLIVEN. Oh, I think the minimum requirement is 3 years.

Mr. O'BRIEN. Three years?

Dr. BLIVEN. Yes.

Mr. O'BRIEN. Now, what is the minimum requirement for a student entering a college of pharmacy?

Dr. BLIVEN. This is a bit difficult to explain because we have a 5-year curriculum.

Mr. O'BRIEN. Yes.

Dr. BLIVEN. Some schools operate on what we call a 0–5. In other words, the student can enter directly from high school into this 0–5 program. In a few colleges we have what is termed 1–4. The student must have had 1 year of college prior to admission of pharmacy. And in the other, the minimum, we have what is known as a 2–3, 2 years of college, primarily basic sciences, plus 3 years of work in the school of pharmacy.

Mr. O'BRIEN. Yes.

Well, then, under the bill as it is now, a student in a school of medicine would have a minimum of 3 years of college behind him?

Dr. BLIVEN. That is correct.

Mr. O'BRIEN. For which he received no financial assistance, whereas in a school of pharmacy, it would be possible under your recommendation for a student with only high school behind him, or 1 year of college behind him, to become eligible for loans?

Dr. BLIVEN. Under my recommendation? No, I am recommending, sir, only for the last 3 years, the minimum professional program.

Mr. O'BRIEN. Yes.

Then you would still have a 1-year advantage over the medical student?

Dr. BLIVEN. That is correct.

Mr. O'BRIEN. Would it not be more realistic, then, for you to recommend 2 years instead of 3 years?

Dr. BLIVEN. Well, one advantage of a loan program would be to provide the incoming student with the knowledge that he would have an increased opportunity for financial help from the onset of his professional program.

Mr. O'BRIEN. He would have that same help for 2 years as well as 3 years.

Dr. BLIVEN. That is correct.

Mr. O'BRIEN. I am not trying to split hairs here.

Dr. BLIVEN. No.

Mr. O'BRIEN. I am just trying to figure out whether you are not perhaps asking for aid for the student in the college of pharmacy at an earlier point in his academic career than the student in the school of medicine.

Dr. BLIVEN. Measured on that basis, it should be on a 2-year basis; yes, sir.

Mr. O'BRIEN. Thank you.

Mr. ROBERTS. The gentleman from Colorado?

Mr. BROTZMAN. I do not know if you covered this in your introductory remarks or not, but I have one question.

Are there colleges of pharmacy in existence in this Nation that are not a part of your association?

Dr. BLIVEN. Yes, there is one college.

Mr. BROTZMAN. The score is 77 to 1, is that right?

Dr. BLIVEN. Yes.

Mr. BROTZMAN. One that is not?

Dr. BLIVEN. One that is not a member of our association and is not accredited by our national accrediting agency.

Mr. BROTZMAN. I think you were in the room and heard the testimony of Dr. Dorman from the American Medical Association. Does your association have any similar lending facilities such as was described here to the committee this morning?

Dr. BLIVEN. Through our American Association of Colleges of Pharmacy, no. There is, however, a modest program, but a very helpful program, being operated by the National Association of Retail Druggists. It is known as the Dargavel Foundation.

Mr. BROTZMAN. What was that name again?

Dr. BLIVEN. Dargavel.

I have a few figures on that, if you are interested in them.

Mr. BROTZMAN. It would be of interest to me.

Dr. BLIVEN. From the beginning, which I believe is about July 1957, to July 31, 1961, the total loans have been $221,000, with an average loan of $308, to a total of 717 students.

We do have a pharmaceutical foundation known as the American Foundation for Pharmaceutical Education which, for the period 1942 to 1962, has granted funds in the form of scholarships in the amount of $525,000 to 2,332 students.

These are undergraduate students.

So that they are both modest programs. We are trying to help ourselves, but the source of our funds for some of these programs is the same sources used by other health professions, so that we are all trying to work together.

Mr. BROTZMAN. I would assume your testimony is that presently from private resources it is not meeting the need, is that right?

Dr. BLIVEN. I would say that is correct; yes.

Mr. BROTZMAN. What would you say the prognosis is? Do you think the tendency in this particular area is going to be enlarged or do you think that it may dwindle substantially, should this particular bill become law?

Dr. BLIVEN. May I ask if you are referring now to scholarships?

Mr. BROTZMAN. Yes.

Dr. BLIVEN. Loan provisions?

Mr. BROTZMAN. Primarily scholarships.

Dr. BLIVEN. I would like to think that the need in terms of the individual might remain somewhat the same. I think a figure for a student body, as far as loans are concerned, might be about 10 percent of the students might apply for loans, for example.

The size of the loan requested under the Dargavel Foundation has gradually been increasing.

Mr. BROTZMAN. Thank you very much.

Thank you, Mr. Chairman.

Mr. O'BRIEN. Mr. Chairman?

Mr. ROBERTS. Mr. O'Brien?

Mr. O'BRIEN. Could I be recognized for a brief statement.

A short while ago the representatives of the American Medical Association were testifying. Reference was made to the fact that the medical colleges have a central office, and that the names of all applicants to any colleges in the country are listed there, and I think it would be unfortunate if we left the impression that there was something sinister about that, but the fact, I am informed, is that the student, that several colleges may now admit a student, and he has a choice, and the colleges that he turns down, in effect, have no knowledge of that until pretty near the start of the academic term.

This is avoided by the medical schools, because if one medical college admits an applicant who has applied to several medical colleges, the others drop his name.

That might be centralization, Mr. Chairman, but I think it is very good business, too. It is good for the students and good for the colleges, and I just wanted to get that into the record.

Mr. ROBERTS. Thank you, Mr. O'Brien.

I think, also Dr. Wiggins mentioned the fact that there would be a witness to appear in behalf of the Association of American Colleges, and I think it might be well if we direct some questions to them as to how that is handled.

I thank the gentleman.

This will conclude the hearing this morning, and the committee will be in recess until 2 p.m. in the same hearing room.

(Whereupon, at 12 o'clock noon, the committee adjourned, to reconvene at 2 p.m., of the same day.)

AFTERNOON SESSION

Mr. ROBERTS (presiding). The committee will be in order.

I believe our next witness is Mr. James M. Hester, president of New York University, representing the American Council on Education, 1785 Massachusetts Avenue, Washington, D.C.

Doctor, you may proceed.

STATEMENT OF JAMES M. HESTER, PRESIDENT, NEW YORK UNIVERSITY, ON BEHALF OF THE AMERICAN COUNCIL ON EDUCATION

Mr. HESTER. I have a prepared statement which I would like to read. It is brief.

Mr. Chairman and members of the committee, I am James McNaughton Hester, president of New York University, a private, nondenominational university. I am present as a representative of the Commission on Federal Relations of the American Council on Education. Among the nearly 1,000 educational institutions belonging to the council are all those accredited universities which have schools of medicine and dentistry.

I am honored to be asked to address this committee, Mr. Chairman, and to state the position of the American Council on Education with respect to the Health Professions Educational Act of 1963, H.R. 12. The council wishes to go on record as strongly endorsing the proposed

act and urging its enactment by the Congress. The act as presently drawn is a necessary first step in meeting the pressing problems of expanding our system of education for the health professions.

The urgent need for expanded programs in this area has been documented in the hearings held regarding H.R. 4999, the Health Professions Educational Assistance Act of 1961, which the American Council on Education also supported. In view of the previous testimony on behalf of the American Council on Education, it is necessary only to state again that we are concerned with the public welfare and that the council deems this act to be in the interests of the public welfare.

With regard to some of the specific provisions of the proposed act, I offer the following comments:

There are two ways to develop additional training facilities for the health professions. The first is through the creation of new schools, and the second is through the expansion and improvement of existing facilities. Those who have studied this problem closely realize that substantial progress in providing new facilities will depend upon aid from the Federal Government. Although the States and the private institutions have made some progress in providing new facilities, the tremendous costs involved make this development, at best, slow and unpredictable. The provisions for matching grants contained in H.R. 12 will stimulate these efforts and thus furnish needed acceleration in the development of training facilities.

It should be pointed out that, although the creation of new schools for the health professions would make possible an eventual increase in the number of persons in the professions, a more immediate gain can be secured through the encouragement which H.R. 12 provides to existing schools to undertake substantial expansion. The provision of matching Federal grants for this purpose is eminently sound.

H.R. 12 recognizes the fact that it is essential not only to create more training facilities for the health professions, but also to recruit additional well-qualified students to these professions. H.R. 12, by providing for loans to students enrolled for study in medicine and dentistry, would open up training opportunities in the health professions to many students who, for financial reasons, cannot now consider such training. The health professions, especially medicine and dentistry, are attracting relatively few young people who come from families with limited incomes. The low interest rate and the generous period for repayment, together with the forgiveness policy which applies to those who undertake professional practice under special circumstances, parallel the loan provisions of the National Defense Education Act and we endorse these provisions. Since the actual costs of medical and dental education approximate $4,000 per year, the maximum annual loan, which set at $2,000, should be reviewed. It should be noted here that, although other non-Federal loan programs have been instituted for medical students, higher rates of interest and the absence of provisions similar to those in H.R. 12 reduce the attractiveness of such loans for young people from low income families. Many highly qualified students who lack financial resources are reluctant to undertake the large debt which they would incur through financing their entire medical education through most existing plans. In addition, persons

familiar with the problem of recruitment for the health professions are convinced that for many students nonrefundable scholarship grants offer the most effective incentive. It is hoped that attention will be given to a reconsideration of the scholarship program as originally contained in H.R. 4999.

I wish to comment on the provisions in H.R. 12 for the extension of facilities grants for health related research and research training. This provision provides a frontal attack on the critical problem of securing more persons to provide training in the health professions. In order to secure more persons in the health professions, new and enlarged facilities and financial assistance programs for students must be supported by a larger group of scientists and teachers. There is presently an inadequate number of health scientists and teachers. It is tremendously encouraging to note that H.R. 12 has been drawn with an appreciation of this fundamental problem and with a realization that teaching and research are inseparable.

In conclusion, the American Council on Education firmly believes that, if we are to secure the additional personnel in the health professions to meet the predicted needs of the future, action should be initiated immediately.

Mr. Chairman, I deeply appreciate the opportunity you and the members of this committee have given me to express the views of the American Council on Education on the proposed Health Professions Educational Assistance Act of 1963, H.R. 12.

Mr. ROBERTS. Dr. Hester, I have no questions but I do wish to thank you for a very brief but a very worthwhile statement.

Do you have any questions?

Mr. SPRINGER. Yes. May I just put in this one word, Dr. Hester, that this kind of a statement, of this type of brevity, has a great deal more prestige with this committee than some of these 45-page ones, the last 30 pages of which I can hardly listen to at 2 in the afternoon.

Now, there is one area that you covered that no one else has. You have been talking about grants to the students.

Are you the president of New York University?

Mr. HESTER. Yes, I am.

Mr. SPRINGER. Do you have a loan program for your students?

Mr. HESTER. Yes; we do.

Mr. SPRINGER. Do you have a grant program for your students?

Mr. HESTER. Scholarships?

Mr. SPRINGER. Grants.

Mr. HESTER. That would be the same. You mean nonrefundable?

Mr. SPRINGER. Right.

Mr. HESTER. Not to any appreciable degree in the medical school.

This is a pattern among medical schools and dental schools. The amount of scholarship, meaning nonrefundable grants, available to men in these professions, is quite disproportionate to anything in the graduate school of the arts and sciences or in the law school or in the school of engineering, for example.

We have a few endowed scholarships, but they are rather exceptional.

Mr. SPRINGER. Actually, Dr. Hester, practically all of the money, the significant money, comes in the form of loans to doctors and dentists, does it not?

Mr. HESTER. That is right.

Mr. SPRINGER. And that is coming through the medical educational loan program of AMA.

That is the only substantial program, is it not?

Mr. HESTER. That is the only one of which I am aware; yes.

Mr. SPRINGER. Now they have made available, I believe, over $6 million, according to Dr. Dorman this morning, $6,111,400 including 2,890 medical schools, 617 interns, and 1,132 residents.

That is the only real program, is it not, and that is all refunded. Would you say that that program is not successful?

Mr. HESTER. Not successful? I would say that—I heard the testimony this morning that it was doing a good job toward helping to meet the problem.

The concern that I expressed here is that we believe that there are many students who will be good doctors, who are not entering the profession because they will not undertake a loan of this kind.

Mr. SPRINGER. Let me ask you, Doctor: Do you think a student entering medical school who does not have the intestinal fortitude to finance his own education, has very much incentive to be a doctor?

Mr. HESTER. These things must be looked at now comparatively because good undergraduates can count on receiving scholarship assistance in practically every other field of graduate education.

If they wish to go into physics, chemistry, biology, and psychology, they can get substantial scholarship assistance.

If they wish to go to law school, they will get it. If they go into engineering and mathematics, they can get it.

Mr. SPRINGER. Let me say this, that the University of Illinois, and I can only speak from what I know, but I can say to you that the loans from the University of Illinois Law School simply do not come in the same class that the University of Illinois Medical School obtains.

Mr. HESTER. Well, I can only speak authoritatively here in our own case, where——

Mr. SPRINGER. There is nothing comparable. I can say this on authority, in the law field of anything like $6,111,000 available to lawyers.

Now, there is no such fund for lawyers from the American Bar Association. And I want to commend the AMA.

Mr. HESTER. Yes, indeed.

Mr. SPRINGER. I want to commend them on a program which seems to be a very thoughtful program. This is something that somebody started that is good.

It is one of the fine things, I think, the AMA has done, in trying to make it possible to create more doctors.

Mr. HESTER. I would certainly agree with you. I was——

Mr. SPRINGER. I wanted to ask you that question because all of you are coming to Washington. You are not the only ones because we hear about all of these programs. Everybody wants grants for students.

We came around reluctantly to the National Defense Education Act which I think has proved good.

I would be in favor of expanding that program as a loan, but as a grant I think it would be most difficult to convince the members of this

committee that a student who says, "I have $2,000 or $3,000 a year that I do not want to repay," should get a grant.

I want to ask you if this is true: Do you have any shortage at the New York University of students who will pay their own way?

Mr. HESTER. Who will do what?

Mr. SPRINGER. Pay their own way?

Mr. HESTER. In the medical school?

Mr. SPRINGER. Yes.

Mr. HESTER. It happens that our medical school is in the ascending curve of attractiveness and we are getting plenty of applicants, and I am speaking now of the National Education Council.

Mr. SPRINGER. Let me ask you, can you name one medical school where there are not far more applicants than there are places to be filled?

Mr. HESTER. I cannot name you one school, but I can comment on the picture that you present.

There are more applicants, yes, but not qualified applicants.

Mr. SPRINGER. Not qualified applicants?

I just went through this last week with the University of Illinois, and I think the figures which our chairman had out here—and we went down that list and saw the number of applicants a year ago, and then the second year and the third year, and then the amount of money it took—and this is fantastic, the number of young men who want to be doctors.

Now, we heard yesterday that 10 years ago there were more A students. Well, of course, you have got to remember in 10 years science has gone up astronomically. A lot of A students have gone into science.

And now it has dropped down to B. I think B is a pretty good average for graduate school. But this idea of a grant sure does not strike me. I hope I am not wrong in this, because we want this program to succeed, and I do not think we are going to put the grant program in.

It would certainly take a lot of changing in my convictions to do it.

On the other hand, we certainly want this program to succeed and, as I said, our good friend, Dave Hendrick, recommended you very highly.

Mr. HESTER. Thank you.

Mr. SPRINGER. Thank you, Mr. Chairman.

Mr. ROBERTS. Mr. Long.

Mr. LONG. Where do you get the funds for the running of your university?

Mr. HESTER. From private funds.

Mr. LONG. Altogether?

Mr. HESTER. Of course, we have research grants that come from Federal sources, but the operating income of the institution is private.

Mr. LONG. Has your New York University participated in the other programs promoting the construction of facilities?

Mr. HESTER. Yes, indeed, matching programs.

Mr. LONG. Matching programs?

Mr. HESTER. Yes, indeed.

Mr. LONG. At the time that your university and other universities with which you are familiar went into these programs, did they have

any reservations about taking Federal money into the operation of their university?

Mr. HESTER. Well, I was not part of New York University when this commenced, but I certainly know there are no reservations on the part of the university now on entering into matching programs with the Federal Government.

Mr. LONG. You think this program is a proper activity for the Federal Government?

Mr. HESTER. If it is the policy of the Federal Government to try to increase the health facilities of the country, I see no other way to accomplish it than by doing it through these means.

Mr. LONG. Do you think this should be the problem of the Federal Government? Do you think this problem is serious enough that in the absence of adequate action taken by the State government the Federal Government should move into it?

Mr. HESTER. I have seen the predicted shortages in this field. I am well acquainted with some of the problems of trying to meet the cost of medical education.

I do not see how we are going to meet those predicted needs unless there is substantial aid from some other source of which we are aware, and I assume that is the Federal Government.

Mr. ROBERTS. Mr. Younger.

Mr. YOUNGER. Thank you, Mr. Chairman.

Many of the universities and colleges in New York do get help from the State although they are still considered private schools.

Do you receive any financial aid from the State of New York?

Mr. HESTER. None directly. Our students receive what is called scholar incentive awards, which is a sum of money which they receive as residents of the State of New York if they are paying a certain amount of tuition, and it varies with their income level.

We do not receive any directly, as the university.

Mr. YOUNGER. You do from the fees charged students?

Mr. HESTER. Yes, indeed.

Mr. YOUNGER. The student gets money from his State to pay his fees?

Mr. HESTER. Yes; he gets some portion of it.

Mr. YOUNGER. You just have a different method of milking the State than most schools?

Mr. HESTER. Of course, we have a number of students from outside the State of New York to whom this does not apply, and we have a number of foreign students.

The minimum is $100 a year, which I think applies to a large number of students, and our tuition is $1,500. So it is not a substantial element.

Mr. YOUNGER. New York as a State does not have a State university, like——

Mr. HESTER. Yes, it does, sir.

Mr. YOUNGER. Other States?

Mr. HESTER. Yes, it does.

Mr. YOUNGER. Where is it located?

Mr. HESTER. It is located within a number of places within the State.

It is not a single physical entity as it is in some States, but it has a total enrollment of some 100,000 students in various colleges through-

out the State, teachers' colleges, medical college, and a number of other units.

Mr. YOUNGER. Is Cornell a part of it?

Mr. HESTER. Some of the colleges in Cornell are part of the State system.

The School of Agriculture——

Mr. O'BRIEN. Labor relations——

Mr. HESTER. Right [Continuing]. Is operated on contract from the State.

Mr. YOUNGER. Can you shed any light on how we are going to keep the doctors down on the farm?

Mr. HESTER. You mean keep them from going to the big cities?

Mr. YOUNGER. That is right.

Mr. HESTER. I cannot. I wish I could.

Mr. YOUNGER. That seems to be the real problem.

Mr. HESTER. Yes.

Mr. YOUNGER. If it were not for supplying doctors to the rural communities, I doubt if there is a need for this bill according to the testimony we have had, although there is a case for it.

But the real case and the real need are in the rural areas.

All of the testimony demonstrates that, but nobody has suggested a sound method how we are going to get the doctors into the rural areas.

Mr. HESTER. I have thought a good deal about this, particularly in connection with the provisions of this act, and I do not have any simple solution to it.

Mr. YOUNGER. That is all, Mr. Chairman.

Mr. ROBERTS. Thank you, sir.

The next witness is Dr. Chester H. Pheiffer, on behalf of the American Optometric Association. Dr. Pheiffer, you may proceed.

STATEMENT OF CHESTER H. PHEIFFER, O.D., DEAN OF THE COLLEGE OF OPTOMETRY, UNIVERSITY OF HOUSTON, HOUSTON, TEX., ON BEHALF OF THE AMERICAN OPTOMETRIC ASSOCIATION, ACCOMPANIED BY W. P. MacCRACKEN, JR., WASHINGTON COUNSEL

Dr. PHEIFFER. Mr. Chairman and members of the committee, my name is Chester H. Pheiffer. I reside in Houston, Tex. My appearance is on behalf of the American Optometric Association. This organization represents more than two-thirds of the practicing optometrists of the United States.

I received an A.B. degree with honors in psychology from the University of Louisville in 1943, an M.A. degree from the Ohio State University in 1944, and the Ph. D. degree in 1949. At the Ohio State University I taught courses in general and experimental psychology and summer postgraduate research laboratory for optometrists and also worked on the gustatory and olfactory problems of certain distillates for Seagrams, and of powdered milk for the armed services in conjunction with the dairy department, as well as conducted a project on the visual discrimination of areas for the Air Materiel Command.

In 1949 I joined the staff of the Southern College of Optometry teaching general and child psychology, psychological optics, and visual training. For service to the students and to optometry, I was given the L.A. Farmer award in 1950. In 1954 I received the O.D. degree, having completed the required courses.

I joined the staff of the University of Houston College of Optometry in 1954. Among the courses I taught were: psychology of vision, analysis of optometric data, visual training, history of optometry, socio-legal aspects, illumination, and clinical practice. In 1958, I was appointed director of clinics; 1959, full professor; 1961, dean of the college of optometry.

During the 1960–61 academic year, I was elected chairman of the faculty assembly, the highest elected post a faculty member can achieve. My research interests have been in the field of children's visual care, visual phenomena, and caecanometry or the effect of toxic involvements on vision.

Approximately a year ago when similar bills were considered by this committee of the 87th Congress, Dr. Alfred Rosenbloom, dean of the Illinois College of Optometry, testified and suggested certain amendments. It is my understanding that the testimony taken at that time will be made available to the members of this committee and therefore I will refrain from repeating the facts set forth in Dr. Rosenbloom's statement. However, I endorse them wholeheartedly and commend them for your careful consideration. It is particularly gratifying to note that some of the amendments which Dr. Rosenbloom suggested were adopted by the committee and are in H.R. 12.

Part C of H.R. 12, entitled "Student Loans" differs in its entirety from part C of H.R. 4999, 87th Congress, as introduced, although it conforms to that bill as reported. The original H.R. 4999 provided for scholarship grants; the bill as reported and now before the committee provides for student loans. All we asked a year ago was that our students be granted the same financial assistance as that to be made available to students of medicine, osteopathy, and dentistry. Our position today is the same but we believe it is even stronger because we are not asking for grants for optometry students, but merely loans which will be repaid with interest. We believe the bill should be amended so as to make the student loan provisions available to optometry students as well as to students of medicine and dentistry. This can be accomplished by a few simple amendments on pages 18, 19, and 20 of H.R. 12.

The suggested amendments are attached to my statement.

We recognize that a group must be important to the public welfare in order to obtain financial assistance, thus it would seem necessary to point out the importance of optometry to the public welfare. We believe that we can give you some ideas of optometry's importance with just a few summary sentences.

Very few people past the age of 45 are able to perform efficiently in our modern culture without the help of a vision specialist. Many of our children and young people are hampered in their academic work as well as in their everyday life without the assistance of a vision specialist. Since the future of our Nation is dependent on our children, as they are hampered, so is our Nation.

In addition to caring for the visual welfare of the public, optometry has also participated in producing a great amount of important scientific knowledge. The increased demand on vision by our culture not only in everyday life on the surface of the earth, but under the seas, in the air, and in space, points up the importance of vision and thus of the vision specialist, namely the optometrist, in today's educational, cultural, and economic worlds.

While our primary objective is to provide for the visual welfare of the civilian population, we hope you will bear in mind the fact that last year between 15 and 20 percent of the members of our graduating classes were commissioned as optometrists in the armed services.

In addressing our annual meeting in 1961, Maj. Gen. O. K. Neiss, Surgeon General, U.S. Air Force, after describing a number of air research projects in which optometrists were engaged, including study of radiation damage to the eye, eye protectioin of aircrew personnel, feasibility of contact lenses for flying personnel, and so forth, said:

> While the research of Air Force optometrists is necessarily devoted to problems related to military requirements, the results of our research may have far-reaching benefits to man's efforts to conquer space.

The optometrist performs an important function in finding and properly referring patients with pathology. It is worth while to note that there are fewer optometrists in the South than in other regions of the United States, and that the incidence of blindness in the South is higher than for other regions. Optometrists are relatively well distributed geographically. Without them, many small communities would not have visual care. Were it not for optometrists, many people in the low- and middle-income groups would be forced to go without visual care.

Our most recent surveys have indicated that there should be 1 practicing optometrist for every 7,000 members of the population.

And may I interject that this is a minimum.

The average the country over falls far short of meeting this requirement, and the situation is growing steadily worse. The figures based on 1958 data which were submitted to the 1960 White House Conference showed, Mr. Chairman, that in your State of Arkansas there was 1 licensed optometrist for every 11,079 of the population.

Mr. ROBERTS. You may change that, if you like.

Dr. PHEIFFER. Thank you, sir.

In Congressman Roberts' State of Alabama there was 1 for every 15,222 of the population; in Florida, the average was 1 for 10,704; in Louisiana, 1 for 11,938; in Maryland, 1 for 14,923; in Mississippi, 1 for 15,833; in my own State of Texas there was 1 for 10,751. Time will not permit my giving the figures for all 50 States, but I will be glad to furnish them for any member of this committee who is particularly interested in his own State. During the decade from 1950 to 1960, the population of Colorado increased 32.4 percent, but the number of optometrists increased only 1.2 percent. This was the situation several years ago.

It has grown steadily worse and our estimates are that unless there is a substantial expansion both in the facilities and the student population of our schools and colleges of optometry, by 1975 the ratio in New York State will be 1 optometrist for every 17,300 persons.

The figures submitted in 1960 showed that at the time they were compiled, there was 1 optometrist for approximately every 8,000 persons in New York State.

A report prepared by the office of development projects of the University of Houston states:

> A detailed statistical study indicates that the future need for optometrists in a 16-State region encompassing the entire South, a region with a 1960 population of 57,160,000, is approximately 220 new optometry graduates yearly.

In this area are located only two optometry schools. These 2 schools entered 131 new students in 1962. I can assure you that some will not graduate for lack of application; others because the need to work will cut into their study time so deeply that they will not be able to make their grades and yet they are unable to attend school without working.

The 1960 Blue Book of Optometrists lists 4,317 licensed optometrists in the southern region. The 1962 Blue Book lists 4,322. It can readily be seen that the number of optometrists required to provide adequate visual care in the South is not being met. It has been estimated that the minimum need for optometrists in Texas alone during the years ahead will be 28 annually just to maintain the present ratio of 1 optometrists to every 12,000 Texans.

Not only is there an acute shortage of optometrists in this country, but there is an even greater shortage in the underdeveloped countries, particularly in South America.

In December, Dr. H. Ward Ewalt, Jr., of Pittsburgh, Pa., president of the American Optometric Association, and Dr. Ralph Wick of Rapid City, S. Dak., retiring president of the American Academy of Optometry, headed a delegation to attend the Colombian Optometric Congress held in Bogotá, Colombia.

Our president-elect, Dr. Judd Chapman of Tallahassee, Fla., will head a delegation which is going to attend the International Ophthalmic Congress in Geneva, Switzerland, this April. All the nations are looking to us for leadership in this area as well as many others. This will give you some idea of the seriousness of the situation which is developing and against which corrective measures need to be taken.

In order to meet the need for optometrists in the Nation as well as in the South, it is first necessary to increase the enrollment in the optometry schools. At present it is not possible to produce the number of optometrists necessary to satisfy the public needs in terms of deaths and retirement of optometrists as well as the population increase, due to lack of physical facilities.

Secondly, students have difficulty not only in finding finances to begin the program but to complete it. Many optometry students are forced to prolong the length of their program by the necessity to work, thus shortening their years of service to the public. Florida now has five 4-year scholarships issued each year; South Carolina has an assistance program award of $300 per student per year. A number of other States have made attempts or are planning to secure financial assistance for students from their respective States.

Another mode developed to help potential optometry students in the South was the creation of the Better Vision Scholarship Fund by

the University of Houston. Optometrists in the South make donations to this fund which is then used to assist 10 to 12 first-year professional students each year. It must be recognized that this fund assist the student through the first year: He is then thrown upon his own resources after that.

I believe that very few professions can brag of a contribution record to education such as that possessed by optometrists. But how long can we expect a small group of valiant, dedicated men to finance the entire optometric visual care program for the public?

While talking about the contribution of optometrists, it might be well to point out that the University of Houston College of Optometry was founded at the request of the optometrists of Texas who contributed $100,000 during the first 5 years of its existence. This is not completely unique in Texas, as California and Indiana optometrists arranged for their annual license renewal fee to be increased and for the increase to go to optometry schools in their States.

Indications of the need for financial assistance by prospective students of optometry is demonstrated by the fact that 30 percent of the letters of inquiry also include requests for financial assistance. Of the 70 approved applications for last year's entering class, some 7 percent wrote at the last minute that they were financially unable to enter.

How many of the remaining 30 percent that did not appear at registration time for financial reasons is not known. Our Office of Loans and Scholarships at the University of Houston has informed me that they were compelled to reject some 60 requests for national defense student loans during the past year by optometry and preoptometry students. How many of these were from the 116 students enrolled in the college and how many were students seeking entrance into the college was not known.

However, Loans and Scholarships informed me that many of the accepted students who did not receive these defense loans did not show up at registration time. Since optometry students are high-quality people, they fall in the upper 25 percent of the college population; the reason for their not receiving these loans must be sought elsewhere than academic records.

The main reason is that those groups high on the priority list, namely, education, certain language groups, and the pure science students, utilize all the money available long before optometry students are given consideration. From the foregoing, it can be seen that too many highly qualified people are being denied, by inadequate financing, the education necessary for them to provide the public with the important service of visual care and that other optometry students are being hampered in their academic pursuits by the necessity to work many hours.

Loans and Scholarships informed me that the repayment record for optometry students is better than for any other students. Loans and Scholarships also informed me that optometry students have an excellent reputation for repaying these short-term loans. Better than 45 percent of our students are working and attempting to go through professional school at the same time.

Some 70 percent or better of the students' wives are working, also. In many cases both student and wife are working in order to meet

the heavy expenses of an optometric education. It is very disturbing to watch these young people striving to accomplish a difficult curriculum and earn the financial means simultaneously. We estimate that the requirements for loans to optometry students would be less than 1 percent of the loan authorization in the bill.

Along with the steadily increasing visual demands upon both our civilian and military population, a situation has arisen which cannot be tolerated. Some of the State legislatures are doing a little, but the Federal Government must point the way. All the professions are competing for students, and the competition with industry becomes more severe each year. To provide loans for students of medicine and dentistry but not for optometry would give us another handicap to overcome.

Our national association is undertaking a vigorous program of student recruitment under the leadership of our committee on vocational guidance. The adoption of the amendments suggested and the passage of the bill with the amendments will be of great assistance to the work of that committee.

The need for high-quality vision specialists, namely, optometrists, to provide the people of the South, as well as of the Nation, with the best vision care possible so that they are adequately prepared to meet the visual demands of our present culture, is evident.

Optometrists have earned great honor by their unselfish devotion and contribution to the public visual welfare, by their constant striving for higher standards both professionally and educationally. It seems only fair that part of the cost of training those who will provide visual care should be furnished by the Federal Government.

In closing, let me again stress the point that we are not asking for gifts for our students but merely for loans to be repaid when the recipients are established in practice.

The opportunity to make this presentation is sincerely appreciated, Mr. Chairman, and if you or any of the members of the committee have any questions or desire additional information, I will be most happy to answer them or to furnish additional facts.

(The suggested amendments follow:)

AMENDMENTS TO H.R. 12, 88TH CONGRESS, 1ST SESSION

Page 18, line 3, after the word "osteopathy," insert the word "optometry."
Page 19, line 12, strike out the period and insert in lieu thereof a comma and the words "or Doctor of Optometry or an equavalent degree."
Page 19, line 17, after the word "osteopathy," insert the word "optometry."
Page 20, line 7, before the word "or," insert the word "optometry."
Page 20, line 9, after the word "physicians," insert the word "optometrists."
Page 20, line 11, after the word "physicians," insert the word "optometrists."
Page 20, line 13, after the word "physician," insert the word "optometrist."
Page 20, line 20, after the word "physicians," insert the word "optometrists."

Mr. ROBERTS. Thank you very much, Doctor.

I am glad to see you are accompanied here by Bill MacCracken, a very longtime friend.

I appreciate your statement. I only have one or two brief questions.

You will note in the report on H.R. 4999 that there was a decline in the number of students from 1951 to 1961. Now, can you give us what you think are the reasons for that decline?

Dr. PHEIFFER. There are two. The main reason, I would say, or one, of course, is your big increase following World War II which gave us—what shall we say—an unexpected increase, but since that time we have had a great decrease resulting from, I think, a lack of simple assistance to many of the men that would like to go into the field.

Mr. ROBERTS. I take it then that you believe the availability of Federal loans for applicants would help you overcome this decline?

Dr. PHEIFFER. I would say from what we say in our report that we have so many students seeking financial assistance and so many saying that they cannot come because they do not have the financial wherewithal that the answer is definitely yes.

Mr. ROBERTS. Mr. Younger.

Mr. YOUNGER. I have only one question. I received a telegram from Paul Yarwood, the administrator and director of the California Optometric Association. He suggests not only the amendments which you suggest but also feels that the association should have a place on the advisory council. And I did not catch that in your testimony.

What is your feeling on that?

Mr. MACCRACKEN. Congressman, I think the bill provides that they could be appointed to the Advisory Council; it does not say they have to be.

Mr. YOUNGER. No; but he mentioned that it does specify some of the other fields, without specifying your field.

I just wondered why he should be recommending something that you do not recommend, because, in his telegram, he says that you are going to be here representing the association. He did not discuss that with you?

Dr. PHEIFFER. No; he did not discuss that with me, but I can assure you that if we had any possibility of being part of that group, which would, of course, then be of greater assistance to us, no doubt in the long run we would be most happy to accept the opportunity.

Mr. YOUNGER. Thank you, Mr. Chairman.

Mr. ROBERTS. Mr. O'Brien.

Mr. O'BRIEN. Dean Pheiffer, when a graduate receives the degree of doctor of optometry or any equivalent degree, how many years of study at a college level does that student have behind him?

Dr. PHEIFFER. A minimum of five. Many have six.

Mr. O'BRIEN. Now, we have been told that for a doctor of medicine or a physician that there would be a minimum of 7 years. Do you think that if we were to amend the bill that we should limit the loan opportunity to the student of optometry to the same number of years?

In other words, would you be willing to accept a loan that would set in after 4 years of study at the college level?

Dr. PHEIFFER. This would mean that there would be assentially only 1 additional year left.

Many of our students need assistance much before then. This is somewhat like saying that one man can send his son through college and also give him a bomb—I believe that is the modern term for a hot rod—to drive around in, whereas another man cannot afford to send his son to college, and we are in the position of the poor man who is having a difficult time sending his boy to school.

Many of our applicants come from lower income groups. They are all very capable persons, but not particularly affluent.

Mr. O'BRIEN. Well, that is also true, it is not, of a family who wants to send a boy through medical college, but under present circumstances that young man or woman is confronted with the necessity of 7 years of study at the college level, whereas in the field of optometry, it is 5 or 6 years.

So there is a greater burden on the family of the young person who is studying in a medical college.

Is that correct?

Dr. PHEIFFER. Well, this is really a relative question of the greater burden, because we are trying to say that the income of the family—the student going to medical or optometry school is the same.

This may or may not be true, in which case it would be so. Also I see many of our students who are fighting their way to get through, and therefore the need is present, and whether medicine has it at one level or not, I do not know.

They seem to have an awful lot of money to set up a lot of aid which we do not have and, therefore, since the need is present, if it can be secured, then I think it would be a big boom to supplying a greater number of optometrists to take care of our public.

Mr. O'BRIEN. Yes. I am not quarreling, at all, Dean, with the need. I recognize that and I know just what you are getting at.

It is just that the point is that we are not extending in this bill any aid under this bill to the young man studying for an M.D. during his first 4 years of college.

Now, that is a cost to the family, and I was just wondering about the width of the door that we may have to go through, and if it might not be necessary, because of the emphasis on the cost to the family and the young man, to say that perhaps we would grant the loan for 2 years or 3 years of the period of study in the college of optometry.

I am not advocating that; I am simply suggesting that if we reach the period of compromise in this committee, it may be a fact.

Dr. PHEIFFER. If I may suggest, sir, I believe this morning they said the period was 3 year and not 4 years before entering medical school?

Mr. O'BRIEN. Three years.

Dr. PHEIFFER. Three years? Of course, the period for optometry is 2 years before entering.

I am not sure whether 1 year would make that much difference in terms of our needing something like 1 percent when the need of the student and the population is so great.

Mr. O'BRIEN. Well, you may have it correctly, and I am not arguing with you. I am just looking ahead to the questions that may be raised when we consider the bill.

Thank you very much.

Mr. ROBERTS. Gentlemen of the committee, I certainly have no desire to foreclose anyone, but I am trying to get these two Texans on the plane.

So are there any further questions?

Mr. BROTZMAN. I have one.

Mr. ROBERTS. Mr. Brotzman.

Mr. BROTZMAN. I just want to say, Doctor, first of all I congratulate you on an excellent statement. I really appreciate the fact that

you put your qualifications in here, which I consider to be excellent, and it certainly helps me and some of the members of this committee to know a little bit more about some of our witnesses than we would otherwise have the opportunity to do.

One question: You say on page 4 of your testimony that there should be 1 practicing optometrist for every 7,000 members of population.

Dr. PHEIFFER. As a minimum.

Mr. BROTZMAN. Now, that is a conclusion.

Very quickly, could you tell me what factors support that conclusion?

Dr. PHEIFFER. This has been attacked in a number of ways. One has been simply to determine what the number of patients are or determine the number of patients an optometrist could handle and then determine what the need of the public is, and then, finding that, this gives us the bare minimum care that the patients need, or the number of people who need visual care, and the optometrist can only provide the minimum needs in terms of the time that he has to give this visual care.

May I answer this that one of our States earlier found that 1 optometrist to every 4,000 was not excessive. And there is now, I believe, in a town in California a condition where there is 1 optometrist to every 3,000 in population, and they are all doing quite well in terms of living, which I think indicates there is a need or people would not be going to them.

And these men find that there is still plenty for them to do. And this is the reason that we say that that is a minimum.

An optimum is somewhere closer to 1 to 4,000.

Mr. BROTZMAN. Before you leave, I noticed that you very kindly offered to tell any member of the committee who is particularly interested in his own State what the ratio is.

I happen to be from Colorado and since you are leaving, I thought I would just ask you that one question.

Mr. PHEIFFER. According to this particular study, Colorado in 1950 had a ratio——

Mr. BROTZMAN. If you are in a hurry, I do not want to detain you from catching your plane, and I think Mr. MacCracken could give me that information.

Mr. MACCRACKEN. I will get it and put it in the record for you.

Dr. PHEIFFER. I can say this, in this particular report that we have, it was estimated that Colorado will need some 39 additional optometrists just to meet the minimum, and this was in 1958, and things have not gotten better.

(The following letter was later received from Mr. MacCracken:)

AMERICAN OPTOMETRIC ASSOCIATION,
Washington, D.C., February 11, 1963.

Re H.R. 12.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives,
Washington, D.C.

MY DEAR MR. CHAIRMAN: During the course of the hearings on Thursday, February 7, Congressman Brotzman, a member of your committee, requested that the figures pertaining to the ratio of licensed optometrists to the population of Colorado as of 1958 be incorporated in the record.

These figures, which were submitted to the White House Conference on Children and Youth in 1960, showed there was 1 licensed optometrist for every 7,370 of the Colorado population.

Respectfully yours,

WILLIAM P. MACCRACKEN, Jr.

Mr. BROTZMAN. That is all, Mr. Chairman. Thank you.

Mr. ROBERTS. Thank you, Mr. Brotzman.

Thank you, gentlemen.

Dr. PHEIFFER. I will be glad to answer any more if we have any that you particularly need.

Mr. ROBERTS. Thank you for your statement.

Dr. PHEIFFER. Thank you.

Mr. ROBERTS. Our next witness is Dr. Robert Berson, who is dean of the South Texas Medical School.

Dr. BERSON. Mr. Chairman, I would like for Dr. William Soderman, who is with me, and Dr. Powers, who is the executive director of the association, to join me at the table.

Mr. ROBERTS. Fine.

I may mention that Dr. Berson was the president or dean of our medical school of the University of Alabama and was host of our subcommittee on safety when we were down doing some studies last year.

We feel very grateful to you, and if I had had anything to do with it, I would not have allowed you to leave Alabama and go to Texas. You did such a fine job at the University of Alabama, you simply worked yourself out of a job.

We are glad to have you, Doctor, and it is always a pleasure to have you before this committee.

STATEMENT OF DR. ROBERT BERSON, DEAN, SOUTH TEXAS MEDICAL SCHOOL, ACCOMPANIED BY DR. WILLIAM SODERMAN, DEAN, SCHOOL OF MEDICINE, UNIVERSITY OF TEXAS, AND DR. LEE POWERS, ASSOCIATE DIRECTOR, ASSOCIATION OF AMERICAN MEDICAL COLLEGES

Dr. BERSON. Thank you.

The simple statement that I have was rather hastily prepared, and since the committee has been hearing this testimony today I think I can be more useful in trying to make a verbal statement and trying to answer questions.

You will recall that in testimony before your committee last year the association made rather extensive statements and introduced a good deal of material which is printed in the hearings on pages 101 to 168.

Instead of trying to repeat that material at this time, I would like at this time to make a simple statement about the urgency of this matter; some comments on the four major provisions and say just a little bit about the functions of the central office of the association and of the accreditation process because of some questions that were addressed to other witnesses this morning.

The urgency can be stated very simply indeed.

Every responsible study of the need for trained medical manpower in relation to the population has indicated a severe shortage

in the 1970's, and thereafter, unless quite a lot is done to increase the output of trained manpower.

Now, the leadtime in expanding the enrollment of a medical school or developing a new medical school is so long that this is an urgent matter today.

It takes at least 4 years to make all of the arrangements to plan, construct, and equip a medical school building, whether this is for major expansion of enrollment or a new building.

Then you take entering students, and it takes another 4 years for them to graduate. So if, as we hope, this measure becomes law this year, we are talking about an increasing number of doctors, graduating in 1971, which is already in the period when every responsible student says there is going to be a considerable shortage.

The time is late and we hope that the Congress will act on this measure as it is, and promptly.

The association is completely in favor of the provisions for construction as they are written.

It would be logical for this committee to review the program after an interval of 5 years to see what is the situation then. We are convinced that everything that is provided will be fruitfully used in that period.

The association regrets the fact that the committee did not see fit to support scholarships which we favored. The loan fund provisions written into H.R. 12 seem to us excellent. They will meet a part of the very real need.

The loan program of the American Medical Association, as Dr. Dorman said this morning, was not designed to meet the whole need and it cannot, although it is an excellent program, so far as it goes.

The loan provisions in H.R. 12 will meet an additional and an important part of the need, particularly because your committee included in its report last year the wise provision for forgiveness of a portion of this indebtedness for those physicians who do follow certain lines in their careers.

The only change we would recommend that you consider on that particular portion of the bill is that of making the maximum possible forgiveness greater than 50 percent.

It is a fact that a substantial percentage of the graduating classes from medical schools each year go into careers of public service where they are needed, the Armed Forces, the Veterans' Administration, the Public Health Service, State mental hospitals, tuberculosis hospitals, departments of health, faculties of medical schools, some research positions outside of medical schools, foreign missions, and practice in some localities that are never going to be very lucrative.

We think the provisions for forgiveness in the bill are good and very well justified for people who follow those careers.

Two other provisions in the bill that we think are important do not involve additional money, but do grant authority that we think would be useful.

One is the technical assistance provision, which is on page 26 of the bill as printed. We think it can be extremely helpful if the Surgeon General has the authority to render technical assistance through the staff that he has, and will build up, to the institutions as provided in this portion.

It does not involve additional money but additional authority, which we consider important.

The other is the provision on page 27 for the construction of regional facilities, which again is authority, rather than additional funds.

We believe that that provision is in the national interest and that if it is authorized, it will be wisely used and beneficial.

Now, a point about the function of the central office of the association that was questioned somewhat this morning:

The Association of American Medical Colleges is made up of the medical schools in this country. None of them have to belong to it if they do not wish to, and it has not been but about 17 or 18 years since some of them did not, in fact, belong to it.

It is a voluntary association of these professional schools. In the central office, the staff does a wide variety of statistical studies on matters related to students and to other functions of the medical school, with no authority to reach any decisions or take any actions concerning applicants.

Each school does report the individual applicants it has accepted. This is sent in to the central office and is then made available to all of the schools.

No school would have to do this if they did not want to, but they do, in fact, do it.

The information then comes periodically to each member institution, but it is the individual medical school's decision what to do with it, or whether to act on any of that information.

For example, the vast majority of students apply to more than one medical school. When a given student is accepted by a given medical school and another school to which he has also applied comes to know that, the admissions committee in the second school may decide that this is such a very promising student, and he would fit so well in our class, we will speed up our process and also accept him.

Or they may decide that he is not that promising a student and if he is accepted in another medical school, he is going to have a chance to become a doctor, and they will give very little additional consideration to him.

But the emphasis here is that this is all voluntary with the authority resting in the individual medical schools.

The accreditation process is much the same way.

The whole accreditation process in institutions of higher education has quite a history. The process in the field of medicine was one of the earliest to be developed and is commonly considered one of the better approaches to it.

In essence, a medical school that wishes to become accredited by the American Medical Association and a member of the Association of American Medical Colleges lets these associations know of that desire.

Then the two agencies, acting jointly through a committee, send visitors to study the program and to reach an opinion of whether this is a sufficiently good program so that they would be happy to accept them as members of the association, or to say, "Yes, we approve of this program."

In the beginning, the minimum standards that were laid down were very important. They are not very important any more.

One of the earliest ones, about which there was a lot of controversy late in the last century, was whether it was good enough to repeat the same lectures to the same student each year or whether, in fact, you had to have a somewhat different program for the student in his second and third years.

When the association decided that this graded curriculum was desirable and that they would not take any new schools that did not have it, a fair number of medical schools went right on with their old program.

Over the years it has become a habit for medical schools to wish to be members of the association and to be fully approved, but the minimum requirements now mean very little, because most medical schools far surpass them.

The process of being visited and having your whole program laid out before impartial visitors that know the field is usually very helpful, indeed. And if those visitors should find that, everything considered, this is really not a good enough program for the general public, who thinks it is comparable to other medical schools, a mechanism does exist for a school being dropped from membership or being publicly disapproved by the council.

So far as there is any legal authority, this has been created by the several States when they have revised their licensing laws and regulations, and when they have decided that graduation from an approved school is a criterion they have wished to write into their law.

Now, Mr. Chairman, it seems to me that that is enough of a statement for me to make.

I am sure Dr. Soderman and Dr. Powers would be delighted to try to answer any sort of questions that you would like to ask. We think this is an excellent bill and it should be enacted right away.

It would not do everything that we would like to see done, but these are clearly the first things that should be done.

The CHAIRMAN. Thank you, Dr. Berson.

I have known of your interest in this program for some time. I believe you were before the committee at the last session of Congress to express interest in this. I take it you were at the University of Alabama at that time?

Dr. BERSON. That is right, sir.

The CHAIRMAN. Mr. Roberts just left the chair and has gone. This is Mr. Texas, I started to say. Mr. Rogers has just come in, from Texas. I am not going to try to indicate whether you have increased your prestige by going to Texas or whether you have decreased it. I will leave that argument with Alabama and Texas.

But you are now, I believe, with the University of Texas and setting up the new school at San Antonio?

Dr. BERSON. Yes, Mr. Chairman.

I think that new schools and expansion of an old one is so important, I am working on it personally.

The CHAIRMAN. Personally, I think Texas is very fortunate to have a man of your caliber to assist in this program.

Mr. ROGERS?

Mr. ROGERS of Texas. Mr. Chairman, let me say this:

Texas feels very fortunate in having Dr. Berson in the school, and, being a University of Texas man myself, I want to say thank you

for coming over, doctor. We know you are doing a great job and will continue to.

In the interests of time, there is only one question that is in my mind.

Is there any way, doctor, as the matter presently stands, where an individual could become a licensed practitioner of medicine without going through an accredited school?

Dr. BERSON. Mr. Rogers, to be licensed in any of the States, the individual can graduate from a medical school in another country, and a certain number of American young people do this every year. In those instances the accreditation by agencies in this country do not apply.

Now, some States have tight restrictions against people so educated, and some others have a little bit more lenient approach.

At this time there is not in operation in this country a medical school that is not approved and accredited.

Mr. ROGERS of Texas. What I am getting at, though, doctor, is this:

If a man decided to just take different courses himself and make his own course of study, is there any way that he can be subjected to an examination to determine whether or not he can practice, or does he have to show that he has attended a certain school for a certain length of time?

Dr. BERSON. So far as I know, the latter. This is a function of the licensing laws of each State, and I do not believe that any of them now recognize an individual as a doctor who has not graduated from medical school.

Mr. ROGERS of Texas. There is not any way for a man to become a doctor as we know in the legal profession of becoming a lawyer by having studied in a lawyer's office?

Dr. BERSON. No, sir.

Mr. ROGERS of Texas. Thank you.

Dr. BERSON. That used to be the case.

Mr. ROGERS of Texas. Yes.

Dr. BERSON. But it has been a long time, now.

The CHAIRMAN. It used to be the case with lawyers, too.

Mr. ROGERS of Texas. Thank you, Doctor.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. No questions.

The CHAIRMAN. Mr. O'Brien?

Mr. O'BRIEN. I just have one question.

Doctor, I think you have very propery stressed the time lag that will occur even if we act this year, and I suspect that somewhere along the way it will be suggested to us that, in view of the time lag, perhaps we should defer the operation of the loans themselves.

I would like to ask this question:

Supposing, instead of the sentence which now reads in the bill, "In the granting of such loans a school shall give preference to persons who enter as first-year students after June 30, 1963," that was rewritten to provide, "Such loans shall be available to persons who enter as first-year students after June 30, 1965"?

I am not advocating that. I am merely posing the question to you so that we might have an answer to the suggestion, if it is made later in our sessions.

Dr. BERSON. It is my own opinion that it is better the way it is than it would be changed to 1965. The time factors are different.

But I am concerned about the problem of young people who would be properly cast in the role of doctor who may not now consider that career because of the economic barriers which they are unable to surmount.

This is the case today, and this will, I think, continue to be the case. Already we are seeing that a very large percent of medical students, come from the families in this country who have fairly high incomes, and a very small percent of medical students come from the large number of families whose total family income is, say, less than $5,000 a year.

It is my own opinion that natural aptitude for medicine is not distributed in keeping with the economics of the family, so I would think the change you suggest would not be as good as the way it is written.

Mr. O'BRIEN. In other words, you think that the desire to become a doctor occurs, perhaps, at the high school level?

Dr. BERSON. Yes.

Many students make that decision in high school or very early in college, and particularly those from families of little means. They feel that they must at least decide what they are going to do with their lives. And if they see no hope of entering such a long period of study, they decide on something else.

Mr. O'BRIEN. Thank you very much, sir.

The CHAIRMAN. Mr. Brotzman?

Mr. BROTZMAN. I just wanted to get one thing clear, doctor. Is it correct that your association is the Association of American Colleges?

Dr. BERSON. Association of American Medical Colleges.

Mr. BROTZMAN. Medical colleges?

Dr. BERSON. Yes, sir.

Mr. BROTZMAN. And you said, I think, that is a voluntary organization?

Dr. BERSON. Yes.

Mr. BROTZMAN. Belonging to it?

Dr. BERSON. Yes.

Mr. BROTZMAN. How many medical colleges are there in the Nation now, or do you know that?

Dr. BERSON. 97.

Mr. BROTZMAN. 97?

Dr. POWERS. Including Puerto Rico.

Dr. BERSON. Including Puerto Rico.

Mr. BROTZMAN. The question I was driving at:

How many of the American medical colleges belong to your association?

Dr. BERSON. They all do. I thought he was giving me the wrong figures. It is 87, sir. They all do.

Mr. BROTZMAN. And they all belong on a voluntary basis?

Dr. BERSON. That is right.

They ask to be considered as members, and then there is a process for considering that, and then they become members.

Mr. BROTZMAN. Do I understand that your testimony here is the consensus of opinion of all the people or the particular members of your association, or are part of these your own personal opinions?

Dr. BERSON. Everything that I said in the beginning is for the association.

In the spring of 1961, the association addressed itself to this question formally, had quite a lot of work done drawing up a statement of position for the association, and then asked the representative from each member institution to come to a meeting of 2 or 3 days in which every sentence in this statement was revised and talked over, and then adopted by the whole association with no dissent.

This statement, if it is not in your record, we will introduce it for the record, because that is the basis on which I can say that much is for the whole association.

A few of the latter comments I have made, just the last few, I have had to speak personally, because the association had not formally established a position.

Mr. BROTZMAN. That is fine. Thank you.

The CHAIRMAN. Doctor, thank you very much.

Dr. BERSON. Thank you, sir.

The CHAIRMAN. It is a pleasure to have you.

Dr. BERSON. We appreciate the opportunity to appear, and we hope you will take early, favorable action.

The CHAIRMAN. Thank you.

(The following letter was later received from Dr. Berson:)

THE SOUTH TEXAS MEDICAL SCHOOL,
THE UNIVERSITY OF TEXAS,
San Antonio, Tex., February 11, 1963.

Congressman OREN HARRIS,
House Office Building,
Washington, D.C.

DEAR CONGRESSMAN HARRIS: The purpose of this letter is to request that the enclosed printed statement of the position of the Association of American Medical Colleges, concerning Federal aid to medical education, be included in the printed record of the hearings of the House Committee on Interstate and Foreign Commerce on H.R. 12.

When I appeared before your committee, one of the members asked to what degree my statement reflected the views of the association and to what degree they were my own. The enclosed statement, "Association of American Medical Colleges Proposals for the Suport of Medical Education by the Federal Government, January 11, 1961," was developed with care and approved by the institutional members of the association in February of 1961 without dissenting vote. The institutional members reaffirmed their support of this statement of position at their annual meeting in the fall of 1962, again without dissenting vote.

On behalf of the association, I want to express our appreciation to you and your committee for your courtesy during the hearings, and the very strong hope that the committee will make a favorable report on H.R. 12 in the immediate future and that it will become law during the present session of Congress.

Sincerely yours,

ROBERT C. BERSON, M.D., *Dean.*

ASSOCIATION OF AMERICAN MEDICAL COLLEGES PROPOSALS FOR THE SUPPORT OF MEDICAL EDUCATION BY THE FEDERAL GOVERNMENT ADOPTED BY THE INSTITUTIONAL MEMBERSHIP, JANUARY 11, 1961, CHICAGO, ILL.

PREAMBLE

The American people are deeply concerned about health. Responding to this concern as a matter of national policy, the Federal Government in the past 15

years, largely through the Department of Health, Education, and Welfare, has joined State and local governments, health and educational institutions, voluntary health agencies, private philanthropy, and industry in meeting two especially critical needs in the attack on disease: the construction of hospital and other facilities for the care of patients (Hill-Burton program), and the support of medical research (National Institutes of Health).

Expenditures by the Government in support of these two programs represent investments in the health of the Nation which pay rich dividends, as has been amply documented. It is imperative that these programs be continued and developed further.

Health service facilities and medical research have made possible dramatic progress in the prevention and treatment of disease. A block to the effective use of new knowledge and to the pursuit of further knowledge is the increasing shortage of personnel in the health professions, particularly doctors. This block can be removed only by the improvement and expansion of the Nation's system of medical education.

The critical nature of this problem has been defined in five reports prepared in recent years by advisory groups of non-Government consultants.[1] These authoritative studies show that by 1975 the Nation will need to train about 50 percent more physicians than in 1960 just to maintain the current ratio of physicians to population, a ratio generally accepted as a minimum requirement.

Because of the time required to improve and develop facilities and faculties and to take doctors through the full cycle of 5 to 9 years of professional training, action to improve and expand programs of medical education must be taken at once. Otherwise, the Nation faces a very serious reduction in its ability to control and cure disease, and our people will not have available the medical service they want and expect.

Since the problem of medical manpower can be solved only by prompt and comprehensive national effort, it is appropriate that medical schools and their parent institutions outline the basic requirements which to them seem necessary to accomplish this national objective while preserving the traditional freedom of the educational institutions. To this end, the Association of American Medical Colleges is suggesting principles of a Federal program of assistance to medical education which have been generally agreed to by its members.

The program presented in this statement outlines those measures that the medical schools believe necessary if existing programs of medical education are to be maintained at an adequate level of quality and if there is to be a sufficient expansion of our facilities to provide the number of well-trained medical graduates that the Nation requires.

In considering needs of medical education, it is important to understand the variety, complexity, and interrelationships of activities involved in the training of medical personnel. This is especially true in relation to the three components of medical education: teaching, research, and service. The inseparable nature of these three functions has led to the "medical center" concept as a more realistic characterization of medical education than the too frequently held concept of the medical school, the teaching hospital, the research program, and community health services as activities independent of each other. However, the two major Federal support programs—for medical facilities and for medical research—while understandably directed toward specific restricted objectives have complicated the conduct of medical education by failing to recognize that research and service are integral functions with teaching. Thus, the need for service facilities and the need for research facilities in a medical education environment have been considered independently by the Government, and no provision at all has been made for teaching facilities, although teaching is basic to both service and research.

The medical center typically has as its nucleus a medical school for the undergraduate training of candidates for the M.D. degree. Essential to this program is a strong faculty in the basic health sciences. Such scientists can be retained and can be fully effective only when they are given broad opportunity for research activity—teaching is barren in the absence of an environment conducive to the vigorous pursuit of new knowledge. These same faculty

---

[1] 1952 report of the President's Commission on the Health Needs of the Nation; 1958 final report of the Secretary's Consultants on Medical Research and Education; 1959 report of the Surgeon General's Consultant Group on Medical Education; 1960 report of the Committee of Consultants on Medical Research to the Subcommittee on Departments of Labor, Health, Education, and Welfare, of the Committee on Appropriations, U.S. Senate, 86th Cong., 2d sess.; 1960 report of the President's Commission on National Goals.

members are also called upon to train another important group of students—the future specialists in their fields who are Ph. D. candidates within the graduate program of the parent university. This is a vital function, particularly for the production of medical teachers and research personnel. Likewise, these faculty members in many situations are called upon to teach basic sciences to dental students, nursing students, and paramedical personnel. They must also participate in clinical teaching conferences in support of both undergraduate and graduate medical education.

The medical center concept is particularly pertinent in the teaching of the clinical specialties. Clinical teaching is conducted in relation to patient care and a high standard of patient care is necessary for good teaching. A core of full-time teachers is required to give continuity and responsible direction and supervision to patient care and the related teaching. The teaching hospital of a medical school, then, whether directly operated by the school or affiliated with it, is an important component of the medical center, Also, opportunity for research is important to the clinical teacher and to good clinical teaching just as is true in the basic sciences.

The clinical faculty, in addition to its responsibility for teaching of M.D. candidates, is becoming increasingly responsible for graduate training of doctors—interns, residents, and fellows. Medical graduates are tending more and more to seek advanced clinical training in hospitals operated in conjunction with medical schools because of the educational orientation of the training. These teaching and training responsibilities put a heavy burden on the schools and their teaching hospitals for which support is required.

Finally, a new and growing responsibility of medical schools is to provide leadership in coordinating medical services within their area and in providing postgraduate and specalized training opportunities for practicing physicians.

These various activities of the medical school beyond the 4-year M.D. program must be understood and recognized—and support of medical education must be provided in keeping with the concept of the medical center.

The proposals that follow represent the initial steps that the Association of American Medical Colleges believe should be undertaken in order to accelerate the ability of this Nation's system of medical education to produce the numbers, categories, and quality of the professional and technical personnel required to meet the health needs of a population that is not only growing in size but also in medical understanding.

These proposals cover only the needs of the Nation's existing schools of medicine and the need for new schools. The Association of American Medical Colleges recognizes the importance of the health professional areas other than medicine, and also of the research and research training that is done in institutions other than schools of medicine. Any provision which the Federal Government makes to meet the needs of educational and research activities that take place outside the medical school and its research and service facilities should be over and above the recommendations in this statement.

While all of the proposals require implementation, funds for construction are taken to solve this problem, little will be accomplished by efforts to increase is the primary obstacle to the overall development that is needed. Until steps are taken to solve this problem, little will be accomplished by efforts to increase medical school faculties or student enrollments. Students and teachers must have suitable places in which to work, including classrooms, laboratories, libraries, hospitals, and clinics.

I. MATCHING FUNDS FOR MODERNIZATION AND EXPANSION OF EXISTING SCHOOLS AND THE CONSTRUCTION OF NEW SCHOOLS

A. The need

In the fall of 1959 the Surgeon General's Consultant Group on Medical Education reported that to maintain this Nation's present ratio of physicians to population, by 1975, 3,500 more physicians must be graduating each year than is presently the case. This means, with due allowance for dropouts between admission and graduation, that by 1970 this Nation must provide an increase of approximately 4,000 first-year places in its schools of medicine.

A survey in the fall of 1960 [2] discloses that 1,700 of these additional first-year places can be created by the full modernization and expansion of existing

[2] "Medical Education in the United States and Canada," Wiggins, W. S., Leymaster, G. R., Taylor, A. H., and Tipner, Anne, JAMA 174: 1425–1431.

schools. The remaining 2,300 must come from the establishment of new schools. Therefore, the provision of funds that will provide for both of these approaches will permit enrollment increases that can be both prompt and continuous. The Nation's schools of medicine, colleges, and universities of themselves do not have the resources to finance the necessary modernization expansion and new development. Most of the needed money must come from the Federal Government.

B. Policy

Since medical education serves many national purposes and since its strength comes through the diversity of local ownership and control, the Association of American Medical Colleges favors both Federal and local participation in the construction of medical schools and their related research, library, hospital, and clinic facilities.

Federal matching funds should be providid under conditions that will—

1. Be sufficient in amount to encourage action that is both prompt and adequate;
2. Encourage the modernization and expansion of existing schools;
3. Encourage academic institutions not presently involved in medical education to plan and develop new schools;
4. Encourage an institution's continuing effectiveness in maintaining diversity in its sources of financial support;
5. Recognize the essential unity of medical education and research by identifying the support of one with the other;
6. Recognize the indispensability of the library, the university hospital, and clinic to medical research and education.

C. Proposals

1. As an initial step, the Association of American Medical Colleges recommends that the Congress pass enabling legislation covering a 10-year span that will provide matching funds for the full modernization and expansion of existing programs in medical education and the development of new programs.

2. It is recommended that the first appropriation measure cover a 3-year period with a provision for annual amendment, depending upon the continuing study of needs and of the amounts that can be expended to the best possible advantage. As a basic appropriation for this 3-year period, the association recommends—

(*a*) That $50 million a year be appropriated for grants for the full modernization, expansion or replacement of the educational, research, and library facilities of existing schools of medicine. If an increase of 5 percent or more is made for the enrollment of first-year medical students, the Federal matching should be $3 to $1; if there is less than a 5-percent increase in first-year places, the Federal matching should be $3 for $2;

(*b*) That $50 million a year be appropriated for grants to existing schools of medicine for the establishment, modernization, and expansion of those teaching hospitals and clinics that are their primary base for clinical teaching and research, the granting of such funds to be upon application made by the medical school or university. The matching formula for such grants should be one Federal for one local dollar;

(*c*) That the first year, $50 million be appropriated for grants for the construction of new schools, including research facilities and teaching hospitals and clinics. Federal funds should be provided upon a 3-to-1 basis;

(*d*) That $300,000 per year be appropriated for grants, up to $50,000 to an academic institution that wishes to study the feasibility of establishing a new school.

II. FINANCIAL AID TO STUDENTS OF MEDICINE

In spite of a rapid increase in the number of liberal arts graduates, there continues to be a decline in the number of medical school applicants. While this may be due to a variety of reasons, there can be no doubt that one important reason is the amount of personal expense and time involved in study for the M.D. degree and in the additional years the young physician must spend in internship and residency training as contrasted with the time and cost involved in securing the Ph. D. in the various sciences.

A nationwide study of the students graduating from medical schools in 1959 showed that at least one-third had important financial problems.

The Association of American Medical Colleges believes that to insure an adequate number of medical students, the most crucial need at this time is for nonrefundable educational grants (predoctoral medical fellowships). The association recommends that these grants be provided in amounts and under conditions that will attract and hold qualified students who for financial reasons might not otherwise be able to pursue a career in medicine. The association recommends that these nonrefundable fellowships should—

1. Be available for students during all 4 years of medical school;
2. Not in any way limit the ability of a student to attend the school of his choice;
3. Not impose restrictions upon the student's freedom to obtain postgraduate training or pursue a career of his choice;
4. Be made available as a lump-sum grant to each school, the amount to be determined by the number of enrolled medical students. Five hundred dollars per student is suggested;
5. Be administered by each school in accordance with its particular needs and circumstances with the provision that all such funds be used in direct aid to medical students, that up to $2,500 per student be the maximum of the Federal fellowship allowed in a single school year, and that no restrictions be placed upon the freedom of the school to use funds for student aid from other sources.

III. THE PROVISION OF THE FULL COST OF PROJECT-SUPPORTED RESEARCH AND RESEARCH TRAINING

The association continues to recommend that grants from the National Institutes of Health for the support of research and research training permit the payment of full costs based upon a formula that will allow for variations in the costs from institution to institution.

IV. THE SUPPORT OF RESEARCH AND RESEARCH TRAINING

The Association of American Medical Colleges recognizes that the Federal support of research and research training has led to great improvement in the health of both the Nation and of the world and recommends that this support be continued. One of the major objectives of the association's proposals for funds for the remodeling and expansion of existing schools and for the construction of new schools, as well as its recommendations for full reimbursement for the cost of research and research training, is to strengthen the basic capacity of the Nation's schools of medicine to conduct these activities.

The association therefore recommends that, as the result of constant study, each year's appropriation for research and research training continue to be adjusted to the national need, to the availability of facilities and scientific personnel, and to the amounts of money that can be spent wisely and efficiently.

V. GENERAL SUPPORT OF MEDICAL EDUCATION

The program of assistance to medical education offered in the foregoing sections is essential to modernize and expand the physical facilities of the medical schools of the Nation, to assist in the creation of new schools, and to make it possible for young men and women of intelligence and character, even though of modest means, to secure a medical education.

But this program alone will not provide enough physicians to meet the needs of the Nation. A strong system of medical education requires adequate financial support that is continuing and stable. Universities with budgets already under great stress will be unable to maintain, improve, or expand their existing medical programs or to establish new medical schools or new educational programs unless sources of additional operating funds are found.

Since this is a matter of vital concern to the entire Nation, the Association of American Medical Colleges believes it is reasonable and proper that the Federal Government should provide together with other national and local sources the needed additional operating funds. All such funds should be made available in a manner which will assure the continuation of full institutional control of medical education.

VI. ADMINISTRATION

The Association of American Medical Colleges believe that the cose coordination of Federal programs that support medical education is essential.

The association takes cognizance of the long and effective working relationships existing between the medical colleges and the Department of Health, Education, and Welfare, particularly the U.S. Public Health Service and its National Institutes of Health, and expresses its hope that the future Federal support of medical education will be administered in the same enlightened manner, with the full utilization of non-Federal consultants, that has characterized the past.

The CHAIRMAN. General Adams, you have a statement which you want to file, Gen. Joseph P. Adams.

STATEMENT OF JOSEPH P. ADAMS, ATTORNEY FOR THE INTERNATIONAL CHIROPRACTORS ASSOCIATION

Mr. ADAMS. Chairman Harris and distinguished members of this committee, you are certainly to be congratulated for your patience and your devotion to duty in completing these 3 days of hearing on this most important legislation, and I would like to present for your consideration a statement on behalf of the International Chiropractors Association, whose offices are at 741 Brady Street, Davenport, Iowa.

If I may describe the statement, Chairman Harris, and ask your permission to have it made a part of the record, I will do so briefly.

The statement goes to the fact that the chiropractic profession is the second largest healing art in the United States today, and that it is licensed in 46 States, and that it is considered that, in the opinion of the association, that the public interest of this bill will certainly be improved by inclusion of chiropractic, both from the standpoint of their colleges and of their students, on the bases that are generally prescribed in the bill.

The statement is merely an elaboration on the basis of that reasoning.

The CHAIRMAN. Your statement will be included in the record, General.

(The statement referred to follows:)

STATEMENT OF JOSEPH P. ADAMS, ATTORNEY FOR THE INTERNATIONAL CHIROPRACTORS ASSOCIATION, IN SUPPORT OF H.R. 12, AND COMPANION BILLS, RELATING TO HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE

Chairman Harris and distinguished members of the committee, I am privileged to address this committee on behalf of the International Chiropractors Association. My position with the association is one of attorney and counselor. The International Chiropractors Association is active and represents member chiropractors in all States of the Union. It is dedicated to the public welfare and to the promotion and preservation of high professional standards. It maintains that all citizens are entitled to freedom of choice of doctor for their personal health care.

Chiropractic is now a licensed profession in 46 States of the Union. Chiropractic is generally recognized not only by National and State Governments, but also by independent insurance companies, unions, industry, and the public. Some industries now have staff doctors of chiropractic and many routinely refer injured employees to chiropractors. Management labor contracts provide for chiropractic care. Workmen's compensation laws in most States provide for chiropractic care. The public is utilizing services of doctors of chiropractic in an ever-increasing volume.

Certainly, gentlemen, there are compelling reasons why the science of chiropractic should be included in any consideration of the Health Professions Educational Assistance Act of 1963, by appropriate amendment. On October 16, 1961, the conservative Wall Street Journal published a comprehensive article headlined: "Chiropractors Make Headway in the Struggle To Win Complete Acceptance." That article commented that Dr. Charles Bechtol, chief of orthopedics at the University of California, at the Los Angeles Medical Center, said: "Chiropractic has a place in the healing arts. * * * Established professions tend to look down their noses too much at professions which may not be so well established, and therefore, the older professions miss what good there can be in the newer ones."

Samuel Grafton, in an article in McCall's magazine some time ago, reported: "A certain number of M.D.'s have been impressed by chiropractic enough to make use of some of its methods, and to offer their patients spinal manipulation. Medical opposition in this country is so strong that this type of acceptance has spread more rapidly abroad. A group of 200 West German M.D.'s, including members of the medical school faculties, has formed an organization for research and work in chiropractic. One of its leaders, Dr. L. Zukschwerdt, professor of surgery at the University of Hamburg, has praised chiropractic in the German medical press, recommending that physicians not neglect the application of so worthwhile a method."

In considering H.R. 12, and its companion bills, you will find an opportunity to make significant gains for the American people in the quest for health and fitness if you will permit the chiropractic profession to share in the responsibilities and opportunities afforded in the bill to increase the number of doctors so seriously needed by the public today.

Chiropractic today is the second largest healing profession in the United States, and has earned, and deserves your consideration for its inclusion in legislation now the subject of this committee's study. Research and development in the chiropractic colleges of this country will probably afford the greatest dollar's worth of value purchasable in the entire health field today, while at the same time increasing the output of doctors whose training was made possible by the student loan section of the act.

Gentlemen, on behalf of the International Chiropractors Association, I submit that H.R. 12 will be even more in the public interest if it is amended to include provisions which will authorize participation by chiropractic colleges and students. The International Chiropractors Association, which I represent, pledges itself to assist the Congress of the United States in making it possible to provide Federal assistance to medical schools and medical students.

Thank you.

The CHAIRMAN. Any questions of General Adams? Thank you very much.

Mr. ADAMS. Thank you very much, Chairman Harris.

The CHAIRMAN. Miss Julia C. Thompson. Miss Thompson, you may proceed.

STATEMENT OF JULIA C. THOMPSON, WASHINGTON REPRESENTATIVE, AMERICAN NURSES' ASSOCIATION, INC.

Miss THOMPSON. Mr. Chairman and members of the committee, I am Julia C. Thompson, Washington representative of the American Nurses' Association, the national organization of registered professional nurses. We welcome this opportunity to appear here once again to submit this short statement in support of H.R. 12.

For the past 5 years the ANA has supported similar proposals, requesting that assistance for nursing education be included. Documentation of the urgent needs in nursing has been previously submitted to the committee. Therefore, we are submitting a very short statement and would like to acknowledge with pleasure the fact that the committee recognized the needs last year, when it reported the bill

with amendment supporting construction grants for collegiate nursing education.

Although the funds that will be available are limited, your proposals for construction grants for teaching facilities in collegiate schools of nursing is an important beginning. We believe the following examples which have been communicated to us from deans of schools of nursing across the country will illustrate some of the urgent need.

At least 14 additional classrooms for nursing students are needed now.

And the "now" is underlined.

Two additional laboratories, 14 offices and library seating space for 60 students are needed now.

From another school:

In the last 3 years, applications for this program have numbered around 150 annually, but because of limitations in clinical facilities and of limitations in faculty able to develop new clinical facilities only 40–50 of these applicants could be admitted.

In another school:

Housed in the basement of the old nurse's home, we teach in classrooms converted from bedrooms and in service rooms in the university hospitals. Teaching space in the college and in the basic science classrooms and laboratories is so limited that our enrollment may have to be limited to many fewer than the qualified applicants coming to us.

At a time when the shortage of professional nurses is recognized as being critical, it is of serious concern to us that qualified applicants cannot be admitted to college programs in nursing because teaching facilities are inadequate. It is from these programs that the future teachers of nurses and administrators and supervisors of nursing service will come. While the programs have expanded slowly in the past 10 years, expansion needs to be accelerated or the situation now prevailing will be compounded. Although the traineeship program for graduate education to prepare teachers, supervisors, and administrators, authorized by the Health Amendments Act of 1956 by this committee, has been helpful, a January 1963 survey shows that there are 1,157 budgeted teaching vacancies in baccalaureate and diploma schools of nursing, as compared with 996 vacancies in 1960.[1]

We were pleased to note in the President's health message today, which he submitted to Congress, that he has made recommendations in relation to nursing education. He stated that—

the number of nurses graduating from collegiate courses would have to double from 4,000 in 1960 to at least 8,000 in 1970. This expansion would require the equivalent of more than 30 to 35 new collegiate nursing schools. Graduates from hospital schools would have to increase from 25,000 to 40,000 by 1970, and junior colleges would have to be graduating 5,000 by that year.

A recent study[2] of nurse supply reveals that the total number of graduates from schools of nursing has remained fairly constant over the past 10 years, but the demands for nursing services have greatly

[1] National League for Nursing, January 1963.
[2] "Biennial Estimate of Nurse Supply," prepared jointly by American Nurses' Association, National League for Nursing, and Public Health Service.

increased. For example, since the Hill-Burton Act was passed in 1946, 6,470 projects expanding health facilities have been completed, including an additional 23,376 nursing home beds; another 286 nursing homes have been constructed through loans from the Small Business Administration; and 26 new veterans' hospitals with a bed capacity of 18,280 have been constructed since 1952.[3] If these facilities are to be adequately staffed by well-prepared nurses, the public must accept some responsibility for the education of qualified nursing staff.

At this point, Mr. Chairman, I would like to insert several paragraphs in response to some comments that Dr. Russell Nelson, spokesman for the American Hospital Association, made in his testimony yesterday, and we would like to highlight some of the reasons why we think assistance to collegiate schools of nursing is so crucial at this time.

Dr. Nelson pointed out that a quarter of the positions for residents and interns are unfilled in hospitals. He also said that the teaching facility needs of the school of nursing, and I quote, "are incidental to the needs to expand or create the hospital for beds and other diagnostic and treatment facilities and often suffer because of their incidental nature."

We would agree that this is the case and suggest that this inevitable result is exactly why an increase in collegiate-trained nurses is so essential.

The increasing burden on the professional nurse, due to hospital staff shortages, the rapidly changing technical functions, and the vastly increased supervisory functions that have been forced on the professional nurse because of the additional auxiliary assistance in hospitals, requires a better prepared professional nurse, rather than one whose preparation has been "only incidental" to the service of the institution, as Dr. Nelson states.

In a speech made by our current president at the 1960 convention, Mrs. Margaret B. Dolan said, and I quote.

> "When the clinical experience of the student is geared to meet the service needs of the institution, the educational objectives of the students are frequently disregarded. The apprenticeship system will continue in nursing as long as the majority of nurses receive their preparation in institutions whose primary objective is the treatment of the sick and injured. This is not to say that service institutions and hospitals do not have an important part to play in nursing education. It is that they should not have to bear the cost of nursing education and to administer and support an educational institution.

In Esther Lucille Brown's book on "Nursing for the Future," which was published in 1948, she said:

> Increasingly, it is being realized everywhere that no technical training, however good, is sufficient as preparation for professional personnel. A broad understanding of the physical and social sciences on which professional practice is built and of the society which the profession serves is essential.

We believe that the quality of nursing care available in this country will deteriorate unless the corps of baccalaureate-trained nurses is

[3] Data from: Public Health Service, Veterans' Administration, and Small Business Administration.

increased. We believe it is deplorable that only 15 percent, according to Dr. Nelson, of the professional nurses in this country have even a minimum baccalaureate degree.

The Congress has provided traineeships for graduate nurses, but where will the supply of candidates for these traineeships come from unless we have an additional supply of college-trained nurses?

In today's world the minimum expected of a professional person is a basic baccalaureate degree, and, unless these kinds of opportunities are open to nurses as well as other groups, the profession cannot be expected to attract the needed proportion of high school graduates.

Quality nursing care is the backbone of the hospital, and if nurses are expected to fill all the new roles being thrust upon them, they must have a soundly based preparation.

I would like to thank the committee for the opportunity of presenting once again our views on this legislation, and we hope that the committee will consider it favorably.

The CHAIRMAN. Thank you very much, Miss Thompson. We are glad to have your statement.

Any questions?

Mr. ROGERS of Texas. Mr. Chairman, let me ask this of Miss Thompson.

Miss Thompson, do you think there will be plenty of candidates for nursing training in the additional facilities?

Miss THOMPSON. There are some collegiate schools that are not able to take all of the applicants because they do not have the facilities, as was indicated in one of the examples which I gave, and this is repeated over and over again from most of the 167 collegiate schools of nursing.

Mr. ROGERS of Texas. There was something in my mind that one reason they have trouble getting candidates for nurses training is because of the pay scale. Do you know if that would have any bearing on it?

Miss THOMPSON. That does contribute to the difficulty. We are working very diligently in this area, and we have made some progress, but not very much.

Mr. ROGERS of Texas. Trying to get the pay up?

Miss THOMPSON. Right.

Mr. ROGERS of Texas. Thank you, Miss Thompson.

The CHAIRMAN. Any further questions by any other member of the committee? Mr. Broyhill?

Mr. BROYHILL. I would like to ask this question.

I think it was mentioned the other day in testimony that the collegiate schools of nursing provide 15 percent of the nurses. Is this correct?

Miss THOMPSON. That is approximately right. There were 4,039 graduates from collegiate schools of nursing in 1961–62.

Mr. BROYHILL. And 85 percent of the nurses, every year, then, come from schools other than those requiring a college degree?

Miss THOMPSON. That is correct.

Mr. BROYHILL. No other questions.

The CHAIRMAN. Thank you very much, Miss Thompson.

Dr. Irving Yale.

STATEMENT OF DR. IRVING YALE, CHAIRMAN, COUNCIL ON EDUCATION, AMERICAN PODIATRY ASSOCIATION, ACCOMPANIED BY DR. ABE RUBIN, EXECUTIVE SECRETARY AND EDITOR OF THE JOURNAL OF THE AMERICAN PODIATRY ASSOCIATION, AND LLOYD E. BLAUCH, PH. D., CONSULTANT

Dr. YALE. Mr. Chairman, Members of the committee:

I am Irving Yale, D.S.C., Ed. D., a practicing podiatrist from Ansonia, Conn., formerly chief of podiatry, New Haven Medical Center affiliated with Yale University. With me are Abe Rubin, D.S.C., our executive secretary and editor of the Journal of the American Podiatry Association, and our consultant, Lloyd E. Blauch, Ph. D., formerly U.S. Assistant Commissioner for Higher Education.

The Council on Education of the American Podiatry Association is recognized by the Commissioner of Education, U.S. Department of Health, Education, and Welfare, as the accrediting agency for podiatry schools, two of which were founded 52 years ago. Podiatry schools are listed in the Directory of Higher Education, published by the Office of Education.

The American Podiatry Association is a voluntary nonprofit federation, with 52 component societies and celebrated its 50th year of service to the profession and the public in August 1962. The council on education was created in 1919, assuming and expanding the functions of a committee on education which preceded it.

We are particularly pleased to support H.R. 12 since it represents the deliberations of your committee in the previous Congress. We appreciated the opportunity to present information which resulted in your including, in the best public interest, podiatry schools in H.R. 4999 as reported out by your committee.

We were interested to hear the other morning, Mr. Chairman, that the hearings before your committee of the 87th Congress on H.R. 4999 would be included by reference in these hearings. We will, therefore, not repeat much of the information provided last year but we respectfully call the attention of the committee to the statements by Dr. Rubin and myself on pages 409 and 476, respectively, of the published report.

In those statements we endeavored to advise you of how the profession was attempting to meet an otherwise unmet health need, some information about the needs of our schools and what we podiatrists are doing to help meet these needs. Our members through their dues structure are now making almost $100,000 available annually through matching grants. These funds are earmarked for salaries for instructional and research personnel. In addition, the fund for the advancemnt of podiatry education has stimulated the giving, by alumni and friends of our schools, of more than $250,000 in its first 3 years of operation.

We especially call your attention to the Public Health Service report quoted in our previous presentation which disclosed that twice as many registrants were rejected for foot problems (1.4 percent) as were for dental problems (0.7 percent) in World War II and that the completely inadequate ratio of 1 podiatrist for every 23,000 persons in the United States cannot be maintained without rehabilitating and

expanding our present school facilities. Some examples of ratios within States are: New York, 1:10,488; California, 1:26,193; Texas, 1:68,426; Georgia, 1:112,660.

Since our presentation last year, the capacity of our schools has been reduced from just over 1,000 to slightly over 800. One of our schools had to be removed from our accredited list, resulting in its closing its door, because it did not have the financial resources necessary to rehabilitate itself so that the quality of its program of education could satisfy our minimal requirements. This year two of the remaining four colleges enrolled capacity first-year classes and one other approached this state. In the past 4 years there has been a 20.5 percent increase in first-year enrollment, 18.6 percent of this in the last 2 years. At this rate, our present schools will be unable to accept all qualified applicants by 1966.

Plans are underway and a charter has been secured to establish one new school in Philadelphia affiliated with St. Luke's and Children's Medical Center, but it will require Federal assistance such as is contemplated in H.R. 12. Additionally, unless our present schools are able to rehabilitate some of their facilities, their capacities are likely to decline and the quality of education decrease. Federal assistance through matching grants will prevent this and even enable them to expand their present capacities, so that our schools can help meet much more of the public need for more and better foot health.

We have just recently established a special commission on a podiatry curriculum survey and the section, planning grants for health education programs, would accelerate the conduct of this important study to improve our program of training podiatrists. This will be an 18- to 24-month study and we are seeking additional diversified grants to a total of $80,000.

We respectfully solicit your continued inclusion of podiatry in the Health Professions Educational Assistance Act and urge its early enactment so that the necessary impetus can be given to the public's well demonstrated need for more health professions personnel.

Thank you for the opportunity to come before you and present this information. We are appearing in person in order that the members of this committee will have the opportunity to elicit any further information from us that it deems it needs.

Thank you, gentlemen.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Texas. Dr. Yale, who does the accrediting of your school?

Dr. YALE. The Council on Education of the American Podiatry Association is the accrediting agency.

Mr. ROGERS of Texas. The American Podiatry Association?

Dr. YALE. Yes.

Mr. ROGERS of Texas. Who sets that up?

Dr. YALE. Basically, it is part of the structure of the American Podiatry Association, but is representative of members of the profession and representatives of the colleges themselves.

Mr. ROGERS of Texas. Is every man who practices podiatry eligible to join the American Podiatry Association?

Dr. YALE. Yes, sir, provided he abides by the usual rules and code of ethics as propounded by the American Podiatry Association.

Mr. ROGERS of Texas. Then that simply means this:

The majority of the podiatrists in the United States control the rules and regulations as to people who become subsequently licensed in that field?

Dr. YALE. I believe that 65 percent of the profession are members of the American Podiatry Association, approximately that.

Mr. ROGERS of Texas. I know, but what I am talking about is the basic issue:

That the members of the podiatrists association who are licensed podiatrists are the ones who determine, finally, as to who gets a license in podiatry in subsequent years?

Dr. YALE. This depends on the State licensing board. It has nothing to do with the American Podiatry Association, and is governed by the individual State.

Mr. ROGERS of Texas. Well, but, now, the State licensing board cannot give a man a license to practice podiatry unless he shows that he has graduated from an accredited school, can he?

Dr. YALE. That is true, sir.

Mr. ROGERS of Texas. And the only way a school can be accredited is by majority vote of the podiatrists who belong to the American Podiatry Association, is that not correct?

Dr. YALE. No, it does not function that way. This, again is a voluntary situation where the school requests that an evaluating team come into the school to assist them in obtaining accreditation, if this is the situation, and, together with——

Mr. ROGERS of Texas. Well, now, right there, doctor, why do they ask that? Do they not ask that you come in and advise with them to accredit their schools so that they can graduate people who can get licenses to practice podiatry?

Dr. YALE. Well, they would have to get their licenses through the particular State licensing act in the State in which the student intends to practice. The Council on Education and the American Podiatry Association have nothing to do with this. However——

Mr. ROGERS of Texas. But you do have to do with the accreditation of the school, do you not?

Dr. YALE. Yes, sir.

Mr. ROGERS of Texas. And, unless you accredit the school, it is not an accredited school, and a man who graduates from a school that is not an accredited school cannot get a license to practice podiatry in any State in the United States, can he?

Dr. YALE. There are no nonaccredited schools that I know of, in our profession.

Mr. ROGERS of Texas. But a man, in order to get a license, must graduate from an accredited school?

Dr. YALE. This, again, would depend on the individual State law, and it is possible that such a request is not necessary.

The State law may not provide for this. I do not know.

Mr. ROGERS of Texas. But, now, you said in your statement, you said that you had to withdraw the accreditation of schools because they did not have money.

Now, the reason you do not have any nonaccredited podiatry schools is because, when you take away their accreditation, they close up, do they not?

Dr. YALE. No, sir. This is not the case, because there have been schools that have been in existence, and there are schools in other areas that are still in existence, that are nonaccredited. The problems that accrue in relation to my statement, sir, have to do with the ability of the institution of learning to provide adequate education that would be in the public's interest, primarily, and without the necessary funds for laboratories and adequate faculty and equipment and the essentials for maintaining an institution of learning that would be of benefit to the public, why, a school of this type ceases to exist.

Mr. ROGERS of Texas. According to the American Podiatry Association, as far as accreditation is concerned?

Dr. YALE. Yes, as far as accreditation.

Mr. ROGERS of Texas. Have you had any arguments with any of these people running these schools who say, "We do not want to have our accreditation taken away?"

Dr. YALE. Well, we certainly provide all the necessary hearings by the very nature of our——

Mr. ROGERS of Texas. I know, but has there been controversy about it?

Dr. YALE. Nothing that would stand out in my mind as being unusual. The schools admit their lack of these facilities, and, in many instances, have tried to upgrade themselves, but, unfortunately, with lack of adequate alumni assistance or governmental assistance, or wherever funds may come from, why, they just cannot afford to continue their institution of learning.

Mr. ROGERS of Texas. Now, your schools have been reduced from 1,000 to less than 800, is that correct?

Dr. YALE. That is capacity of students, yes.

Mr. ROGERS of Texas. I thought you said schools.

Dr. YALE. No, not schools, sir. All we have are four recognized colleges, accredited colleges of podiatry.

Mr. ROGERS of Texas. And your students have been reduced from 1,000?

Dr. YALE. That is true.

Mr. ROGERS of Texas. To less than 800 students. You mean to tell me that these places cannot raise enough money to take care of 200 students?

Dr. YALE. Well, I might say this about our profession. It is very interesting. The basis upon which we come before you today, gentlemen, I think was pointed out in our statements of last year, where we mentioned to you that we in the podiatry profession saw the need to have an unbiased commission set up for the purpose of evaluating our profession.

To briefly point this out, I would like to say that a document has been presented to us, and I believe is also in the hands of those gentlemen who were on the committee last year, on the status and opportunities of podiatry education in the 1960's. One of the bases upon which we feel we can come before you with our heads up high is on the recommendations of this committee of individuals who were representative from the medical profession, education in general and the National Commission on Accrediting, headed by Dr. Seldon, who was the chairman of this particular committee and the man who was formerly president of the Illinois College and is presently executive secretary of

the National Commission on Accrediting; and Dr. I. L. Baldwin, Ph.D., formerly vice president, presently assistant to the president, of the University of Wisconsin; and Lloyd E. Blauch on my left here, formerly United States Assistant Commissioner for Higher Education, presently assistant director of the Retired Professors Registry; George E. Gensler, D.S.C., past president of the American Podiatry Association, formerly member of its council on education; and Leland Powers, M.D., who was here before you today with another group, associate director of the Association of American Medical Colleges.

These gentlemen prepared a report through the efforts of their special commission, and at one point here state that:

"The American Podiatry Association should represent to the appropriate legislative and executive officials of the Government the need and social advisability of making financial provisions for podiatry education in ways similar to those made for the other health sciences."

You gentlemen have seen fit to do this sort of thing.

Mr. ROGERS of Texas. How many podiatrists are there in the United States?

Dr. YALE. There are approximately 8,000. I believe Dr. Rubin can answer the statistical questions a little better than I.

Dr. RUBIN. About 8,300 graduates still living around the United States, about 7,600 of them in active practice.

Mr. ROGERS of Texas. How much money do you think would be required of the Federal Government to meet this need, just approximately?

Dr. RUBIN. Our rough estimate was it would be about 1 percent of the total authorization, about $750,000.

Mr. ROGERS of Texas. Thank you, Mr. Chairman, that is all.

Mr. CHAIRMAN. Any further questions?

Mr. O'BRIEN. I would like to ask just one.

The CHAIRMAN. Mr. O'Brien.

Mr. O'BRIEN. Where are your four colleges located, Doctor?

Dr. YALE. We have one college in New York City; a new proposed college with a charter in Philadelphia; a college in Cleveland; one in Chicago, and one in San Francisco.

Mr. O'BRIEN. None in Texas?

Dr. YALE. No, and we are trying to interest Texas.

Mr. O'BRIEN. I was quite impressed with your figures here. You have one podiatrist for every 10,000 in New York and one for every 68,000 in Texas. With the boots they wear out there, I would think the need would be much greater in Texas.

Mr. KORNEGAY. They ride horses out there.

Mr. O'BRIEN. That is all, Mr. Chairman.

Mr. ROGERS of Texas. If the gentleman will yield, the Chairman tells me that they treat heels, too. [Laughter.]

The CHAIRMAN. Any further questions?

Mr. Broyhill.

Mr. BROYHILL. Mr. Chairman, just one thing here. In his testimony the doctor indicated that of the four colleges, that two of the colleges had a capacity enrollment in the first-year class, and that one other approached this, and I assume, then, that the other college had openings, then?

Dr. YALE. Yes, they did.

Mr. BROYHILL. In the first-year class.

Then you also indicated that in the past few years you have had an increase in enrollment in the first-year classes. Does this mean that you do not have students applying for these positions? Do you see what I mean? Do you have positions open but do not have students applying for them?

Dr. YALE. Well, you must recognize that in our profession, as in all medical professions, I presume, that we are selective to a degree; that we also are suffering with the problem that medicine suffers with, and dentistry as well, where the A students are not applying to our institutions. However, we have a very interesting arrangement that has developed in the last few years in our profession that is primarily based on the impetus given to us by the Seldon report just mentioned here, wherein we have increased our educational qualifications, pre-educational qualification for the study of podiatry, and we are today getting a quality of student that is so much higher than what we had dreamed of some 20 years ago; that we find it necessary, in order to meet the requirements of these students, to upgrade our physical facilities, and, as pointed out by the Seldon Commission, they state here:

> The physical plant facilities require renovation and improvement. Equipment needs to be added or replaced. There are heavy requirements for additional laboratories and research space, construction of new outpatient clinics and larger libraries. There will also be an eventual demand for more schools.

This gentlemen, is why we come before you. As to why there are vacancies in schools, this becomes a local problem at times. There are medical schools in this country where vacancies do exist. We are aware of this. The same thing in dental shools. But, yet, there are other dental schools and medical schools which are so overwhelmed with applicants they could not possibly educate them.

Mr. BROYHILL. I have no further questions, Mr. Chairman.

The CHAIRMAN. Any further questions?

Mr. Rhodes.

Mr. RHODES. Mr. Chairman, I would like to ask Dr. Yale if the colleges of podiatry are accredited schools?

Dr. YALE. Yes.

The colleges of podiatry are accredited through the accrediting agency, which is the Council on Education of the Amerian Podiatry Association, and this accrediting agency is accepted as the accrediting agency by the Commissioner of Education of the U.S. Department of Health, Education, and Welfare as the accrediting agency for podiatry schools.

Mr. RHODES. To what extent is your profession able to take care of the needs of these training schools?

Dr. YALE. Are you now referring to our ability to maintain the institutions?

Mr. RHODES. Yes.

Dr. YALE. From a facilities standpoint or constructional?

Mr. RHODES. School facilities.

Dr. YALE. I might say this, and I did read this into the record, a statement to the effect that we had endeavored to advise you last year of how the profession was attempting to meet an otherwise unmet health need, some information about the needs of our schools and what we podiatrists are doing to help meet these needs.

Our members, through their dues structure, are now making almost $100,000 available annually through matching grants, and these funds are earmarked for instructional and research personnel. In addition, the Fund for the Advance of Podiatry Education has stimulated the giving by alumni and friends of our schools of more than $250,000 in its first 3 years of operation.

Mr. RHODES. Thank you, doctor.

Dr. YALE. Thank you.

The CHAIRMAN. Doctor, thank you very much.

Dr. YALE. Thank you very kindly.

The CHAIRMAN. This concludes the hearings on these bills. The record will remain open for 5 days for anyone to submit statements which could be appropriately included in this record.

Before we adjourn, I do wish to include in the record the special message which was received today from the President of the United States on health.

(The special message referred to follows:)

SPECIAL MESSAGE ON IMPROVING AMERICAN HEALTH

THE WHITE HOUSE, *February 7, 1963.*

To the Congress of the United States:

Health, as Emerson said, is the "first wealth." This Nation has built an impressive health record. Life expectancy has been increased by more than 20 years since 1900; infant mortality rates have been dramatically reduced; many communicable diseases have been practically eliminated. We have developed or are close to developing the means for controlling many others. The intensive medical research effort begun shortly after World War II is now showing dramatic results. The array of modern drugs, appliances, and techniques available to prevent and cure disease is impressive in scope and in quality.

But each improvement raises our horizons; each success enables us to concentrate more on the remaining dangers, and on new challenges and threats to health. Some of these new challenges result from our changing environment, some from new habits and activities. More people than ever before are in those vulnerable age groups—the very young and the very old—which need the greatest amount of health services. More people are living in huge metropolitan and industrial complexes, where they face a host of new problems in achieving safety even in the common environmental element of food, water, land, and air. The hazards of modern living also raise new problems of psychological stability.

In addition to the long-neglected problems of mental illness and mental retardation on which I made recommendations earlier this week, other areas affecting our Nation's health also require serious and sustained attention:

There is a shortage of professional health personnel. We must take prompt and vigorous action not only to increase the numbers of trained personnel but to perfect better means for making the most effective use of the health manpower now available.

Health facilities must be improved and modernized. More of them need to be geared to the problems of older and long-term patients.

Health care is not adequately available to our older citizens. Costs to aged individuals too often are prohibitively high, and we have not yet been effectively able to bring modern health services to many of them.

Threats to the physical well-being of our families from the contamination of food, air, and water, and from hazardous drugs and cosmetics, must be dealt with more promptly and more effectively.

Health protection and care must be made more widely available to our children, particularly those whose parents cannot afford proper care and those who are suffering from crippling diseases.

In each of these key areas, this Nation has an obligation to strengthen its resources and services. The alternative is a weaker people and nation, a waste of manpower and funds, and a denial to millions of people of a full and equal opportunity to life, liberty, and the pursuit of happiness. The Federal Government has stimulated much of the recent progress in medical research without

any interference with scientific, academic, or individual liberty. Our task now is to be equally decisive in putting this knowledge into practice. Financial provision for the recommendations made in this message was included in the 1964 budget which I transmitted to the Congress last month.

I. PROFESSIONAL HEALTH PERSONNEL

Perhaps the most threatening breach in our health defenses is the shortage of trained health manpower. Our health can be no better than the knowledge and skills of the physicians, dentists, nurses, and others to whom we entrust it. It is essential that we always have a sufficient supply of such talent, drawn from the best and most gifted men and women in the land.

But the harsh fact of the matter is that we are already hard hit by a critical shortage in our supply of professional health personnel, with the situation threatening to become even more critical in the years immediately ahead. Our hospitals report substantial numbers of unfilled positions for nurses and other health workers. In some cases, entire wings or floors have been closed for lack of trained personnel. In others—particularly mental hospitals, where thousands of patients languish in needless confinement and suffering due to a lack of doctors and nurses—the unavailability of sufficient personnel is a reluctantly accepted fact.

A. Medical and dental education

The shortage of physicians and dentists is particularly serious. Our medical and dental schools do not graduate enough students to keep pace with our growth in population. There are 137 physicians and 56 dentists for every 100,000 American people in the country today. And merely to maintain even this ratio will require, over the next 10 years, a 50 percent increase in the number of graduates from our medical schools and a 100 percent increase in the number of dental graduates.

In an effort to meet present needs, we now license more than 1,500 graduates of foreign medical schools each year to practice in this country—approximately one-fifth of the annual additions to our medical profession. In addition, one quarter of the interns and residents in our hospitals are foreign medical graduates. Yet many internships and residencies remain vacant due to lack of manpower. More and more physicians are devoting their time to teaching, to research, to advanced preparation in a speciality; and while this trend represents progress, it also decreases the proportionate supply of physicians available to treat our families. In 1950, there were 1,300 people in the United States for each family physician. The present outlook—unless steps are taken now to increase the supply of physicians—is for more than 2,000 people per family physician by 1970.

Therefore, I again urgently recommend enactment of legislation authorizing (1) Federal matching grants for the construction of new, and the expansion or rehabilitation of existing, teaching facilities for the medical, dental, and other health professions; and (2) Federal financial assistance for students of medicine, dentistry, and osteopathy.

B. Nurses' training

There were 550,000 professional nurses and 225,000 practical nurses in active practice in 1962. This number is far too small to meet the needs of high quality nursing care. Too many hospitals have been required to rely on inadequately trained orderlies and attendants. At my request, a distinguished group of citizens, serving as consultants to the Surgeon General, has studied the scope and solutions of this problem. They concluded that a feasible and essential goal for 1970 is to increase the number of professional nurses in practice to some 680,000 and the number of practical nurses to 350,000. This requires a 25-percent increase in the supply of nursing personnel and, therefore, a major expansion in both collegiate and hospital programs of nursing education. The number of nurses graduating from collegiate courses would have to double from 4,000 in 1960 to at least 8,000 in 1970. This expansion would require the equivalent of more than 30 to 35 new collegiate nursing schools. Graduates from hospital schools would have to increase from 25,000 to 40,000 by 1970, and junior colleges would have to be graduating 5,000 by that year.

Nursing schools are unable to bear the tremendous financial burden for an expanded effort of this size. Despite diligent effort, nursing has had little success in commanding sufficient local support for the development of its edu-

cational facilities and programs. Federal assistance in the expansion of our capacity to train nurses will be necessary.

To meet these goals, and generally to improve the quality of nursing services, the consultant group recommended that the Federal Government: (1) provide financial assistance to expand teaching facilities for nurses' training; (2) provide financial assistance to students of nursing, many of whom cannot afford an education beyond high school; (3) initiate new and improved programs for the support of graduate nursing education, to provide more teachers of nursing; and (4) initiate new programs and expand current programs of research which are directed toward improved utilization of nursing personnel.

I shall transmit to the Congress for action legislation now being prepared on the basis of this report.

II. HEALTH FACILITIES

A. Aid for construction of hospitals and nursing homes

The Hill-Burton program of Federal aid for the construction of health facilities has been in operation for more than 16 years. Its success can best be measured by the network of modern and efficient hospitals which have been built throughout the country, particularly in smaller towns and rural areas. But the gains have been more than quantitative. The program has had a marked effect in raising State licensing standards, and in improving the design, maintenance and operation of health facilities in every State. It has helped attract vitally needed physicians and other health specialists to rural areas. And, through development of more effective State plans, it has encouraged the first steps toward the establishment of more coordinated systems of hospital and other facilities to provide more efficient and economical health care.

A year ago I asked the Secretary of Health, Education, and Welfare to review this program and to make recommendations for its future. This review has now been completed. It points out the necessity for continuing the program to meet new and changing medical facility needs.

Significant progress has been made in reducing the deficit of general hospital beds throughout the country, especially in rural areas. Nevertheless, shortage areas remain and their needs should be met. Indeed, rapid population growth alone requires a constantly expanding hospital system. I recommend, therefore, that the Hill-Burton program, which is due to expire June 30, 1964, be extended for 5 years.

A particularly acute problem is that of the older hospitals faced with physical deterioration and functional obsolescence. Many hospitals are growing obsolete at such an alarming rate as to hamper the quality of care. State Hill-Burton agencies have reported that there are 75,000 beds in general hospitals that have serious structural or fire hazards. Almost half of all the hospitals in the Nation need some form of modernization.

A 1960 study, based on reports made by State hospital agencies, revealed that it would cost $2.8 billion to modernize or replace antiquated general hospitals, without even adding to the number of beds. This estimate is more than three times the present annual level of construction expenditures for all health facilities. Because of the priority it gives to projects which increase the total number of beds, particularly in rural areas, the Hill-Burton Act as presently constituted cannot meet this vast need for modernization and replacement.

In response to this critical national need, I am recommending modification of the Hill-Burton Act to authorize a new program of financial assistance for modernizing or replacing hospitals and other health facilities.

Although some progress has been made in meeting the backlog of need for chronic disease hospitals and nursing homes, it is estimated that less than one-third of this need has been met and that an additional 500,000 beds for long-term patients are required to meet today's demand.

The outlook for the future is even more serious. In 1960, there were nearly 18 million people aged 65 or over. By 1980, this group will exceed 24 million. As the number of older people increases and as the economic barriers to care in these facilities are eased, the demand for long-term care facilities will soar. The need for high quality nursing homes will be especially great. For these reasons, I recommend amendment of the Hill-Burton Act to increase the appropriation authorization for nursing homes from $20 million to $50 million annually.

B. Mental health and mental retardation facilities

My proposals for a national mental health program and a national program to combat mental retardation, including proposals to assist in the construction of community mental health centers and mental retardation facilities, have been set forth in an earlier message on these subjects. I wish to underline here again the urgency of the Nation's need for long-postponed solutions to a long-neglected problem, and to urge once more their prompt enactment by the Congress.

C. Health facility planning grants

As health facilities become more numerous and complex, there is a greater need for more coordinated planning, particularly in our metropolitan areas. This is necessary to insure against the use of public and private resources to construct facilities which are not needed, are poorly located, create unnecessary duplication, or create further imbalances among the kinds of services provided. Proper planning will not only make for more efficient use of the large sums of capital expended for health facility construction, but may also help materially to control the ever increasing cost of hospital care. Therefore, I recommend legislation to authorize planning grants to public and nonprofit organizations, including State agencies, to assist in developing comprehensive areawide plans for the construction and operation of all types of health facilities.

D. Encouragement of group practice

Concern over the shortage of professional personnel and the shortage of health facilities makes clear the desirability of encouraging those efforts which seek to make the most effective use of both. Experience has demonstrated that both patients and professional personnel benefit from group practice facilities—where general practitioners and specialists are able to combine their diverse professional skills and use common facilities and personnel to furnish comprehensive medical and dental care. Group practice of medicine and dentistry promises to improve the quality of medical and dental care, while making possible significant economies for both patient and practitioner. Unfortunately, the difficulty of obtaining financing on reasonable terms to construct and equip such facilities is too often a major obstacle in their development.

In order to encourage this trend, particularly in our smaller communities and under the sponsorship of cooperative or other nonprofit organizations, I recommend legislation to authorize a 5-year program of Federal mortgage insurance and loans to help finance the cost of constructing and equipping group practice medical and dental facilities.

III. COMMUNITY HEALTH PROTECTION

Substantial advances have been made during the past year in protecting the American people against contamination of food, air, and water, and the hazards associated with drugs.

In 1962, as a result of legislation passed by the 87th Congress, our communities with Federal financial aid, spent $600 million to build needed waste treatment facilities, the largest total in our history. Our national program of protection against undue exposure to radiation was strengthened through broadened surveillance, expansion of research, increased training of manpower, and aid to the States in developing their own programs of radiation protection and control. Better protection for the consumer was assured by the enactment of the Kefauver-Harris drug control amendments, which set higher standards of safety, honesty, and efficacy in the manufacture and sale of prescription drugs and new drugs of all kinds. Additional action by the Department of Health, Education, and Welfare to improve controls over the clinical testing of new drugs will add to our safeguards against the possibility of health catastrophes during the development of new remedies.

But much remains to be done.

We need to broaden our surveillance and control of pollution in the air we breathe, the water we drink, and the food we eat. We need to intensify our research effort in this area, to define the precise damages done to our health by various contaminants, and to develop more effective and economical means of controlling or eliminating them. We need to step up our training of scientific manpower in the many disciplines related to the maintenance of a healthy environment. We need to continue our support and stimulation of vigorous control programs in States and communities.

In addition, there is clear and urgent need for new legislative authority in three specific areas of health protection.

A. Food, drugs, devices, and cosmetics

Legislation is needed to strengthen the Food, Drug and Cosmetic Act in its task of protecting the health of the consumer. The Food and Drug Administration—which lacks authority to require the adequate safety testing of cosmetics before they are placed on the market—has ample evidence of the harm which is caused by harmful cosmetic products. Other problems are presented by untested dangerous or worthless therapeutic or diagnostic devices. Of particular danger to children are the 300,000 ordinary household items containing poisonous or dangerous substances without proper labeling and warning. Food, drugs, and cosmetics were not included in the Federal Hazardous Substances Labeling Act of 1960.

We cannot afford to withhold from the Food and Drug Administration the full authority required to provide the maximum protection to our families. I recommend the enactment of new legislation to—

(*a*) Extend and clarify inspection authority to determine whether food, over-the-counter drugs, cosmetics, and therapeutic or diagnostic devices are being manufactured and marketed in accordance with the law; and to provide authority similar to that of most other regulatory agencies for the production of evidence in hearings;

(*b*) Require cosmetics to be tested and proved safe before they are marketed;

(*c*) Require manufacturers of therapeutic devices to maintain controls which assure the reliability of their products, and require proof of both safety and effectiveness before such devices are put on the market; and

(*d*) Extend existing requirements for label warnings to include hazardous household articles, where necessary.

Further delay in the enactment of this authority can only prolong and aggravate these unnecessary hazards to health.

B. Air-pollution control

Reports by leading scientists in the past year have stressed that there is overwhelming evidence linking air pollution to the aggravation of heart conditions and to increases in susceptibility to chronic respiratory diseases, particularly among older people.

Economic damage from air pollution amounts to as much as $11 billion every year in the United States. Agricultural losses alone total $500 million a year. Crops are stunted or destroyed, livestock become ill, meat and milk production are reduced. In some 6,000 communities various amounts of smoke, smog, grme, or fumes reduce property values and—as dramatically shown in England last year—endanger life itself. Hospitals, department stores, office buildings, and hotels are all affected. Some cities suffer damages of up to $100 million a year. One of our larger cities has a daily average of 25,000 tons of air-borne pollutants. My own home city of Boston experienced in 1960 a "black rain" of smoke, soot, oil, or a mixture of all three.

In the light of the known damage caused by polluted air, both to our health and to our economy, it is imperative that greater emphasis be given to the control of air pollution by communities, States, and the Federal Government. We are currently spending 10 cents per capita a year in fighting a problem which cost an estimated $65 per capita annually in economic losses alone. I therefore recommend legislation authorizing the Public Health Service of the Department of Health, Education, and Welfare—

(*a*) To engage in a more intensive research program permitting full investigation of the causes, effects and control of air pollution;

(*b*) To provide financial stimulation to States and local air pollution control agencies through project grants which will help them to initiate or improve their control programs;

(*c*) To conduct studies on air pollution problems of interstate or nationwide significance; and

(*d*) To take action to abate interstate air polution, along the general lines of the existing water pollution control enforcement measures.

C. Environmental health

The long-range assault of multiple environmental contaminations on human health are cumulative and interrelated. It is of great importance, therefore,

that our efforts to learn about and control health hazards be unified and mutually supporting. The President's Science Advisory Committee, in cooperation with the Federal Council for Science and Technology, has undertaken a major review of the Government's activities with respect to the use of chemicals in the environment. Special attention is being given to the control of pesticides. Nearly 180 million pounds of pesticides valued at more than $1 billion are used in the United States every year. If this review reveals need for additional authority, necessary recommendations will be made to the Congress.

I am renewing my recommendation of last year that authority be granted to the Surgeon General of the Public Health Service, with the approval of the Secretary of Health, Education, and Welfare, to bring environmental health functions together in one bureau. I also ask that the Congress approve the funds requested in my 1964 budget for initial steps to establish a central facility in the Washington area which can serve as a focal point for related research, training, and technical assistance in environmental health.

IV. HEALTH RESEARCH

This Nation has made impressive strides in its search for knowledge to combat disease and, as a result of a deliberate national effort, a bold and far-reaching program is moving well. The Federal Government is now providing the financial support for nearly two-thirds of the $1.5 billion in public and private expenditures for medical and health-related research in this country. But this effort is unending—new breakthroughs lie ahead—major problems are unsolved. This country must invest in a further expansion of essential and high quality research and related activities. I have, therefore, recommended appropriations in the 1964 budget of $980 million for support of the National Institutes of Health, an increase of $50 million in authorizations and $113 million in expenditures over the current year.

The budget also provides funds for the work of the Institute of Child Health and Human Development and the Institute of General Medical Sciences. These new institutes, which were authorized by the 87th Congress, will provide a needed focus for more intensive research efforts in these areas.

One of the greatest threats to maintaining the high quality health research now being achieved through the activities of the National Institutes of Health is the continued loss of its outstanding scientists as the result of pay scales which are not generally competitive. The Federal Salary Reform Act approved last October carries forward the Administration's plan to provide Federal salary rates that are comparable with national private industry salary rates for the same work levels. However, the final stage of that salary reform plan, which will be effective next January, provides salary rates that are still too low, particularly in the upper levels, when measured by the compensation provided outside of Government. It is important that the Congress take appropriate action to correct this disparity.

Last year I pointed out that the accumulation of knowledge through research is of little use unless communicated in useful form to those who need to use it—to other scientists, educators, practitioners, administrators, and the public. There is now wide recognition that improved scientific communication is an urgent goal—and action is being taken. With the assistance of information developed by congressional studies, I have asked the Department of Health, Education, and Welfare to take the lead in developing new methods and systems of utilizing and making effectively available more health research results and information. Should additional legislation be required, it will be transmitted promptly to the Congress.

V. OTHER ESSENTIAL HEALTH EFFORTS

A. Health insurance for our older citizens

In a subsequent message to the Congress concerned solely with the needs of older people, I will again outline my recommendations for a long overdue measure to fill a crucial gap in our social insurance protection—health insurance under social security. This measure should also be at the top of the congressional agenda on health.

It is a tragic irony that medical science has kept millions of retired men and women alive to face illnesses they cannot afford—that the very drugs and methods which have done so much to prolong their lives and ease their pain

are too expensive for the majority of the older citizens. Many can face one siege of serious illness, with the help of savings and families. But a second wipes them out—and the average person can expect two or three hospital bouts after age 65. Needless suffering in silence, financial catastrophe, public or private charity—these are not acceptable alternatives in the richest country on earth. Social security health insurance must be enacted this year. Details will be contained in a forthcoming message.

B. Improving maternal and child health

In my special message on mental health and mental retardation, I recommended several new measures designed to improve the health of mothers and children. The relationship between improving maternal and child health and preventing mental retardation is clear. But equally clear is the fact that the need for better health services for mothers and children is steadily increasing in general, due to the growing child population, the rising costs of medical care, and changes in the practice of medicine and public health. I take this opportunity, therefore, to stress again the urgency of those provisions.

C. Vocational rehabilitation

As we expand and improve health services, we make it possible for larger numbers of people to recover from the damaging effects of serious illness and injury, and to return to active and useful lives. Vocational rehablitation programs, both private and public, are playing a key role in helping to convert these gains in curative medicine into gains in productive living. Work—often the mere hope of returning to work—provides a powerful incentive for large numbers of seriously disabled people as they travel the difficult road to recovery and rehabilitation. For these reasons, I recommend that funds for the State-Federal program of vocational rehabilitation be increased to permit 126,500 handicapped individuals to be successfully returned to employment, a 25 percent increase over this year, I am also recommending legislation to strengthen and improve the vocational rehabilitation program, including Federal assistance in constructing rehabilitation facilities and workshops, additional aid to help States increase the number of persons rehabilitated, and special provisions to increase the rehabilitatin of the mentally retarded.

D. Community health service

Last year the Congress passed the Vaccination Assistance Act and the Migrant Health Act, both of which were designed to meet important national health problems. The Vaccination Assistance Act looks toward the eradication of poliomyelitis, diphtheria, whooping cough, and tetanus through the mass immunization of children at the earliest possible stage, under community-sponsored programs. We can and should eliminate these four deadly diseases. The Migrant Health Act authorizes grants to improve the deplorable health conditions of migrant workers.

I am submitting supplemental appropriation requests to the Congress to provide funds in this fiscal year to enable both the vaccination assistance and migrant health programs to get underway at the earliest possible date.

These programs, coupled with progress new being made under the Community Health Services and Facilities Act of 1961, are directed toward the long-range goal of comprehensive community health services, available to people in their own communities, when and where they need them. To permit the more effective prosecution of programs to improve health services at the community level, I am again renewing my recommendation of last year that authority be granted to bring all community health activities of the Public Health Service together in one bureau.

E. International health

We must continue our collaborative efforts with other nations in the global struggle against disease. Over the past few years the United States has rapidly expanded its international medical research activities and support. We have also been instrumental in encouraging research under the aegis of the World Health Organization. These efforts are consistent with and in furtherance of our goals of world peace and betterment, and it is important that they be continued.

A problem of particular significance in the Western Hemisphere is that of yellow fever. Many countries of the Americas have conducted campaigns to eradicate the mosquito which carries yellow fever, but the problem of reinfesta-

tion has become a serious one, particularly in the Caribbean area. We have pledged our participation in a program to eradicate this disease-carrying mosquito from the United States, and the 1964 budget provides funds to initiate such efforts. This will bring this country into conformity with the long-established policy of the Pan American Health Organization to eliminate the threat of yellow fever in this hemisphere.

CONCLUSION

Good health for all our people is a continuing goal. In a democratic society where every human life is precious, we can aspire to no less. Healthy people build a stronger nation, and make a maximum contribution to its growth and development.

This national need calls for a national effort—an effort which involves individuals and families, States and communities, professional and voluntary groups, in every part of the country. The role of the Federal Government, although a substantial one, is essentially supportive and stimulatory. The task is one which all of us share—to improve our own health, and that of generations to come.

JOHN F. KENNEDY.

(The following material was submitted for the record:)

CONGRESS OF THE UNITED STATES, HOUSE OF REPRESENTATIVES,
Washington, D.C., February 8, 1963.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce, House Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: Legislation to provide greater opportunities for training of physicians, dentists, and professional public health personnel has been under consideration by your committee. I should like to reiterate my support for this program and urge its favorable consideration.

You will recall that when legislation to encompass this program was before your committee in 1962, I endorsed its objectives and called to your attention the support expressed by Gov. John N. Dempsey and the beneficial effects which would follow enactment for the rapidly growing areas of New England.

I believe a program to develop more of these critical skills is clearly in the national interest. As one whose legislative responsibilities bring him in close contact with the requirements for skilled scientists and engineers, I am greatly aware of the graduate level training required to meet our need. I have made special studies of the area of research in the life sciences for the space program, an area bringing direct dividends to the future health and welfare of our people.

Despite the critical importance of the space program, however, I do not believe we can pay less attention to the need for training physicians and dentists to minister to the needs of their communities. This legislation can authorize a substantial contribution to the solution of a most difficult problem.

Sincerely,

EMILIO Q. DADDARIO,
Member of Congress.

PORTLAND, OREG., *February 6, 1963.*

HON. OREN HARRIS,
Chairman, Interstate Commerce Committee,
House Office Building, Washington, D.C.

DEAR SIR: I am writing you on behalf of the Student American Medical Association regarding the public hearings that your committee is holding on H.R. 12. Circumstances do not permit me or a member of our organization to appear before your committee but I think it is important that you are aware of the medical students' opinion of Federal loans as expressed by our house of delegates in our 1962 session in Washington, D.C.

In 1961 the house of delegates of the Student American Medical Association adopted a resolution stating:

"That until private and State sources of medical scholarship funds are completely explored, the Student American Medical Association disapproves of Federal scholarships for medical students."

In the interim between 1961 and 1962 session our committee on medical education studied this problem and it was again discussed at the 1962 annual meeting. At this time the house of delegates approved a report which stated:

1. It is the contention of this house that if Federal assistance is deemed necessary then the appropriate action which should be forthcoming by the Federal Government should be the least offensive or the least objectionable and in this instance, it would be our recommendation that a loan program rather than a scholarship program be instituted.

2. New or potential sources of monetary aid have not been completely explored by the house of delegates or by its individual constituents.

Since that time we have seen the establishment of the AMA–ERF loan program which has met with greater success. As of November 1962, 9 months after the program's inception, the loan program had granted loans totaling $9 million to 3,042 medical students and 1,787 interns and residents. At the present time applications are being received at the rate of 150 per week requesting amounts averaging $1,000 each.

The Student American Medical Association would be the last one to say this is the final answer but it does prove that financial assistance for medical students can be obtained without turning to the Federal Government for assistance. SAMA was instrumental in getting the concept of a loan fund such as AMA–ERF started and we will continue our efforts along these lines.

No one is more aware of the financial burdens of the medical student than the medical student himself. However, our organization is very proud of the fact that we are willing, as students, to seek solutions to our problems without turning to the Federal Government with its already overburdened fiscal structure for assistance. While the amount of funds necessary for such a loan program as H.R. 12 proposes may be a minor amount in the Federal budget it cannot be a source of satisfaction to us to know that we are among the ever-increasing throng that turns to the Federal Government for assistance.

It is with these facts in mind and the striking evidence of the success of private funds in meeting the financial needs of medical students that the Student American Medical Association, representing the majority opinion of 18,000 medical students, asks that you consider the portion of H.R. 12 dealing with Federal loans to medical students. It would be our contention at the present time that the need is being met and the necessity for Federal funds is yet to be demonstrated.

My sincere thanks for your consideration of these remarks.

Sincerely,

JAMES A. BROOKS,
National President, Student American Medical Association.

TEMPLE UNIVERSITY SCHOOL OF MEDICINE AND HOSPITAL,
Philadelphia, Pa., February 19, 1963.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

MY DEAR MR. HARRIS: I was quite surprised to read of the statement issued by the Student American Medical Association since it has been my personal observation that demand and need for medical student financial assistance far exceeds our abilities to fulfill the needs. We have utilized National Defense Education Act moneys and have never seen any hesitancy on the part of a student to accept a loan from this source. Since I questioned the validiy of the Student American Medical Association opinion as representative of the current medical students, I surveyed the medical student body in this school of medicine and would like to give you the following report.

Eighty-five percent of the students in the Temple University School of Medicine state that they are in favor of seeing a Federal loan program for medical students. Only 8 percent indicated opposition and 7 percent did not desire to express any opinion. This overwhelming majority of opinion in favor of a Federal loan program for medical students takes on even greater significance when one realizes that over 40 percent of the medical students come from families with incomes of $10,000 or more and these families represent only 11 percent of the families in the Nation. Although there is no reliable data available, one would still surmise that there may be many students who have been denied an opportunity to pursue

a career in medicine because of financial limitations rather than limitations in ability.

May I express to you on behalf of this institution and its student body the hope that a Federal loan program for medical students will be made available since our current sources of loan funds and scholarship funds are grossly inadequate.

Respectfully yours,

ROBERT M. BUCHER, M.D., *Dean.*

BOSTON UNIVERSITY,
SCHOOL OF MEDICINE,
Boston, Mass., February 19, 1963.

Mr. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. HARRIS: Considerable publicity has been given to the telegram sent to you by James A. Brooks, president of the Student American Medical Association, stating that his organization sees no need for Federal assistance to medical students. Mr. Brooks' statement does not have the endorsement of all medical students. The chapter of the Student American Medical Association here at Boston University School of Medicine wishes me to inform you that its members do not agree with Mr. Brooks and feel strongly that Federal assistance is urgently needed.

Sincerely yours,

SYDNEY S. GELLIS, M.D., *Acting Dean.*

YALE UNIVERSITY, SCHOOL OF MEDICINE,
New Haven, Conn., February 18, 1963.

Hon. OREN HARRIS,
Chairman of the Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. HARRIS: It has come to my attention that the Student American Medical Association, which is said to represent all of the medical students in the United States, has communicated with you to the effect that medical students are not in favor of including the scholarship loan provision in H.R. 12.

I should like to point out that at this and many other medical schools the students are not affiliated with the Student American Medical Association and that association does not speak for them. I have not carried out a referendum among our students but have the distinct impression that the majority believe that the availability of a scholarship loan fund would be desirable.

Sincerely yours,

VERNON W. LIPPARD, M.D.

NEW YORK, N.Y., *February 21, 1963.*

Hon. OREN HARRIS,
House Interstate and Foreign Commerce Committee, House Office Building, Washington, D.C:

The officers and directors of the International Chiropractors Association assembled in New York City for midyear directors meeting today voted appreciation and commendation for your early session consideration of H.R. 12 and respectfully request your consideration of an amendment that will include chiropractic, the Nation's largest drugless healing art.

JOHN Q. THAXTON, D.C.,
President, International Chiropractors Association.

SPRINGFIELD, ILL., *February 20, 1963.*

Hon. OREN HARRIS,
Chairman, House Interstate and Foreign Commerce Committee, House of Representatives, Washington, D.C.:

The protection and advancement of the public health is endangered by the shortage of professional manpower in Illinois. Population growth makes the shortage progressively more serious. H.R. 12, Health Professions Educational Assistance

Act, would greatly contribute to solution of this problem through the construction of new and expanded medical, dental, and public health, and other health teaching facilities. H.R. 12 is in the House Interstate and Foreign Commerce Committee. I urge you to support the passage of H.R. 12.

FRANCIS J. GERTY, M.D.
Director, Illinois Department of Mental Health.

MULESHOE, TEX., *February 20, 1963.*

Representative OREN HARRIS,
Washington, D.C.:

As a practicing dentist may I urge you to oppose H.R. 12.

Dr. CHARLES G. LEWIS.

AMERICAN RED CROSS,
LANCASTER COUNTY CHAPTER,
Lincoln, Nebr., February 5, 1963.

Hon. OREN HARRIS,
House Office Building,
Washington, D.C.

DEAR MR. HARRIS: I am writing you in regard to H.R. 12 which, I understand is now up for hearing. This is a bill advocating construction grants for collegiate schools of nursing teaching facilities, among other things.

I represent the Nebraska State Nurses' Association which is comprised of over 1,600 registered nurses. We are interested in improving facilities for schools of nursing, believing that in this way more and better nurses can be trained and give better nursing care to the public. The directors of schools of nursing could offer more adequate training if the facilities were improved. The public deserves this better nursing care and this is what they are paying for. We hope that this committee will give serious consideration to the passage of this bill, H.R. 12.

Sincerely,

RUBY MCARTHUR, R.N.,
Chairman, Legislative Committee, NSNA.

MICHIGAN STATE NURSES ASSOCIATION,
Lansing, Mich., February 5, 1963.

Hon. OREN HARRIS,
House of Representatives,
Washington, D.C.

DEAR MR. HARRIS: We wish to extend our appreciation to you for introducing the "Health Professions Educational Assistance Act of 1963," (H.R. 12), which provides for construction grants to medical, dental, pharmaceutical, optometric, podiatric, collegiate nursing, osteopathic, and public health teaching facilities.

As practitioners of nursing we are especially aware of the urgent need for expanded collegiate nurse education programs leading to a baccalaureate degree or graduate degree in nursing. Nurse educators, clinical specialists, and nursing service administrators are in critically short supply (as are other categories of nurses). This seriously limits the profession's ability to prepare practitioners and to guide professional practice. With expanding health facilities and increasing demands for nursing services, the shortage will be correspondingly greater unless steps are taken to correct this. We feel our most urgent need is to educate nurses who can assume the responsibility for conducting nurse education programs which will ultimately lead to larger numbers of nurses being graduated from these programs. For this reason, we look to H.R. 12 with high hopes.

We wish to commend you for your interest in advancing legislation which is destined to result in improved health services to the public. You can be sure the 7,500 members of the Michigan State Nurses Association will follow the course of H.R. 12 with keen interest.

Sincerely yours,

SUSAN M. BRUNO, R.N.,
Assistant Executive Secretary.

STATEMENT BY DR. EMMETT J. MURPHY, DIRECTOR OF INDUSTRIAL RELATIONS, NATIONAL CHIROPRACTIC ASSOCIATION, WASHINGTON, D.C.

Mr. Chairman and members of the committee, my name is Dr. Emmett J. Murphy, director of industrial relations, National Chiropractic Association, Washington, D.C. This professional organization represents the majority of chiropractic doctors licensed and practicing under the laws of the States.

Chiropractic is the second largest of the three generally recognized healing professions. The 1960 census reports that chiropractors have gained 10 percent in numbers during the past decade.

The National Chiropractic Association has seven sponsored chiropractic colleges whose purpose is to graduate well-educated doctors trained in the use of manipulative therapy. This is also the central tenet and practice of the sister profession of osteopathy.

NCA sponsored colleges are presently undergoing rigorous examination and evaluation by an accrediting committee composed of leading doctors of chiropractic augmented by two well-known professional educators not associated with any of the colleges. The findings of this accreditation committee indicate encouraging signs that our leading NCA sponsored colleges qualify for inclusion in the list of institutions maintained by the U.S. Office of Education. Once this is done such colleges should be eligible for participation in Government programs.

All of the National Chiropractic Association's colleges are 4-year professional schools, chartered by their States to grant the degree of doctor of chiropractic. Their courses of study include the basic sciences taught in both medical and osteopathic colleges, whose subject coverage and time allotted is likewise comparable. NCA sponsored colleges require completion of a course minimum of 4,200 hours of classroom, laboratory and clinical instruction.

The graduates of chiropractic colleges must take basic science examinations in States requiring them, the same examinations as are taken by both graduates of medical and osteopathic colleges.

Once in practice, doctors of chiropractic are subject to all the laws which safeguard the public and which apply to any of the licensed healing arts. Moreover, as members of the National Chiropractic Association they subscribe to a code of ethics governing the conduct of members of the profession.

Doctors of chiropractic perform a much sought after public service, meeting many of the health needs of a rapidly growing number of patients. They are respected members of their communities, serving on civic and service committees, contributing taxes, and participating in the support of their Government. More than 500 insurance companies operating in the United States accept their diagnoses and treatment of cases as is done for the other licensed healing arts.

We come now to the bill before the committee, H.R. 12, to increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes.

Surely, there is no evidence on the part of the authors and supporters of this legislation to exclude any properly recognized healing art. In the case of chiropractic, the applicant is licensed by the State to practice after furnishing evidence of having completed the prescribed course of study in a college and after passing the examination held under the laws of the State. The National Chiropractic Association has established an accrediting agency to assure that its colleges meet its prescribed standards of excellence. Once this agency is recognized by the Office of Education and colleges are able to meet all tests and inspections and thereby become accredited institutions such colleges should be given full participation in any benefits made available by such legislation as H.R. 12. For this is a citizens' tax supported program intended to increase the number of properly qualified personnel in the healing arts.

We recommend to the committee certain changes in H.R. 12, which will be fair to all concerned, as follows:

Page 1, line 8, after the word "facilities" add a comma and insert this wordage "and other health training institutions which are or may be listed as accredited by the United States Office of Education."

The bill should be made to conform to this amendment throughout in order not to exclude any presently existing and duly accredited and licensed profession in the health field. In our reading of the measure, the wording of our amendment should be added to accomplish this reasonable objective wherever professional occupations are mentioned specifically.

A simple way to accomplish this would be to add the word "chiropractic" immediately following the words "osteopathic" or "osteopathy" wherever these terms appear in the bill.

Thank you, Mr. Chairman, for this opportunity to present the views of the National Chiropractic Association on this important subject.

DUKE UNIVERSITY MEDICAL CENTER,
Durham, N.C., December 21, 1962.

Hon. HORACE R. KORNEGAY,
House of Representatives,
Washington, D.C.

MY DEAR SIR: Before you return to the next session of Congress, I must write you once again concerning the difficult problem of securing Federal support for medical school construction during this coming year. I write you as dean of the Duke Medical School, as a medical educator, and as a practicing brain surgeon, and finally as a citizen well versed in the fact that elected representatives of the people must keep in mind the financial integrity of the Nation as a whole.

Dr. Douglas M. Knight, president-elect, Duke University, in his first public appearance in North Carolina, recently said: "For the Western World, at least, the university is summoned into being by the need to relate three major human concerns—knowledge, wisdom, and action. Without some formal way of relating them, they are likely to lose their meaning in a confusion of voices."

Speaking about professional schools, he also said, "There is no quicker way to stifle a profession than to perpetuate its routines without criticism or imaginative reappraisal. One major element of vital service that a professional school performs in criticism; it exists in a constant state of tension, questioning and being questioned by the vocation to which it belongs." One might paraphrase Dr. Knight's statement by pointing out that a professional school related to medicine must meet the social responsibilities of its age.

The State of North Carolina has three good medical schools. Under the research facilities bill, and under the research grant program initiated by the National Institutes of Health, all schools have been able to contribute to the welfare of its citizenry, by appropriate research pursuits, housed in appropriate facilities. An equally far-reaching act of Congress, the Hill-Burton Act, has allowed the development of hospital beds for our citizens. Unfortunately, most university hospitals find themselves in an area of dense population with large numbers of hospital beds. Although they may take care of patients from far and wide, they unfortunately rest on the bottom of the totem pole in terms of securing funds for hospital construction for themselves.

The third cornerstone of this important response to the demand of our people for good health lies in the training of new physicians and more physicians. The actual act of teaching has become really more difficult because of the great growth of scientific knowledge and the importance of transmitting this knowledge to new practitioners in medicine. The same may be said of any health profession, including nurses and biomedical students.

To my knowledge, all three medical schools in this State have done their utmost to further the solution of this third problem. They all have increased the numbers of their medical students and all have done their part in terms of matching funds for appropriate facilities. It is unnecessary to tell knowledgeable people that good health is not only a social responsibility, but represents a strong political force in terms of national defense. As far as Duke University is concerned, we are prepared, with considerable scraping of the bottom of the barrel, to match Federal funds for the construction of new teaching facilities, so that we can at least double the number of our medical students, nursing students, and biomedical students.

Finally, I would say that it is very important to arrive at some type of decision, be it positive or negative. But since there is a long lagtime between securing the funds and actual construction, there would be probably even a longer lagtime between the initiation and accomplishment of any substitute measure for producing more medical students. The only substitute measure of which I can conceive would be a striking constriction of our physical facilities, and inevitable loss of quality in our teaching efforts. This year I would trust would be a year of decision one way or another.

I am enclosing a preamble from the Association of American Medical Colleges of which all three medical schools in this State are members. It is rather long, and perhaps too long, for easy reading. I, personally, do not support Federal support of scholarships. I believe that we can handle this problem, although it again is a difficult one. I further see no conflict in the professional schools between church and state. There is in this modern civilization no conflict between religion and science. Medicine has the responsibility of taking care of people regardless of race, creed, or country of origin, and we should teach our students from this same point of view.

May I offer you my very best regards for the Christmas season and good wishes for the coming year.

Yours sincerely,

BARNES WOODHALL, M.D.

DUKE UNIVERSITY MEDICAL CENTER,
Durham, N.C., January 10, 1963.

Hon. HORACE R. KORNEGAY,
Congress of the United States
House of Representatives,
Washington, D.C.

DEAR MR. KORNEGAY: Thank you very much for your long note of December 27 and the amended explanation of H.R. 4999.

I delayed in answering your request because I wanted Dr. Deryl Hart, president of Duke University, to review this information as well.

Dr. Hart agrees with me that the most important issue has to do with section I related to the construction of teaching facilities. Dr. Hart agrees with me that we can probably handle the student loan issue, certainly within the foreseeable future, although later the issue may become much more important. You are probably familiar with the long-term trend in other professional schools, such as law and engineering, in which a very high proportion of such students receive either outright scholarships or very low cost loans.

We both feel that section III is fundamental in our long-term development, and I would trust that the Congress would see fit to continue the $50-million-a-year maximum expenditure. Simple arithmetic in terms of construction funds for perhaps 85 medical schools indicates, as Dr. Hart has pointed out in his note to me, that less than three-quarters of a million dollars per year per school would be available over the estimated 10-year period. If it is inevitable, of course, that some of the more recently established schools and perhaps schools that might be termed poorer schools will have great difficulty securing matching funds. This is a separate issue, but one that will certainly come into prominence within the next few years and one which Congress must keep a close and wary eye upon in the long run.

As you undoubtedly know, we have financed our own programing and planning, and have now completed 3 years of work in this detail study. Perhaps sometime when you have a brief surcease from the responsibilities of your task, you may want to see at least a pictorial representation of this material.

With my warm regards and very good wishes, I am,

Sincerely yours,

BARNES WOODHALL, M.D.

STATEMENT BY FREDERICK G. KILGOUR, LIBRARIAN, YALE MEDICAL LIBRARY, NEW HAVEN, CONN., FOR THE AMERICAN LIBRARY ASSOCIATION AND PRESENTED TO THE HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE

Mr. Chairman, gentlemen of the committee, my name is Frederick G. Kilgour, and I am librarian of the Yale Medical Library. As a representative of the American Library Association having 25,000 members, I would like to inform you of the association's recommendations for action on H.R. 12, the Health Professions Educational Assistance Act of 1963. In brief, I can say that the association requests that your committee make a favorable report on H.R. 12.

As I have reported to you on earlier occasions, the association continues to be concerned with assuring increasing library contributions to the national welfare and security including, of course, our most important resource, namely, health. The association supports H.R. 12 because it believes that this bill will effectively stimulate much-needed construction, renovation, and equipping of medical libraries as a necessary area in health research and teaching facilities.

Medical education and medical research without medical libraries is unimaginable. Yet Federal funds have not been available to medical libraries during the period of successful expansion of research. In fact, Federal moneys have been so successful in stimulating research that there has been a powerful impact on libraries forcing them into desperate circumstances.

Research programs have trebled and quadrupled the numbers of library users and, at the same time, have immensely increased the amount of medical publications which libraries must have on their shelves. Multifold expansion in numbers of volumes and users has generated serious inadequacies for libraries, and inadequate space for readers, books, and staffs has become a critical deficiency requiring expensive correction. H.R. 12 will enable libraries to expand physically so that they can furnish effective services, thereby increasing the advances of health programs.

The association, therefore, supports the objectives of H.R. 12 and requests your committee to render a favorable report on the Health Professions Educational Assistance Act of 1963.

CITY OF CHARLOTTE, N.C.,
OFFICE OF HEALTH DEPARTMENT,
February 19, 1963.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

SIR: I would like to solicit your favorable consideration to pass H.R. 12, now being considered by the House Committee on Interstate and Foreign Commerce. This bill is intended to provide Federal assistance for the training of personnel in medicine, dentistry, nursing, and other public health professions.

Our area has been particularly hard hit in its attempts to provide the necessary health services for an expanding and aging population. The rapid change from a semirural to an urban and now to a metropolitan community has pointed up sharply our lack of health personnel for direct and preventive health services. The Charlotte Memorial Hospital, a 600-bed institution, and the only publicly supported hospital in Charlotte, has been without a house staff of interns and residents for the past 2 years. For short terms, foreign-trained physicians have worked as house officers. This has been completely inadequate to provide the emergency and inpatient care necessary for this size institution.

A short time ago, the Charlotte Memorial Hospital was unable to open a new wing for patient care because of its inability to recruit nurses to work in this new section. In addition, about 6 months ago, a psychiatric wing of 33 beds could not be operated because of the inability to recruit nurses and other psychiatrically trained staff to operate this unit. This is the only inpatient hospital facility for psychiatric patients in the Charlotte area.

The health department has suffered from a continuing shortage of health personnel, and because of this shortage, has been unable to recruit needed physicians, public health nurses, engineers, and sanitarians. It is my considered opinion that H.R. 12 can provide a needed incentive and stimulus to foster the training of health personnel in these disciplines.

Many of our newer programs particularly directed to the aging population have not been implemented because of the lack of health personnel. It was necessary to delay a home care program for stroke patients almost 6 months because of our inability to secure nurses, a physiotherapist, and a physician. Many of the newer programs directed to the care of patients at home in order to relieve the shortage of beds in acute hospitals cannot be implemented because of personnel shortage. This is keenly felt in Charlotte because this health department operates an extensive home nursing care program.

The health department has been unable to meet the need of dentally indigent patients requiring dental care. Two part-time dentists connected with our health department have been working tirelessly to make a dent in the tremendous backlog of needed dental care. The same situation prevails so far as private dental care is concerned. There is a great need for the training of dentists in order to provide a means of overcoming this inadequacy.

I am sure you will give this bill much thought and I hope you will find it possible to consider favorably its passage.

Sincerely yours,

MAURICE KAMP, M.D., *Director of Health.*

WEST VIRGINIA NURSES ASSOCIATION, INC.,
Charleston, W. Va., February 5, 1963.

HON. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. HARRIS: The West Virginia Nurses Association wishes to advise you and your Committee on Interstate and Foreign Commerce of our support of your bill, H.R. 12, health professions educational assistance bill. We were very pleased to learn that you had introduced this much-needed legislation early in the 88th Congress and had called for hearings on it.

We feel that this bill is a step in the right direction to meet one of the pressing needs of collegiate schools of nursing. Our professional nursing association has consistently supported similar proposals for the past 5 years.

Although the number of graduates from schools of nursing has remained fairly constant the past several years, demands for nursing service continue to grow. If we are to meet these increasing demands, additional support, such as proposed in your bill H.R. 12, must be forthcoming.

We appreciate the committee's and your continued efforts on behalf of the health professions.

Very truly yours,

JULIANN RITTER, R.N.,
Executive Director.

SEATTLE, WASH., *February 6, 1963.*

OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
Washington, D.C.:

Washington State Nurses Association urges H.R. 12 support because more professional nurses with baccalaureate preparation desperately needed. Nurses required to serve as educators, supervisors, administrators, and team leaders. Daily evidence insufficient numbers of qualified nurses to fill positions. Profession believes best way to meet need is to expand baccalaureate program and provide student scholarships.

HELEN HANSON,
President, Washington State Nurses Association.

STATEMENT OF THE AMERICAN PHARMACEUTICAL ASSOCIATION WITH REFERENCE TO TO H.R. 12 IN THE 88TH CONGRESS

The American Pharmaceutical Association, organized in 1852, is the oldest national association in American pharmacy. The objectives of the association since its inception have concerned themselves exclusively with the development of standards to improve and promote public health. For 111 years, we have devoted our energy to maintain and achieve higher standards of professional practice and improvement of the quality of drugs available to the American people.

The American Pharmaceutical Association has no financial, business, or commercial interest in any pharmaceutical product, manufacturer, wholesaler, or pharmacy; its sole interest is promoting the highest standards of public health through improved professional pharmaceutical service.

One basic objective of the association, as stated in its constitution, is: "To provide a system of education and training in the art of pharmacy, calculated to produce competent personnel through all phases of the practice of pharmacy and the training of pharmacists as the means of providing the greatest protection for the public at large."

On behalf of the high standards of professional competence we have fostered, and which we seek not only to maintain but improve, the American Pharmaceutical Association favors congressional consideration of means of making funds available in order to foster adequate facilities for public health education and the training of professional health personnel. The American Pharmaceutical Association believes that H.R. 12 would stimulate the progress of pharmacy thereby aiding the profession and ultimately the public.

We must emphasize that the public health function of pharmacists is not merely a phase of the practice of the profession of pharmacy, but rather, the practice of the profession of pharmacy is an integral phase of the practice of public health.

Pharmacists join with physicians, dentists, and other members of the public health team to assure our citizens the highest obtainable type of health care. The practitioner's role in the public health of the Nation is an ever-expanding one as newer, more effective, chemotherapeutic agents are made available and new approaches to the mitigation and cure of disease are developed.

Community and hospital pharmacies, research and control laboratories, product development and manufacturing, and numerous governmental agencies are among the numerous public health areas utilizing pharmaceutically trained personnel. Public Law 87–781 enacted by the 87th Congress will require additional scientific personnel for its effective implementation in the Food and Drug Administration and pharmaceutical manufacturing industry. The special education, background and knowledge of pharmacists is creating additional public health service responsibilities for members of our profession. Schools of pharmacy are making every effort to respond to the demands for their graduates.

To determine the magnitude of the need for additional facilities and to intelligently project the future demands for pharmacists in all professional specialities, the American Pharmaceutical Association and the American Association of Colleges of Pharmacy, in cooperation with the U.S. Public Health Service, is undertaking a professional manpower study in pharmacy. It has been announced that the findings of this study will be published about May 1. Thus, by first accurately determining the areas and amounts of manpower needs within the profession, both private and Government funds invested in pharmaceutical education would be used most effectively.

The assistance proposed by H.R. 12 would enable pharmaceutical education to move forward without delay. Under the bill before you, schools of pharmacy are eligible for financial aid. With such assistance, the public would be assured of the availability of competent personnel to provide complete professional pharmaceutical services and thus preserve our high standard of health care.

MARYLAND NURSES ASSOCIATION, INC.,
Baltimore, Md., February 5, 1963.

Re H.R. 12—Health professions educational assistance bill.

Hon. OREN HARRIS,
House Office Building, Washington, D.C.

DEAR MR. HARRIS: The Maryland Nurses Association, a constituent of the American Nurses' Association, urges your support of H.R. 12, to increase the opportunities for training professional health personnel, including nurses.

The need to increase the facilities for collegiate schools of nursing is well known to you. Well-qualified teachers, supervisors, and administrators are essential to preparing nurses adequately for the increasing responsibilities assigned to them.

With so much of your attention focused on the health needs of your constituents, we are confident that you see the importance of providing professional nursing personnel to meet their needs.

Sincerely yours,

ALICE J. AKEHURST, R.N., *President.*

CHATTANOOGA-HAMILTON COUNTY HEALTH DEPARTMENT,
Chattanooga, Tenn., February 13, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR SIR: I would like to urge favorable consideration of H.R. 12 which would provide funds to assist in the training of personnel for the health professions. We are faced with an ever-increasing shortage of personnel in the health professions, particularly in the public health field. Funds to assist in the training of

additional personnel and also to provide additional facilities are therefore greatly needed.

Sincerely yours,

M. M. YOUNG, M.D., *Director.*

NEW YORK, N.Y., *February 18, 1963.*

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.:

We wish to be recorded in very strong support of H.R. 12 Health Professions Educational Assistance Act. Passage of this act will be one of the most important health actions ever taken.

Respectfully yours,

RAY E. TRUSSELL, M.D.,
Director, School of Public Health and Administrative Medicine,
Columbia University.

NEW HAVEN, CONN., *February 12, 1963.*

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.:

On behalf of the Yale University School of Public Health, I ask to be included in the hearing record as wholeheartedly endorsing the provisions of H.R. 12, the Health Professions Educational Assistance Act.

ANTHONY M-M PAYNE, *Chairman.*

UNIVERSITY OF ILLINOIS COLLEGE OF NURSING,
Chicago, Ill., February 15, 1963.

Hon. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
House Office Building, Washington, D.C.

DEAR MR. HARRIS: I write to thank you for your introduction recently of the health professions educational assistance bill (H.R. 12). I am sure you are thoroughly familiar with the dire need of nursing as one of the health professions included in your bill. As you know, staffing of our health services in the future will depend in a very special way upon the ability of our collegiate nursing institutions to expand sufficiently to accommodate the increasing number of young women in the present generation who are seeking college education. A generation ago many of these young women would, without question, have entered our fine hospital-schools; but with the almost revolutionary change in educational aspirations of young women, these girls and their parents expect them to go to college. Unless our collegiate nursing institutions are prepared to attract and to teach them, they will select other majors in college and be lost to the essential public service of nursing.

The College of Nursing at the University of Illinois is a very young one. Founded as a school of nursing in 1954, it graduated its first class in 1957 and was reorganized into one of the constituent colleges of the university only in 1958. Since that time our enrollment has more than doubled. We are currently investigating whether or not it will be possible for us to admit 65 sophomore students in September of 1963. I am certain we could not admit more despite the likelihood of many more applicants. Our first constriction will be helped if we are able to qualify under the bill that you have introduced. While we have great need of an operating budget to support additional faculty and other expense, we have not now the space to teach students and place faculty even if we had the operating budget. For this reason, the news of your bill gave us encouragement indeed.

I sincerely hope that your committee and the House of Representatives will support you in this bill and, through you, give your important assistance to the future staffing of our nursing services.

Yours sincerely,

Mrs. MARY K. MULLANE, *Dean.*

CITY OF CHICAGO, BOARD OF HEALTH,
Chicago, Ill., February 16, 1963.

Re H.R. 12

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. CHAIRMAN: As commissioner of health for the city of Chicago, I am constantly aware of the shortage of qualified personnel—particularly doctors, dentists, nurses, engineers and trained public health professionals. This shortage has presented the greatest obstacle to the expansion of existing activities and the establishment of new programs.

I believe there is great need for financial assistance toward the training of doctors, dentists, nurses, and public health personnel, and I urge full support for H.R. 12.

Sincerely,

SAMUEL L. ANDELMAN, M.D., M.P.H.,
Commissioner of Health.

HAWAII PUBLIC HEALTH ASSOCIATION,
Honolulu, Hawaii, February 18, 1963.

Re H.R. 12, Health Professions Educational Act.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN HARRIS: In a meeting held on February 4, the Hawaii Public Health Association voted unanimously in support of H.R. 12.

The association, which is composed of professional public health workers and other lay persons interested in public health, strongly urges favorable consideration of H.R. 12 for the following reasons:

(*a*) The provision of grants for medical scholarships and supporting costs will be of assistance in increasing the opportunities for young men and women of Hawaii to study in the health profession.

(*b*) The bill will help to meet the short supply of health personnel in the State of Hawaii.

(*c*) Expansion and improvement of teaching facilities in existing schools of medicine, dentistry, public health and osteopathy, as well as construction of such schools will help to meet the anticipated shortages in the medical and dental professions in the years ahead.

Very truly yours,

KATHERINE J. EDGAR, M.D., *President.*

CONSOLIDATED FOODS CORP.,
Chicago, Ill., February 6, 1963.

THE CHAIRMAN OF INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

MY DEAR MR. HARRIS: Attached is a photocopy of a letter which I recently wrote to Mr. Celebreze, Secretary of Health, Education, and Welfare.

Last week, while in Washington, I had the opportunity of discussing the project referred to in my letter with Messrs. Ventura, Jones, Pond, and Meyer.

I do hope that I can enlist your enthusiastic sponsorship in furthering the development of a new type medical school, which is so very much needed in our major medical teaching institutions.

I believe this would come under the heading of H.R. 12, on medical education. May I suggest that this correspondence become a part of the records.

Shall be out of the country for the next 30 days, but if necessary, after mid-March, will be available to come to Washington for further discussion.

It is my understanding that preliminarily, the project would cost about $20 million. Thus, we are dealing with a situation of major proportions. We sin-

cerely believe that the need for specialized teaching was never greater than now.

Thanking you for your cooperation, I am,

Sincerely yours,

NATHAN CUMMINGS.

JANUARY 15, 1963.

Hon. ANTHONY J. CELEBREZZE,
Secretary of Health, Education, and Welfare,
Washington, D.C.

MY DEAR MR. SECRETARY: Rather a coincidence * * * was most pleased to receive your Christmas card with your message of good will as it came at a time when I am seriously considering a project in which the Cummings family would like to enlist the benefit of your experience in the development of hospital teaching projects.

I plan to be in Washington in the late afternoon of January 31 and if it were convenient, I'd like to come to your office anytime during the morning of February 1 to tell you about a medical school I would like to sponsor at Michael Reese Hospital. This is an institution here in Chicago with approximately 850 beds, and it is at present without direct medical school facilities.

I have set aside $1 million from the Cummings Foundation to be used as the nucleus of setting up the necessary financing. I believe under the Hill-Burton formula, a certain amount of money can be made available if the project is along certain prescribed ideas. However, the school I envision is one that will have smaller classes than normally exist in medical teaching, thus giving the student a more concentrated opportunity to gain the necessary knowledge.

As the population of our country grows, it is natural that we need more doctors. It is my information that approximately $20 million would be needed to give the school the proper sendoff.

In your organization, no doubt, there are some experts who can give me the right answers; first, as to the practicality of what I would like to do; and secondly, as to how it might best be financed with the assistance of our Government.

By the time this letter reaches you, we shall be at the Palm Beach Towers in the same apartment where I had the pleasure of showing you some of our art objects last season. I would appreciate it if your reply is addressed to me there.

Looking forward to seeing you early next month, I am,

Sincerely,

NATHAN CUMMINGS.

MISSISSSIPPI STATE MEDICAL ASSOCIATION,
Jackson, Miss., February 5, 1963.

Hon. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce, New House Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: This statement is a formal expression of the views of the Mississippi State Medical Association with respect to H.R. 12, the Health Professions Educational Assistance Act of 1963, which we understand is pending before the House Committee on Interstate and Foreign Commerce. It is respectfully requested that this statement be considered in connection with this bill and made a portion of the record of hearings by your committee. The position of our association with respect to H.R. 12 and preceding identical bills was established by our board of trustees (board of directors) on January 15, 1959, and confirmed by our house of delegates at the 91st annual session of our association, May 12–14, 1959.

In opposing H.R. 12 and all similar measures, we reaffirm our support of medical education. In Mississippi, we take justifiable and understandable pride in the excellence of our University of Mississippi School of Medicine, its competent faculty, and splendid student body. Many members of our association in private practice deem it a high privilege to teach in this institution on a part-time basis, and in 1962, as in each of the preceding 7 years, Mississippi physicians voluntarily contributed funds to the medical school through the American Medical Association Education and Research Foundation. In fact, it is from this concern for continued excellence and effectiveness of medical education that our position, in part, is derived.

H.R. 12, as was the case with H.R. 4999 and S. 1072 of the 87th Congress, would amend the Public Health Service Act to provide the following programs:

(1) Federal funds in the amount of $750 million over a 10-year period for matching grants for construction at medical, dental, and ostoepathic schools.

(2) Federal funds for scholarships in such schools of $1,500 multiplied by one-fourth of the number of first-year students during the first fiscal year that the legislation becomes effective, thereafter escalating to include first-and second-year students in the third fiscal year; and all students in the fourth and succeeding fiscal years. Additionally, another grant of $1,000 per scholarship awardee would be made to each participating school for "cost of education," which is not defined in the bill.

(3) Federal funds for extension and expansion of the research facilities construction by increasing the present authorized maximum of $30 million annually to $50 million for a stated period.

We entertain specific objections to each of the three major areas of the bill as well as objections to the proposal as a whole.

School construction.

There are, in our opinion, compelling reasons why Federal funds with inevitable Federal stipulations and controls should not be used for school construction. Our discussion, however, will be confined to medical schools.

(1) *Federal stipulations and controls.*—Construction or "bricks and mortar" grants are contingent upon stringent criteria requiring surrender of local initiative with respect to building standards, labor contracts in construction, utilization, and admissions policies. These conditions prerequisite to the granting of Federal funds are strangely inconsistent with the prohibition in this section over exercise of control or supervision of schools by any Federal official.

(2) *Degree of necessity.*—Where Federal funds are not available for construction of certain categories of public works, this unavailability does not always operate to prevent such construction by States, counties, and municipalities. Often, these categories of public works, while useful and uplifting to the cultural, economic, social, and recreational life of the area in which built, are apparently less critical to public well-being than schools of medicine. In this connection, we have reference to coliseums, stadiums, public auditoriums, and cultural centers, and related facilities. It therefore seems that dedication of Federal funds as proposed in the bill is not merely improper but also unnecessary.

Scholarship program

Two pertinent factors raise serious questions as to the wisdom and necessity of embarking upon a program of Federal medical scholarships with concomitant "cost of education" subsidies. The first concerns the medical students, and the second, the schools.

(1) *Students.*—There now exist many public and private sources of medical scholarships and training loans. The State of Mississippi has assisted more than 600 medical students who successfully completed their training with scholarships up to $5,000 each. No Federal funds were sought or used in this program which has been effective for 16 years. The American Medical Association has initiated a large and effective loan program for students, interns, and residents. Moreover, most applicants for admission to medical schools have arranged for financing their training at or before the time of application.

(2) *Medical schools.*—American medical schools now receive and use enormous sums of Federal money. Of all total expenditures by U.S. medical schools in 1960–61, more than 40 percent was provided by Federal sources. These funds were in three categories: research grants (27.4 percent), training funds (9.8 percent), and overhead or program administration costs (4.3 percent).

The American Medical Association's Council on Medical Education and Hospitals has stated that such funds exert influence on school growth and curriculum emphasis: "In recent years, it has not been unusual for agencies to invite proposals for projects in specific areas. This practice has resulted, in part, from large governmental appropriations intended to assist in the development of specific areas. Under these circumstances, institutional growth is almost certain to be uneven and unbalanced." The comment goes on to state that "these moneys are intended by the grantors to influence training and do so by supporting some programs in preference to others. They are allocated preferentially to areas and disciplines which are believed by the grantor to be in need of encouragement."

It is apparent that substantial Federal controls accompany present Federal grant programs in medical education. Enactment and implementation of the proposed Federal scholarship and subsidy section would only extend and amplify these controls. We observe that this section of the bill does not contain a disclaimer over supervision or control of medical schools. Furthermore, no valid need for this legislation has, in our judgment, been demonstrated.

Research facilities

Our objections to the third major section of H.R. 12 are esentially the same as those to the first section on construction and facilities rehabilitation. Additionally, the present proposal would liberalize the granting of Federal funds for research facilities construction from the present limit of 50 percent Federal funds to as much as 100 percent Federal funds. A second liberalization is found in broadened eligibility in that funds would be granted not only for research facilities construction but also for building facilities whose purpose is related to research. We find no evidence to suggest that medical science can be advanced at a more accelerated pace through this construction program, nor do we accept the inferred premise of a need which can be met only through provision of more Federal funds.

We believe that the basic concept of H.R. 12 erroneously presumes that political subdivisions are neither willing nor able to provide sufficiently for tax-supported medical schools. Similarly, it seems to assume that governing boards of private institutions have neither the resource nor initiative to continue to fulfill their historic and impressive role in medical education. Conversely, we respectfully recommend that the Congress seek ways and means of withdrawing Federal influence and control from academic activities toward the end that every educational institution, medical and otherwise, can be genuinely free to present a curriculum best suited to the needs of the area it serves, to interpret through this curriculum and associated endeavors the goals and aspirations of those under whose sponsorship it functions, and to determine its own academic course and future within the context of these opportunities and responsibilities.

Sincerely,

C. P. CRENSHAW, M.D., *President.*

AMERICAN PODIATRY ASSOCIATION,
Washington, D.C., February 11, 1963

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. HARRIS: The American Association of Colleges of Podiatry favors the enactment of the Health Professions Educational Assistance Act by the 88th Congress and appreciates the opportunity of having this statement included in the records of the hearings considering H.R. 12.

Our member colleges of podiatry are all accredited nonprofit institutions which for over half a century have provided undergraduate and graduate training which meets the educational requirements for practicing in all 50 States, the District of Columbia, Puerto Rico, Canada and other foreign countries. The armed services, Veterans' Administration, and public health agencies specify graduation from our colleges as a requisite for service as a podiatrist. The clinical facilities of our colleges assist in meeting the health needs of their communities and serve as clinical research centers for detecting chronic diseases and reducing the incidence ands severity of foot disorders.

The provisions of H.R. 12 would accelerate plans for the rehabilitation and expansion of our existing colleges and assist in the construction of needed new podiatry colleges.

Information contained in previous statements has not been repeated since it is our understanding that this will be considered by the committee.

Respectfully submitted.

L. C. NUMBERS, D.S.C.,
Secretary, American Association of Colleges of Podiatry.

PHARMACEUTICAL MANUFACTURERS ASSOCIATION,
Washington, D.C., February 14, 1963.

Re H.R. 12, the Health Professions Educational Assistance Act of 1963.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This letter is submited on behalf of the Pharmaceutical Manufacturers Association on H.R. 12, a bill amending title VII of the Public Health Service Act and entitled the "Health Professions Educational Assistance Act of 1963."

The PMA is a nonprofit membership association, incorporated under the laws of Delaware, with its principal office in the city of Washington, D.C. At the present time, there are included in its membership about 140 member companies which are engaged in the manufacture of prescription drugs, and these companies produce about 95 percent of the Nation's output of such products.

The PMA supports the provisions of H.R. 12 establishing a Federal matching grant program for the construction, expansion, and rehabilitation of medical schools. This program also had our support in the 87th Congress when H.R. 4999, the predecessor to H.R. 12, was before this committee.

Since its inception, the PMA has recognized that the highest possible standards of medical education should be maintained in order to assure that the best medical care is provided to the American people. In recent decades impressive advances have been made in medical sciences. They have been accompanied by great changes in the pattern of medical education and medical care. Meanwhile, it has become well established that the adequacy of physical facilities bears an important relationship to the quality of medical education and hence, ultimately, the quality of medical care provided. If the goal of continual improvement in medical education is to be achieved, provision must be made to assure the adequacy of physical facilities.

The PMA also supports the inclusion of schools of pharmacy in this program. Graduates of these schools are meeting demands in many areas involved with the public interest, as, for example, in Federal and State governments, in the Armed Forces, in education, in research, in hospitals and community pharmacies, and in industry.

Our support of this matching-grant program is conditioned, however, on its not containing any factor diluting American medical or pharmacy education, and on its giving maximum assurance of freedom from Federal controls. In addition, we believe that it should give priority consideration to the construction of new medical and pharmacy schools in those areas where such facilities do not now exist.

Private funds are now supporting scholarships and student loan programs to alleviate financial difficulties among students and encourage careers in medicine and pharmacy. The success of programs such as the American Medical Association's medical education loan guarantee program and American Foundation for Pharmaceutical Education speak for themselves. We are pleased to call to the attention of this committee the fact that members of this association have contributed substantially to both these programs. To the extent that private funds are inadequate to provide all the financial aid that may be needed by well-qualified students the PMA supports the loan provisions of H.R. 12 to include undergraduate and graduate students in medicine and pharmacy as a supplementary benefit. There is an increasing demonstrable need for financial aid by these students so that they may continue their education and thus assure this Nation of an essential number of well-trained and well-qualified persons in these vital field. The increased availability of financial aid may also have the healthy effect of encouraging greater numbers of top-ranked students to follow careers in medicine and pharmacy.

The PMA favors short-term periodic review by the Congress of a program of this kind which involves the provision of Federal funds. Ten years as a starting period, it would seem to us, is unnecessarily long. We would suggest an initial period of from 3 to 5 years. After that, Congress could review the entire operation and decide on the basis of its performance whether it should be renewed in its present form or whether some changes should be made.

It would be deeply appreciated if you would make this letter a part of the record of your committee's hearings on H.R. 12.

Sincerely yours,

AUSTIN SMITH, M.D.

STATE OF CALIFORNIA, DEPARTMENT OF PUBLIC HEALTH,
Berkeley, Calif., February 14, 1963.

Re H.R. 12.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: As director of public health for the State of California, I would like to urge favorable action of your committee on H.R. 12. Extensive studies in California have shown the great need for more physicians, dentists, and public health personnel. During the next 10 years, the supply of our physicians must be doubled to meet the needs of our rapidly increasing population. This statement is based on the assumption that physicians will continue to come to California to practice at the same rates that they are now coming. A similar need for the training of dentists and public health personnel exists.

We, in public health, are particularly concerned with the existing shortages of public health personnel. With the increasing realization of the value of preventive medicine and public health and with the addition of very complex public health problems resulting from our "exploding population," the need for public health personnel is particularly great. Recruitment and training must be increased to meet these urgent needs.

Enactment of H.R. 12, would be of major benefit in stimulating and aiding the development of the necessary additional educational facilities for the training of the seriously needed health personnel.

Very sincerely yours,

MALCOLM H. MERRILL, M.D.,
Director of Public Health.

BOARD OF HEALTH,
Paterson, N.J., February 14, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: H.R. 12, now before the House Committee on Interstate and Foreign Commerce, would provide valuable assistance in the training of personnel in medicine, dentistry, nursing, and other public health professions.

Many of our problems in all areas of medical care and public health stem mainly from a serious shortage of personnel and the imbalance of the public demand for medical services and the available personnel to meet this demand. It eventually becomes a personal tragedy to individual human beings, on all levels of our American society, that the richest country in the world cannot meet the demand for medical and health services, which such an affluent country requires.

In sending us their medical graduates as hospital interns, Turkey, Iran, the Philippines, and many other less developed countries are in fact carrying out a "foreign aid program" for the United States.

I am certain that you will derive deserving gratification from your support of this measure, and ask that you be kind enough to give this bill your active endorsement.

Respectfully yours,

J. ALLEN YAGER, M.D., M.P.H.,
Director, Department of Health.

BALTIMORE CITY HEALTH DEPARTMENT, *February 11, 1963.*

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR Mr. CHAIRMAN: This letter is in support of bill H.R. 12 which I understand is having hearings before your committee.

There is no doubt that there is a serious lack of trained personnel in medicine, dentistry, nursing, and other public health professions. In the various programs of the Baltimore City Health Department, we are constantly hampered because of unfilled positions in essential posts. It was thought that part of this problem might lie in inadequate salaries; but even since the salaries have been raised, we are finding that there are no personnel available. From my discussions with other health officers and physicians from all over the Nation, I find that this problem is universal.

This shortage, while very acute at the present time, will become disastrous in the future. As a result of medical research and technical advances, there will be increasing need for trained health personnel to bring these new knowledges to the public. Our medical schools and other training facilities, however, have not been expanding at the same rate that medical technology has.

The only realistic prospect of correcting these various deficiencies can be by congressional action such as H.R. 12; and therefore, I urge your full support for this vital bill.

I thank you for your consideration of this matter.

Sincerely yours,

ROBERT E. FARBER, M.D.,
Commissioner of Health.

UNIVERSITY OF CALIFORNIA, SCHOOL OF PUBLIC HEALTH,
Berkeley, Calif., February 7, 1963.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: May I add my strong support for H.R. 12 on which you held hearings this week. Our university was most ably represented by Vice Chancellor Stafford Warren and by coordinator of Medical and Health Sciences, John Porterfield. Also, our schools of public health had the representation of Dean Stebbins. I should be very grateful if you include this letter in the record of the hearings.

Having served on the Surgeon General's Consultant Group on Medical Education which also included brief consideration of the needs for dental education, I am acutely aware of the pressing need for passage of H.R. 12 to aid in the building of more medical and dental schools and to provide loan funds for medical students. It is so essential that the facilities for research must be complemented by construction of teaching facilities to prepare research workers and both are needed to provide medical and dental services (including future public health leaders) for our burgeoning population.

In our own State of California we must expand the two already nearly completed tax-supported medical schools with from three to five more in order to maintain the medical services of our State's population at their present level. The need is just as great if not greater for the expanding dental schools. It is my privilege to serve also on the statewide advisory committee for medical and health sciences and we are constantly impressed with the tremendous need for this essential support.

Among the schools of public health these needs are just as acute, if not even more so. While each of the five State-supported accredited graduate schools of public health has its individual problems with respect to its unmet space requirements, they share common difficulties in solving them. All of our schools of public health, private and tax-supported are national and because of fellowships of A.I.D. and W.H.O., "international" schools, as well. Especially since the passage of the U.S. Public Health Service Traineeship Act in 1956 and the resultant stimulus to national public health recruitment, the State taxpayers who support the State schools have been carrying a disproportionate share of a national responsibility. The enactment of the Hill-Rhodes Public Law 86-720 providing Federal aid to these national and international schools of public health for assistance in teaching these expanded classes has brought a degree of alleviation to the schools and some equalization for the taxpayers of State-supported schools.

No comparable support exists for medical and dental schools. However, in our schools of public health the concomitant augmentation of faculty and auxiliary teaching personnel has accentuated already existing deficiency in space. Our California State taxpayers already have provided basic building requirements. Thus in 1955 the school of public health at the University of

California in Berkeley occupied its new Public Health Building, Earl Warren Hall, with 43,000 square feet. While this met our needs in 1955, now our graduate student body has more than doubled. Some of our faculty are forced to double up in occupancy of rooms and we are forced to resort increasingly to rented space both for instruction and research. Indeed, there are teaching programs which we cannot provide because we cannot house them.

The favorable consideration of H.R. 12 is a matter of major importance to all of us in the field of the health sciences.

Sincerely yours,

Charles E. SMITH, M.D.,
Dean, School of Public Health,
President, California State Board of Public Health.

OREGON PUBLIC HEALTH ASSOCIATION,
Portland, Oreg., February 13, 1963.

Hon. OREN HARRIS,
Chairman, House Interstate and Foreign Commerce Committee, House of Representatives, Washington, D.C.

DEAR MR. HARRIS: This letter concerns House bill 12, introduced on January 9, 1963, by you.

The members of Oregon Public Health Association, an affiliate of the American Public Health Association, has voted favorable endorsement of this bill.

As you know, the shortage of physicians, dentists, nurses, and other health personnel is a major problem for essentially all of the States. For many years Oregon has held an enviable position among Western States for advancement in the field of public health.

However, during the more recent years it has become increasingly more difficult to obtain qualified professional presonnel to fill public health positions. This has been true whether the positions were newly created in order to keep pace with population growth and the addition of essential public health programs or merely to fill staff vacancies as they have occurred.

While we realize that the passage of this bill would not totally solve Oregon's problem, it would certainly enhance the opportunity for us to continue to assure that we will be able to insure continued growth in Oregon's public health programs.

In the interest of increasing enrollment of health personnel, now in such short supply, we thank you for your support of House bill 12. May we also please request that you send us by return mail 10 copies of this bill.

Respectfully,

Mrs. VIVIAN E. RUNTE, *President.*

OREGON NURSES ASSOCIATION, INC.,
Portland, Oreg., February 12, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington D.C.

DEAR MR. HARRIS: The Oregon Nurses Association is very much interested in H.R. 12, health professions educational assistance bill.

We have two collegiate schools of nursing in Oregon, including a program for graduate nurses desiring to specialize in public health nursing, teaching, or administration.

These schools could admit more students if more adequate facilities were available. In common with most other States, Oregon has a critical gap between the number of nurses needed to staff hospitals, public health agencies, and other health facilities and the supply available. Even more serious, is the shortage of personnel prepared for teaching, supervision, and administration of a high quality.

We request, therefore, that your committee give favorable consideration to this bill. We hope that it will be sent to the floor of the House with a recommendation that it be passed.

Sincerely,

Mrs. BERTHA G. BYRNE, *Executive Secretary.*

LAFAYETTE, INDIANA, *February 8, 1963.*

Re inclusion of this letter in hearings currently being held in relation to the alleged dental manpower shortage and the need for Federal aid to build new dental schools.

HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE,
House Office Building, Washington, D.C.

DEAR SIRS: It is my understanding your committee is holding public hearings on the need for Federal funds for new dental schools. It has been widely stated and suggested that there is currently, and that there will be, a dental manpower shortage. I have spent some time investigating the alleged dental manpower shortage and can see no shortage of dentists. Neither do I see any urgency in resolving the question of Federal aid to dental schools.

I am including in this letter a summary of the recent dental manpower history of the United States, and am requesting that it be included in the official record of the hearings of your committee.

Sincerely yours,

W. KELLEY CARR.

A SUMMARY OF THE RECENT DENTAL MANPOWER HISTORY OF THE UNITED STATES

This summary will list the important points involving the productivity of the dental manpower history of the United States since 1930. For briefness, all points will be listed.

1. In 1930, there were 58 dentists per 100,000 people in the United States, and in 1958 there were 49 active dentists per 100,000 people.[1]

2. In 1930, 20 to 25 percent of the population of our country were seeing their dentists at least once a year.[2]

3. In 1958, 40 to 45 percent of the population of our country were seeing their dentists at least once a year.[3]

4. During this 28-year period of declining numbers of dentists per 100,000 people, the productivity of the dental profession has increased over 100 percent.[4]

5. When the 100 percent productivity increase is divided by the 28 years in the period, a yearly average productivity increase of approximately 3.5 percent is obtained.

6. From 1950 to 1960, the dentists increased their productivity 42 percent.[5] For this 10-year period, the average yearly productivity increase was 4.2 percent.

7. In 1960, 18 percent of the dentists said they needed more patients and 38 percent said they could handle more patients.[6] It is obvious that there is no current dental manpower shortage, although there is a maldistribution of dentists in some areas.

8. The Surgeon-General's Office feels that 16,000 more dentists will be needed by 1975 to preserve present dentist population ratios.[7]

9. From 1930 to 1958, the dentist population ratio has gone from 1 : 1,724 to our present 1 : 2,174.[8] Even though the ratio is changing, we have more dental manpower than dental demand by the public (see point 7). There seems to be no justification for the establishment of a dentist : population ratio at this time.

10. The Survey of Dentistry projects that 24,000 dentist equivalents will be produced by increased use of auxiliary personnel by dentists from 1960 to 1975.[9] In 1975 we will have approximately 120,000 dentists.[10] The dentist equivalents will represent a 20 percent increase in dental productivity during this 15-year period. A little simple mathematics shows this to be a 1.33 percent yearly increase of dental productivity.

11. This 1.33 percent projected yearly increase of dental productivity (as suggested by the Survey of Dentistry) would more than fill the projected need for dental manpower by 1975.

12. If the 15-year period of 1960 to 1975 has the same yearly average productivity increase as existed in 1950 to 1960, then 75,000 dentist equivalents will be available in 1975 instead of the projected 24,000. Both the 24,000 figure and the 75,000 figure are higher than the projected need of 16,000 dentists.

13. The record of American dentists under the free enterprise system is a record of amazing productivity over these last 30 years. There seems little sound basis for questioning their ability or desire to continue to be more productive. The historical record of our profession, as it applies to increasing productivity, is clear and strong.

14. One can only conclude that there is no dental manpower shortage at present, and that the alleged dental manpower shortage of 1975 has been manufactured by people who do not understand the basic factors working to make dentists more productive.

15. These facts from The Survey of Dentistry and the Michigan Workshop on the Future Requirements of Dental Manpower and the Training and Utilization of Auxiliary Personnel should make clear to all that there is no urgency needed in resolving the question—"Should the Federal Government provide funds for building dental schools?" These facts should also convince you that there is no need for additional dental schools through Federal aid. Our present system is working well.

16. Those people who remain unconvinced as to the past or present ability of dentists to be productive should take a long hard look at the productivity ability of American farmers. Their productivity was underestimated by many Government officials. There seems to be no logical reason for feeling that private practicing dentists are any less intelligent than farmers, or that the dentists will be any less productive.

17. The record of American dentists is a clear-cut record of progressive action, ability, productivity, and providing for the dental demand of the public.

BIBLIOGRAPHY

1. Hollinshead, B. D. "The Survey of Dentistry." One final report, Commission on the Survey of Dentistry in the United States. Washington, D.C., American Council on Education, 1961, p. 77.
2. Ibid., p. 31.
3. Ibid.
4. Ibid., p. 85.
5. "Proceedings of the Workshop on the Future Requirements of Dental Manpower and the Training and Utilization of Auxiliary Personnel." The University of Michigan, W. K. Kellogg Foundation Institute Graduation and Postgraduate Dentistry, Jan. 15–19, 1962, p. 24.
6. Ibid., p. 19.
7. Hollinshead. Op. cit., pp. 78–79.
8. Hollinshead. Op. cit., p. 77.
9. Hollinshead. Op. cit., p. 86.
10. Hollinshead. Op. cit., p. 79.

W. KELLEY CARR, D.D.S.

COLUMBUS, OHIO.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

May I respectfully ask that our endorsement be recorded in favor of H.R. 12, "The Health Professions Education Assistance Act of 1963." State and local health departments have long been handicapped by a shortage of qualified health personnel. We consider the benefits provided in H.R. 12 to have vast potential toward resolving this barrier hindering the advance of many urgently needed public health programs. We trust that the Interstate and Foreign Commerce Committee will act favorably toward this legislation and would greatly appreciate having this telegram included in the record of the hearings just concluded.

RALPH E. DWORK, M.D.,
Director, Ohio Department of Health.

THE OHIO STATE UNIVERSITY,
Columbus, Ohio, February 7, 1963.

Hon. OREN HARRIS,
House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: It is my understanding that hearings are now underway before the House Interstate and Foreign Commerce Committee on H.R. 12, dealing with educational assistance to the health professions. One provision of the bill authorizes loans to students in medicine, osteopathy, and dentistry.

Since optometry at the Ohio State University is now a 5-year course, with a possibility of being extended to 6 years in the near future, some of our students would be helped considerably if they, too, could be eligible for such loans. Most of our students come from families of modest means and many of them are contributing substantially to the costs of their education. Some students are wholly self-supporting. Where loans can be made available, it often is possible for a student to reduce his employment and thereby do much better at his studies than he did before.

Since Arkansas does not have a school or college of optometry, some of our students come from your State. However, out-of-State students are required to pay about $450 more than Ohio residents, and they are to that extent even in greater need of financial assistance than Ohio students, who pay a university fee of $441 per year, not including books, incidentals, and room and board.

Even in Ohio, where this school supplies most of the new optometrists, the number in practice has declined slightly during the past 10 years despite the need for more with the growth in population.

I should appreciate the addition of optometry students to the list of those eligible for such loans so that young men and women interested in the profession of optometry need not be prevented from choosing optometry because of financial limitations.

Our own alumni and those of other schools are sufficiently interested in this problem that they are contributing increasingly larger sums for scholarships. But the availability of Federal loans would be of important additional assistance.

Sincerely,

FREDERICK W. HEBBARD, Ph. D.,
Associate Director.

HARVARD SCHOOL OF PUBLIC HEALTH,
Boston, Mass., February 8, 1963.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. HARRIS: I write as dean of the faculty of public health at Harvard University to endorse your bill, H.R. 12, and to urge its favorable consideration by the committee. Aside from the obvious need for more practicing physicians and dentists in this country, it should be noted that an increase in the number of graduates from medical and dental schools would help to alleviate the shortage of graduate-trained public health personnel since more physicians and dentists would be available to pursue this specialty.

The school which I administer cannot increase enrollment without first adding teaching facilities. We have learned from our efforts in this direction that such expansion is dependent upon substantial Federal assistance because private sources of support regard the preparation of health personnel for public service as primarily a public responsibility.

Your committee and the Congress have accepted the principle of Federal participation in graduate public health education through the provision of fellowships and teaching grants. My colleagues and I appreciate this very helpful support and would welcome the logical extension of Federal assistance to the construction of needed public health teaching facilities.

With best wishes,

Sincerely yours,

JOHN C. SNYDER, M.D., *Dean.*

THE UNIVERSITY OF MICHIGAN,
SCHOOL OF PUBLIC HEALTH,
Ann Arbor, Mich., February 8, 1963.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN HARRIS: I understand that you are holding open hearings on H.R. 12, a bill to provide aid to schools of medicine, schools of public health, schools of dentistry, and others. Last year I had the privilege of testifying

before your committee, on behalf of H.R. 4999, and I understand that the version of that bill finally reported to the House by your committee was identical with the text of H.R. 12, as now introduced.

May I take this opportunity, therefore, to reemphasize some of the arguments in favor of this most essential bill. Of the 12 schools of public health in the United States, 6, the University of California at Berkeley, the University of California at Los Angeles, the University of Minnesota, the University of North Carolina, the University of Puerto Rico, and the University of Michigan are State supported. These schools now play a significant role in training students from other States and indeed from other countries. In our own school, for example, more than two-thirds of the students are out of State, far and away the highest percentage of out-of-State students of any school on campus. While the State legislature has steadily, albeit slowly, increased its support for the school of public health, it hardly seems justified to expect the tax funds of a single State to be devoted in higher proportion to a school which is truly national in scope. Similar situations obtain at the other schools of public health.

Our need and the need of other State schools for increased physical facilities is urgent. Not only are we being called upon to accept more students to fill the hitherto unmet needs of public health services but we are called upon increasingly for programs of continuing and postgraduate education to keep currently employed personnel abreast of new developments. Although we currently bring approximately 1,000 public health workers to short courses at Ann Arbor for periods of 2 days to 2 weeks, there is a much greater demand which could better be satisfied if we had facilities to accommodate additional students.

An important role of all schools of public health is that of serving international purposes. Each of the schools has a large percentage of students from other countries, and in our own case the percentage of students from abroad is higher than that of any other school on the campus—and I should note that the University of Michigan ranks among the very top among U.S. universities in respect to numbers of students from other countries. My own personal experience through years of work in an international health agency convinces me that this type of training is exceedingly important for U.S. prestige and influence in the world. To train both these students from abroad and those U.S. citizens interested in service in other countries, greater facilities are urgently needed.

In summary, it seems to me that any objective evaluation clearly justifies the need for Federal aid to the expansion of urgently needed physical facilities in schools of public health. I respectfully urge a favorable vote on H.R. 12.

Very sincerely yours,

MYRON E. WEGMAN, M.D., *Dean.*

NATIONAL TUBERCULOSIS ASSOCIATION,
New York, N.Y., February 11, 1963.

Congressman OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: As managing director of the National Tuberculosis Association, I would like to add the support of this organization to others in the field of public health seeking passage of H.R. 12.

On January 25, 1963, the board of directors of the NTA voted to support H.R. 12 on the grounds that it represented a realistic approach to relieving the shortage of medical personnel.

As the tuberculosis death rate in this country declined and the ratio of physicians to population did not increase, it was difficult to recruit young doctors into the specialty of tuberculosis treatment which years ago had attracted many able doctors because of their personal experience with the disease. Although we are happy fewer medical students and physicians contract tuberculosis, this decline in interest in tuberculosis on the part of young physicians is regrettable because tuberculosis remains our most serious communicable disease in terms of numbers and chronicity. In 1961, over 50,000 new active cases were reported, and yearly case reports include significant numbers of patients who have relapsed. Furthermore, a special concern with tuberculosis has been our best starting point for training in the entire field of chest diseases.

The advent of chemotherapy resulted in a spectacular decline in tuberculosis mortality, but there is fear that irregular use of drugs will lead to an increasing appearance of drug-resistant strains of the tubercle bacillus. In spite of the

availability of a specific therapy, tuberculosis is a disease which needs continuous, lengthy supervision, and discriminative medical judgment must be exerted in most cases if the patient's disease is to be successfully controlled.

Moreover, the great increase in nontuberculous chest diseases has caused increasing alarm among medical authorities. Reports from the Veterans' Administration indicate that the incidence of such diseases in the veteran population has been at a far greater rate than anticipated even a few years ago, and has more than offset the decline in tuberculosis cases in that group. Concern has been expressed over the limited number of medical personnel skilled in the advanced therapeutic techniques necessary for treatment of cases of pulmonary insufficiency.

Pneumonia and influenza have been the fifth cause of death from disease for some years. The increase in cancer of the lung is well known. Deaths from emphysema, a comparatively unimportant disease in the past, have increased sixfold in the past 10 years. With the relentlessly increasing pollution of the atmosphere and the possibility of its adverse effects on respiratory conditions, we cannot afford to be unprepared to treat disease which may well multiply in the decades to come.

The interests of the National Tuberculosis Association have for years extended beyond the field of tuberculosis and respiratory disease into the broad areas of general public health. For instance, the NTA has actively supported the program of the Division of Indian Health. In spite of increased attention and financial support for this program, it is still extremely difficult to obtain physicians to work with the Indian population, except as interns. In spite of the fact that 21 percent of all deaths among Indians in 1961 occurred in infants under the age of 1, it is almost impossible to recruit pediatricians. Admittedly, work in such areas is not always attractive; nonetheless, the law of supply and demand in the medical profession operates to the disadvantage of our Indian population, as it does in many other remote areas.

I am sure that the committee is fully aware of the excessive costs of medical education today which closes the field to many able students unable to finance a career.

Certainly the adequacy of medical services among our people will dictate not only how far we advance in alleviating the problems of degenerative disease, which assume more and more importance as our population ages, but it will affect all phases of our progress as a nation.

As an organization working for the optimum development of our human resources, we urge the passage of H.R. 12 as a logical step toward the alleviation of a serious problem.

Sincerely yours,

JAMES E. PERKINS, M.D., *Managing Director.*

ALDERSON-BROADDUS COLLEGE,
Philippi, W. Va., February 8, 1963.

Hon. OREN HARRIS,
Chairman, House Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR REPRESENTATIVE HARRIS: We wish to thank you for your bill H.R. 12, the health profession education assistance bill. We are writing our Congressman, Harley O. Staggers, urging his support of this much-needed legislation.

It seems imperative that this financial aid to professional nursing education become a reality if we are to meet the nursing and health needs of society.

We do appreciate your sincere interests in this important legislation.

Sincerely,

LORITA DUFFIELD,
Chairman, Department of Nursing.

U.S. CONFERENCE OF CITY HEALTH OFFICERS,
Washington, D.C., February 8, 1963.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: The U.S. Conference of City Health Officers, whose membership is composed of health departments of major cities, is very much

concerned with the training of the personnel to meet growing health demands. Few citizens—inside or outside the public health professions—could read the report (H. Rep. 1489) by the Committee on Interstate and Foreign Commerce on a similar bill (H.R. 4999) in the 87th Congress without becoming convinced of the Nation's need for this legislation.

In Philadelphia, where I am commissioner of the department of public health, a couple of statistics are enough to indicate some of the lacks which H.R. 12 would help fill. As of March 12, 1962, when the latest survey was completed, 24 hospitals in Philadelphia needed 387 interns and 282 were matched in the national intern matching program—leaving 105 unfilled internships, or 27.1 percent. Even so, the Philadelphia picture was brighter than the national average of 46.9 percent unfilled internships. As of now, 41 hospitals in the Delaware Valley Hospital Council report vacancies in 11 categories—including unfilled assignments for 448 registered nurses, 164 licensed practical nurses, and 41 laboratory technicians.

The general need for enactment of H.R. 12 is summed up for many conference members by a report to me by Dr. George James, commissioner of health in New York City:

"I am deeply concerned about the need for support and expansion of our medical schools and other graduate schools in the health professions as proposed in H.R. 12.

"Every day I am confronted with problems arising from the shortage of trained health professionals such as doctors, dentists, nurses, engineers. This shortage is nationwide in scope and will certainly get worse without constructive action as our population booms in the immediate years ahead. It has curtailed expansion in many areas and has forced us not to implement new programs.

"Although great benefits have been realized as a result of research, much more can be expected. Much of this research has been conducted in our medical schools. These schools have been able to expand their research facilities substantially as a result of wise governmental and voluntary health organization and foundation support. However, they do not get appropriate support for one of their primary purposes—the training of enough first class physicians to meet present and future needs. The same is true regarding financial aid to the schools of public health whose graduates play an important role in the delivery of health services across the Nation.

"As a result of the expansion of health research and teaching responsibilities of our medical and public health schools, there has been too little expansion, rehabilitation, and remodeling of existing facilities for the training for doctors, dentists, and professional public health workers. There has even been deterioration in the facilities of some schools. No realistic prospects of correcting these various deficiencies can be expected except by congressional action such as H.R. 12.

"I urge full support of H.R. 12. The need for many more qualified professional personnel in medicine, dentistry, nursing, and other public health personnel is crucial especially in the older age brackets in terms of our expanding population and the current shortages of skilled health personnel. Funds are desperately needed."

We would be pleased if you would make this letter a part of the record of the hearings just completed.

Very truly yours,

EUGENE A. GILLIS, M.D.

STATEMENT IN SUPPORT OF HEALTH PROFESSIONS EDUCATION ASSISTANCE ACT OF 1963 SUBMITTED TO HOUSE OF REPRESENTATIVES COMMITTEE ON INTERSTATE COMMERCE ON BEHALF OF THE AMERICAN CANCER SOCIETY, INC., BY HAROLD S. DIEHL, M.D., SENIOR VICE PRESIDENT FOR RESEARCH AND MEDICAL AFFAIRS AND DEPUTY EXECUTIVE VICE PRESIDENT

Mr. Chairman and members of the committee, the legislative committee and the board of directors of the American Cancer Society directed that I convey to you the society's earnest and strong support of H.R. 12—A bill to increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes.

The American Cancer Society is convinced that the provisions of this bill are essential for progress in the alleviation of suffering and the prevention of unnecessary deaths from cancer. This same is true also for various other diseases.

However, since the society which I represent is concentrating its efforts upon cancer, my comments will relate primarily to this disease.

The first part of this bill provides grants on a matching basis for the construction of teaching facilities for physicians, dentists, and other health service personnel. The need of more physicians to provide adequate medical care for the increasing population of our country is too well accepted to require argument or documentation. Yet, the urgency of this need is particularly impressive to those of us who are devoting ourselves and our efforts to the control of cancer. This is because we have available the scientific knowledge necessary to save fully half of the 450,000 persons in this country who each year develop cancer. We are, however, saving only approximately one-third of these. In other words, we have the medical and scientific know-how to save an additional 75,000 persons who each year die from this disease.

To accomplish this we need not only the understanding and cooperation of the public but also more physicians to conduct the regular thorough physical examinations upon which the early diagnosis of cancer so largely depends. As illustrations of what I have in mind, let me mention briefly two types of cancer: cancer of the uterus and cancer of the colon and rectum.

Deaths from cancer of the uterus in this country have been reduced from 25 per 100,000 women in 1940 to 14 per 100,000 in 1960. This is a magnificent achievement. Yet for those who understand the situation, any feelings of satisfaction are offset by the knowledge that practically all of the 14,000 women who are dying annually from this type of cancer are dying unnecessarily.

I say unnecessarily because the patient and dedicated research of Dr. George N. Papanicolaou has given us a procedure which if properly and universally utilized could result in the complete eradication of this tragic form of cancer. The first step in the accomplishment of this is for all adult women to have regular physical examinations including what is now commonly called the "Pap test."

The American Federation of Women's Clubs, the American Farm Bureau Federation, the National Home Demonstration Council and other groups are cooperating with the American Cancer Society in bringing this message to the women of our country. However, if all women were to request these tests as we urge, there would not be enough physicians and other trained personnel to carry them out.

My other illustration, cancer of the colon and rectum causes about 40,000 deaths annually in this country, approximately equally divided between men and women. These cancers, which develop in the lining of the colon and rectum, can usually be recognized when they are still small enough to be curable. The usual procedure for discovery of these early cancers is a proctosigmoidoscopic examination. Such examinations if included in regular physical examinations could save the lives of about 28,000 men and women whose lives are sacrificed annually to this type of cancer.

The American Cancer Society's public education program urges such examinations. However, most physicians are so busy taking care of sick people that they could not possibly perform these examinations for even a substantial proportion of the adult population.

To these two illustrations I might add that as the number of older persons in our population increases, more cancer patients will need the specialized medical care which can be rendered only by physicians and other health service personnel.

The American Cancer Society therefore has a very special interest in having available an adequate number of well-trained and cancer-conscious physicians. To provide these the teaching facilities of existing medical schools must be expanded and improved and new medical schools must be developed.

Part C of this bill provides for loan funds for students of medicine, dentistry, or osteopathy. It is obvious that if we are to have more physicians, more dentists, and more medical investigators, we must have an adequate number of high-quality medical and dental students. It is the purpose of this section of the bill to help provide more such students for the health professions.

The expenses of attending medical school today are vastly greater than when I was a student, and the possibilities of earning money while so doing are distinctly less. Furthermore, today a large percentage of potential medical students are married before they are ready to enter medical school. In fact, of last year's medical graduates 24 percent had been married before entering medical school and 36 percent were married while in school. Many wives of mar-

ried students work to help support their husbands in school but the arrival of children frequently puts an end to this at the same time that it increases financial obligations. We may not look with favor upon these early marriages; they are, however, among the facts of life which we must face realistically.

Another disturbing fact is that more than half of our medical students come from the 10 percent of families with incomes of $10,000 or more per year. In other words, about half of our medical students come from the 10 percent of upper-income families. Incidentally, as I am sure many of you realize from personal experience, it is not easy today, even with an annual income in excess of $10,000, to finance the college education of one's children even if they do not aspire to the long expensive education required for medicine, dentistry, or medical research.

Business, industry, and intellectual activities of all types are competing for able young men and young women. In this competition, recruitment for medicine and the other health professions is handicapped by the length and the costs of training and the inadequacy of financial aids. To maintain adequate and high quality health service, we must be able to recruit a fair share of America's finest minds for the medical and allied professions. And recruits for professions which serve all of our citizens should come from all walks of American life without financial roadblocks diverting them to other vocations or occupations.

Superior ability and the desire to be of service to others, are not limited to the children of parents in the upper-income brackets. If loan funds under the liberal conditions provided by this bill become available, I am convinced that many more able and dedicated young men and young women will prepare themselves for careers in the health professions.

The American Cancer Society believes that the provisions of this bill for financial assistance to qualified students and for the expansion of training opportunities are basic and essential to the provision of the quality of medical care which should be available to our citizens.

In conclusion, I would like to emphasize that in urging passage of this bill the American Cancer Society is speaking not for itself but rather for the hundreds of thousands of men, women, and children in this country who are victims of cancer and for the tens of thousands each year in whom the development of the disease might be prevented.

I thank you.

THE UNIVERSITY OF NORTH CAROLINA,
SCHOOL OF PUBLIC HEALTH,
Chapel Hill, February 8, 1963

HON. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. HARRIS: It is understood that the Committee on Interstate and Foreign Commerce is now considering the Health Professions Educational Assistance Act (H.R. 12) and is holding hearings upon it. This is written in support of this bill to express the hope that the committee will report it favorably and that it will be favorably acted upon by the House of Representatives. It is also respectfully requested that this letter be made a part of the record of the hearings.

There is probably no more pressing health need in the United States than for an increase in the number of people in the health professions, especially for physicians, dentists, nurses, and public health workers. In the field of public health particularly, this need is distressingly acute. Not only are there, at the present time, insufficient personnel employed in the field but approximately one-third of those so employed to do work of a professional nature are without professional training in public health. The enactment of the Health Professions Educational Assistance Act would go a very good way toward making it possible to meet some of these needs both by providing additional facilities and by providing for student loans.

The bill has my support and that of the entire faculty of this school and, indeed, I am sure practically all who are concerned with professional education in the health disciplines. We hope that it will be enacted at an early date.

Sincerely yours,

R. E. COKER, Jr., *Acting Dean.*

CALIFORNIA COLLEGE OF MEDICINE,
OFFICE OF THE PRESIDENT,
Los Angeles, Calif., February 4, 1963.

HON. HARRY R. SHEPPARD,
House Office Building, Washington, D.C.

DEAR CONGRESSMAN SHEPPARD: This is relative to some legislation that probably is to be introduced in the House, involving aid to medical education. As you may be aware, we are a new medical school and have a long way to go. Without any endowment you can appreciate what a difficult chore it is to develop a medical school with the high costs of modern education.

As I understand it, this is a bill for conconstruction aid. I sincerely hope that when this comes to your attention you will attempt to include a provision for schools which do not have matching funds. There should be some kind of an escape clause to assist the institutions that really need help. The way the bill is set up now it will help those most who do not need the help. In other words, "them that has, will get." There should be some criteria set up—say schools less than 10 years old—to aid schools that need this kind of support, to obtain a grant outright for construction purposes. A matching plan, as far as this school is concerned, would be of very little use to us. We do not have the money with which to match, and if we do the sum total is so small it cannot meet our need.

An example in point is our most pressing need of a new multipurpose building to house the library, the basic science laboratories, research laboratories and offices for the faculty. Conservative estimates I get on such a facility are $8 to $10 million. On a matching plan we would have to have $5 million, and we just haven't any chance of getting it. And yet, this is essential to train a doctor according to modern standards.

When next you are in the Los Angeles area, if at all possible, please come and visit California's newest medical school and meet some of our faculty members. Anything you can do to assist a small, struggling medical school will be greatly appreciated.

Yours truly,

W. BALLENTINE HENLEY, *President.*

CALIFORNIA COLLEGE OF MEDICINE,
OFFICE OF THE PRESIDENT,
Los Angeles, Calif., February 14, 1963.

HON. HARRY R. SHEPPARD,
Member of Congress, 33d District, California,
House Office Building, Washington, D.C.

DEAR CONGRESSMAN SHEPPARD: Thank you for your letter of February 8 and the enclosed copy of H.R. 12. I have read with interest the pages which you indicated. This bill, which is a matching plan (for us, 2 for 1) still puts us in the position of having to raise a rather substantial amount of money to meet the high demands which are being made by our accreditation by the American Medical Association.

For example, as I said in my previous letter, we are in need of a facility which is estimated to cost $8 to $10 million. On a matching basis we would have to have at least $3 million to build what everyone feels is our No. 1 need.

I would be greatly indebted if you could find it possible to place the story of our need before the Committee on Interstate and Foreign Commerce. Also, I would very much appreciate being kept informed as to how this bill proceeds.

This school is tax exempt as an eleemosynary institution, and is governed by a self-perpetuating board of lay trustees. I am taking the liberty of enclosing the school bulletin and our 1962 annual report for your perusal.

You probably know that, according to Governor Brown's study, to maintain the present doctor-patient ratio in California by 1970 we will need five additional medical schools. It is estimated that it takes 12 years to put the first class into the field at a minimum expenditure of $25 million for the school. This college is an accredited school, in existence, with an established faculty, a complete program, and a freshman, sophomore, junior, and senior class in matriculation. We will graduate 85 M.D.'s next June. However, it is a school that does need financial assistance if we are to continue existence.

If this information suggests any further questions, please do not hesitate to ask. We sincerely appreciate your interest and concern.

Yours truly,

W. BALLENTINE HENLEY, *President.*

(NOTE.—The school bulletin and the 1962 annual report, referred to above, have been placed in the committee files.)

The CHAIRMAN. The committee is adjourned.

(Whereupon, at 4 p.m., the committee adjourned.)

○

