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AID TO MEDICAL EDUCATION

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HEARINGS

BEFORE THE

SUBCOMMITTEE ON HEALTH

OF THE

COMMITTEE ON

LABOR AND PUBLIC WELFARE

UNITED STATES SENATE

EIGHTY-FOURTH CONGRESS

FIRST SESSION

ON

S. 1323

A BILL TO AUTHORIZE A 5-YEAR PROGRAM OF GRANTS
FOR CONSTRUCTION OF MEDICAL EDUCATIONAL AND
RESEARCH FACILITIES

S. 434 (Part E)

A BILL TO FACILITATE THE BROADER DISTRIBUTION OF
HEALTH SERVICES, TO INCREASE THE QUANTITY AND
IMPROVE THE QUALITY OF HEALTH SERVICES AND
FACILITIES, AND FOR OTHER PURPOSES

MAY 5 AND 6, 1955

Printed for the use of the Committee on Labor and Public Welfare



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AID TO MEDICAL EDUCATION

THURSDAY, MAY 5, 1955

UNITED STATES SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
SUBCOMMITTEE ON HEALTH,
Washington, D. C.

The subcommittee met, pursuant to notice at 10:15 a. m., Senator Lister Hill (chairman) presiding.

Present: Senators Hill and Lehman.

Also present: Mr. William G. Reidy, professional staff member.

The CHAIRMAN. The committee is meeting this morning to consider Senate bill 1323 and part E of Senate bill 434.

Both of these bills have to do with the question of providing Federal assistance to medical schools.

Senate 1323 proposes a 5-year program of financial assistance. Part E of Senate 434 provides a public program of Federal aid to be used not only for construction but to help defray the cost of maintenance and operation as well.

At this point we will put these two bills in the record.

(The bills referred to, S. 1323 and S. 434, and the reports of the Department of Health, Education, and Welfare, and of the Bureau of the Budget follow:)

[S. 1323, 84th Cong., 1st sess.]

A BILL To authorize a five-year program of grants for construction of medical educational and research facilities

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 "Medical Educational Facilities Construction Act of 1955".

SEC. 2. The Public Health Service Act, as amended, is amended by adding at the end thereof the following new title:

"TITLE VII—MEDICAL EDUCATIONAL FACILITIES CONSTRUCTION PROGRAM

"SEC. 701. The Congress hereby finds and declares that—

"(a) the health, both physical and mental, of the people of this country is of paramount concern to the national welfare;

"(b) the medical schools are responsible for the quality and number of physicians being educated today, including those preparing for general practice and the specialties, covering both physical and mental health;

"(c) the medical schools are also responsible for the number of teachers and research workers through the education they provide for graduate students in the basic medical sciences, in clinical medicine, and in the other health sciences;

"(d) the Nation, through the Federal Government, industry, foundations, and the voluntary health agencies, expects our medical schools to conduct urgently needed research which these various agencies are sponsoring;

"(e) accordingly, the welfare and particularly the growth and development of our medical schools are matters of national concern worthy of bipartisan support;

"(f) although tuition fees have been substantially increased, the income from this source represents only a small portion of the costs of medical education and further increases in tuition fees would create a major economic barrier to the study of medicine;

"(g) despite contributions of many of our citizens and the development of funds and foundations to encourage the medical profession, individuals, and industry to participate in financing the basic operating expenses of our medical schools, such schools have not been able to obtain the necessary capital funds required for urgently needed alteration, modernization, and construction; and

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

"DEFINITIONS

"SEC. 702. As used in this title—

"(a) The term 'construction' includes construction of new buildings, and expansion, remodeling, and alteration of existing buildings, including architect's fees in excess of amounts granted under section 704 (a) (3), but excluding the cost of off-site improvements and the cost of the acquisition of land;

"(b) The term 'nonprofit' means 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; and

"(c) The term 'accredited medical school' means a school providing training leading to the degree of doctor of medicine, approved or accredited by a recognized body or bodies approved by the Surgeon General after he has obtained the advice and recommendation of the Federal Council on Medical Educational Facilities created under section 703.

"SEC. 703. (a) There is hereby created a Federal Council on Medical Educational Facilities (hereinafter referred to as the Council) consisting of the Surgeon General, who shall serve as Chairman ex officio, and twelve members appointed without regard to the civil-service laws by the Surgeon General with the approval of the Secretary of Health, Education, and Welfare. Six of the appointed members shall be selected from the general public and six shall be selected from among leading medical or scientific authorities who are skilled in the sciences related to health.

"(b) The Council shall advise, consult with, and make recommendations to, the Surgeon General in connection with payments out of appropriations authorized by section 704 and on other matters relating to the administration of this title.

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 704. (a) There is hereby authorized to be appropriated for the fiscal year ending June 30, 1956, and for each of the four succeeding fiscal years, the sum of \$50,000,000 to enable the Surgeon General, upon the recommendation of the Council, to make grants for construction to assist in the establishment of new public or nonprofit medical schools and in the improvement and expansion of teaching and research facilities of existing accredited public or nonprofit medical schools necessary to carry out the provisions of section 701. 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) where the school gives satisfactory assurances that the freshman enrollment will be increased by 5 per centum of the 1954-1955 freshman enrollment, the grant shall be made in an amount equal to 66 $\frac{2}{3}$ per centum of the cost of construction;

"(2) in the case of new schools, grants may be made, upon recommendation of the national accrediting agencies, in an amount not to exceed 66 $\frac{2}{3}$ of the cost of construction; and

"(3) upon application of any medical 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.

"(b) No grant or grants shall be made to any one medical school in excess of \$3,000,000 for the total five-year program authorized in this section, exclusive of amounts granted under subsection (a) (3) of this section.

"(c) Funds appropriated pursuant to this section shall remain available for the fiscal year in which appropriated and the two succeeding fiscal years.

"(d) Except as provided in subsection (a) (2) of this section, payments from appropriations under this section may be made only in the case of accredited medical schools.

"APPLICATIONS BY MEDICAL SCHOOLS FOR GRANTS

"Sec. 705. Any new or existing public or nonprofit medical 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. 706. (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 school from appropriations under section 704 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 new construction may, at the discretion of the applicant, be allocated to permanent endowment for the cost of maintenance of the new facility.

"REGULATIONS

"SEC. 707. All regulations under this title with respect to payments to medical schools shall be made only after obtaining the advice and recommendation of the Council.

"GENERAL PROVISIONS

"SEC. 708. Nothing in this title shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any control over, or prescribe any requirements with respect to, the curriculum or administration of any medical school, or the admission of applicants thereto."

TECHNICAL AMENDMENTS TO ACT OF JULY 1, 1944

SEC. 3. The Act of July 1, 1944 (58 Stat. 682), as amended, is hereby further amended by changing the number of title VII to title VIII and by changing the numbers of sections 701 to 714, inclusive, and references thereto, to sections 801 to 814, respectively.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, D. C., June 7, 1955.

HON. LISTER HILL,
Chairman, Committee on Labor and Public Welfare,
United States Senate.

DEAR MR. CHAIRMAN: This is in response to your request of March 5, 1955, for a report on S. 1323, a bill to authorize a 5-year program of grants for construction of medical educational and research facilities.

For the convenience of the committee this report also includes brief comment on the proposals contained in S. 434 with respect to Federal assistance to schools of medicine and nursing.

S. 1323 proposes authorization of \$50 million a year for a 5-year period, beginning with fiscal year 1956, for construction grants to accredited public and private nonprivate medical schools for new schools or for the improvement and expansion of teaching and research facilities in existing schools. Amounts appropriated annually would be available for the 2 succeeding fiscal years.

There would be a ceiling of \$3 million for any 1 school for the 5-year period. Individual construction grants would be limited to 50 percent of construction costs for existing schools, except that in the case of a school which gave satisfactory assurances of a 5-percent increase in freshman enrollment over that for the academic year 1954-55 the grant is directed to be made in an amount equal to 66⅔ percent of the cost of construction. Also, in the case of new schools, the grant could be made up to a ceiling of 66⅔ percent. An additional grant not in excess of \$25,000 could be made for planning. In the case of any grant for new construction the school would have the option of allocating up to 20 percent of the amount of the grant to permanent endowment for the cost of maintenance of the new facility.

Almost without exception, the medical schools on which we must rely for the necessary numbers of properly qualified physicians, teachers, and research scientists are faced with serious financial difficulties. Many are housed in buildings half a century or more old. A new school, including teaching hospital and related research facilities, could cost in the neighborhood of \$25 million. The costs involved in reconstructing and modernizing old facilities are likewise great. Costs of instruction far exceed tuition payments. Additional sources of funds, both for operating expenses and for capital investment, are urgently needed. Further increases in tuition fees would create an undesirable and major economic barrier to many qualified students. Funds for the support of medical education raised through the strenuous efforts of private groups have not so far met the necessary costs of operation and maintenance. These facts indicate that our medical schools need some new sources of revenue as well as increased revenues from sources now available.

However, other branches of higher education are experiencing financing difficulties. Bills such as S. 1323 for direct Federal aid to one branch of higher education must inevitably raise the question of the Federal Government's role in the financing of higher education in this country, and if that role is to be limited to selected areas of higher education, it would appear that some criteria for Federal aid should be established.

We believe that if Federal aid were contingent upon expansion of medical school enrollments, there might well be a valid basis for singling out medical schools for one-time Federal grants, in that the increase in the overall supply of physicians is an important goal in improving our national health. However, S. 1323 is not so contingent, and hence provides no assurance of increased enrollments. It also provides for endowment funds for maintenance. We fully recognize the problems of expanding enrollments when medical schools are already running at a deficit, and the undesirability of inducing expansion unless quality can be maintained. Nevertheless, as the Federal agency concerned with the field of education generally, as well as health, we must view the question of Federal aid for higher education in its entirety.

This Department believes that it would be preferable to consider Federal aid to medical education, as proposed in S. 1323, as a part of a broader inquiry into the costs of higher education, the problem of how those costs can best be met, and the basic question of the appropriate role of the Federal Government. We are exploring these problems within the Office of Education, and, if implementing funds requested in the President's budget were made available, these problems would be appropriate subjects for intensive inquiry initiated upon recommendation of the National Advisory Committee on Education and conducted under the program of cooperative research (as authorized by Public Laws 531 and 532, 83d Cong., 2d sess.). The report of the Commission on Intergovernmental Relations which will soon be available may prove valuable in the development of sound positions on these questions.

S. 434, also before your committee for consideration, proposes to amend the Public Health Service Act by the addition of a new title VII, part E of which would authorize a program of Federal payments to approved schools of medicine and nursing (a) for costs of maintenance and operation, based on enrollment with an incentive payment for increased enrollment, and (b) for construction and equipment up to 50 percent of the cost of the project. For grants to assist the schools in meeting operational costs, the bill would authorize annual appropriations in amounts necessary to meet the annual per student payments specified. These amounts are specified in the statute only for the 3 fiscal years 1956, 1957, and 1958. For grants for construction, the bill would also authorize appropriations in amounts necessary, but eligibility is limited to schools filing applications prior to July 1, 1961, and grants would be required to be made in the order of estimated importance or value of the construction or equipment in alleviating the shortage of medical or nursing personnel.

The views earlier expressed in this report in connection with the general question of Federal aid to training institutions are equally applicable to this proposal. We would be particularly opposed to Federal assistance for general operational costs—for schools of nursing, for schools of medicine, or for other areas of higher education—pending thoroughgoing consideration of the entire problem of Federal aid to higher education.

On the question of construction grants for schools of nursing, so far as we know the limitations of existing physical facilities are not the major effective obstacles to desirable increases in well qualified nursing personnel.

Unlike S. 1323, the construction grant proposed in S. 434 is clearly linked to expansion of enrollment capacity in that it requires an appraisal of each individual construction project in terms of its contribution toward alleviating personnel shortages. Also, relationships between this program and the hospital survey and construction program are made explicit. Clarification and greater specificity on key features of the proposal would be desirable if this bill is considered for enactment.

The Bureau of the Budget advises that it perceives no objection to the submission of this report to your committee.

Sincerely yours,

OVETA CULP HOBBY, *Secretary.*

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C., June 8, 1955.

HON. LISTER HILL,
*Chairman, Committee on Labor and Public Welfare,
United States Senate, Washington 25, D. C.*

MY DEAR MR. CHAIRMAN: This is in response to your letter of March 5, 1955, requesting the views of the Bureau of the Budget on S. 1323, a bill to authorize a 5-year program of grants for construction of medical education and research facilities. For the convenience of the committee our comments are also related to S. 434.

This bill would authorize a 5-year grant program to assist accredited medical schools in financing construction of educational and research facilities. Appropriations of \$50 million for each of the 5 years would be authorized. Each grant would be limited to 50 percent of the cost of construction, except that the grant could equal two-thirds of the cost of construction for new schools and for schools which give assurances of a 5-percent increase in the freshman class. The total of grants which may be made to any 1 school over the life of the program is limited to \$3 million. The bill would also permit, at the option of the applicant, retention, of up to 20 percent of a grant for new construction as a permanent endowment for the cost of maintenance of the new facility. A Federal Council on Medical Educational Facilities would be established to advise and make recommendations to the Surgeon General on the program.

It is recognized that many universities and professional schools are faced with financial difficulties both in terms of operating expenses and the need for capital expansion and improvement. There is also a shortage of highly qualified scientific and professional personnel to staff these institutions and to further the progress of scientific research in our universities and colleges. Efforts to solve or remedy these difficulties are being made by educators, industry, and Government.

The National Fund for Medical Education, for example, has devoted its efforts to raising unrestricted funds for medical schools. Many business and industrial establishments are making grants of funds to such schools and to other research and educational institutions. Some of the States have increased their appropriations for support of these institutions.

In addition, the Federal Government, through the various agencies interested in the training and development of scientific and other professional personnel, is supporting scholarship, fellowship, and training programs for individuals. Research grants and contracts awarded by the Federal Government are also providing a stimulus for the improvement of facilities of educational and research institutions. Through these comprehensive programs, the Federal Government is providing a significant measure of support for medical as well as other scientific fields of education.

While the financial problems of new construction for our medical schools are serious, similar problems are being encountered by higher education generally.

We believe that it is essential for any proposal for legislation in this field to be preceded by careful studies which will analyze the needs of educational institutions and the appropriate role of the Federal Government in financing them. Such an inquiry can be undertaken most appropriately by the Department of Health, Education, and Welfare. As the committee knows, the Federal Government has provided only limited support for institutions of higher learning in the United States. Traditionally such institutions have obtained most of their support from other sources. We believe that action by the Congress contemplating a departure from the historical patterns of financing should await the results of a study of and an evaluation of the possible alternative solutions which may be developed.

S. 434, which is also before your committee, includes in part E of title VII provision for a program to increase enrollments of medical and nursing schools by payments to schools of medicine and nursing for costs of operations in addition to grants for construction and equipment of such schools. The above comments apply with equal force to that proposal.

Sincerely yours,

DONALD R. BELCHER,
Assistant Director

[S. 434, 84th Cong., 1st sess. (Part E)]

A BILL To facilitate the broader distribution of health services, to increase the quantity and improve the quality of health services and facilities, and for other purposes.

* * * * *

"PART E—ASSISTANCE TO MEDICAL AND NURSING SCHOOLS

"APPROPRIATIONS AUTHORIZED FOR AID TO SCHOOLS

"SEC. 741. It is the purpose of this part to provide assistance in maintaining and increasing the number of individuals trained annually in the fields of medicine and nursing. It is the finding of Congress that there is a shortage of physicians and nurses essential to maintaining and improving the Nation's health, that these are the most serious and urgent of the personnel shortages affecting the Nation's health, and that payments to schools to alleviate such shortages must be undertaken at the earliest possible date. There is hereby authorized to be appropriated for the fiscal year ending June 30, 1956, and for each fiscal year thereafter, such sums as may be necessary to make the payments provided in this part.

"APPLICATIONS BY SCHOOLS FOR PAYMENTS

"SEC. 742. Any new or existing school desiring payments under section 741 may file an application with the Surgeon General for the fiscal year in which such payments are desired. Such application shall contain such information as the Surgeon General may by regulation prescribe and shall contain adequate assurance that—

"(1) the school has been certified by the State health authority as an institution (A) no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual, and (B) is or will be accredited under the State law as a school providing training leading to the degree of doctor of medicine, or to a degree in nursing or to a diploma as a professional nurse; and

"(2) the school does not and will not impose any unreasonable restrictions upon the admission of out-of-State students; and

"(3) the school will submit from time to time such reports as the Surgeon General may find necessary to carry out the purposes of this part, and will comply with such other conditions as may, subject to the provisions of section 746, be prescribed in regulations.

"PAYMENTS BASED ON ENROLLED STUDENTS

"SEC. 743. (a) Payments under section 741, for each of the fiscal years ending June 30, 1956, June 30, 1957, and June 30, 1958, shall be made by the Surgeon General to any school, which has submitted and had approved by him an application in accordance with section 742, based upon the number of students enrolled therein for such fiscal year as follows:

"(1) To each school of medicine which provides training leading to a degree of doctor of medicine, (A) the sum of \$500 for each enrolled student, plus (B) an additional sum of \$1,000 per student to the extent that the present enrollment is in excess of the average past enrollment;

"(2) To each school of nursing which provides basic or advanced training leading to a degree in nursing, (A) the sum of \$200 for each enrolled student, plus (B) an additional sum of \$1,000 per student to the extent that the present enrollment is in excess of its average past enrollment;

"(3) To each school of nursing which provides basic training leading to a diploma as a professional nurse, and which provides tuition, books, and other facilities and services needed in such training and board and lodging during such training to all students without charge therefor, the sum of \$200 for each student enrolled in the first year of training, \$150 for each student enrolled in the second year of training, and \$50 for each student enrolled in the third year of training.

"(b) In calculating the extent to which present enrollment is in excess of the average past enrollment under paragraphs (1) (B) and (2) (B) of the preceding subsection (a), the present enrollment shall in no event be calculated at a figure in excess of 5 per centum more than the highest previous enrollment in the school. The average past enrollment of any school shall be the average of its enrollments during the fiscal years ending June 30, 1953, June 30, 1954, and June 30, 1955. However, any of these three fiscal years shall be excluded from the computation if the number of years of training offered by the school during that year is less than the number of years of training offered during the fiscal year for which payment is to be made. If all of these three fiscal years are hereby excluded, the school shall be paid, for each student enrolled therein, the sum of \$750, in the case of medical schools, and the sum of \$600, in the case of nursing schools of the type described in subsection (a) (2) of this section.

"(c) The purpose of this section 743 is to provide payments to schools toward the costs of establishing, maintaining, and enlarging their staffs and of maintaining and operating their facilities (including the acquisition of equipment).

"GRANTS FOR CONSTRUCTION AND EQUIPMENT

"SEC. 744. (a) The Surgeon General may make payments under section 741 of grants for construction and equipment to assist in the establishment of new schools and improvement and expansion of existing facilities (including teaching hospitals and other related facilities and including equipment thereof). The Surgeon General, after consultation with the Federal Health Council, shall make such grants in the order of the estimated importance or value of the construction and equipment in alleviating the shortage of personnel adequately trained in the medical and nursing fields. No such grant shall be in excess of 50 per centum of the cost of the construction and equipment with respect to which it is made.

"(b) Payments may not be made for the construction and equipment of any new school or of any addition to an existing school, except upon the filing of an application prior to July 1, 1961, which shall contain adequate assurance that the school will, upon completion of the construction and equipment and for a period of ten years thereafter (comply with the requirements of subparagraphs (1) and (2) of section 742.

"(c) If an application is filed under this section with respect to a facility or part of a facility which also constitutes a 'hospital', 'diagnostic or treatment center', 'rehabilitation center', or 'nursing home' as defined in section 631 of this Act, no payments shall be made pursuant to the provisions of this section unless an application is also made and approved under section 625 or 654 of this Act for Federal assistance in the cost of such construction and equipment. Payments shall be made under section 625 or 654 with respect to so much of the cost of construction and equipment as relates to the hospital, diagnostic or treatment center, rehabilitation center, or nursing home, and shall be made under this section 744 with respect to so much of the cost of construction and equipment as relates to the school. For purposes of administering this section, the Surgeon General is authorized to allocate such costs upon the basis of 50 per centum for the hospital, diagnostic or treatment center, rehabilitation center, or nursing home, and 50 per centum for the school, where in his judgment no better cost allocation can practicably be made.

"PAYMENTS TO MEDICAL SCHOOLS

"SEC. 745. (a) The Surgeon General, in accordance with regulations, shall determine from time to time the amount (or portions thereof) to be paid to each school under this part, and shall, prior to audit or settlement by the General Accounting Office, pay the amount or portions so determined.

"(b) Whenever the Surgeon General, after reasonable notice and opportunity for hearing to a school, finds with respect to payments from appropriations under section 741 that there is a failure to carry out any of the requirements of, or assurances given pursuant to, section 742 or section 744, or to comply with regulations issued in conformity with this part, the Surgeon General shall notify such school that further payments will not be made to it from appropriations under such section until he is satisfied that there is no longer any failure. Until he is so satisfied, the Surgeon General shall make no further payments to such school from appropriations under such section.

"(c) If payments have been made under section 744 for construction of a building or facility to a school which shall, within ten years after completion of construction, fail to carry out any assurance given pursuant to section 744 (b), the United States shall be entitled to recover from the owners of such building or other facility an amount bearing the same ratio to the then value of such building or facility (as determined by agreement of the parties or by action brought in the district court of the United States for the district in which such building or facility is situated) as the amount paid with respect thereto under section 744 was of the total cost of such building or facility.

"REGULATIONS; LIMITATION ON FEDERAL CONTROL

"SEC. 746. The Surgeon General may make such regulations as he may deem necessary or appropriate to effectuate the provisions and purposes of this part. However, except as otherwise provided in this part, nothing in this part shall be construed to authorize any department, agency, officer, or employee of the United States to 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."

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C., March 3, 1955.

HON. LISTER HILL,
*Chairman, Committee on Labor and Public Welfare,
United States Senate, Washington 25, D. C.*

MY DEAR MR. CHAIRMAN: This is in response to your recent requests for the views of the Bureau of the Budget on S. 886, a bill to improve the health of the people by encouraging the extension of voluntary prepayment health services plans, facilitating the financing of construction of needed health facilities, assisting in increasing the number of adequately trained nurses and other health personnel, improving and expanding programs of mental health and public health, and for other purposes; S. 434, S. 929, and S. 1076 which are related bills.

The President in his special health message on January 31, 1955, recommended a broad program of action to meet many of our most pressing health problems. Several bills, including S. 886 and its companion bill H. R. 3458, have been introduced in the Congress to carry out these recommendations: S. 890 provides for extension and strengthening of the water pollution control program; H. R. 3293 provides for an expanded program of medical care for public assistance recipients; and S. 894 and H. R. 3771 provide for a new program to attack the problem of juvenile delinquency.

S. 886 is an omnibus bill consisting of six titles. Title I provides for a program of reinsurance of health services prepayment plans. The reinsurance program has as its purpose the encouragement of private health insurance organizations in the offering of broader benefits and wider coverage. It would particularly emphasize three areas: (a) protection against the high costs of severe or prolonged illness, (b) provision of coverage for individuals and families in rural areas, and (c) provision of coverage relating to home care and physician's office care, as well as hospital care, for individuals and families with average or lower incomes. The bill would authorize the appropriation of not more than \$100 million to provide the necessary operating capital. It is anticipated that the

program would ultimately be self-supporting from premiums paid by the participating health insurance organizations.

Title II provides for a program of mortgage insurance for construction of health facilities. This program has as its purpose the stimulation of the flow of private credit for the construction of needed health facilities through Government insurance of loans made by private lending institutions, without Federal subsidy. Such insurance would be available for the construction of private hospitals, clinics, nursing homes, and other health facilities. An appropriation of \$10 million and such sums as may be necessary thereafter would be authorized for providing the necessary capital for the insurance fund from which the program would be financed. It is expected that premium charges on insured mortgages would maintain the insurance fund on a self-supporting basis.

Title III provides for 5-year program of grants to States for training of practical nurses, patterned after the present Vocational Education Act of 1946. Appropriations of \$2 million for 1956, \$3 million for 1957, and \$4 million for each of the following 3 fiscal years would be authorized.

Title IV would amend the Public Health Service Act by providing for a program of traineeships for the training of professional nurses for teaching, administrative, or supervisory positions and for graduate or specialized training in the several public health specialties.

Titles V and VI also would amend the Public Health Service Act by revising, improving, and simplifying the structure of health grants-in-aid to States. A single grant would replace the present categorical health grants, except that a separate grant for mental health would be authorized for a 5-year period. This and other changes proposed in these titles would permit greater flexibility in the use of Federal funds to meet specific problems of each State.

S. 434 is also an omnibus health bill. It would propose to achieve broader distribution of health services by marked expansion of Federal financial assistance to States and the establishment of a number of new Federal grant programs.

The other two bills, S. 929 and S. 1076, each deal with one program area. S. 929 would provide for a permanent program of grants to States for the training of practical nurses and auxiliary hospital personnel rather than the 5-year practical nurse training proposal in S. 886. S. 1076 would provide for Government loans for the acquisition, construction, and equipping of health facilities to voluntary nonprofit associations offering prepaid health services. Title II of S. 886 provides for Government insurance of private mortgage loans for construction of health facilities rather than direct Federal loans. It also would provide broader coverage than S. 1076.

Enactment of the President's health program would go far toward broadening the distribution and improving the quality of health services without excessive increases in Federal operations or the Federal financial burden. At the same time the program recognizes the primary responsibility of the State and local levels for the health of the community. Since S. 886 embodies the recommendations outlined in the special message, I am authorized to advise you that its enactment would be in accord with the program of the President and that the Bureau of the Budget recommends enactment of S. 886 in preference to S. 434, S. 929, or S. 1076.

Sincerely yours,

DONALD R. BELCHER,
Assistant Director.

The CHAIRMAN. Our first witness is Dr. Howard A. Rusk, department of physical medicine and rehabilitation, New York University, Bellevue Medical Center, and Chief of the Health Resources Advisory Committee of the Office of Defense Mobilization.

STATEMENT OF DR. HOWARD A. RUSK, NEW YORK UNIVERSITY

The CHAIRMAN. Doctor, I have a long list, here, of your many achievements, which I will put in the record. I just want to make it known that you are an old friend of the committee. You have been with us many times and have always been a fine witness and most helpful to us. We very much appreciate your being here this morning.

You may proceed in your own way.

(The biographical sketch above referred to follows:)

BIOGRAPHICAL DATA: HOWARD A. RUSK, M. D.

Dr. Rusk is chairman, department of physical medicine and rehabilitation, New York University, Bellevue Medical Center; associate editor, the New York Times; and chairman, Health Resources Advisory Committee, Office of Defense Mobilization, and National Advisory Committee, the Selective Service System.

He practiced internal medicine in St. Louis, Mo., from 1926 to 1942 and was an instructor at Washington University School of Medicine and associate chief of staff of St. Luke's Hospital. He originated and directed the Army Air Force convalescent rehabilitation training program during World War II in the capacity of colonel in the Medical Corps. For this he was awarded the Distinguished Service Medal.

Dr. Rusk, in recent years, has observed and studied rehabilitation services in Great Britain, France, Italy, Greece, Israel, Poland, Austria, Switzerland, the Netherlands, Denmark, Sweden, Germany, Finland, Japan, and Korea. He served as president of the American-Korean Foundation in 1954 and is currently chairman of its board. In 1954 he was elected president of the International Society of the Welfare of Cripples for a 3-year term.

He has been the recipient of the 1944 American design award; 1948 survey award; 1948 meritorious service award, National Rehabilitation Association; 1951 research award, American Pharmaceutical Manufacturers Association; 1952 Lasker award, American Public Health Association; 1952 Dr. C. C. Criss award; 1952 annual award, National Multiple Sclerosis Society; 1952 award, New York Philanthropic League; 1953 award, Save the Children Federation; 1953 medal of honor, National Association of Women Artists; 1953 annual award, National Foundation for Muscular Dystrophy; 1954 annual award, AMVETS; 1954 gold medal, National Institute for Social Science; 1954 annual award, Modern Medicine; 1954 distinguished service award, Phi Delta Epsilon; 1955 gold medal, International Benjamin Franklin Society; and National Medal of the Republic of Korea.

Dr. Rusk's degrees include the bachelor of arts, University of Missouri, 1923; doctor of medicine, University of Pennsylvania, 1925; doctor of laws (honorary), University of Missouri, 1947; doctor of science (honorary), Boston University, 1949; doctor of laws (honorary), Westminster College, 1950; doctor of laws (honorary), Hahnemann Medical College, 1952.

He is or has been in the past several years consultant in rehabilitation to the United Nations, New York City Department of Hospitals, Office of Vocational Rehabilitation and the Veterans' Administration, and a member of the board or medical advisory committee to the Hospital Council of Greater New York, the National Society for Crippled Children and Adults, American Occupational Therapy Association, Arthritis and Rheumatism Foundation, National Foundation for Infantile Paralysis, International Society for the Welfare of Cripples, Council on Physical Medicine and Rehabilitation of the American Medical Association, New York Heart Association, National Fund for Medical Education, Commission on the Financing of Hospital Care, Armed Forces Medical Advisory Committee, Commission on Chronic Illness, National Multiple Sclerosis Society, New York Health and Tuberculosis Association, the Baruch Committee on Physical Medicine and Rehabilitation, and National Advisory Arthritis and Metabolic Diseases Council, National Institutes of Health.

In addition to his numerous contributions to professional journals and books, encyclopedias and general periodicals, he is coauthor with Eugene J. Taylor of *New Hope for the Handicapped and Living with a Disability*.

Dr. Rusk. I appreciate very much the opportunity to testify before your committee and especially to have the invitation from you, Senator Hill.

I would like to comment on two points, primarily. The first is the problem, and the second is the means provided in these bills to correct it.

I am one who believes very definitely that we have a shortage of physicians. We have 165 million people in this country today, and it is estimated in 1965 we will have 190 million.

In 1941, we had 133 million with 166,000 active physicians, or 1.25 physicians per thousand population.

Now, even with the increase by 1960, or 7,400 graduates from our medical schools, which I know personally strain the facilities available and include the 5 new medical schools that are phasing in.

By 1960 we will again be at the ratio of 1.25 physicians per thousand population, exactly the same as in 1941.

Now, some have said with the antibiotics and with all the advances in medicine, that one physician well trained can handle more people. It has been my own personal experience that every time you make a scientific advance and get more knowledge, you give better care which in the long run really takes more time.

We know what medicine has done in the last decade, especially, and its advances, and I am intrigued by the fact that life expectancy in this country has increased 5 years in the last 10.

The CHAIRMAN. The last 10 years?

Dr. RUSK. Almost 5 years. It is 4.8 years, in the last 10. My distinguished colleagues in medical education will point out the specifics in medical-school personnel needs and shortages, and I would like to just include a single figure in summarizing some of the shortages in medicine and that is that in the 1953 report of the AMA, there were 283 unfilled, full-time position vacancies in the instructional staffs of the medical schools and that did not include the large number of physicians who give part of their time to medical teaching. It did not include the demands for personnel in the new schools.

Now, the hospital house staff situation is even more critical. We have 30,000 approved internships and residencies in the country, today and in 1952 and 1953, 82 percent of the internships and 24 percent of the residencies were unfilled.

Senator LEHMAN. What were those figures again?

Dr. RUSK. There were 30,000 approved internships and residencies and in 1952 and 1953, 82 percent of the internships and 24 percent of the residencies were unfilled.

It is really worse than it sounds because in July 1953, we had 5,589 alien physicians holding appointments as interns, residents and fellows on house staffs in civilian hospitals. That represented 22 percent of the total house staff complement in the United States, and in spite of that we had this 28 percent and 24 percent positions unfilled.

Now, the public health problem is even worse. The last survey in detail that we have had available to us has shown that in budgeted vacancies in existing State and local public health departments, that 20 percent of the position vacancies were unfilled, 21 percent of the dentists, and so on—6 percent of sanitarians, 8 percent public health nurses.

This is a serious thing, not only in the day-to-day care of our people, but in planning for civil defense, the problems that might arise in atomic attack, or biological warfare. That is budgeted vacancies on the level of 1951 and not taking into account the greater demands that are really needed in the public health services today.

The CHAIRMAN. Since they couldn't fill the quota in 1951 they wouldn't be disposed to budget much in the way of additional funds, would they?

Dr. RUSK. No, sir; and with the increased knowledge in the public health field, in the preventive field, I am personally sure that the needs and the desires are higher than they were in 1951.

There are nine public health schools in the country who have 232 full-time faculty members and 262 part-time faculty members.

These schools found that this faculty strength is totally inadequate, but in spite of this fact, there were 131 full-time faculty members needed in our public health schools.

In the problem of mental health is where we really get into astronomical figures.

The CHAIRMAN. You say 232 full-time faculty members now?

Dr. RUSK. With 262 part-time, which we feel is totally inadequate and there is an additional need for 131 full-time faculty members that are not present or available.

The CHAIRMAN. In other words, you need more than 50 percent additional full-time faculty members?

Dr. RUSK. That is right.

Senator LEHMAN. The men are available, but I suppose you refer to thoroughly, well-qualified men?

Dr. RUSK. Well, sir, and the demand in other places for individuals trained in public health, the salary level, the training, the demands for them to be used in the State and local and city programs. They are not available in the present demanding market. I think that would be the simplest way to explain it.

Now, in 1954, we had 8,347 psychiatrists in the United States of whom 2,100 were administrators, superintendents, and commissioners. The American Psychiatric Association has worked out a formula—and it seems to me to be a very reasonable one—there is need for 1 position for every 30 patients under intensive treatment and 1 for every 150 patients under continued treatment.

Our State mental hospitals in 1951 had 1 physician to each 228 patients. The estimates that I was able to get on the need for psychiatrists ranged between 10 and 20,000. I know that there are more than 4,000 budgeted physician vacancies for psychiatrists in publicly maintained mental institutions. The other figure came out of a survey done by the Council of State Governments and published 2 years ago in which they took into consideration the need for mental health clinics for preventive programs, and it is not a firm figure, but as I say it ranges from 10 to 20,000, depending on how psychiatrically oriented you are.

Now, in industrial health, which is an ever-increasing need, I take the figure from the subcommittee on industrial health of the American Medical Association, which was the same figure that we came to in our estimates in the Health Resources Committee some 5 years ago, and that is that there are 1,600 full-time, or equivalent full-time physicians needed in industry, and that is a figure that is 2 years old, and with the expansion that we have had industrially, and with the increasing knowledge of what industrial physicians can do toward the prevention of accidents and the increase in production, I am sure and personally feel that that figure is low.

Now, in the field of rehabilitation, which is my own field, I feel we are probably the most woefully short as in any branch of medicine.

Testifying before this committee last year, this was brought out in the testimony very vigorously. Again, it is difficult to get a real

figure, but if as the plan of the program of rehabilitation is now to increase from a goal of 60,000 rehabilitees last year up to 200,000 in 1959, the 3,000 estimated by the Office of Vocational Rehabilitation, in my opinion, is conservative.

It is conservative because like every other thing in medicine, when you provide a service and can demonstrate what it can do, the need increases by geometric ratio.

We have not had a young man go out of our training program, to establish a rehabilitation service in the hospital or medical school, who has not increased the service from 2 to 400 percent within the first year. And they immediately start to cry for assistants, which are not available.

I have in the record and I am sure it will be repeated here, the excellent statement of Dr. John Stallneker who points out that a medical college is really more than a school, that it not only teaches undergraduate students, some 27,500 a year, provides graduate training for 12,500 doctors, runs courses for practicing physicians that range from 17,000 up to 25,000, instructs 18,000 dentists, pharmacists and nurses, 10,000 nonmedical students taking medical courses, and seminars, 59,000 additional family doctors.

Senator LEHMAN. Dr. Rusk, may I return for a moment to the discussion of the rehabilitation of the physically handicapped?

Dr. RUSK. Yes, sir.

Senator LEHMAN. We had quite lengthy hearings last year. I was strongly in favor of a larger appropriation for the training of teachers, doctors and attendants who had to render expert service to the physically handicapped.

Do you recall how much was finally appropriated for the purpose of training?

Dr. RUSK. Well, it was mixed last year, Senator Lehman, in that there were \$250,000, as I remember, earmarked by the Heart Council to be used in that, and for the training of physicians it was to be taken over this year by the Office of Vocational Rehabilitation.

If my memory serves me correctly—and I can't be sure about this—I think that there was a total for training in all fields of about \$750,000.

Senator LEHMAN. That was a very great reduction from the already totally inadequate appropriation which was virtually promised at the time we had the hearings.

As I recall it, the understanding was, or the request was for \$1,900,000, and my recollection is that that was cut just about in half.

Dr. RUSK. That is the way I remember it.

If I may say so, I have been deeply concerned to see the report recently in consideration of the new budget, that the House had cut out the \$1 million for training in this coming year in the upcoming budget which, to me, I think would be the greatest tragedy and the death of the program, because that is the total key to the total program.

Senator LEHMAN. Is it not a fact that even without the two main considerations of vocational rehabilitation, it is a mighty good investment in dollars and cents?

Dr. RUSK. I think you get about \$5 in taxes for every dollar you invest. That has been documented not only in the Federal program but in our own experience in the communities.

Senator LEHMAN. I have strengthened my belief that a considerably larger sum should be made available for the purposes of training.

Dr. RUSK. Now, I haven't taken up what I believe to be a shortage of service of the general population. We all know that is true in many geographic locations. I personally feel that there are not enough physicians to provide the care that is needed and wanted in the general population, and I do think that there is one serious fact that should be brought out and that is in a study we did some 3 years ago we found that the physicians workweek in their most productive years from 30 up to 55, was about 69 hours a week and in many cases went up into the 80-hour week.

The CHAIRMAN. They are not on a 40-hour week?

Dr. RUSK. They are not on a 40-hour week.

I think there might be some connection with the workload in the fact that the physicians as a group have the highest coronary rate of any profession.

The CHAIRMAN. They do have the highest coronary rate?

Dr. RUSK. Yes, sir. I think that also has to be considered.

So, with these facts, it seems to me that the only logical approach to this problem is to increase the production.

The first thing you do when you have to increase production is to have a factory in which the production can occur.

I think this bill is sound, it gets to the core of the problem and at the present time I know of nothing that would do as much to start to take off on a new track to meet the problem that I believe to be a real and serious one.

The CHAIRMAN. Doctor, as chairman of the Health Resources Advisory Committee, you made a report entitled "Mobilization of Health Manpower," did you not?

Dr. RUSK. Yes, sir.

The CHAIRMAN. In preparing this report you carried on and brought up to date the long studies that you had made on this question of doctors and the shortage of doctors; is that not true?

Dr. RUSK. Yes, sir.

The CHAIRMAN. The information that you bring us here today is the information that you have gathered from long and hard study and data brought up to date.

Dr. RUSK. Not only from this survey, which I might say started almost 6 years ago when the report was made, there has been a continuing study with the staff working on it more or less continuously for the past 2 years.

The CHAIRMAN. The staff working together under you?

Dr. RUSK. Yes, sir.

The CHAIRMAN. Gathering this data which you have brought to us this morning?

Dr. RUSK. Yes, sir.

The CHAIRMAN. You spoke about "the" bill. You refer to S. 1323 which is the 5-year program for construction and remodeling of medical school facilities, is that correct?

Dr. RUSK. Yes, sir.

The CHAIRMAN. Doctor, we certainly want to thank you, again, for coming here this morning and for bringing us this very interesting statement.

Dr. RUSK. May I show you one other thing?

The CHAIRMAN. Yes, sir.

Dr. RUSK. This came in the mail to me yesterday, which is a headline in the University of Southern California Daily Trojan. The heading is that the medical students at a meeting the night before had pledged \$240,000 out of their own pocket to be paid within the first 3 years after they start to practice, in order to provide matching funds, if these funds are available, to increase the facilities of their own medical school.

The CHAIRMAN. That is very fine, and should be very stimulating to the Congress to provide these matching funds. I am sure it will be.

Dr. RUSK. I am sure the Congress stimulate the students. It is a chain reaction.

The CHAIRMAN. Thank you, Doctor.

Now, Dr. Vernon W. Lippard, President of the Association of American Medical Colleges.

STATEMENT OF DR. VERNON LIPPARD, DEAN, SCHOOL OF MEDICINE, YALE UNIVERSITY

Dr. LIPPARD. I speak for the university presidents and deans who have been assembled here this morning in telling you how much we appreciate the opportunity to testify.

The CHAIRMAN. We are glad to have you here, Doctor. I know personally of your great interest in this matter.

Now, do you have a prepared statement, Doctor?

Dr. LIPPARD. I have, sir.

My name is Vernon Lippard. I am dean of the school of medicine at Yale University and previously held the same position at Louisiana State University and the University of Virginia. During the current year, I am president of the Association of American Medical Colleges which includes in its membership all of the 80 established medical schools in the United States and will probably soon include the 5 schools which are in the developmental stage or are just beginning operation.

I believe it is fair to say that no bill affecting medical education and research presented to Congress in recent years has had more widespread and enthusiastic support of the medical schools, their parent universities, medical educators, and scientists than this one. It meets squarely the most urgent requirement for advancement of medical science and medical care.

The 80 medical schools in the United States are responsible for the production of the physicians who serve the American people. With our rapidly increasing population, the demand for more physicians is constantly before us. Data recently released by the Health Resources Advisory Committee to the Office of Defense Mobilization indicate that despite an increase of 33 percent in the size of our graduating classes between 1940 and 1954, physician-population ratios remain about constant. This increase in production has been possible only because we have stretched our facilities to the limit. I think this matter has been brought out well in the previous speaker's remarks.

I refer here to the fact that between 1930 and 1954, the number of graduates have increased by 33 percent, as shown in Dr. Rusk's studies but that is taken out by the increase in population.

The fact that this legislation can break the bottleneck and make possible a continued increase in enrollment will be established clearly by data which will be presented to you by the next speaker.

Another consideration which is less dramatic but of equal or greater importance is the necessity for maintaining standards of instruction at a high level. Medicine is not taught in lecture halls but in laboratories and classrooms with small groups of students. This requires both space and equipment.

Let me emphasize the significance of this legislation in medical research. This country and many other countries in the world are dependent upon these 80 institutions for not only much of the medical research in progress—and the events of the past few weeks illustrate what can be achieved—but also the entire production of the medical scientists, both M. D.'s and Ph. D.'s, who have the ideas and perform the investigations.

We hear a great deal about increased support for medical research to hasten the solution of the cancer, heart disease, and other problems. A most significant aspect of this problem is that under consideration here today. Unless the continued production of scientists is assured and they are given the buildings and basic equipment with which to work, there is serious doubt as to whether larger appropriations can be used effectively.

Finally, let me tell you how this legislation will affect the school which I represent. When I was a first-year student 30 years ago, we worked in a biochemistry laboratory which was built to accommodate 45 students and there were related laboratories for a faculty of 5. Today, a class of 80 medical students, twice as many Ph. D. candidates, and a faculty of 18 work in the same quarters.

That is a simple concrete example in one school and you will hear of others.

Such laboratories as these are the very heart of our entire teaching and research programs. Yale has the reputation of being a fairly wealthy university but I can assure you that its resources are stretched to the very limit. Our needs are typical of those of the schools across the country, State and private and from the youngest to the oldest.

In summary, we see in this bill the best solution to the demand for increased production of physicians and medical scientists, the maintenance of high standards of medical education and advancement of medical research.

Senator LEHMAN. I would like to make an observation. When we had the vocational rehabilitation bill up, I don't think there was any doubt in the minds of anybody, either members of the committee or experts who testified, of the need and the value of vocational rehabilitation both from a humanitarian standpoint and from an economic standpoint.

Some of us have been very eager to have larger appropriations recommended than the President and the budget directed.

There are already 2 million physically handicapped in the country and that is being increased by 250,000 annually. We could only help about 50,000 or 60,000 at the outside.

The answer was always made, "Well, there is no use going into this matter in a more comprehensive way because the bottleneck is in training personnel." That was the argument. It seems to me that is borne out by the testimony we have so far heard today, that there-

is this tremendous shortage in trained personnel for the handling of cases.

Dr. LIPPARD. Behind the bottleneck in personnel is the very factor that we need a place to train these persons. This seems to us the opportunity to take the first step and a very logical way to take it.

The CHAIRMAN. It would be the first step, would it not, Doctor?

Dr. LIPPARD. Yes. We cannot produce more physicians unless we have more places—have better and more adequate places for them to be trained in.

As far as operating expenses are concerned—well, for the moment, we think we will find our way, if we can get over this big capital expenditure.

The CHAIRMAN. Doctor, we deeply appreciate your coming and being with us. Thank you very, very much.

Dr. LIPPARD. I appreciate the opportunity of being heard.

The CHAIRMAN. Dr. Joseph C. Hinsey.

STATEMENT OF DR. JOSEPH C. HINSEY, DIRECTOR, NEW YORK HOSPITAL, CORNELL MEDICAL CENTER

The CHAIRMAN. Doctor, you are dean of the Cornell University Medical School, the director of New York Hospital, Cornell Medical Center, and also chairman of the Council of the Deans of Medical Schools, is that correct?

Dr. HINSEY. I was chairman of the council, Senator Hill. I retired and Dr. Lippard serves in that capacity now. I served for quite a number of years.

Senator Hill and Senator Lehman, I want to express for our medical schools not only our appreciation for appearing here, today, but also the wonderful cooperation and understanding that we have received from your chairman and the members of the committee, in the formulation of this legislation. From our standpoint, it has been a pleasure and a great reassurance to work with you in the development of this program.

I have a prepared statement which I will read, but before I do, the interest that has been shown in the problem of rehabilitation, because of that, I would like to say that we have in 12 of our medical schools, pilot programs in the teaching of rehabilitation at the graduate and undergraduate levels that are being supported by the National Foundation for Infantile Paralysis.

The medical schools recognize the great need for greater emphasis upon the total field of rehabilitation and its other implications, and it is our judgment that one of the first moves that can be made to strengthen this field is to see that every doctor that is graduated has in his undergraduate education experience a background upon which he can build in later years.

They tell me I have to read this to get it in the record so I will do it.

I am Joseph C. Hinsey, director of New York Hospital, Cornell Medical Center, and chairman of the committee on financing medical education of the Association of American Medical Colleges. I was dean of Cornell University Medical College from 1942 to 1953. I served as chairman of the executive council of the Association of American Medical Colleges from 1946 to 1954 and was a member of the

committee on the survey of medical education which was conducted between 1947 and 1952. In 1952 I served on the President's Commission on Health Needs of the Nation.

Through membership on two of the committees of the National Foundation for Infantile Paralysis, in addition to experiences in our own institution, I have had an opportunity to see something of medical research and its development. Through being a member of the board of advisers of Pierre University at Montgomery, Ala., and the Medical Advisory Council at Brookhaven, the medical advisory committee to the Medical Director of the Veterans' Administration—that is the committee on medical education—I have had an opportunity to see something of the relationship of medicine to Federal services.

For over 30 years I have been concerned with problems of medical education and of meeting the health needs of this Nation.

All medical schools have been asked to express their attitude toward Senate bill 1323. So what I present to you today has been the result of a poll of all of our schools.

There are today 81 accredited and approved medical schools operating in this country, of which 6 are schools of basic science. One additional school, Miami, which will offer all 4 years of medical education in 1955-56, has not been in operation long enough to be eligible for accreditation.

In addition to these 82 schools, there are 3 medical schools planning to open in the near future—Albert Einstein College of Medicine in New York City, the University of Florida School of Medicine at Gainesville, and Seton Hall College of Medicine in Jersey City, N. J. All 85 medical schools were polled.

For certain technical reasons, 3 of the medical schools are unable to express an attitude at this time pending consideration by certain controlling boards which meet infrequently. Of the 82 medical schools which did respond, 96 percent favor the bill, an amazingly high degree of unanimity among academic folk, and particularly among people in medical education.

Bill S. 1323, in the opinion of the medical schools, provides significant and needed help which will permit them to produce more and better physicians and thus serve the Nation more effectively.

In the current year, 1954-55, there are 82 medical schools in operation. These schools have enrolled, roughly, 7,500 freshmen. Bill S. 1323 would, it is estimated, result in buildings which would permit an increase of the enrollment of these schools to 8,378 freshmen, or an overall increase of 11 percent.

This substantial increase is equivalent to the output of 9 new medical schools of average size. The 3 medical schools now in the final planning stages estimate that with the help of bill S. 1323 they will be able to enroll 271 freshmen, to bring the total number of freshmen enrolled in all 85 medical schools to 8,649.

Thus, it is evident that this bill will increase significantly the number of physicians being produced to meet the health needs of the growing population, and to do so without sacrificing quality which is of unquestioned importance where matters of health are concerned. This increase in freshman enrollment will soon result—even allowing for attrition—in some 1,000 more physicians being graduated each year. The so-called incentive feature of this bill will be a wholesome

stimulus to the medical schools to expand as rapidly as possible without sacrificing the quality of their work. I should point out that there are accrediting agencies which will guard against overexpansion at the expense of quality.

I call your attention to the fact that 71 percent of the schools would increase their freshman enrollment 5 percent or more, and with the new buildings about half of the medical schools would increase their freshman enrollment well over 5 percent.

There were 77 of the medical schools which were able on short notice to give estimates of the cost of the building programs which they would develop if the funds proposed in S. 1323 were to be made available. The total amount which these schools would spend for construction would be \$460 million, of which 67 percent would be spent for new buildings, 21 percent for the expansion of present facilities and 12 percent would be used to create an endowment fund to maintain the new structures. Of this \$460 million about 50 percent—\$187 million—would be sought from the Federal Government and 60 percent—\$273 million—would come from other sources.

Of the \$187 million of Federal funds which would be requested by the 77 schools, some 69 percent would be used for new buildings, 23 percent for expansion of existing facilities, and 8 percent for endowment to maintain the new structures.

In addition to these costs, the schools estimate that they would request about \$1,700,000 for the cost of preparing the initial plans.

The medical schools recognize that steps must be taken today if we are to meet the health needs of tomorrow. Medical education is a long as well as an expensive process, but more doctors must be produced.

The medical schools seek help to accomplish this task so that the supply of physicians 5 years hence will not fall short of the number required to meet the health needs of an expanding population insistent upon, and rightly so, broadened medical services.

We have heard today from Dr. Rusk about the shortages we already have, and I would like to point out that in these new buildings and this rehabilitation of our facilities, we need this money badly in many of our institutions to maintain the quality of our present work. It is not only the matter of expansion but it is present structures. You need do nothing but look at the facilities in one of your medical schools right in this community, which you will hear about a little bit later, to realize just how badly those needs are in many of our institutions.

With the physician the basic person in the health picture, the medical school is the one link in the chain which must be strengthened. Large increases in college enrollments are virtually certain. More qualified students may be expected to demand admission to our medical schools. More must be accepted and graduated, for the graduates of our medical schools are sorely needed.

From these graduates come the research workers whose efforts—usually in a medical school setting—will solve more and more of our health problems. From the graduates of our medical schools will also come the specialists and general practitioners who provide health services to the Armed Forces as well as the civilian population.

Bill S. 1323 reflects the views of the medical schools accurately and completely. It has the enthusiastic endorsement of the committee on financing medical education, of the executive council of the AAMC,

and of the overwhelming majority of all medical schools. This bill will make it possible for the medical schools to serve the Nation more effectively. The health of the Nation depends upon the quality and quantity of medical education.

The CHAIRMAN. Doctor, you have certainly brought us a very clear picture in a very fine and eloquent way. I am delighted that you emphasize quality as well as quantity. In other words, you need this not only to meet the shortage, that we might expand and have more doctors, but also to maintain the quality of education that we should be giving our doctors.

Dr. HINSEY. Senator Hill, as I have gone over this country—and I think I have seen most every medical school in this country within the last few years—I can tell you that there are some of the institutions that are carrying on their programs in totally inadequate facilities. They have expanded their enrollment in an endeavor to meet this need. You have heard about the expansion that has been made. They are carrying on, they are doubling up in their classes. You have heard from the dean of the medical school at one of our midwestern institutions in which he points out that they have to carry on two series of classes and laboratory exercises in buildings that were prepared 50 years ago for a much smaller student body than they have now.

That is duplicated in a number of our institutions.

It happens that I talk for an institution where that isn't important today, because we have relatively new facilities. But, I do know that over the country, from my own personal observation, these young people from Los Angeles—I know something about that situation, and it is true in other places.

Senator LEHMAN. I don't want to speak for our very distinguished chairman, but I think I am safe in saying that the majority of the members of this committee are deeply in sympathy with this, as with this and other bills, which would increase facilities for training doctors and other scientists.

Now, Dr. Rusk has given us some very interesting figures with regard to the vacancies that occur in various fields of medicine, and the inadequate number of the doctors who may be called upon, now or in the next several years.

You haven't given any exact figures but it is perfectly clear from your statement that it is highly important that we do train more physicians, and research men.

Regardless of the attitude of this committee, we have to get the bill through the Congress.

One of the most depressing and frankly discouraging things to me is the fact that so many physicians—men of high reputation and high character—have taken the position that no more physicians are needed, that the supply of physicians in this country is adequate for the needs of the people.

That position has been taken in broad and wide circles. It does have an effect on Members of the Congress, members of the legislatures of the different States and the public, which, after all, is the one that is responsible for legislation.

I wish in some way that the doctors could convince—doctors who know this subject—could convince their associates that there is a need for more doctors. It has been a very, very discouraging and somewhat

frightening thing to me to be confronted with that attitude so frequently.

Dr. HINSEY. Of course, Senator Lehman, a great amount of our difficulty in many areas is because we haven't carried out a sufficiently thorough educational program. I think that those people who hold those opinions—they are honest opinions. They are physicians and they view things in terms of the area that they happen to know about.

However, it is difficult to get everybody to see this, but I do think that among our fields of medical education that is generally recognized. The great fear that is had by many people in the profession is that there will be a balloon type of expansion, large increases in the outputs, without sufficient quality being maintained. That is the thing that people worry about.

But, when we look at what is going to happen in the increase in population ahead, that in itself will be an important demand upon our personnel, even if we didn't have shortages today.

No one can foretell what advances in research may bring about, but as Dr. Rusk pointed out, it seems that when we get advances, our demands upon personnel become greater and greater as we come to know more.

I realize there are honest differences of opinion and among people for whom I have a very high regard. I have tried to reflect to you the feeling of the institutions of the country as nearly as we have been able to get it.

The CHAIRMAN. Isn't it true, too, that through the years you have built up a really very effective and fine system of accreditation?

Dr. HINSEY. Yes, I think it has been a very, very fine thing. That has been done through the cooperation of the American Medical Association and our college groups.

The CHAIRMAN. We are much obliged to you.

Now, Dr. Walter A. Bloedorn, dean of the George Washington University School of Medicine.

STATEMENT OF DR. WALTER A. BLOEDORN, DEAN, GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

The CHAIRMAN. We are happy to have you here this morning.

Dr. BLOEDORN. I appreciate greatly the opportunity of appearing before your committee.

Senator, I have a prepared statement which I should like to introduce in the record.

The CHAIRMAN. The prepared statement will appear in full in the record and you may make other particular comments you see fit.

(The prepared statement of Dr. Bloedorn follows:)

STATEMENT OF DR. WALTER A. BLOEDORN, DEAN, THE GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, RE SENATE BILL 1323

I am Dr. Walter A. Bloedorn. I have been dean of the George Washington University School of Medicine since 1938 and prior to that time served as assistant dean for several years. I have been president of the Association of American Medical Colleges and served for 6 years on the executive committee of the Association of American Medical Colleges. Currently I am serving as a member of the Association of American Medical College's committee on financing medical education, the executive committee of the National Board of Medical Examiners, a representative to the Federation of State Medical Boards, the advisory

committee on the National Fund for Medical Education, and a special medical advisory group of the Veterans' Administration.

The purpose of this statement is to support and to urge passage of proposed legislation to authorize a 5-year program of grants for construction of medical educational and research facilities.

Section 701 of the bill itself accurately and fairly outlines the reason why this bill is urgently important. Everyone must agree that, as stated in section 701, the health, both physical and mental, of the people of this country is of paramount concern to the national welfare. The medical schools are the sole source of supply of physicians. The continuing adequate supply of well-trained physicians is absolutely essential to the maintenance of the national health, welfare, and the national defense.

It is common knowledge among all concerned with medical education that the medical schools are in dire need of funds for construction of medical educational and research facilities. During recent years the medical schools, individually and collectively, have explored every possible resource but have been unable to obtain the necessary capital funds for urgently needed alterations, modernization, and construction. It is for this reason—the urgency of the need, and the unavailability of adequate funds from any other source—that the Association of American Medical Colleges, and the individual medical schools, are supporting this bill to authorize a 5-year program of grants for construction.

During the years of the Second World War, and the years thereafter, a number of influences have combined to precipitate what is virtually a crisis in the history of medical education in this country wherein new or expanding facilities have become increasingly urgently needed.

On the one hand the existing physical facilities of the medical schools have gradually been deteriorating with the passage of time; on the other hand many of these facilities have been rendered inadequate by the increasing complexity of medical knowledge and the necessity for training medical students in terms of this knowledge. As an example, few medical schools have facilities or space for educating physicians with reference to the vast body of new knowledge in the field of medical electronics and nuclear physics.

Furthermore the very advances in medical science which have rendered existing facilities inadequate have at the same time created a need for training additional physicians with special knowledge in these areas.

In addition, the increasing number of medical specialties, with their wider utilization in medical practice, has created a demand for additional physicians. In general it has proved to be a fact that no forward step in medicine reduces the number of physicians needed—on the contrary every advance in medical knowledge requires additional personnel for its application and for the education of students and physicians in that area of new knowledge.

Through the years these increasing needs for physicians have been gradual, but they have confronted the medical schools with very grave problems in attempting to increase their enrollments without adequate increases in modernization of physical facilities.

Despite their handicaps the medical schools, so far, have largely been able to meet the needs for training an adequate number of physicians, and at the same time maintain the highest standards of medical education.

The various medical schools have met their individual problems, but in general they have found it necessary to crowd students into classrooms and laboratories designed for smaller numbers. Wherever this has been impossible, classes have been divided into sections and courses repeated by already heavily burdened faculties for each section of students. At times it has been necessary to employ laboratories designed for other purposes to take care of the overflow.

The medical schools now have reached the limit beyond which such makeshift devices cannot be further pushed—even small increases in the number of medical students will be impossible unless existing physical plants are expanded.

If the medical schools are unable to provide for an increase in the number of students enrolled to accompany the increase in the need for physicians that reasonably can be expected in the future it will not be long before the supply falls short of the demand. This means the construction of medical educational and research facilities during the next few years is imperative.

There are several reasons, in addition to those previously mentioned, why an increase in the number of physicians trained during the coming years is desirable and necessary. The increased size of the population will require some increase in the number of physicians available. The increasing proportion in the population of persons in the older age groups among whom the chronic

diseases are more prevalent and prolonged will enlarge the total medical task. Rapidly expanding research programs in almost every area of health and disease are demanding more work of more medical and scientific personnel of all kinds. New knowledge gained from such research already is beginning to have an impact on the Nation's health and is providing and will continue to provide information which will make it not only possible but necessary for more physicians to do more for more people in the diagnosis, treatment, and prevention of a wide range of physical and mental disabilities.

There is one very important additional reason why replacement and expansion of the physical facilities of the medical schools is essential to the national welfare: Were the Nation suddenly to be confronted with a serious emergency requiring the education of additional physicians there is no means under present conditions whereby this could be accomplished satisfactorily. With needed modernization and expansion of facilities, however, the medical schools would be in a better position to meet the demands of such emergencies. It also should be borne in mind that in the event of disaster one or several medical schools may be physically put out of action; reserve capacity would be necessary to provide for at least partial continuation of their programs.

One provision of Senate bill S. 1323 is related to the subject of increasing medical school enrollment. It provides for grants equal to 66% percent of the cost of construction where a medical school gives assurances that the freshman enrollment will be increased by a minimum of 5 percent. This is 16% percent more than the 50-percent grant contemplated for schools not planning such an increase in freshman enrollment.

A recent poll by the Association of American Medical Colleges indicates that 54 schools would be able to increase their freshman enrollment 5 percent or more if the facilities provided by this bill were available. The poll indicated that 82 schools having a freshman class in 1954-55 enrolled 7,529 freshmen. With the proposed new construction the freshman enrollment of these same schools is estimated at 8,378, or the equivalent in output of about 9 new medical schools. The 3 new medical schools, Einstein, Florida, and Seton Hall, will add 271 new freshmen.

Two principles should be borne in mind with respect to the provision of a slight increase in the proportion of construction cost granted to those medical schools contemplating moderately increased enrollment. First, the medical schools of this country in the past have demonstrated their ability to maintain the highest standards of medical education, to select promising candidates for entrance into medical school, and to determine the number of students that need to be trained and can be trained well by the individual schools. There is every reason to believe that in the future, as in the past, the medical schools can be trusted with the great responsibility of determining suitable increases in enrollment. Second, since it obviously will cost more to construct facilities for an increased number of students than it would for a stationary number it is quite reasonable to provide a small increase in the proportion of money granted for construction to those schools who deem it advisable to increase their enrollment.

As a whole the bill is one of the most important pieces of legislation affecting the Nation's health that has come before the Congress—it provides assurance that the Nation's medical schools will have urgently needed physical facilities for continued high quality of medical education and research, and it further facilitates a moderate increase in the number of new physicians trained each year to keep pace with the needs of a growing population, increasing medical research, and increasing knowledge applicable to the improvement of the physical and mental health of all the people.

Dr. BLOEDORN. I am Walter Bloedorn, dean of the George Washington School of Medicine since 1938. I have been president of the Association of American Medical Colleges and served on the executive committee of the association.

Currently, I am serving as a member of the association's committee on financing medical education, and the executive committee of the National Board of Medical Examiners; representative to the Federation of State Medical Boards; the advisory committee of the national fund for medical education, and the special medical advisory group of the Veterans' Administration.

Senator, I also served on the board of the Gorgas Foundation of which you are familiar.

The CHAIRMAN. You and I have the pleasure and privilege of serving on that together.

Dr. BLOEDORN. We do, indeed, sir.

The purpose of this statement is to support and urge the passage of proposed legislation, to authorize a 5-year program of grants for construction of medical educational and research facilities. Section 701 of the bill itself accurately and fairly outlines the reason why this bill is urgently important. Everyone must agree that, as stated in section 701, the health, both physical and mental, of the people of this country is of paramount concern to the national welfare. The medical schools are the sole source of physicians. The continuing adequate supply of well-trained physicians is absolutely essential to the maintenance of the national health, welfare, and to the national defense.

It is common knowledge among all concerned with medical education that the medical schools are in dire need of funds for construction of medical educational research facilities.

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During the years of the Second World War, and the years thereafter, a number of influences have combined to precipitate what is virtually a crisis in the history of medical education in this country, wherein new or expanding facilities have become increasingly urgently needed. On the one hand the existing physical facilities of the medical schools have gradually been deteriorating with the passage of time. On the other hand, many of these facilities have been rendered inadequate by the increasing complexity of medical knowledge, and the necessity for training medical students in terms of this knowledge.

As an example, few medical schools have facilities or space for educating physicians in the vast body of new knowledge in the field of medical electronics and nuclear physics.

Furthermore, the very advances in medical science which have rendered existing facilities inadequate, have at the same time created a need for training additional physicians with special knowledge in these areas.

In addition, the increasing number of medical specialties, with their wider utilization in medical practice, has created a demand for additional physicians. In general, it has proved to be a fact that no forward step in medicine reduces the number of physicians needed—on the contrary, every advance in medical knowledge requires additional personnel for its application and for the education of students and physicians in that area of new knowledge.

Through the years these increasing needs for physicians have been gradual, but they have confronted the medical schools with very grave

problems in attempting to increase their enrollments without adequate increases in and modernization of physical facilities.

Despite their handicaps the medical schools, so far, have largely been able to meet the needs for training an adequate number of physicians, and at the same time maintain the highest standards of medical education.

The various medical schools have met their individual problems, but in general they have found it necessary to crowd students into classrooms and laboratories designed for smaller numbers. Wherever this has been impossible, classes have been divided into sections and courses repeated by already heavily burdened faculties for each section of students. At times it has been necessary to employ laboratories designed for other purposes to take care of the overflow.

In our own school, Senator, we are faced with this very problem, overcrowded laboratories, overcrowded class rooms and the necessity of dividing classes into two sections in order to accommodate them.

The medical schools now have reached the limit beyond which such makeshift devices cannot be further pushed—even small increases in the number of medical students will be impossible unless existing physical plants are expanded.

If the medical schools are unable to provide for an increase in the number of students enrolled to accompany the increase in the need for physicians that reasonably can be expected in the future it will not be long before the supply falls short of the demand. This means that construction of medical educational and research facilities during the next few years is imperative.

There are several reasons, in addition to those previously mentioned, why an increase in the number of physicians trained during the coming years is desirable and necessary. The increased size of the population will require some increase in the number of physicians available.

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capacity would be necessary to provide for at least partial continuation of their programs.

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A recent poll by the Association of American Medical Colleges indicates that 54 schools would be able to increase their freshman enrollment 5 percent or more if the facilities provided by this bill were available. The poll indicated that 82 schools having a freshman class in 1954-55 enrolled 7,529 freshmen. With the proposed new construction the freshman enrollment of these same schools is estimated at 8,378, or the equivalent in output of about 9 new medical schools. The three new medical schools, Einstein, Florida, and Seton Hall, will add 271 more freshmen.

Two principles should be borne in mind with respect to the provision of a slight increase in the proportion of construction cost granted to those medical schools contemplating moderately increased enrollment. First, the medical schools of this country in the past have demonstrated their ability to maintain the highest standards of medical education, to select promising candidates for entrance into medical school, and to determine the number of students that need to be trained and can be trained well by the individual schools. There is every reason to believe that in the future, as in the past, the medical schools can be trusted with the great responsibility of determining suitable increases in enrollment. Second, since it obviously will cost more to construct facilities for an increased number of students than it would for a stationary number it is quite reasonable to provide a small increase in the proportion of money granted for construction to those schools who deem it advisable to increase their enrollment.

As a whole the bill is one of the most important pieces of legislation affecting the Nation's health that has come before the Congress—it provides assurance that the Nation's medical schools will have urgently needed physical facilities for continued high quality of medical education and research, and it further facilitates a moderate increase in the number of new physicians trained each year to keep pace with the needs of a growing population, increasing medical research, and increasing knowledge applicable to the improvement of the physical and mental health of all the people.

The CHAIRMAN. Doctor, isn't it true, with the accreditation plans you have now and with the provision in the bill that no funds should go to any school except an accredited school, that no one need have any fear of any expansion at the expense of quality?

Dr. BLOEDORN. I think that is well provided for. Our system of accreditation, as Dr. Hinsey has indicated, is an excellent system. I think you can be assured that high standards will be maintained and that no medical school would expand the enrollment beyond its capacity, and even if desired it probably would not be allowed to.

The CHAIRMAN. You have what is termed a very tight situation at George Washington, do you not?

Dr. BLOEDORN. Indeed we do, sir. We are occupying a building erected in 1902. For over 50 years it has served as a plant, entirely inadequate. We are in dire and desperate need of new physical plant.

The CHAIRMAN. You need a medical school more in keeping with George Washington Hospital, do you not?

Dr. BLOEDORN. We do indeed, sir.

The CHAIRMAN. Thank you.

Now, Father Hussey? Father Hussey, president of Loyola University.

Father, we are very happy to have you here this morning.

Reverend HUSSEY. Thank you, Senator. I am very happy to be here.

STATEMENT OF VERY REV. JAMES T. HUSSEY, PRESIDENT, LOYOLA UNIVERSITY

The CHAIRMAN. Do you have a prepared statement?

Reverend HUSSEY. I should like to supply it later, if I may, because this has been revised so much.

The CHAIRMAN. You make such statement as you see fit and then we will have your full statement appear in the record.

(The prepared statement of Very Rev. J. T. Hussey follows:)

STATEMENT OF VERY REV. JAMES T. HUSSEY, S. J., PRESIDENT OF LOYOLA UNIVERSITY OF CHICAGO

When I became president of Loyola University in 1945, the most demanding problem confronting the administration was centered around the medical school. There were two critical phases of the medical school problem: First, operating deficits; and second, an inadequate building.

Because of the vastness of the problem and in particular because of the detrimental effect the mounting deficits of the medical school were having on the entire university, the board of trustees seriously considered the idea of closing the medical school.

Such action would have deprived the Nation of the services of 85 physicians annually.

When the number 85 is compared with the population of the Nation it appears to be insignificant. When it is regarded in the light of the increased population of the United States and the increased need for medical services, it becomes a number of tremendous consequence. On the basis of the ratio of 1 doctor to 750 citizens, approximately 65,000 people would be affected annually.

It must be remembered that the medical school of Loyola University has supplied 25 percent of all the physicians practicing in the city of Chicago.

Recognizing the serious responsibility the university had of continuing medical education, I conceived a program which would supply the aforementioned two needs: Annual operating funds; and new, modern, physical facilities.

Since the operating deficit of the medical school was a drain on the general income of the university, and since there were no endowment funds for the medical school operation, that problem was faced first.

As a result of our efforts, we have succeeded in each of the past several years in raising the necessary funds to balance the medical school budget.

In 1948 we inaugurated what was termed the fulfillment fund program for the medical school. It called for \$6 million of endowment for operating costs and a new \$6 million medical school plant.

The new physical facilities were required because the present medical school building is utterly inadequate for the teaching of modern medicine. The present building is a composite of three separate buildings whose floors are not even at the same level. It was not constructed for medical education. It is so inadequate as to demand replacement.

Between the years 1948-51, \$2,225,000 were donated by friends and alumni of the university toward the erection of the new medical school building.

In 1951 two things happened simultaneously. It became necessary for the university administration to divert its attention from raising funds to erect a new medical school building, to the supplying of operating funds for the university generally.

Up to that time I had devoted approximately 60 percent of my time toward solving the medical school problem, to the detriment of the other 9 schools in the university. My preoccupation with the medical school problem certainly affected the morale of the other nine deans.

Like all other private universities, Loyola University was caught in the inflationary spiral subsequent to the start of the Korean war. At the same time prospective donors were staggered at the mounting cost of medical education and given such pause as to decelerate their willingness to contribute.

You will recall, also, that at that time there were bills proposing Federal aid to medical education. At the present time Loyola University is in possession of 25 acres of land upon which the new medical school is to be built. The architects have been working for months on the preliminary drawings. With sufficient funds we could break ground for our new medical-school building within 15 months. Our only need now is additional funds for the construction of the new medical-school building.

Imagine the reaction that the potential contributor to the new medical-school building would have if this bill were passed. I would then be able to go to him and say, "We now have \$5,225,000 of the required \$6 million."

Compare that happy situation with the present prospect of telling our constituents we have \$2,225,000 of the required \$6 million.

Since I am referring to 66½ percent of the total constructional cost as provided in the bill, it is pertinent to point out that Loyola University is determined to increase its freshman enrollment from 88 to 100.

As you will immediately recognize, this represents an increase of Freshman enrollment of 13.6 percent.

I have told you the story of the recent history of the plans for increasing opportunities in medical education at Loyola University and what it would mean for the future of those plans were this bill, S. 1323, to be passed.

I have used Loyola University's Medical School merely as what I would regard as a rather dramatic example of the plight of the schools nationally. The medical schools in this country have at great cost to their universities served their country well beyond the call of duty.

I am convinced that no elaboration is needed to indicate how much more fully service could be rendered to the health and welfare of the country by the type of Federal support proposed in S. 1323.

With respect to the matching gift feature of the proposed legislation, I can speak with conviction and experience about the attractiveness and the effectiveness of matching gifts.

The matching gift feature of the bill has more than a priming effect. It has two important psychological effects on the prospective donor—the person who is to do the matching.

First, he thinks of himself as putting his shoulder to a vehicle that is already in motion and not facing the huge effort of trying to get it started from a dead stop—the old story of getting on the band wagon. Second, he is enjoying the satisfaction of knowing that his taxes are being spent on a project in which he has faith, interest, and concern.

In the meantime it must be recognized that the ordinary layman is not sufficiently aware of the national medical problem. He looks to men, such as yourselves, for leadership in thinking out the health-welfare problems of the Nation.

Gentlemen, if the Congress enacts this proposed legislation, future generations of Americans will be indebted to you for making possible the perpetuation of American medical education in the traditions of both public and private schools.

I can speak for only one medical school, but I can say this with positive conviction, the enactment of this legislation in its present form will mean the difference between a new, modern medical school at Loyola University in the immediate future. If the bill fails to pass it will mean many years of strenuous struggle to secure sufficient funds to erect a new medical school; this will postpone participation on our part in solving the national problem.

I must point out that it is tremendously difficult to seek funds for a building project when we are in the midst of a continuous campaign for operating funds, funds which are the very lifeblood of the university.

It is my personal feeling that we are at the crossroads in the history of American medical education.

Are we to advance with a steady increase in both the quality and quantity of medical school students? Are we to go forward in this crucial field of education so that the health-welfare needs of our great country can be assured?

Gentlemen, through the enactment of this legislation you can chart the course of constant progress in American medical education for an unlimited period, a period in which our Nation's medical schools will be able to train an increasing number of highly qualified medical researchers and physicians.

God knows the country will need them.

Reverend HUSSEY. I am Father James T. Hussey, member of the Society of Jesus, president of Loyola University of Chicago, a member of many educational associations, and presently a member of the advisory council of the National Fund for Medical Education.

When I became president of Loyola University in 1945, the most demanding problem confronting the administration was centered around the medical school. There were two critical phases of the medical school problem. First, operating deficits and second an inadequate building.

Because of the vastness of the problem, and in particular because of the detrimental effect of the mounting deficits that the medical school was having on the entire university, the board of trustees seriously considered the idea of closing the medical school.

The CHAIRMAN. When was this, Father?

Reverend HUSSEY. 1945.

The CHAIRMAN. As recently as that?

Reverend HUSSEY. Yes, sir.

Senator LEHMAN. How long has the medical school been in existence?

Reverend HUSSEY. 1919, approximately.

Such action would have deprived the Nation of the services of 85 physicians annually.

When the number "85" is compared with the population of the Nation, it appears to be insignificant. When it is regarded in the light of the increased population of the United States and the increased need for medical services, it becomes a number of tremendous consequence.

On the basis of the ratio of 1 doctor to 70 citizens, approximately 65,000 people would be affected annually.

It must be remembered that the medical school of Loyola has supplied 25 percent of all the physicians practicing in the city of Chicago.

Recognizing the serious responsibility the university had in continuing medical education, I conceived a program which would supply the aforementioned two needs. Annual operating funds and new, modern, physical facilities.

Since the operating deficit of the medical school was a drain on the general income of the university, and since there were no endowment funds for the medical-school operation, that problem was faced first.

As a result of our efforts we have succeeded in each of the past several years in raising the necessary funds to balance the medical-school budget.

In 1948 we inaugurated what was termed the "fulfillment fund program" for the medical school. It called for \$6 million endowment for operating costs and a new \$6 million medical plant. The

new physical facilities were required because the present medical-school building is utterly inadequate for the teaching of modern medicine. The present building is a composite of three separate buildings whose floors are not even at the same level. It was not constructed for medical education; it is so inadequate as to demand replacement.

Between the years 1948 and 1951, \$2,225,000 was donated by friends and alumni of the university toward the erection of the new medical school building.

In 1951 two things happened simultaneously. It became necessary for the university administration to divert its attention from raising funds to erect a new medical-school building to the supplying of operating funds for the university generally.

Up to that time I had devoted approximately 60 percent of my time toward solving the medical-school problem. This to the detriment of the other nine schools in the university. My preoccupation with the medical-school problem certainly affected the morale of the other nine deans.

Like all other private universities, Loyola University was caught in the inflationary spiral subsequent to the start of the Korean war. At the same time, prospective donors were staggered at the mounting cost of medical education and given such pause as to decelerate their willingness to contribute.

You will recall also that at that time there were bills proposing Federal aid to medical education. At the present time, Loyola University is in possession of 25 acres of land upon which the new medical school is to be built. The architects have been working for months on the preliminary drawings. With sufficient funds we could break ground for our new building within 15 months. Our only need now is additional funds for the construction of the new medical school building.

Imagine the reaction that the potential contributor to the new medical school building would have if this bill were passed. I would then be able to go to him and say, "We now have \$5,225,000 of the required \$6 million."

Compare that happy situation with the present prospect of telling our constituents we have \$2,225,000 of the required \$6 million.

Since I am referring to 66 $\frac{2}{3}$ percent of the total construction cost as provided in the bill it is pertinent to point out that Loyola University is determined to increase its freshmen enrollment from 88 to 100.

As you will immediately recognize this represents an increase in freshmen enrollment of 13.6 percent.

I have told you the story of the recent history of the plans for increasing opportunities in medical education at Loyola University and what it would mean for the future of those plans, were this bill, S. 1323 passed.

I have used Loyola University's medical school as what I would regard as a dramatic example of the schools nationally. The medical schools nationally have at great cost to the universities served their country well beyond the call of duty. I am convinced no elaboration is needed to indicate how much more fully service could be rendered to the health and welfare of this country by the type of Federal support proposed in S. 1323.

With respect to the matching gift feature of the proposed legislation I can speak with conviction and experience about the attractiveness and the effectiveness of the matching gifts. The matching gift feature of the bill has more than a priming effect. It has two important psychological effects on the prospective donor, the person who is to do the matching.

First, he thinks of himself as putting his shoulder to a vehicle that is already in motion and not facing the effort of trying to get it started from a dead stop. The old story of getting on the bandwagon.

And second, he is enjoying the satisfaction of knowing that his taxes are being spent on a project in which he has faith, interest and concern.

In the meantime it must be recognized that the ordinary layman is not sufficiently aware of the national medical problem. He looks to men such as yourselves for leadership in thinking out the health-welfare problems of the Nation.

Gentlemen, if the Congress enacts this proposed legislation, future generations of Americans will be indebted to you for making possible the perpetuation of American medical education in the traditions of both public and private schools.

I can speak for only one medical school, but I can say this with conviction: The enactment of this legislation in its present form will mean the difference between a new modern medical school at Loyola University in the immediate future. If the bill fails to pass it will mean many years of strenuous struggle to secure sufficient funds to erect a new medical school. This will postpone participation on our part in the solving of the national problem.

I must point out that it is tremendously different to seek funds for a building project when we are in the midst of a continuous campaign for operating funds for the very lifeblood, as a matter of fact, of the university.

It is my personal feeling that we are at the crossroads in the history of American medical education. Are we to advance with a steady increase in both the quality and quantity of the medical-school students? Are we to go forward in this crucial field of education so that the health and welfare needs of our great country can be assured?

Gentlemen, through the enactment of this legislation you can chart the course of constant progress in American medical education for an unlimited period, a period in which our Nation's medical schools will be able to train an increasing number of highly qualified medical research people and physicians. God knows, the country will need them.

The CHAIRMAN. Thank you, Father, for that very splendid statement. We appreciate it very much.

If you will let the reporter have the full copy, it will be included in the record.

Now, Dr. M. D. Kogel, dean of the Albert Einstein School of Medicine.

STATEMENT OF DR. MARCUS D. KOHEL, DEAN, ALBERT EINSTEIN COLLEGE OF MEDICINE

Dr. KOHEL. I am Dr. Marcus D. Kogel, the dean of the Albert Einstein School of Medicine of Yeshiva University of New York City.

Senator LEHMAN. Doctor, am I right in saying that you for a long time were the commissioner of hospitals in the State of New York?

Dr. KOGEL. Yes, sir. It is a new medical school opening its doors to the first class in September. For 5 years before assuming the post of dean, I was commissioner of hospitals of the city of New York and before that I was the director of the medical and hospital services at the department of hospitals.

The CHAIRMAN. Of the State of New York?

Dr. KOGEL. Of the city of New York. I have been a civil servant of the city of New York for 26 years.

It is my task to supervise the construction of the new college of medicine, to assemble its faculty and to get the college going.

The urgent need for Government grants for the construction of medical educational and research facilities is exemplified by the present construction program of the Albert Einstein College of Medicine. We are learning the hard way that the cost of building a modern medical school, except under the most unusual circumstances is beyond the resources of private institutions. Yet, the desirability of continuing medical education in this country, for the most part under private auspices, is recognized by all.

The inspiration of progress arises from private enterprise. Government can make its greatest contribution by a formula such as is proposed under this bill, providing encouragement and assistance in an hour of need, and imposing no controls in return. This is in the best traditions of our democracy.

The splendid program of hospital improvement made possible by the Hill-Burton Act should demonstrate to even the most skeptical that Government assistance need not mean Government control.

Some background on the Albert Einstein College of Medicine may be of some interest to members of this committee. In December 1950 the State of New York through its board of regents amended the charter of Yeshiva University, authorizing programs in medical and dental education. Yeshiva University immediately undertook the purchase of a 16-acre tract in the Borough of the Bronx, city of New York, adjoining the 63-acre Bronx Municipal Hospital Center.

To insure adequate clinical facilities, the university then entered into a written agreement with the city of New York, providing for the professional care of the patients in the Bronx Municipal Hospital Center, under the jurisdiction and responsibility of the faculty of medicine at Yeshiva University.

Under their agreement, the university has not only undertaken the care of the patients but also the servicing of the laboratories of the hospital center.

The 511-bed Nathan B. Van Etten Hospital, the smaller of the 2 hospital units comprising the Bronx Municipal Hospital Center, has been in operation since July 1, 1954. The 898-bed Abraham Jacobi Hospital, the larger of the two, will open July 1, 1955.

In addition, the State of New York will construct a 4,000-bed psychiatric hospital on an adjoining site and, with the municipal hospital, will form a \$100 million center, of which the Albert Einstein College of Medicine will be the pivotal force.

The combined facilities will make this one of the largest and most comprehensive centers of medical training, care, and research in the world. The successful operation of this center is dependent on the

early completion of the construction program of the college of medicine. For it is the college of medicine that will produce the physicians, provide the scientists, and train the technicians that will be the heart and soul of this enterprise.

In August 1952, an architectural contract was awarded for plans and specifications for the college of medicine, the full cost of which is now estimated at \$12 million. In September 1953, the university awarded the contract for the foundations of the school at a cost of approximately \$450,000. To complete the school an additional \$11,500,000 was needed. In order to insure partial facilities for the entering class of September 1955, a contract was awarded in June 1954, for the construction of part of the main science building at a cost of \$6 million. To provide further for payment of this over and beyond the present resources of the university, the university, after great difficulty, obtained a construction loan of \$3,500,000 from the Bankers Trust Company of New York, and a permanent mortgage commitment in the sum of \$4 million from the Metropolitan Life Insurance Co., the latter being repayable in 5 years.

Since the granting of the charter in 1950, Yeshiva University has embarked on a nationwide campaign for capital funds for construction of the medical school and today approximately \$6.5 million in pledges have been received, with cash collections of approximately \$3 million, which have been used for the cost of the acquisition of the site, to meet the architectural and construction costs to date.

The Albert Einstein College of Medicine will admit 100 students a year and will have a student body of 400 students taking the course leading to the degree of doctor of medicine. The college is coeducational and nondenominational. The first class will commence this September. Graduate programs will also be offered leading to the degrees of doctor of philosophy in basic sciences—biochemistry, physiology, pharmacology, anatomy, and so forth, thus providing the most needed teachers. It is estimated that the annual operating budget of the college of medicine will be approximately \$2 million.

The college of medicine has now assembled a very strong senior faculty, men and women of outstanding qualifications. With the almost limitless facilities of the Bronx Municipal Center, it has already undertaken important research work in many fields of medical science. Its target is to enrich our country's scientific and professional resources, particularly to produce well-qualified family physicians, to advance the frontiers of medical knowledge, and to make significant contributions to medicine and scientific education.

I would like to say we have established a department of rehabilitation medicine, giving it full departmental status in the school, just as the department of medicine, surgery, anatomy, or any of the others.

The continued growth and operation of this important new college of medicine is dependent upon the receipt of adequate capital funds for the necessary construction and completion of the facilities now in the process of construction.

With the assistance from the Government made possible from the passage of this bill, our goal would be reached much sooner and we would be adding to this country's scientific and professional manpower much earlier than if we depend entirely on voluntary contributions.

Moreover, Government assistance would act as a powerful shot in the arm for the fund-raising campaign. We are only doing \$6 million worth of the \$12 million needed for construction.

Three million dollars provided by the Government would bring in an additional \$3 million from people throughout the country. We could complete the construction, properly equip the college and begin operating at full blast.

Not only to insure completion of our college, but also the general welfare of the country requires the prompt passage of the bill authorizing a program of grants for construction and improvement of medical educational and research facilities.

The CHAIRMAN. Doctor, would you estimate how much the passage of this bill, Senate 1323, would expedite your reaching your goal?

Dr. KOGEL. I believe if this bill were passed in time, we could start operating at full blast, and actually begin to accept the graduate students who are needed so very badly in order to provide the teachers that we need throughout the country, we would be able to accept the full blast—our first class, by the way, is 50—we are scheduled to accept classes of 100.

Senator LEHMAN. You say the first class would be 50. In the course of your remarks you mentioned the number of 100.

Dr. KOGEL. That is right. The very next one we hope will be 100.

Senator LEHMAN. All in one jump?

Dr. KOGEL. That is right. We are starting with a first-year class. The next year we will have a first- and second-year class, and so on.

Senator LEHMAN. You referred to this 4,000-bed psychiatric building. That is a State project?

Dr. KOGEL. That is a State project.

Senator LEHMAN. Would it be run by the State?

Dr. KOGEL. It would be run by the State, but we will train the psychiatrists for that project and train the nurses and train all the technical people that they need. We would be responsible for their program.

Senator LEHMAN. Are you training psychiatrists, specifically as psychiatrists, or giving them a general medical training?

Dr. KOGEL. In the medical college we are training family physicians but as part of that 1,400-bed center for which we are responsible, there are 131 psychiatric beds and there we expect to have a large program for the training of psychiatrists. We are opening the mental hygiene clinic June 1. There is a great dearth of psychiatrists at the present time and we do hope to be able to do something about that, by providing facilities.

The CHAIRMAN. Thank you.

We appreciate very much your coming and being with us and giving us your splendid statement.

(Dr. Kogel's prepared statement follows:)

MEMORANDUM OF DR. MARCUS D. KOGEL, DEAN, ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY, NEW YORK, IN SUPPORT OF THE BILL TO AUTHORIZE A 5-YEAR PROGRAM OF GRANTS FOR CONSTRUCTION OF MEDICAL EDUCATIONAL AND RESEARCH FACILITIES

I am Dr. Marcus D. Kogel, the dean of the Albert Einstein College of Medicine of Yeshiva University of New York City, a new medical school opening its doors to the first class this September. It is my task to supervise the construction of the new College of Medicine, assemble its faculty, and get the college going.

The urgent need for Government grants for the construction of medical educational and research facilities is exemplified by the present construction program of the Albert Einstein College of Medicine. We are learning the hard way that the cost of building a modern medical school, except under the most unusual circumstances, is beyond the resources of private institutions. Yet, the desirability of continuing medical education in this country, for the most part, under private auspices is recognized by all. The inspiration of progress arises from private enterprise. Government can make its greatest contribution by a formula such as is proposed under this bill—providing encouragement and assistance in an hour of need and imposing no controls in return. This is in the best traditions of our democracy.

Some background on the Albert Einstein College of Medicine and Yeshiva University may be of interest to the members of this committee.

Yeshiva University, the first American university under Jewish auspices, traces its origin to 1886 with the establishment of a school for religious studies and a theological seminary founded in 1896.

From these humble beginnings Yeshiva University has developed into an accredited university with 12 schools and divisions, 4 auxiliary services, and 4 scholarly publications. Its main academic center is at Amsterdam Avenue and 186th Street, in the Washington Heights area of New York City. However, it also maintains educational facilities in Brooklyn, the Bronx, and midtown Manhattan. It is educating in the arts, sciences, and Jewish learning more than 2,500 men and women students from all parts of the United States and abroad who are pursuing courses of study leading to 15 different graduate and undergraduate degrees.

Graduates of Yeshiva University are engaged in business, government, Jewish and general education, law, rabbinate, science, medicine, social work, and other professions.

In December 1950 the State of New York, through its board of regents, amended the charter of Yeshiva University, authorizing programs in medical and dental education. Yeshiva University immediately undertook the purchase of a 16-acre tract in the borough of the Bronx, city of New York, adjoining the 63-acre Bronx Municipal Hospital Center.

To insure adequate clinical facilities the university then entered into a written agreement with the city of New York, providing for the professional care of the patients in the Bronx Municipal Hospital Center, then under construction, with a capacity of approximately 1,400 beds, under the jurisdiction and responsibility of the faculty of medicine of Yeshiva University. Under this agreement the university has not only undertaken the care of the patients but also the servicing of the laboratories of the hospital center. The 511-bed Nathan B. Van Etten Hospital, the smaller of the 2 hospital units comprising the Bronx Municipal Hospital Center, has been in operation since July 1, 1954. The 898-bed Abraham Jacobi Hospital, the larger of the 2, will open July 1, 1955.

In addition, the State of New York will construct a 4,000-bed psychiatric hospital on an adjoining site and, with the municipal hospital, will form a \$100 million center, of which the Albert Einstein College of Medicine will be the pivotal force.

The combined facilities will make this one of the largest and most comprehensive centers of medical training, care and research in the world. The successful operation of this center is dependent on the early completion of the construction program of the college of medicine. For it is the college of medicine that will produce the physicians, provide the scientists and train the technicians that will be the heart and soul of this enterprise.

In August 1952, an architectural contract was awarded for plans and specifications of the college of medicine, the full cost of which is now estimated at \$12 million. In September 1953, the university awarded the contract for the foundation of the school at a cost of approximately \$450,000.

To complete the school, an additional \$11,500,000 was needed.

In order to insure partial facilities for the entering class in September 1955 a contract was awarded in June 1954 for the construction of part of the main science building at a cost of \$6 million. To provide funds for payment therefor over and beyond the present resources of the university, the university, after great difficulty, obtained a construction loan of \$3.5 million from the Bankers Trust Co. of New York, and a permanent mortgage commitment, in the sum of \$4 million, from the Metropolitan Life Insurance Co., the latter being repayable in 5 years. These loans were made on the basis of faith in the project and in the people supporting it.

Since the granting of the charter in 1950, Yeshiva University has embarked on a nationwide campaign for capital funds for construction of the medical school. To date, approximately \$6.5 million in pledges have been received, with cash collections of approximately \$3 million which have been used for the cost of the acquisition of the site and to meet the architectural and construction costs to date.

The Albert Einstein College of Medicine will admit 100 students a year and will have a student body of 400 students taking the course leading to the degree of doctor of medicine. The college is coeducational and nondenominational. The first class will commence this September. Graduate programs will also be offered leading to the degrees of doctor of philosophy in basic sciences—biochemistry, physiology, pharmacology, anatomy, etc., thus providing the muchneeded teachers. It is estimated that the annual operating budget of the college of medicine will be approximately \$2 million.

The college of medicine has now assembled a very strong senior faculty, men and women of outstanding qualifications. With the almost limitless facilities of the Bronx Municipal Hospital Center, it has already undertaken important research work in many fields of medical science. Its target is to enrich our country's scientific and professional resources, particularly to produce well-qualified family physicians, to advance the frontiers of medical knowledge, and to make significant contributions to medicine and scientific education.

The continued growth and operation of this important new college of medicine is dependent upon the receipt of adequate capital funds for the necessary construction and completion of the facilities now in the process of construction.

With the assistance from the Government made possible from the passage of this bill, our goal would be reached much sooner and we would be adding to this country's scientific and professional manpower much earlier than if we depend entirely on voluntary contributions. Moreover, Government assistance would act as a powerful "shot in the arm" to the fund-raising campaign. We are only doing \$6 million worth of the \$12 million needed for construction. The \$3 million provided by the Government would bring in an additional \$3 million from people throughout the country. We could complete the construction, properly equip the college, and begin operating at full blast.

Not only to insure completion of our college, but also the general welfare of the country requires the prompt passage of the bill authorizing a program of grants for construction and improvement of medical, educational, and research facilities.

The CHAIRMAN. Now, Chancellor Kimpton, University of Chicago. It is good to have you here. We appreciate your coming. Do you have a prepared statement?

Mr. KIMPTON. I do.

STATEMENT OF LAWRENCE A. KIMPTON, CHANCELLOR, UNIVERSITY OF CHICAGO

Mr. KIMPTON. I am Lawrence A. Kimpton, chancellor of the University of Chicago, and I appear before you in support of Senate bill 1323. As chancellor of a privately endowed university with a medical school which emphasizes the training of medical investigators and teachers, it is my opinion that the bill presently under consideration is a very good one, highly essential and long overdue.

At the University of Chicago we are currently spending over \$4 million a year on medical research, and we employ 300 investigators who have made many important contributions toward the longevity of man in the fields of heart disease, mental difficulties, and particularly cancer.

This bill will provide things which are now inadequate, namely, modern teaching and research facilities, and at the same time permit an increase in the number of medical students. Our faculty, it so happens, has already formalized its desire to increase the size of the

entering class. This is not currently possible because we have no funds available to make the necessary structural additions and changes.

While in general the funds from the public and Federal agencies have been most generous and permit the maximum effectiveness for the investigator, there have been no funds available to rehabilitate, modernize, and construct new laboratories.

It has not been possible for universities to supply this need, because each time a university accepts an outside grant it must match a certain percentage of the funds from its own budget to meet the direct and indirect costs. Relatively small amounts can be absorbed without difficulty, but it can be well understood that privately endowed universities today have long since passed the point where they can contribute further without damaging their financial stability.

Although research funds have been adequate and even generous, there are none available which permit a university to alter, improve, or expand its facilities in keeping with the research needs of this country. Many institutions, particularly the private ones, have not been able to make any improvements over the past half century except for makeshift, patching jobs.

This bill would enable us to expand and modernize our medical laboratories and teaching facilities and, by its matching provisions, would in addition stimulate contributions from private sources. To me this is the American way—Government and private citizens sharing the responsibility for one of the most important and successful ventures in our day: The improvement of human welfare through discoveries in medicine.

We have a group of dedicated teachers and investigators, particularly young men who are giving their lives to this cause. Unfortunately, because of increased living and education costs, many are being lured away to more attractive financial opportunities in private practice.

Their needs are not demanding or selfish; they want a reasonable wage and an adequate place to work.

They are willing to endure many sacrifices in compensation, but we cannot expect to retain many of these brilliant young investigators in obsolete, reconverted laboratories in old apartment buildings.

The United States today has become the leader of the medical world. There is a constant backlog of foreign scientists attempting to come to this country to improve their knowledge and gain the advantages of our scientific program. We must not only meet the responsibilities of training our own men but also continue to provide the leadership and training the world needs and expects.

Although I am not a medical man, I am reliably informed that prior to World War II the number of drugs that could be prescribed to affect specifically any one disease could be numbered on the fingers of two hands. Mr. Theodore Klump, president of the Winthrop Chemical Co., states that in a recent survey of over one million prescriptions, 90 percent or more were for drugs not even in existence 10 years ago.

This has been accomplished in spite of inadequate facilities, particularly in the area of the basic sciences so essential to medicine where the fundamental discoveries are made. We simply cannot take funds from our already overextended reserves to make the necessary im-

provements compatible with this expanded program of training young investigators and conducting medical research.

We are spending approximately \$200 million a year in the United States today from public and voluntary sources or medical research—approximately 20 times the amount available prior to World War II. I should remind you, however, that not a penny of this can be devoted to the construction or modernization of laboratories.

The present bill calls for a voluntary enrollment expansion of 5 percent on the part of the medical schools which are able to do so. At our particular school we have attempted to expand the number of graduates to meet the needs of the country whose population is increasing in a proportion far beyond the number of physicians available.

For example, our population has increased by approximately 14 million, since the last census 5 years ago. If the birth rate continues at its present rate we will go from 164,500,000 to over 200,000,000 by 1970. An increase in the number of well-trained physicians is essential if for no other reason than to care for our expanding population.

If all the medical schools in the United States should increase their enrollment by a factor of 5 percent, which they probably cannot, this would mean only 350 additional physicians per year.

Like you, Senator Lehman, I regret that that only this small number should be produced.

By passing this legislation we would not only be able to make this increase but, more important, we could turn out quality physicians. Many of the schools having the greatest difficulties financially would hereby be placed in a position where they could provide the type of physician and investigator this country needs and demands.

At the present time 3,500 to 4,000 foreign physicians are coming into this country each year, and, while many of them are well qualified, the greater number are coming from schools which give only a perfunctory medical education.

Senator LEHMAN. Are these physicians permanent residents or visitors?

Mr. KIMPTON. As permanent residents, sir.

Some of these foreign schools, I understand, admit as many as 3,000 or 4,000 students annually, and the entire teaching program is done by formal lectures, a type of training that was recognized as inadequate a century ago.

The CHAIRMAN. You mean they didn't get the clinical training?

Mr. KIMPTON. That is correct, sir, or the laboratory training.

In conclusion may I state my opinion that the responsibility of the modern medical school in the United States is at once to produce outstanding physicians and at the same time to attract, develop, and retain the brilliant young investigator upon whom rests the future of medicine in this country. If it cannot provide ample facilities—and I do not think the Government should do this alone but should share in the responsibility—then we can expect to retrogress rather than maintain our present level of medical teaching and research. The well-spring of our medical talent to provide for our private citizens, the Armed Forces, the various agencies offering medical assistance in foreign lands, the United States Public Health Service with its fine laboratories here in Washington, to mention but a few major cate-

gories, is the medical schools. The people of the United States are now expecting and receiving manifold but not altogether deserved benefits from American medicine, and the personal sacrifices of the scientists to remain in academic medicine is ample proof of this statement. It would be wrong and inexpedient for our Government not to participate in providing expanded, efficient, and modernized facilities in which these dedicated men and women will work.

Senator LEHMAN. In Illinois, is there a medical school connected with the State University?

Mr. KIMPTON. Yes, there is, sir. The University of Illinois has a distinguished medical school.

Senator LEHMAN. How large is yours?

Mr. KIMPTON. We have 75 students each year, whom we admit.

Senator LEHMAN. And the State college?

Mr. KIMPTON. I am sorry to say, I do not know.

Reverend HUSSEY. 175, approximately.

The CHAIRMAN. You spoke of the foreign physicians who come here to be with us. Is it true that their services are needed in their own countries very badly, sir?

Mr. KIMPTON. This would be my judgment, sir. I spent last summer in Europe and I found it very inadequately staffed with competent physicians.

The CHAIRMAN. As you, of course, well know, we have made large grants seeking to help some of our friends across the sea develop more technical men, more scientists, not only in agriculture, but in many other endeavors.

Mr. KIMPTON. In my opinion we are draining off the physicians from Europe by way of more adequately staffing our own hospitals and areas.

The CHAIRMAN. What is the present size of your class?

Mr. KIMPTON. 75, sir.

The CHAIRMAN. You would be gratified to increase that.

Mr. KIMPTON. Indeed we would. Under the new bill, we would be able to increase—it is only four students, but it helps to that extent.

The CHAIRMAN. We are very much obliged to you. We appreciate your coming and your very excellent statement.

Now, Dr. Topping, vice president, University of Pennsylvania.

Doctor, in the old days you were with the United States Public Health Service and you were with us quite often. We welcome you back.

STATEMENT OF DR. NORMAN TOPPING, VICE PRESIDENT, UNIVERSITY OF PENNSYLVANIA

Dr. TOPPING. I am Dr. Norman Topping, for 17 years a Commissioner in the Public Health Service. From 1948 to 1952, I was Associate Director of the National Institutes of Health with the rank of Assistant Surgeon General of the Public Health Service.

Since 1952, I have been vice president of the University of Pennsylvania, in charge of medical affairs.

For clarification, the University of Pennsylvania is a private institution. It is assisted by State appropriations, at times, and it was founded in 1740.

I have a complete statement which I have presented to the clerk, Mr. Chairman, and I would like to make a few comments on that statement, if I may.

(The prepared statement of Dr. Norman Topping follows:)

STATEMENT OF DR. NORMAN TOPPING

Mr. Chairman, my purpose in appearing before you today is to support S. 1323 as a practical and feasible way for the Federal Government to participate in the difficult problem of financing medical education. The bill for Federal participation in the cost of modernizing and improving our medical schools has long been needed. It is based on the principle of Federal funds matching those raised in the local community that has proven so effective under the Hospital Construction Act of 1947.

There can be little doubt of the construction needs of our medical schools. Most of them have struggled for years in order to meet their yearly operating costs with no funds available for alterations and modernization, to say nothing of urgently needed additions. We have expected them to turn out fine physicians for the care of civilians, for our Armed Forces, for public health, and for many other activities, and, at the same time, carry an ever-increasing amount of research to improve our health. These ever-increasing activities and the resulting costs have been met in many ways and by various agencies. The students have been asked to bear as much of this as possible; but when a year's tuition and fees reach \$1,000, not to mention books, instruments, room, board, and clothing, the breaking point has been reached. None of us can afford to allow medicine to become a profession only for the well-to-do, and it is rapidly approaching that position. Even with this high tuition, only approximately one-third of the cost of medical education is met by the students. The other two-thirds must be met by the institution from endowment income, subsidization from other sources, State appropriations, gifts, donations, and the like.

The practicing physicians have participated through alumni giving to their schools and through the American Medical Association's Foundation for Medical Education. Industry is beginning to help meet these operating costs through the national fund for medical education. Some of our States are now carrying a heavy burden, but not all States have medical schools and about 50 percent of our schools are not eligible at present to receive State aid. Many individuals and many foundations have contributed generously to help meet these rising costs. Yet with all this struggle to finance medical education, the faculties are poorly paid, and they must be dedicated souls to continue with such high ideals to meet our health needs, as they have been doing so well.

Isn't it time that the Federal Government recognize this situation and participate in helping in its solution? It would seem that the logical place to participate is by giving assistance in modernizing and providing for the necessary additions. In the constant struggle to meet operating costs, little, if any, funds have been available for this purpose. Many of our medical schools were built many years ago and are in serious need of capital funds for improvement.

These schools today are carrying much heavier responsibilities than ever before and in most instances in facilities inadequate for the program. Let me enumerate some of the activities of our medical schools so that you may clearly see the great contributions they are making to our American life:

- (1) Teach 30,000 undergraduate medical students, graduating about 7,000 each year.
- (2) Instruct 16,000 dental, pharmacy, and nursing students.
- (3) Responsible for the teaching and research of 8,000 graduate students in the biological and medical sciences; these are candidates for the doctor of philosophy degree.
- (4) Conduct research projects costing \$32 million per year.
- (5) Train 11,000 doctors, residents, and interns.
- (6) Give refresher courses to 17,000 physicians each year.
- (7) Provide \$100 million worth of fine medical care to approximately 2 million people.

Perhaps I can best illustrate some of these by citing the experience at our own school of medicine. (As you perhaps know, ours was the first school of medicine in America, founded in 1765.) We have about 500 medical students, admitting each year a class of 125. Our classes can be no larger because of space limitations. In addition to these, students from other schools in the university are taught in the medical-school building and/or by its faculty as follows:

School	Number of students	Courses
Dental	140	Anatomy, physiology, biochemistry.
Veterinary	55	Pathology: Laboratory work is done at veterinary school.
Graduate school of arts and sciences; medical branches.	76	Essentially all courses are taken in the medical school.
Nursing	25	Anatomy, physiology. Taught in medical school building by separate personnel.
Graduate school of medicine	250	The medical school building is the central unit for teaching of these students. Basic science teaching is done by a separate faculty but a considerable portion of clinical teaching is carried out by faculty of the school of medicine.
Auxiliary medical services: Occupational therapy, physical therapy, medical technology.	92	Anatomy, physiology. Taught in the medical school building by separate personnel.

In addition to these instructional endeavors, the faculty conducts a large research program in the medical-school building. This is financed largely through grants and contracts with Government, foundations, and industry. As grateful as we are for this financial support, it must be realized that many agencies carry only a portion of the direct and indirect costs, leaving at times a rather large share to come from university resources. For instance, several Government agencies pay indirect costs amounting to 45 percent of salaries, another pays indirect costs amounting to 15 percent of total grant, and a third Government agency pays only 8 percent of total grant. Unfortunately, most of the grants for medical research are provided by the agency that pays only 8 percent of total grant for indirect costs. The research projects conducted in the medical-school building are as follows:

Number of projects	121
Cost	\$1,470,993
Income from grants and contracts	\$1,226,104
University contribution	\$244,889

The University of Pennsylvania, like many other such institutions, with a medical school, owns and operates a large teaching hospital staffed by the faculty of the school. Here is where the 500 medical students receive their clinical training and experience. In addition, the hospital of the University of Pennsylvania provides for the following training each year:

Students in training:

Nurses:	Number
3-year course	454
5-year course	40
Technicians:	
Radiology	10
Laboratory	24
Interns	32
Residents	200

This teaching hospital, through the faculty of the school, carries on a large and active clinical research program. Here again the previous comments regarding indirect costs for research are applicable. These can be enumerated as follows:

Number of projects	104
Cost	\$1,286,757
Income from grants and contracts	\$1,156,146
University hospital contributions	\$130,000

Another great contribution this teaching hospital makes is the amount of part pay and free care given to needy individuals each year. It is estimated that for the year ending May 1, 1955, the following will have been provided:

Cost to the Hospital of the University of Pennsylvania

Patient status:

Out patient (120,000 visits)	\$340,000
Bed patients (6,000 patients)	1,060,000

It must be pointed out that these patients form the nucleus necessary for our various teaching programs.

I have given you these details of one university, a private institution with some assistance from the Commonwealth of Pennsylvania, so that you might see more clearly the contributions your medical schools are making to our society. I'm confident from this that you realize that our medical schools have obligations broader than just medical education, and that in this area large numbers of people are being trained and educated, which is so important for our future. Here is the heart of our medical research and our medical and biological scientists of tomorrow. Here are our future doctors and many of the dentists and nurses. Here are the people who will later specialize in surgery, medicine, and the other disciplines of clinical medicine as well as public health. Here are the future medical corps for the Armed Forces. But most important, here are our future educators and teachers, so that our fine traditions in patient care, research, and teaching can be carried forward. It is for all of these that S. 1323 becomes so very important.

It is to our medical schools that the American Cancer Society, the American Heart Association, and the National Foundation for Infantile Paralysis turn for their research supported by their voluntary contributions. It is to these same schools that the Public Health Service turns for research personnel to staff the Clinical Center and the Institutes of Health as well as to secure research results under the grants program. Be it peace or war, be it research or clinical medicine, be it the teachers of tomorrow or the health administrators, the schools of medicine are the backbone of our system of which we are all so justly proud. You have heard today of the construction needs of these schools, what S. 1323 will accomplish, and how important it is for the future. Having worked with the chairman of this committee and some of its members during my 16 years with the United States Public Health Service, I feel confident that with your understanding of these problems S. 1323 will be reported favorably to the Senate.

I also want to thank the committee and its chairman for its deep interest in the problems of medical education and for the time it has devoted to exploring ways and means of Federal participation without interfering with a system of proven excellence. We think S. 1323 represents this approach.

Dr. TOPPING. I think you have heard this morning of the increasing difficulties medical schools have had in meeting increasing costs.

I would like to make a little comment on where these funds have been secured to meet these operating costs that have been mounting each year.

The tuition of the students have been increased until they have just about reached the breaking point. The tuition in many of our medical schools are now \$1,000 a year or more and this does not include books, instruments, room and board, clothing, and many of us think the breaking point has just about been reached.

I do not think any of us can afford to allow medicine to become a profession, only for the well-to-do.

In spite of this increasing tuition, it is pretty well understood, I think, by most, that the tuition only pays a fraction of the cost of medical education.

In our school, approximately one-third of the cost of medical education for each individual student is met by tuition.

The CHAIRMAN. It would be most unfortunate if tuition were equal to the whole cost, would it not? It would deny many splendid young men the opportunity to become doctors. Is that not true?

Dr. TOPPING. That is true.

The other two-thirds of the cost are met from endowment income, from subsidization from other sources, State appropriations, gifts, donations and the like.

The practicing physicians have participated through alumni giving to their schools, and through the American Medical Association's Foundation for Medical Education.

Industry is beginning to help meet these operating costs through the National Fund for Medical Education.

Some of our States are now carrying a heavy burden in medical education, but not all of the States have medical schools and about 50 percent of our schools are not eligible for State aid.

Even though we have been struggling these years to meet these operating deficits, I think it must be realized that our faculties have very little salaries and they must indeed be very dedicated souls to continue to meet with such high ideals, our health needs, as they have been doing in these past years.

Now, isn't it time the Federal Government recognize this situation and participate in helping in its solution? It would seem that the logical place to participate is by giving assistance in modernizing and providing for the necessary additions. In the constant struggle to meet operating costs, little if any funds have been available for this purpose. Many of our medical schools were built many years ago and are in serious need of capital funds for improvement.

You will recall that Dr. Rusk mentioned to you earlier this morning that we have about 30,000 undergraduate medical schools, graduating about 7,000 a year. We instruct dental, pharmacy, and medical students. We have refresher courses. We carry on research projects in our medical schools amounting to about \$32 million a year, and on top of that we provide through our medical schools about \$100 million worth of fine medical care for approximately 2 million people each year.

I thought perhaps I could illustrate some of these figures by telling you a little bit of the activities of our Medical School at the University of Pennsylvania.

In this medical school, which, perhaps as many of you know, was founded—the first medical school in America was founded in 1765. We admit about 125 students a year, giving a total school enrollment of about 500.

Over and beyond the 500 medical students our faculty teaches, and who are taught in the building, I would like to enumerate some of the other activities:

We have in anatomy, physiology, and biochemistry—we have 140 dental students each year.

In pathology, we have 55 veterinary students.

We have 76 graduate school students being taught in the medical school.

We have 25 nursing students being taught anatomy and physiology.

We have 250 members of the graduate school of medicine. These are graduate doctors who are back for a full year's course. Two-hundred-fifty of those are being taught in our medical school.

Then, we have 92 students from the auxiliary medical services—occupational therapists, physical therapists, and medical technicians.

In addition to these instructional endeavors, the faculty conducts a large research program in the medical school building. This is financed largely through grants and contracts with Government, foundations, and industry. As grateful as we are for this financial support, it must be realized that many agencies carry only a portion of the direct and indirect costs, leaving at times a rather large share to come from university resources.

For instance, several Government agencies pay indirect costs amounting to 45 percent of salaries. Another Government agency pays indirect costs amounting to 15 percent of the total grant, and a third Government agency pays only 8 percent of the total grant. Unfortunately, most of the grants for medical research are provided by that agency that pays only 8 percent of total grant for indirect costs.

Now, the research projects conducted in the school of medicine building at the University of Pennsylvania are as follows: 121 projects are being conducted at present. It costs the university \$1,470,000, for which we receive from grants and contracts \$1,225,000, leaving \$244,000 that must be contributed from university resources.

Now, the University of Pennsylvania, like many other such institutions with a medical school, owns and operates a large teaching hospital staffed by the faculty of the school. Here is where the 500 medical students receive their clinical training and experience.

In addition, the hospital of the University of Pennsylvania provides for the following training each year:

Four hundred and fifty-four nurses in a 3-year course, 40 nurses in the 5-year graduate course.

There are 10 students in training as radiology technicians. There are 24 students in training as laboratory technicians.

There are 32 interns, and there are 200 residents.

This teaching hospital, through the faculty of the medical school, carries on a large and active clinical research program. Here again the previous comments regarding indirect costs for research are applicable.

In this hospital, we have 104 projects costing \$1,286,000, for which we receive income from grants and contracts of only \$1,156,000, leaving \$130,000 each year that must be contributed by the hospital or the University of Pennsylvania toward its research program.

Another great contribution this teaching hospital makes is the amount of part pay and free care given to needy individuals each year. It is estimated that our faculty in the hospital of the University of Pennsylvania provide the following each year:

As of May 1, 1955, we will have taken care of 120,000 outpatient visits at a cost to the hospital of the University of Pennsylvania, of \$340,000.

We will have taken care of 6,000 bed patients at a cost of \$1,060,000.

It must be pointed out that these patients form the nucleus necessary for our various teaching programs.

I have given you these details of one university, a private institution with some assistance from the Commonwealth of Pennsylvania, so that you might see more clearly the contributions your medical schools are making to our society. I am confident from this that you realize that our medical schools have obligations broader than just medical education, and that in this area large numbers of people are being trained and educated, which is so important for our future.

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our fine traditions in patient care, research, and teaching can be carried forward.

It is for all of these that S. 1323 becomes so very important.

It is to our medical schools that the American Cancer Society, the American Heart Association, and the National Foundation for Infantile Paralysis turn for their research, supported by their voluntary contributions.

It is to these same schools that the Public Health Service turns for research personnel to staff the Clinical Center and the Institutes of Health, as well as to secure research results under the grants program. Be it peace or war, be it research or clinical medicine, be it the teachers of tomorrow or the health administrators, the schools of medicine are the backbone of our system, of which we are all so justly proud.

You have heard today of the construction needs of these schools, what S. 1323 will accomplish, and how important it is for the future. Having worked with the chairman of this committee and some of its members during my 16 years with the United States Public Health Service, I feel confident that with your understanding of these problems, S. 1323 will be reported favorably to the Senate.

I also want to thank the committee and its chairman for its deep interest in the problems of medical education and for the time it has devoted to exploring ways and means of Federal participation without interfering with a system of proven excellence. We think S. 1323 represents this approach.

The CHAIRMAN. Doctor, you have been here many times, and you have always been most helpful to us. Again, you come this morning, and you have brought us a very fine statement. We want to thank you and express our appreciation.

Dr. TOPPING. Thank you very much.

Senator LEHMAN. It seems to me at this hearing this morning—which to me has been intensely interesting, and very, very helpful—we have laid particular stress upon the increase in the student population which can be made possible through various amendments to this bill. I think we overlook the tremendous collateral benefits to come from the bill. I will read the whole section:

To make grants for construction to assist the establishment of new public or nonprofit medical schools and in the improvement and expansion of teaching and research facilities.

It seems to me that the improvement and expansion of teaching facilities is tremendously important. I think it is very important to emphasize that.

Dr. TOPPING. That is correct.

The CHAIRMAN. Thank you, very much, Doctor.

Now, Dr. George A. Wolf, dean of the College of Medicine of the University of Vermont.

Dr. WOLF. I have two statements, one of Governor Johnson who is unable to be present.

May I put this in the record?

The CHAIRMAN. You may put that in the record, and we will print it in full.

We are sorry the Governor cannot be here, but we are happy to have his statement.

(The prepared statement of Gov. Joseph B. Johnson follows:)

STATEMENT OF GOV. JOSEPH B. JOHNSON

I had planned to appear personally before this committee; I regret exceedingly my inability to do so. Perhaps Members of the Senate will understand when I tell them that the legislature is now in its closing days and I feel it imperative that I stay at the State capitol.

I am honored, however, to lay before the committee, with its permission, a general statement of the place of the medical college in the total economy and administration of Vermont. I am sure that Dean Wolf will be able to present to you particular details, and I will myself concentrate only on the broader aspects as I see them.

The University of Vermont, now a State institution, has for a long period of time maintained a medical college of which we are all exceedingly proud. There is no doubt but that it performs a very valuable function in the State, as well as for most of northern New England. There has been developing over a period of time, but especially within the last few years, a considerable medical center in and around the medical school and the associated hospitals in Burlington. Whereas it used to be the case that for difficult diseases or surgery most people in this area were forced to turn to Boston or other large centers, now it is increasingly the case that people throughout the State and in part in northern New England and northern New York State are now turning their attention to the medical school and associated hospitals.

However, there is a very serious question whether the State can go any further in financial support for the institution than it now gives.

It appears quite outside the realm of possibility that in the near future the State can afford, at its own expense, to make any considerable addition to the medical-school facilities. Perhaps a few figures will illustrate the dilemma in which the State finds itself at this point.

The total biennial budget for the entire State for the general fund 2 years ago was \$35 million. The proposed budget for this biennium will be in the neighborhood of \$41 million. The increase will be made up primarily by an increase in the basic income tax of approximately 33½ percent. The largest single source of revenue is the income tax.

In 1940 and during the war years the State appropriated to the college of medicine annually \$60,000. In the last few years since the war this figure has risen markedly. The appropriation contemplated for the next biennium for the college of medicine is \$1,035,000. As you can see, this is an appreciable portion of our budget, and means a very high cost per Vermont student graduated.

Vermont's income-tax rate is already high. For incomes above \$5,000 it runs 7½ percent. Also, relatively to the rest of the Nation, Vermont has a low per capita income.

Many of you, I know, have faced appropriations and budgets within your own States. You will recognize that the demands for other moneys for other services within the State are increasing in all States, as well as Vermont. Currently, the demands for primary, secondary, and higher education, for public health services, rehabilitation services, vocational training, social welfare, etc., press heavily upon our ability to support them.

Approximately only one-third of the students at the medical college are Vermont residents. Of these a relatively large proportion establish practice eventually in Vermont. The rest of the students seem to come from all over, but primarily from the New England States and New York. We are presently in the process of working out a sort of interstate compact with the rest of the New England States for the education of medical students at the university. This involves a mechanism by which the other New England States would reimburse us for the tuition charges and other costs of their medical students at the University of Vermont. It is contemplated that this program would be extended in the future to other services besides medicine such as veterinary services, forestry, and the like. This, however, is only just beginning. It does not, and by the nature of the case, so far at least, cannot contemplate any costs of medical school construction. Unless and until this plan goes into full effect, obviously the State of Vermont is indirectly supporting the medical services of the rest of the New England States, and the high cost to Vermont taxpayers causes us, naturally, some concern.

It would seem, therefore, to me patently true that the State of Vermont, in the foreseeable future, cannot by itself afford a new medical college. It also seems true that the number of Vermonters who will study medicine would not warrant a medical school solely for Vermont students.

I could not presume to determine what the Federal Government should do, but if it seems desirable from a national point of view to expand the education of medical students, I think the University of Vermont is a logical place to do so for northern New England and northern New York, but it does not seem at all possible for Vermont to undertake such expansion within its own resources.

**STATEMENT OF DR. GEORGE A. WOLF, JR., DEAN AND PROFESSOR
OF CLINICAL MEDICINE AT THE UNIVERSITY OF VERMONT
COLLEGE OF MEDICINE**

Dr. WOLF. I am Dr. George A. Wolf, Jr., dean and professor of clinical medicine at the University of Vermont College of Medicine. I have been asked by the Association of American Medical Colleges to describe our needs at the University of Vermont College of Medicine as they relate to the needs of other medical colleges and to this bill. We, for example, are in serious need of a new medical college building.

The University of Vermont College of Medicine was established in 1804 and ceased to operate during the years of 1836 to 1853. From 1853 to date it has been an actively functioning college of medicine. It is of interest that the college of medicine building which now stands in Burlington, Vt., was rebuilt after the former college of medicine building was destroyed by fire. In 1903 the doctors and citizens of the city of Burlington realizing the importance of the college of medicine banded together to supply the funds for the building of our present medical college installation.

For the past many years, we have been turning out between 30 and 50 doctors per year. Although 68 percent of the doctors who are practicing in rural Vermont at the present time were educated at the University of Vermont College of Medicine, the great majority of our graduates are not Vermonters and do not settle in Vermont after graduation. Approximately two-thirds of our 189 medical students are not Vermont residents. There are 77 Vermonters, 72 other New England residents, and 40 residents of other States.

Although some medical colleges in other States have a predominance of their own residents as students, less than one-half the graduates of medical colleges settle in the State in which they were educated. A medical college cannot exist solely for the needs of the State which supports it without limiting opportunity for residents of the State who become physicians and without limiting progress in medicine.

Our medical college along with the rest in the country has provided physicians to the Armed Forces. Our medical college, as do others, participates in the "continuation" education of physicians, in medical research and in regional patient care.

I assure you that the patients who attend our clinics and receive the attention of physicians who are members of our faculty are not solely residents of Burlington, Vt., but come from the entire State of Vermont, parts of New Hampshire and parts of New York State.

Concerning our present needs at the medical college it must first be pointed out that we live in a small State with a small population and a low per capita income. The cost of operation during the past few years has been rising dramatically, as have our educational stand-

ards. There is little doubt that the cost will continue to rise, because we are attempting to maintain high standards, because medical education involves the use of expensive equipment, and because modern teaching techniques require a large staff with many fulltime members who do not support themselves by medical private practice.

Superior patient facilities for residents of Vermont and the northern New England area go along hand in hand with the teaching and research programs. Although suitable funds are available to conduct research programs, the 8 percent overhead costs allowed by most granting agencies are inadequate to cover the costs of operating a research program and many grantors do not provide overhead costs to the university. Research, however, must go on.

A medical college has the responsibility for leading and developing medical thinking in a given area. The doctors in the community look to the medical college in that area to set standards for their level of patient care. Finally, and most important, a medical college must be free to adapt to local medical care problems.

The college of medicine at the University of Vermont for many years had 30 students in a class. As a result of national pressure the enrollment was expanded to 50 students per class in 1949. This expansion occurred in most other schools. Our school has also improved its teaching and research program during these years. As a result, we have expanded our floor area about 200 percent in the last 15 years without a new medical college building. We have a 50-year-old building which formerly housed the entire medical college. Now, it contains offices, classrooms and research laboratories for medical college administration and five departments.

Our last coalbin is being converted to a research laboratory. A quonset hut houses a research facility. A 150-year-old wooden building houses 2 more departments. The remainder of our departments are scattered in the two local hospitals where hospital income-producing space is being used uneconomically for research laboratories. Only 23 of our 118 faculty members are housed in the medical college buildings.

The State of Vermont has helped support our operations in increasing amounts. In 1944-45 the State appropriated \$60,000 to the medical college and we had 147 students. Now, we receive about \$500,000 per year, or more than \$1.30 from each resident of the State, and have 190 students. Thus, the share of operating costs of our medical college which the State pays, is a serious burden. To help alleviate this, we have currently negotiated contracts with Maine and New Hampshire for the partial reimbursement of the State of Vermont for the cost of educating Maine and New Hampshire residents in the University of Vermont College of Medicine. As such regional cooperation grows, we must be prepared to offer increased opportunity for medical education, not only to Vermont residents, but also to those of New Hampshire and Maine. We are the only 4-year medical college in New England north of Boston.

We have estimated that a new additional medical college building will cost between 3 and 5 million dollars. We cannot depend upon the State solely to provide this sum. Federal help is crucial.

Yet, if we have a new building, we can increase our enrollment from 50 per class to 75 per class, eventually. We can continue the rate

of growth of our research program. We can improve the quality of our teaching program. I repeat, we are in serious need of a new medical college building.

The CHAIRMAN. You must be one of the youngest deans in the country.

Dr. WOLF. No, sir; I am getting well along in years. There are several deans who are 35.

The CHAIRMAN. Frankly, one reason I asked the question was that I thought you might have some secret as to how you keep young, which you might pass on to the committee.

Dr. WOLF. I would advise you not to become a dean.

The CHAIRMAN. We thank you very much for coming down and giving us your excellent statement.

Now, Dr. Harold C. Wiggers, dean of the Albany Medical College.

STATEMENT OF DR. HAROLD C. WIGGERS, DEAN OF THE ALBANY MEDICAL COLLEGE

Dr. WIGGERS. Senators, I have a semiprepared statement. In other words, it is in my own hieroglyphics and I will do my utmost to see that it gets in typed form, if time permits.

The CHAIRMAN. Very well. You just go ahead and proceed in your own way, Doctor.

For many years I was a close neighbor of Dr. Wiggers in Albany.

Dr. WIGGERS. I would like to give you some idea of the nature of the school which I represent. It is the Albany Medical College of Union University, which is set up somewhat peculiarly on the British system, whereby the various colleges or departments of the university have the responsibility of obtaining their own finances for both operational and capital expenses.

My name is Dr. Harold C. Wiggers. I have served as dean of the Albany Medical College since 1953. For 20 years prior to that, I was a teacher of physiology in 5 different medical schools and my research efforts were largely concentrated in the field of heart disease.

Today, I represent the opinions of the faculty and trustees of the Albany Medical College of Albany, N. Y., a privately supported, non-sectarian, coeducational school, which, as the sine qua non of the Albany Medical Center provides high quality diagnostic and treatment procedures for the relatively 1½ million residents of our 16-county orbit in northern New York State, and for an undetermined number of individuals who reside in western Massachusetts, western Connecticut, and southern Vermont, who find the facilities of the Albany Medical Center geographically more convenient to them than other medical centers.

Senator LEHMAN. You have a close tieup with the Albany hospital, do you not?

Dr. WIGGERS. Yes; we have an interlocking board of directors. We have no control, but I must say that in recent years there has been very wonderful working arrangements between the two institutions. I might say that it used to be that the hospital wagged the tail of the medical school. I think we can say, now, we are wagging each other.

The CHAIRMAN. Do you mean there are two tails to the dog?

Dr. WIGGERS. There are more.

Although the hospitals of this medical center provide—

The CHAIRMAN. Well, I will say this: Such a phenomenon would not be any more astounding that some of the things you people have done in the field of medicine in more recent years.

Dr. WIGGERS. Although the hospitals of this medical center provide high quality specialty services in every field of medicine, the medical college, by nature of its emphasis and the geographic nature of its enrollment, seeks to encourage the majority of its graduates to enter general practice. Perhaps it is because a higher than average percent of our graduates become family physicians that I have been called upon to testify on bill S. 1323, today.

Although I concur with the very broad and general comments of my colleagues who have preceded me, I shall utilize my time to draw your attention to the singular financial problems which my own institution, which is probably one of the smallest in the country, faces at present.

As I proceed, I hope to make it obvious why my medical college is wholeheartedly in favor of and, in fact, greatly dependent on the passage of S. 1323.

The stature of the Albany Medical College has greatly improved since its founding in 1839, and now prides itself on the high quality of its teachers and advisers and its excellent faculty-student ratio. Bespeaking this great improvement and expansion of the faculty during the last decade is the fact that the operational budget has increased nearly fourfold in this period. In fact, back in 1951-52, the astronomical rise in costs provided a critical situation, in that operational expenses greatly exceeded income. This was particularly serious since our endowment is slightly over \$1 million.

Masterful readjustment of our financial status in the past 2 or 3 years has brought us back to a balanced budget, even though expenses continue to rise. Obviously, there have been no moneys to renovate the archaic structures of the medical college, nor to provide much-needed additional teaching and research facilities to meet the necessary requirements of our greatly expanded faculty.

In addition, we are further handicapped by the fact that in 1953, we responded to the nationwide pressure by increasing our freshman enrollment by some 16 percent. I might add parenthetically that we are recently discussing that if we cannot improve our facilities, we shall probably go back to the original figure of enrollment.

The CHAIRMAN. You think you will be compelled to do that?

Dr. WIGGERS. We will have to do so because we are so extremely crowded for classroom space, because we have a large nursing school, which the medical college also is responsible for teaching.

Within this period, the Albany Medical College has taken on the additional responsibility of providing instructional programs for some 2,000 busy practicing physicians who reside within our 16-county geographical medical orbit. These enthusiastically received programs have enabled these practitioners to keep abreast of modern developments in diagnosis and treatment and have thus undoubtedly elevated greatly the standard of medical care for the 1½ million residents of our medical center area.

Although growth is always indicated, the hospitals which provide our clinical teaching and research facilities have been able to raise, with the aid of Hill-Burton funds, sufficient moneys to achieve the

most modern of facilities, which has greatly improved our setup for clinical instruction of medical students, interns, and health staff.

Where we fall grossly behind modern standards is in the preclinical instruction years in the basic medical sciences, and in which field, our faculty has trebled in the last 8 years.

Our research activity has expanded to the point where our animal quarters are not only grossly inadequate, but have actually been condemned by Public Health authorities.

Research requiring animals must come to a complete halt in the near future unless these quarters are immediately renovated and expanded.

In addition, our space facilities for the instruction of students in the first 2 years are grossly inadequate and, in spots, archaic.

Slightly over 1 year ago, because of these pressures from all sides for modernization, renovation, and the accumulation of more space, a survey was conducted and plans drawn up for the improvement of facilities for basic medical science teaching and research and for the expansion of our medical library.

The cost estimates were staggering for a small medical college, a minimum of \$2,300,000 being the estimated figure, in view of the peculiar difficulty of raising large sums of money from our markedly scattered population.

Specifically, these plans include, first of all, complete renovation and modernization of the Theobald Smith Building, in which surely George Washington or one of his contemporaries must have quartered, and which houses our departments of physiology, pharmacology, and experimental surgery.

And, secondly, the addition of a new 5-story wing to the main college building, to provide the much needed classroom, laboratory, conference, office, and research facilities, which our expanded faculty and student body require.

We therefore took our appeals for the necessary funds to large fund-granting organizations. Up to the present, our efforts in this regard have been unfruitful; in fact, downright disheartening. Within our own community, an appeal for large sums for improving standards of medical education at the medical college has not yet reached the stage where it has the glamor and emotional appeal and understanding that renders fund drives for hospitals, civic buildings, community chest, Red Cross, and the innumerable health agencies, so successful. And yet, how effective could most of these projects be, if the services offered by the medical college were grossly inferior, or even withdrawn.

You can well imagine, gentlemen, the encouragement and hope which we at the Albany Medical College receive, when bill S. 1323 was introduced. With significant financial aid from a Federal grant, the defeatist attitude of our potential local contributors will be changed to one of plausibility, at least, and we can tackle and succeed, I am sure, in the program to raise the additional funds needed for new construction and renovation of existing facilities.

I wish to emphasize that many of our potential contributors to a potential local drive have already indicated their particular pleasure that bill S. 1323 includes provisions for income to help maintain any new structural addition to the college.

In conclusion, we at the Albany Medical College feel that although we are doing the best we can with the facilities available, we could elevate our standards significantly if our physical plant could be expanded and improved. In fact, the need for the facility is truly critical. Time is of the essence, for the continuation of improvement of existing standards of medical education and research productivity at this institution.

It is imperative that we discover some way in the immediate future to correct these deficiencies in our physical plant, if the Albany Medical College is to retain its present faculty and continue to improve it further as time progresses, if it is to attract and interest high-quality graduate students who will become the outstanding instructors and advisers of tomorrow, if it is to maintain modern high standards of education and research opportunities for our medical students, interns, and residents. And finally, if it is to enable its faculty to render the contributions to the advancement of medical science of which they are capable.

Therefore, because we are convinced that our continued development and progress, like that of every medical school, will determine the standards of health and medical care in this country for many years to come, and because immediate renovation and new construction is needed to eliminate the present barrier to our progress, the faculty and trustees of the Albany Medical College strongly support passage of S. 1323, which we feel has been written with such wisdom, foresight, and understanding of one of the most critical problems facing the medical schools of this Nation.

Thank you.

The CHAIRMAN. You really feel, now, if this bill passes, that you could remove those barriers and you could raise the additional funds necessary?

Mr. WIGGERS. Oh, yes; I am sure of that.

The CHAIRMAN. Well, thank you very much, Doctor.

We certainly appreciate your coming and being with us.

Dr. Roscoe Pullen.

STATEMENT OF DR. ROSCOE PULLEN, UNIVERSITY OF MISSOURI SCHOOL OF MEDICINE

The CHAIRMAN. Doctor, we are glad to have you, sir.

Do you have a prepared statement here with you?

Dr. PULLEN. No, sir.

I would like to speak extemporaneously, but I will be happy to prepare one, if you so desire.

The CHAIRMAN. Just proceed in your own way, sir.

Dr. PULLEN. My name is Roscoe Pullen. I am a physician serving the University of Missouri at Columbia, Mo., as dean of the school of medicine. Prior to that, I was dean of the postgraduate school of medicine at the University of Texas, and prior to that, vice dean of the Tulane University of Louisiana School of Medicine in New Orleans, La., for several years.

I should like, Mr. Chairman, to confine my remarks to a series of comments which I believe will be appropriate to this morning's discussion.

At the outset, I should like to concur in the statements of my fellow deans and medical educators which have been presented heretofore, and I appear before you, Mr. Chairman, in a capacity somewhat different, but I believe totally related to the problem which we are discussing.

The University of Missouri is the oldest State university west of the Mississippi River, and the University of Missouri School of Medicine is the oldest medical school west of the Mississippi River.

Founded in 1840, the University of Missouri School of Medicine is now completing its 115th year of operation. Unfortunately, for lack of adequate facilities of the type which have been discussed this morning, our institution has not been able to offer a 4-year type of medical education and to produce trained physicians since 1908, so therefore, the State of Missouri, and the University of Missouri, has not been able to contribute as greatly as is desired to the medical progress of our Nation, for approximately 50 years.

The people of Missouri have recognized this need. In 1951 and 1953, the Legislature of the State of Missouri has appropriated a total of \$13,500,000 for the construction of a new medical center in Columbia, Mo., in the center of the State.

I should like to comment, Mr. Chairman, on our progress and how these funds are being used and how it is germane, I believe, to this morning's discussion.

I have given to the committee the budgetary request for 1955-57, the architects' drawings, and the progress of what we have done, to date.

In addition to the \$13,500,000 now being invested in the construction of the new 441-bed hospital, a medical school building and a nurses' dormitory, the university has likewise invested \$3,200,000 in a powerplant and expansion of the utility lines and the like, which makes a total investment on the part of the people of Missouri, of approximately \$17 million.

We still do not have, Mr. Chairman, a complete medical center which is fitting of the State of Missouri, and which will enable us to provide the type of medical education that we want to provide.

You may ask, "Why do you not ask the Legislature of Missouri for more appropriations?"

That question is a very good one. The University of Missouri, like all State institutions at present, is faced with a rapidly expanding enrollment. In the past year, the enrollment of our liberal arts and undergraduate colleges have increased 10 percent. Now, 9,000; we expect to be 14,000 enrollment by 1970.

The needs of the university and the need for dormitories, classroom spaces, and other facilities are so great that the Governor of the State and our board of curators do not believe we are entitled to ask for additional appropriations at this time to enlarge our medical center.

We have therefore had to compromise on our architectural planning. We have had to leave out certain phases which we could not afford, on today's cost of construction, and which we need in order to enable us to provide a full medical education.

I should like also, Mr. Chairman, on the basis of our experience, to emphasize that any planning—and I can speak from strict experience in this regard—must be done now. We have been working literally 18 hours a day, 7 days a week, for the past 3½ years. Though I began my duties at the University of Missouri in 1953, I was com-

muting between the University of Texas and the University of Missouri for 1 year prior to that. We will not get into operation for at least another year in our new medical center.

I would submit, Mr. Chairman, based on our experience, that if architectural planning and design is now to be placed underway, now is the time, in order to meet the need for increased physicians.

I would call your attention likewise, Mr. Chairman, to the fact that students entering any medical school in the fall of 1955, this year, will have a 4-year program ahead of them, 1 year of internship in an approved, accredited hospital, and perhaps, depending upon the Congress of the United States, 2 or more years of service in the Armed Forces. That would mean, Mr. Chairman, that it will be 1962 at the earliest before our graduates at the University of Missouri, or elsewhere, can assume their rightful place in the practice of medicine in this country.

We must look ahead, 7 to 10 years in our planning, in order that we can start to meet the needs of our increasing population, the aging of our population, the increasing complexity of medical care, the longer curriculum with which we are faced in medical education, and all of the other problems which we are confronting at the present time.

I have another aspect, Mr. Chairman, that I would like to bring out, based on our experience in Missouri, which I believe will be helpful to this morning's discussion.

We are faced, as a nation, with a phenomenal growth of the aged in our population. With this growth in the aged, which has been so ably outlined by Dr. Howard Rusk on other occasions, there is likewise parallel increase in chronic disease. In the State of Missouri, heart disease last year accounted for over half of all the deaths in the State, and also for over half the illnesses. Our people have already, through medical science, reached the biblical "threescore and ten." If we are to keep them economically and socially useful for an even longer life span, we in the medical schools must advance medical science and research.

In our own institution, we have educational affiliations with one of the Nation's finest cancer hospitals, owned and operated by the State of Missouri. It has no facilities whatsoever for research or for clinical investigation in cancer. We need those facilities badly. So research in both heart disease and cancer would go a long ways in our own State in meeting the needs for better medical care.

A third aspect of patient care in Missouri, I believe, will likewise apply to the Nation at large. In several categories of welfare, Missouri ranks No. 3 in the number of people on the roster for disabled and crippled, being exceeded by New York State and the State of Louisiana.

In our State institution, we would be able to serve the people of Missouri by providing for the medically indigent people care which they are not able to obtain at the present time. During the coming year, the budget for which I have given you, Mr. Chairman, the University of Missouri, from funds for the State of Missouri, will provide patient care for from 200 to 300 inpatients daily, totaling approximately 76,825 days of patient care, per year.

The faculty of medical schools provide this care, Mr. Chairman, freely and gladly, as an opportunity to utilize these patients for teaching.

How much this would be worth in terms of professional services, one can only conjecture, but it would be several times more than our annual operating budget requests.

In addition to that, we will serve several thousand of patients annually in our outpatient department. At the University of Missouri approximately 35,000 patients this coming year.

I believe, Mr. Chairman, that these contributions of medical-school faculties are worthy of attention. Our faculty has likewise served in our State as consultants to the Armed Forces for the institutions located in that area.

Since 1947, Mr. Chairman, I have been consultant to the Surgeon General of the United States Army throughout the United States, and I am now consultant in internal medicine to the Fifth Army of the United States.

Other members of our faculty likewise accept gladly this privilege and opportunity to serve our Nation, through the Armed Forces, the Veterans' Administration, and the like.

I concur in what my colleagues have mentioned earlier. As to our educational programs, since we are on the campus of the university, in the center of the State, I can perhaps supplement that which has already been provided. I shall not list all the other categories of personnel taught by medical-school faculties, such as nurses, dietitians, medical-social workers, medical technicians, radiologic technicians, record librarians, anesthetists, public-health workers, and the like, but I would like to emphasize what is sometimes forgotten and that is that of all the topics at our institution, health is the one of equal importance to everyone.

The teachers in the college of education receive courses necessary in preventive medicine and hygiene from our faculty. The class at present numbers 256 in one class of teachers who are to go out and serve the public schools of our State.

Through our cripple-children's program operated by the University of Missouri, we provide training to teachers who are to care for the physically handicapped.

Thirteen percent of the schoolchildren in the public schools of Missouri have physical handicaps of some type or other. Not only is there medical care of the indigent provided by our faculty but the training of teachers to deal with the handicapped children, which is, we believe, a significant contribution to the health and welfare of our State.

I would conclude, Mr. Chairman, by repeating that we are in the process of developing a medical center to train 75 students in each entering class. We are now serving 45, and with our present funds and construction we can accommodate 75.

If Senate bill 1323 is passed, we are in a position, architecturally speaking, to avail ourselves immediately of expansion to 100 students, and would be happy to undertake that assignment.

The State of Missouri at present has a physician ratio of 1.29 physicians per thousand population, which is exactly on the national average.

We have 500 Missourians in the medical schools of this country, including our own. To maintain the ratio, with the aging of our physicians, retirement and for other reasons leaving medical practice,

we need to increase the number of Missourians studying medicine to 732.

If we are able to expand our class to 100, as we believe it is our obligation to our State to do, we will offset in large proportion the dwindling supply of physicians in our State.

I shall be very happy to answer any questions.

The CHAIRMAN. May I say, Doctor, your photographs and your plans here look most interesting. Not only most interesting, but I might say most encouraging.

I want to thank you very, very much for coming here and being with us and giving us this statement this morning.

Thank you, Doctor.

Dr. Carmichael, they say the first shall be last and the last shall be first. I am very proud to ask you to come to the witness stand now, the president of the University of Alabama.

Doctor, you and I were students in the University of Alabama, together.

Dr. CARMICHAEL. That is right, sir.

The CHAIRMAN. You left there and made a very brilliant record at Oxford and came back to Alabama to serve the State Women's College there, went on to Vanderbilt, and then on to your foundation work. Two or 3 years ago the State of Alabama was tremendously fortunate when you decided you would come back home to Alabama.

Dr. CARMICHAEL. Thank you, very much.

The CHAIRMAN. As chairman of this committee, I am very proud and happy to welcome you here, today.

Dr. CARMICHAEL. Thank you, very much, and I appreciate the opportunity of saying just a few words.

I came into the room somewhat behind the eightball, because I have so much less experience in medical education than those who have preceded me, and as each man came on, I got further and further behind, so I am really quite lost behind it at the moment.

I would like to say, however, for the record, something of my interest in medical education and contact with it.

STATEMENT OF DR. OLIVER CARMICHAEL, PRESIDENT, UNIVERSITY OF ALABAMA

Dr. CARMICHAEL. In Vanderbilt University, where I served from 1937 to 1946, we had a medical school and a collegiate school of nursing with which I labored long and hard. I used to think I spent as much time with that small school as with all the others in the university.

At Carnegie for 7½ years, from 1946 to 1953, I was constantly in contact with the presidents of the universities from all over the country, and over and over the problem which they came back to, whether they came in to talk about that or not, was the problem of medical education.

Then for 2 years, 1946-47, I was with the vice chairman of the Commission on the Need of a State University in New York State, which wrestled with the problem of whether, in a new State program, additional medical schools should be provided. Owen B. Young, as you probably remember, was the chairman of that commission.

Then for 5 years I served as chairman of the board of trustees of the State university, which does include 2 medical schools, 1 on Long Island and 1 at Syracuse.

With this detail of my own experience, I have set it out for the reasons that what I am going to say in my few remarks grow out of that experience over a number of years.

I would like, first of all, to say that while I shall not present any new material—I think the ground has been well covered—there are two phases of the problems which have been brought up here this morning that I should like to elaborate upon, at least slightly, because I believe certain facets have not been touched upon quite fully enough.

The first one is the increase of medical students. That problem was before the State of New York. We had many hearings with all sorts of experts and all sorts of laymen coming before it. It was a commission of 30 men, including educators, laymen, and politicians. They voted in the end, unanimously, to set up two medical schools in the State University of New York, thus stating their view on the need for more medical students. That was in 1946-47. If it were true at that time, it is surely true today.

For reasons which have been touched on, which I should like to amplify a little: We heard from Dr. Rusk about the great increase in population. It is a fantastic fact. The increase that has taken place in the past 5 years. But these figures I ran across very recently: In 1933 there were 2,081,000 babies born in the United States. In 1954 there were 4,073,000 babies born.

Now, as Dr. Pullen has just said, at the other end of the spectrum men's lives are going longer, and going longer they need more medical care per capita than the younger groups.

We face what the people in this country—and all phases of our work and medicine is a good example, namely, a deep expansion of population never experienced in this country, and so far as I know, in any other country.

Now, the second thing is the matter of quality of medical teaching and medical education. I should like to say that from my point of view, perhaps the greatest problem of medicine, barring none—this is a layman's view, I know, but perhaps the greatest problem is attracting and holding the ablest men in academic medicine. It is perfectly natural why that should be true. A good man in medicine can, in private practice, secure some five times greater income than he can in academic medicine. So it is a great temptation not to go into academic medicine. We all know, of course, that the quality of medical education depends upon the quality of those who teach.

Now, how do we solve that problem? I have thought about it many, many times. You cannot solve it by competing with the men in the market place, with the private practitioner. It is wholly impossible. All that is left, I think, is to provide his research facilities, well equipped, so that they will be attractive to him, to provide office space and appointments that are worthy of his calling, to provide the classrooms and the helpers, the technologists and the nurses—more than we have been providing heretofore—that will make this life of the academic man in medicine more attractive than it has been.

I have been through many medical schools. I have been impressed over and over with the fact that the offices of the medical professor,

and frequently his laboratory, is in unbelievably poor taste and does not comport with the sort of service that he renders to society.

So I believe in this bill which we have been discussing this morning, S. 1323, that we have a very ingenuous method of meeting the most important needs at the present time of health and medical science. In providing now help in the building of more adequate medical education facilities, you are hitting at the heart of the problem of holding in medicine the best, ablest men.

The fund that set up a very large scholarship for people who had just finished their internship to hold them for 5 years until they are ready for professorship, has done a wonderful thing, I think.

To provide the laboratory facilities and the office space and the classrooms that comport with the kinds of services that the medical academic man renders, is the other thing to round out that picture.

Now, just a word about the medical situation in Alabama. Alabama is a State, as you know, Mr. Chairman, of 3 million people. We have only 1 medical school. In Georgia, they have 2; in Tennessee, they have 3; in Louisiana, they have 2; in North Carolina, they have 3. We have a single medical school, a single dental school. We have 1 hospital nursing school in Birmingham and 1 collegiate nursing school in Tuscaloosa. We have about 320 medical students, 200 dental students, 150 hospital nursing students, and about 140 collegiate nursing students.

We have fairly good basic science laboratories. As a matter of fact, we offer the doctor of philosophy degree in four of the basic sciences. They are not wholly adequate, but they are fairly good. We have almost no research facilities for the clinical men. We have one of the really great men in congenital heart disease, Dr. Behm. I have been in his laboratory several times and have come away ashamed that we haven't provided him better quarters to do this really outstanding work that he is doing there.

We have a problem, and I am sure it is true everywhere. There is a tendency on the part of men who are teaching surgery and medicine, obstetrics and other subjects, to do some practice on the side. I think that is good. If you don't provide the clinical man with research facilities, he will increase and increase and increase, and I have seen it a dozen times in my own experience, his outside practice until he does almost no research and becomes in large part a practitioner instead of a medical education man.

Now, I believe that S. 1323 will meet our needs on the nose. I am not sure where we are going to find the money to match it, but I believe we can do that, and to help us strengthen the medical educational facilities, the research facilities, classrooms, and office space, to meet the real need that I have felt since I have been back in Alabama since September 1953.

I strongly favor, as the staff of the medical center strongly favors, S. 1323, and hope it will be passed.

The CHAIRMAN. Doctor, let me ask you one question, if I may. As the head of a great university, of course you have many, many needs, many demands, and you have only so much in the way of funds. The question, then, is which need is greater than the other need?

The Congress, of course, is daily confronted with the same situation. We have many requests, many needs are presented, many demands. Speaking now from the standpoint of one who is head of a great

university, you see many needs, not only medical needs but other needs. Do you feel that one of our most pressing needs is this need to which you have been addressing yourself this morning, that is, more facilities for our medical schools?

Dr. CARMICHAEL. I do very sincerely. We sometimes talk about the cost of medical education. What we ought to talk about, I think, is the cost of illness and the great saving of medical education that puts men back—I think it was 10 years ago, the average length of time in the hospital was 14 days. The average length of time today, I believe, is seven. To get a man back 7 days sooner into his job over what he was, means that the hospital and medical care is a great moneysaver instead of a great cost.

The CHAIRMAN. A great economic saving to the country.

Dr. CARMICHAEL. That is right.

The CHAIRMAN. Then you would certainly put this bill up as one of the great needs and give it very, very high priority, would you not?

Dr. CARMICHAEL. I would indeed. I would indeed.

The CHAIRMAN. Well, doctor, you have closed the case this morning with a most compelling and eloquent statement.

Dr. CARMICHAEL. Thank you.

The CHAIRMAN. I think we have had a very fine hearing. I don't think the case could have been closed more capably than in the way you have closed it.

I am happy to have had you here.

Dr. CARMICHAEL. Thank you, sir.

The CHAIRMAN. Before I close the hearing this morning, I will say I have had some inquiries from others about the bill which we have had under discussion, S. 1323, to provide for construction grants for our medical schools, and another bill that we have here, the Medical Research Act of 1955, Senate bill 849. Of course, we all know what was the intent and purpose of S. 1323, to authorize these construction grants for our medical schools, and we should have those grants for any research facilities that might be needed or should go along with the construction facilities for the medical schools. It would be unfortunate to pass any legislation for the advancement of our medical schools that did not contain proper provision for research facilities apart from the operation of the schools.

The other bill, the Medical Research Act, we had hearings on in the early part of April. That bill has, I might say, a different primary emphasis from S. 1323, in that it is solely restricted to grants for construction of research laboratory facilities. It offers no aid to the basic operating functions of the medical school. It covers a wide range of research facilities, other than medical schools; universities, hospitals, private laboratories, private hospitals, public-supported hospitals, and research institutes and other facilities, other than our medical schools.

In fact, I am advised by the United States Public Health Service that there are now applications totaling some \$154 million for research facilities such as provided under S. 849. That bill would only authorize appropriations of \$90 million over a 3-year period, so there can be no conflict between S. 1323, and S. 849. They both are to meet what the authors feel to be compelling needs.

I will say this, as chairman of the committee, we shall certainly press for the passage of both these bills to meet the needs which have been so strikingly brought to the attention of this committee.

Dr. Lippard, I want to thank you, as chairman of the Council of Deans, and all of those who appeared here this morning. I have been here some time, both in the House and Senate. I do not think I have ever attended a finer hearing than we have had here this morning. I congratulate you gentlemen and express to you our very deep appreciation.

Dr. LIPPARD. Senator Hill, I am sure I speak for all of the group in telling you how much we appreciate the opportunity to be here.

The CHAIRMAN. Thank you, sir.

The committee will now stand in recess until 10 o'clock tomorrow morning, when we will meet here in this room and continue the hearing on S. 1323.

(Whereupon, at 12:45 p. m., the subcommittee recessed, to reconvene at 10 a. m. Friday, May 6, 1955.)

AID TO MEDICAL EDUCATION

FRIDAY, MAY 6, 1955

UNITED STATES SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
SUBCOMMITTEE ON HEALTH,
Washington, D. C.

The subcommittee met, pursuant to recess at 10:05 a. m., Senator Lister Hill (chairman) presiding.

Present: Senators Hill, Lehman, and Bender.

Also present: Mr. William G. Reidy, professional staff member.

The CHAIRMAN. The committee will kindly come to order. We are glad to have with us our fellow member, Senator Irving Ives from New York.

Senator, would you like to sit up here with us?

Senator IVES. I just informed the stenographer that I would keep to the text. You force me to make some observations. For once I would like to be a witness.

The CHAIRMAN. I wondered whether you, as a member of this committee, wanted to sit up here with us or appear as a witness.

Senator IVES. I thank you for your courtesy. You are always most courteous.

The CHAIRMAN. Thank you, sir.

STATEMENT BY HON. IRVING M. IVES, A UNITED STATES SENATOR FROM THE STATE OF NEW YORK

Senator IVES. I appreciate this opportunity to appear before you during your consideration of S. 1323, which would authorize a 5-year Federal assistance program for the construction of medical education and research facilities, and part E of S. 434, which would provide Federal assistance to medical and nursing schools.

The provisions of both bills would go far in alleviating a serious shortage of adequate facilities which are sorely needed for medical education and research.

I had the privilege of introducing S. 434 on behalf of the junior Senator from Vermont, Mr. Flanders, and the junior Senator from New Jersey, Mr. Case, and myself.

This bill contains a comprehensive approach to the general problem of providing the people of the United States with a broader distribution of health services and facilities.

The cornerstone of the national health program advocated in this bill is Federal financial assistance to voluntary, nonprofit, prepayment health plans.

Part E, which is now being considered by your subcommittee, although of great importance, is only a segment of the broad national program contained in this proposed legislation. Although I am pleased that your subcommittee is now considering the problem of furnishing adequate facilities for medical study and research, I had hoped that all of the provisions of S. 434, as well as those of other comprehensive bills now pending before your subcommittee—including one containing the recommendations of the administration—would be considered together by your subcommittee.

There are certain differences between S. 1323 and part E of S. 434, which should be noted. S. 1323 would authorize a 5-year program for needed medical education and research construction, whereas part E of S. 434 provides for a program of indefinite duration.

I think the chairman will recall that I am always for having these open ends.

Moreover, the authorization for appropriations contained in S. 1323 is limited to \$50 million per annum for 5 years, whereas S. 434 contains an open-end authorization for appropriations based upon need.

Again the open-end approach.

Part E of S. 434 provides for Federal aid to both medical and nursing schools for operational costs including salaries and maintenance, as well as the construction of facilities. S. 1323 provides Federal aid only for medical school and research facility construction, except that up to 20 percent of any Federal grant may be allocated as a permanent endowment for maintenance.

Both bills provide for a maximum Federal grant of 50 percent of the cost of construction. However, S. 1323 provides for Federal participation not in excess of 66⅔ percent with respect to new schools and schools where freshman enrollment has increased by 5 percent over the 1954-55 freshman enrollment period; whereas S. 434 contains provisions for additional grants for the operation of medical and nursing schools if the average enrollment of the school has increased by 5 percent over the average of the enrollments during the fiscal years of 1953, 1954, and 1955.

Although these bills vary in certain other respects, they both have the same common objective, the need for which has been recognized by many of us for some time.

In fact, the provisions contained in part E of S. 434 are substantially the same as those contained in legislation introduced by Senator Flanders and myself in the 81st Congress.

I know that your subcommittee will give and is giving serious consideration to this proposed legislation.

Mr. Chairman, I assume the full committee in due course will be giving the consideration. So I strongly urge that your subcommittee act favorably on legislation containing the best features of these bills. I further hope that it will be possible for your subcommittee and the Senate Committee on Labor and Public Welfare, as a whole, to consider all of the provisions contained in S. 434, as well as other comprehensive legislation designed to improve the health of our Nation in the near future.

I thank the chairman and the committee for this opportunity to appear before you.

The CHAIRMAN. Senator, glad to have you here, sir. You and I will certainly have the opportunity to consider these bills.

Senator IVES. I think, Mr. Chairman, you and I are substantially in accord on this legislation. I don't think there is much difference in our feeling on this matter.

The CHAIRMAN. That is true. I deeply appreciate your coming Senator IVES. I thought i would make the record more complete, not

Senator IVES. I thought it will make the record more complete, not that it is any great addition.

The CHAIRMAN. It does make the record more complete, and it is an addition, too, may I say?

Senator IVES. Thank you.

The CHAIRMAN. Dr. F. J. L. Blasingame and Dr. Walter S. Wiggins.

Doctor, I believe you are a member of the board of trustees of the American Medical Association.

Dr. BLASINGAME. Yes, sir.

The CHAIRMAN. Dr. Wiggins, you are the associate secretary of the council on medical education and hospitals of the American Medical Association.

Dr. WIGGINS. Yes, sir.

The CHAIRMAN. Delighted to have you gentlemen here.

You may proceed in your own way.

STATEMENT OF F. J. L. BLASINGAME, M. D., AMERICAN MEDICAL ASSOCIATION, ACCOMPANIED BY WALTER S. WIGGINS, M. D., AMERICAN MEDICAL ASSOCIATION

Dr. BLASINGAME. I am Dr. F. J. L. Blasingame, of Wharton, Tex., where I am engaged in the active practice of medicine.

I am a member of the board of trustees of the American Medical Association, and am appearing here today, accompanied by Dr. Walter S. Wiggins, of Chicago, Ill., as a representative of that association in connection with S. 1323 and part E of S. 434, 84th Congress, currently under consideration by your committee.

The association supports S. 1323, with 2 modifications which we will suggest later in our testimony, and opposes part E of S. 434. Before commenting on these two bills I should like to present some background information concerning the interest of the association in the subject of medical education.

The original call of the Medical Society of the State of New York which led to a preliminary national convention in 1846 and culminated in the organization of the American Medical Association a year later commenced with this credo:

It is believed that a national convention would be conducive to the elevation of the standard of medical education in the United States.

One of the first acts at the initial association meeting was the establishment of a committee on education which functioned for 57 years before the formation of the present council on medical education and hospitals. Thus, for over a century the American Medical Association has been actively and effectively engaged in the improvement of medical education in the United States.

Largely as a result of the vigorous efforts of the association in conjunction with other interested organizations it can now be said with assurance that medical education in this country is superior to that found anywhere else in the world.

As practicing physicians we are vitally interested in the quality of medical education because of its direct relationship to medical care. It is not a coincidence that the improved standards of medical care in the last half century followed the elimination of substandard medical schools and diploma mills which had been, until then, releasing their graduates in large numbers.

A striking example of the truth of this relationship is found in the experiences of military medicine during World War II and the Korean conflict. It is common knowledge that the death rate from wounds in World War II was just about one-fourth of that in World War I and that this record was markedly improved in Korea.

It is frequently assumed that this great improvement was the result of the new and potent weapons in the armamentarium of science. It is believed that the sulfa drugs, penicillin, and the administration of plasma and whole blood were the causes of our low death rate.

These were not responsible for the high quality of medical care provided our Armed Forces. The success of the Medical Corps was due, rather, to the proficiency of the medical officers and the superiority of their medical education.

That the superior medical education received by our officers was the primary factor is evidenced by the fact that we gave certain of our allies all of the penicillin they could use; we gave them all the sulfa they needed; and we provided them with plentiful supplies of plasma and blood. Their tools were the same as those used by our physicians. Yet, in their armies the death rate was the same as ours in World War I, nearly 30 years ago. Our own medical officers had the training required to use these new weapons of medicine. Unfortunately, this was not the case in the armies of some other countries.

The high degree of excellence of our medical education has been achieved only after a very long struggle. In 1905, when the council on medical education of the American Medical Association was created, it surveyed the status of medical education in this country. The scene was not one to inspire satisfaction; by comparison with England, Germany, and France, medical education in this country was decidedly inferior. Of the more than 160 medical schools in the country at that time, many accepted students without a complete high-school education.

There were only 5 schools that required 2 or more years of college premedical work. Throughout the country, with few exceptions, academic standards were low, facilities and faculties were insufficient, financial support was lacking, students were poorly prepared, and failures in licensing examinations were many.

The first annual report of the council on medical education pointed to the existence of 54 medical schools in the States of Illinois, Missouri, Maryland, Kentucky, and Tennessee, not more than 6 of which could be considered acceptable. These 54 schools in the 5 States mentioned have now been reduced in number to 12 approved 4-year institutions.

The early reports of the council on medical education occasioned considerable resentment in many of the medical colleges. It occurred to some members of the council that the publication and approval of its work by an independent organization of sufficient stature to gain widespread acceptance of its views would assist materially in bringing about an improvement in medical education.

Arrangements were made for Dr. Abraham Flexner of the Carnegie Foundation for the Advancement of Teaching to cooperate with the council in investigating the medical schools.

The Carnegie study was begun in 1908 by Dr. Flexner and Dr. N. P. Colwell, secretary of the council on medical education. Two years later their results were published in what was commonly known as the Flexner Report.

This report revolutionized medical education. As compared with the 160 schools in 1905, the number was reduced to 95 in the following 10 years, to 85 by 1920, and to 80 by 1927. These reductions came from elimination of the inadequate schools.

When the results of the council's early surveys began to take effect, and the number of medical schools decreased, considerable anxiety and even alarm were expressed in certain quarters. There was anxiety lest the decrease in the number of schools would result in far fewer physicians being graduated and consequently, an increasing dearth of physicians in the United States.

Statistics in this regard reveal that in 1905 the 160 medical schools released 5,606 graduates. In 1922, the low point in number of graduates, the remaining 81 schools graduated 2,529 students. Had this condition persisted there would undoubtedly have been a deficiency in physicians, since considerably more than 2,500 physicians die every year.

But it did not persist. In the 20 years from 1922 until 1942 the number of medical schools was still further decreased to 77, yet the number of graduates gradually increased so that in 1944 the schools graduated 5,163, about double the number graduating in 1922 and approximately the number graduating from the 160 schools in 1905.

Last year 80 approved medical schools graduated 6,861 students. Estimated projections made of admissions and graduates show that from 7,300 to 7,500 physicians should be produced annually by 1960.

I should like to stress again that the physicians graduating from medical schools in the United States today not only exceed in number those graduated in 1905 but that they are infinitely superior in their medical knowledge because of the high standards of medical education which have been achieved.

This improvement is due, in large part, to the persistent and frequently misunderstood efforts of the American Medical Association to elevate the standards of instruction in our medical schools. We have never believed in sacrificing quality for quantity and we do not so believe today. Nor has adherence to high standards decreased the numbers of physicians. While the population of the Nation has approximately doubled since 1910, student enrollment in approved schools of medicine has increased from 12,530 to 28,229, or more than 125 percent.

In other words physician population is increased at a more rapid rate than is the general population.

In 1910 there were only 3,165 physicians graduated from approved medical schools as compared to 6,861 in 1954, an increase of 115 percent.

We have no desire to claim more than our share of the credit for this improvement. Throughout the entire period since 1910, the council on medical education and hospitals of the American Medical

Association has worked closely with the Association of American Medical Colleges in constant efforts to assist in developing and maintaining the highest possible standards of medical education in the United States in the interests of the American public, through the medium of establishing sound basic essentials of medical education, consultations, advice, survey evaluation, and annual listings of the approved medical schools. The two mentioned organizations have exerted great influence in medical education in the United States.

They have cooperated in stimulating and encouraging new medical schools and assisting in the improvement of those in existence where such assistance was indicated. They have discouraged only the schools that did not have facilities, finances, or faculty potentials with promise of reasonably sound educational experiences for medical students.

Their objectives have been straightforward, sincere, and directed toward the development of physicians well qualified in the diagnosis, prevention, and treatment of human ailments in keeping with progressive scientific knowledge. Contrary to a common misconception, these organizations have not endeavored to control the number of physicians graduated by the schools. They have advised against medical schools undertaking to admit more students than their faculties or facilities could possibly justify, if they were to be properly educated.

Since the turn of the century the association has also collaborated with the medical licensing bodies of the States. The Federation of State Medical Boards was founded in 1912 as a voluntary organization of the legally constituted licensing bodies. The federation and its constituent licensing boards depend upon the council for verification of the credentials of applicants for licensure. In general, they also depend upon the council's evaluation of the applicant's education, by reference to listings of medical schools and hospitals maintaining acceptable educational programs.

In some instances the medical practice act of the State makes use of these lists mandatory. Elsewhere they are employed by regulation of the boards.

In its efforts to gain and maintain the highest possible standard of medical education and hence the highest possible standard of medical care for the American public, the American Medical Association has accused of suppressing the study of medicine and creating an artificial frequently been criticized by those who do not know the facts. It is shortage of doctors.

Nothing could be further from the truth.

The physical facilities, the availability of qualified instructors, the availability of teaching material and patients for the clinical phases of medical education place definite limits on the number of medical students who can be adequately educated. Increase in the number of students above these limits will result unfailingly in a lower standard of medical education.

Increased numbers of inadequately trained physicians will serve only to destroy the high standard of medical care which has been developed over the past half century.

Many well-intentioned proposals would lead, in our judgment, to a lowering of the educational standards and the standards of medical care. As physicians we must and do vigorously oppose such pro-

posals. We support just as vigorously those proposals which we believe will improve medical education and the quality of medical care.

With your permission, Mr. Chairman, Dr. Wiggins who is here with me will present the viewpoint of the association on the specific proposals before your committee.

The CHAIRMAN. Doctor, we will be glad to hear from you.

Senator LEHMAN. Before you do that, Doctor, I was not here when you read the first page of your statement and it is possible that the answer to my question is contained in those first few pages.

While you give a very clear picture of the situation, the attitude of the American Medical Association, and the desire of the association which we all share that the quality of the medical service be maintained and improved, you do not state so far as I know whether you favor this bill or do not favor the bill.

The CHAIRMAN. As I understand it, Dr. Wiggins is going into that question now.

Senator LEHMAN. May I reserve the right to examine the doctor?

The CHAIRMAN. Yes.

Dr. WIGGINS. Mr. Chairman and members of the committee:

I am Dr. Walter S. Wiggins, of Chicago, Ill.

I am associate secretary of the Council on Medical Education and Hospitals of the American Medical Association.

My testimony will be directed, as Dr. Blasingame has indicated to the specific measures under consideration by your committee.

At the outset I should like to state that the association supports S. 1323. On the other hand, we oppose part E of S. 434 dealing with assistance to medical and nursing schools. I should like to emphasize that although we suggest modifications in S. 1323, the measure has the approval of the American Medical Association.

You gentlemen are aware of the general position of the association with respect to Federal aid. We believe it to be a dangerous device because of the degree of regulation which must necessarily accompany Federal funds.

In cases of demonstrated emergency, however, and as a temporary measure, we feel that Federal assistance is sometimes proper.

There is a definite need for additional financial support of our medical schools. One of the most acute areas of need is for assistance in the expansion, construction and remodeling of physical facilities. We feel that this need is great enough to justify a one-time expenditure of Federal funds, on a matching basis, and in a manner assuring maximum freedom of the schools from Federal control.

S. 434 and S. 1323 represent two radically different approaches to the provision of Federal aid to medical education. S. 434 would establish a permanent program of Federal subsidy, paying annually to the schools sums of \$500 or \$1,500 for each medical student enrolled. The higher sum would be available on a per capita basis to the extent that enrollment was increased over the average past enrollment. No local matching of these funds would be required, and it is intended that the Federal aid money be used for staff and faculty salaries, operation and maintenance of facilities, and acquisition of equipment.

The continuing subsidy, provided in this bill, would, in our opinion, inevitably lead to undesirable regulation of the schools. We appreciate that the bill contains a section designed to minimize this risk, but we feel certain that once the continued financial support of the Nation's

medical schools was established as a proper role of the Federal Government, no one could prevent subsequent Federal direction of medical education.

Further, the wide spread between the \$500 to be paid for each student up to the average past enrollment and the \$1,500 to be paid for each additional student offers a financial premium which is hard to resist and which might induce certain schools to enroll more students than they can properly accommodate.

The high quality of medical care enjoyed by the people of the United States today is basically the result of the improvements in medical education that have taken place in this country during the past 40 years.

To dilute the quality of medical education by inducing the medical schools to increase the volume of students beyond their capacity would, in the long run, result in a deterioration of the medical care available to the American people.

For the above reasons and since the construction aid provisions of S. 434 duplicate the proposals in S. 1323, the American Medical Association recommends against the enactment of part E of S. 454.

Very different from a continuing operational subsidy is the one-time aid to construction proposed in S. 1323. On June 13, 1951, the house of delegates of the American Medical Association adopted a resolution calling for:

A one-time Federal grant-in-aid on a matching basis, based on the Hill-Burton Act formula and administrative machinery, for construction, equipment and renovation of the physical plants of medical schools. No part of the funds shall be used in any manner for operational expenses or salaries.

As we understand S. 1323, the measure is sufficiently close to the type of program recommended by the association to merit our support. The stated purpose of the bill is to authorize a 5-year program of grants for construction of medical educational and research facilities. It would also amend the Public Health Service Act by adding an additional title authorizing appropriations of \$50 million for fiscal year 1956 and a like amount for each of the 4 succeeding fiscal years. This money would be used for matching grants to assist public or nonprofit accredited medical schools in the construction, expansion, remodeling and alteration of teaching and research facilities.

The program would be administered by the Surgeon General of the Public Health Service, advised by a 13-member Federal Council on Medical Educational Facilities. Six members of the Council would be appointed from the general public and six members from among leading medical and scientific authorities skilled in health sciences.

Appointments would be made by the Surgeon General with the approval of the Secretary of Health, Education and Welfare.

The Surgeon General would be the 13th member, and Chairman, ex officio, of the Council.

Grants would be for the purpose of constructing new approved medical schools, and for improving and expanding facilities of existing medical schools. Any existing or proposed school could obtain a grant of \$25,000 for initial planning.

Thereafter, additional grants would be limited to 50 percent of the cost of construction or alteration of existing schools, and 66 $\frac{2}{3}$ percent of the cost of construction of new schools, except that existing schools

could also obtain grants up to 66 $\frac{2}{3}$ percent of the cost of construction or alteration by giving adequate assurances that freshman enrollment would increase 5 percent over 1954-55 figures.

Total grants to any one school over the five year period could not exceed \$3 million.

Schools desiring grants would file applications with the Surgeon General, giving adequate assurances that they would operate as public or nonprofit medical schools, and comply with the Surgeon General's regulations, to be made under the new law.

The bill spells out, however, that it does not authorize Federal control over curriculum, administration or admissions.

At the discretion of the school 20 percent of a grant for new construction may be allocated to permanent endowment for maintenance of the new facility. Otherwise, the bill provides no funds for operation or other maintenance.

We believe that S. 1323 will afford badly needed construction assistance to the Nation's medical schools with a minimum risk of undesirable Federal control. We feel, however, that the suggestions which we offer for its amendment will make it a better bill.

First, we are concerned that the bill needlessly establishes a precedent for urging or inducing medical schools to increase their enrollment more rapidly than is justified by their facilities, personnel, and teaching material.

We have no reason to believe that a 5 percent increase in freshman enrollment at the present time would be detrimental to the quality of medical education offered in most schools, however, it is possible that such an increase in succeeding years would be unwise.

We feel obligated to point out the dangerous principle which is being established and to urge the committee to amend the bill to remove this unnecessary feature.

We are certain that schools capable of increasing enrollment will do so without prompting.

The American Medical Association and the medical schools have every desire to increase the output of adequately trained physicians. We are, however, very much concerned with maintaining the high quality of medical education. As physicians, we would be remiss in our obligations if we failed to point out the dangers in establishing this precedent.

S. 1323 provides for the appointment of a Federal Council on Medical Educational Facilities. We would prefer that the Congress spell out with greater detail the composition of this Council. Specifically, we recommend an amendment to provide that six members be selected from among leading medical authorities and that the public members include persons skilled in the broad aspects of engineering, education, finance, and architecture. We believe that a council so composed would better assure the successful administration of the program.

To avoid misunderstanding, let me summarize the position of the American Medical Association on these two bills. We support S. 1323. We feel that it is a timely and proper approach to the provision of Federal assistance, on a temporary and limited basis, in an area where an urgent need has been clearly demonstrated. We believe, however, that the amendments which we have recommended will make it a better bill.

On the other hand, we oppose part E of S. 434 because it is permanent in nature and would establish a continuing Federal subsidy leading ultimately to Federal control of medical education.

Because of our approval of the construction grant provisions of S. 1323, we do not support the similar provisions of S. 434.

That concludes my formal statement.

Dr. Blasingame and I will be happy to answer to the best of our ability any questions which members of the committee may have.

May I also add appreciation for the opportunity of appearing before this committee?

The CHAIRMAN. Senator Lehman, do you have a question?

Senator LEHMAN. I do have one or two.

I am glad to note your approval of this bill which I strongly favor.

I want to point out that yesterday we had as witnesses before us about a dozen representatives of the leading medical schools in the country—not all of them, but everyone who appeared before us represented a thoroughly responsible, reputable, highly considered medical school. I was deeply impressed by the fact that while in most instances they outlined the need for additional physicians, they placed great emphasis on the fact that the quality of the physicians, the quality of the training, the quality of the doctors turned out be maintained or improved.

The slogan really was "More doctors and better doctors." So I don't think there is any question whatsoever in the minds of anyone of doing anything at all that would lessen the independence, as far as educational procedures are concerned, of the schools or to lessen the quality of the doctors that are to be turned out.

That should be emphasized.

I was very much interested in certain figures which you gave in your statement, Dr. Blasingame. You say that statistics referring to the number of physicians graduated from medical schools in 1905 amounted to 5,606 graduates, whereas last year there were 6,861 graduates from the medical schools, that is an increase of about 20 percent.

That covers an increase of 50 years, exactly 50 years, from 1905 to 1955, and during that period—I don't want to be held to the exact figures because I don't have them in mind—my general impression is that the population of the country has about doubled in those 50 years. And yet the increased number of doctors seems to me a very insignificant one.

Certainly the complexity of medical treatment and medical procedure and the great advances made in sciences require an additional number of doctors.

While I would not like to see anything done by this Congress that would in the slightest degree take away the independence of the medical schools or give them incentives that would make them possibly close their eyes to the unwisdom of too rapid increase in the school population, it seems to me that the increased number of doctors that can be made available at the most under this bill would be so insignificant yet necessary, I do not see any reason for criticism of the bill.

I am a layman, of course, but I can't help but believe that we do not adequately cover the entire country in the number of available doctors.

And that is more true possibly in the rural sections than in the cities. But it seems to me when you realize that the population of the country has been doubled in 50 years, we are certainly a long way from having an adequate number of well-trained physicians.

Dr. BLASINGAME. I should like to comment on that. I appreciate your calling these facts to our attention, Senator Lehman, however, I would like to remind you again in that same particular we pointed out that in 1910, the quality of medical students and medical education and facilities were quite unsatisfactory as compared with some of the European countries and I think we will all recall those days.

And that efforts were made on a very wide and sound basis to improve the quality of admissions, the quality of facilities, and the quality of faculty and that during that time there was some shrinkage in the number of medical schools and even the number of students until it reached a low in 1922 at which time then enrollment began to increase and facilities began to increase.

So that we have since 1922 increased considerably the output of physicians.

For example, in 1922, which is the low point in the number of graduates, as I pointed out, from the remaining 81 schools having had 160 schools in 1905 we turned out 2,000 or 2,529 graduates. From 1922 on, that is increased to 6,861 last year.

The estimated projections on admissions and graduates, as I pointed out is that it will increase from 7,300 to 7,500 by 1960.

That is if we take into consideration the schools under construction and the increase in facilities that are already underway.

I should like to point out to you further, Senator Lehman, that statistically, we have in this country the largest number of physicians per capita of any nation in the world save Israel where there is an abnormal situation, and we have also, I believe the best trained physicians in the world, and also the ability of a physician to care for patients is extended these days and times compared to a few years back. In other words a physician by use of the telephone, by use of his automobile and communication facilities and also because patients come to the hospital where a physician may see a large number of patients in a short length of time, plus the assistant he has from auxiliary personnel, his usefulness in caring for the sick has expanded considerably compared to that of years gone by.

As to how many physicians we should have, I think the question is somewhat unanswerable.

You have to judge the effectiveness of medical care by the results it produces. We have fewer farmers in the United States than we had 70 years ago by 25 percent and yet we have agricultural products in storage and we are not about to be short of many of the things we need to eat or produce on the farm.

The whole story of medical care is not the number of physicians but the circumstances under which they work and how they work as well as numbers.

I jokingly say sometimes the number of physicians, to answer the question is sort of like answering your wife the question of how many dresses she should have. She can always use one more good dress.

The CHAIRMAN. You mean, Doctor, she will advise you to that effect.

Dr. BLASINGAME. That is the same thing with regard to the number of physicians that America needs.

By any reasonable yardstick the American people have good medical care. It could be made better. I agree with your statement that there may be some maladjustment of the distribution of doctors in the country. Our profession and our association together with State and local medical associations has carried on continuing efforts to get better physicians to go to rural communities and to get such communities to establish better facilities to attract these physicians and to use them when they get there.

The supply of physicians is not simply a question of numbers and I contend, sir, with all respect that the number of physicians in this country by any reasonable yardstick is adequate and the number of physicians now being produced by the medical schools we have is increasing in number and maintaining a high quality, increasing in number at a faster rate than our population is increasing.

Senator LEHMAN. May I comment on that?

Dr. BLASINGAME. Yes.

Senator LEHMAN. If we can base our expectations on our experience, it is fair to assume that the population of this country is going to increase by about 5 million persons a year.

So that by 1960—that increased more rapidly as a matter of fact than that during 1950 to 1955 but let us assume that 5 million is reasonable and accurate—the population of this country will have increased by a minimum of 20 million persons.

Against that you suggest that an increase of about 500 to 600 doctors by 1960, the number that are graduated today, would be sufficient to take care of the needs of 20 million additional people?

I am willing to grant you that on a per capita basis we have more doctors than any other country in relation to the population.

I certainly have no question that we have the best trained and the finest doctors in this country.

But that extra 20 million people that we will have in this country by 1960 and the ever-increasing population that will undoubtedly be with us beyond 1960, seems to me to justify an increase in the number of available physicians far in excess of 500 to 600, which is all you claim a year, starting in 1960.

It seems to me it is a very inadequate answer to the medical needs of the people.

Dr. BLASINGAME. I should like to make a comment and have Dr. Wiggins who is a member of the council that studies this problem to make some comments and we have material that we would like to leave with your committee for your records.

During World War II throughout the country the authorities considered that the number of physicians that was adequate to take care of and safeguard the civilian population was 1 physician for every 1,500 of the population.

As a matter of fact, Senator Lehman's statistics show that the health of the country even improved during the time when the per capita population carried by a physician had increased to that number.

We already have about 1 physician for about every 800 people. You have a considerable margin of safety between physicians we have now and the physicians that could take care of the American people.

This question of distribution is one which I say needs very definite attention.

With facilities provided for in this bill and other expansions I am sure that the number of physicians increased in this country during the coming year may be beyond the figures which we have indicated.

Senator, I would like to ask Dr. Wiggins if it is agreeable to comment on this aspect of the bill.

The CHAIRMAN. Certainly.

Dr. WIGGINS. First of all I would like to tell you how that figure was derived, which I think will make clear why it is not perhaps an accurate figure.

That figure as far as the increase is concerned that was mentioned in Dr. Blasingame's testimony was based on material we collected almost a year ago now in which we asked the deans of each of the schools how many students they plan to enroll this year and how many did they feel would graduate this year, that is 1 year later than the time we had asked the question.

We did not ask them all although we had information from other sources, we did not when this figure was given include any proposed increase in the size of the student body in the medical school in future years. Nor did we add in the total quantity of medical students from new schools other than those we knew beyond question were going to go into operation in the next few years.

This represents a very minimum estimate and it was deliberately done that way so we would not be subject to criticism for emphasizing figures that we could not substantiate.

This figure could be substantiated in terms of what we personally know from contacts with the deans of medical schools that could indeed be enlarged and still be substantiated.

Senator LEHMAN. I want to say that the evidence we heard yesterday from these representatives from medical schools, in no case advocated an increase in the school population beyond the number that could be adequately cared for and trained.

My thesis is that if we are going to increase by 5 million people a year—I think you said there should be 1 doctor for every 1,500 people, am I correct—

Dr. BLASINGAME. That was the figure used in World War II.

Senator LEHMAN. That is a fair estimate.

Dr. BLASINGAME. That is a fair figure.

Senator LEHMAN. If you increase 5 million a year and increase the number of doctors only by 500 a year, you certainly are not going to come within a million miles of caring for these additional people, even if you take into account all the doctors now being produced.

Of course there is some mortality among doctors too.

Dr. WIGGINS. A high mortality.

Senator LEHMAN. Thank you very much. It is a pet subject of mine. We would do much more for the health of our people than we are doing now.

You mentioned the population in the rural areas is decreasing. Maybe what is partly responsible for that is the less good facilities we offer people in rural sections. I say that as a city man. I would like to see everybody get exactly the same treatment.

The CHAIRMAN. Any further questions?

Senator BENDER. Your testimony indicates that your organization, the American Medical Association, favors the temporary approval of Federal aid for medical school construction.

Have you explored the State aid and what is your stand on State aid?

Dr. BLASINGAME. State aid has been habitual and customary in many of the schools of the country now. For example, in my own State of Texas we have 2 State schools and 1 denominational medical school.

Not all States have medical schools. Dr. Wiggins can give you the details as to the number of schools in the country that are actually State supported and how many are privately or denominational schools operated by foundations or universities, other than State.

But our attitude of course as far as the American Medical Association is not taken on that point since our association simply deals with policies at the national level.

The only thing that the council goes into is a mechanism of financing at the State level to be sure that the quality of teaching is good and the method of financing is sound and that there is freedom as far as the faculty is concerned in teaching, but we have no policy with regard to fiscal financing at the State level. Does that answer your question?

Senator BENDER. I have been a legislator in various capacities for the past 25 years. During that 25 years I have been exposed to propaganda of the American Medical Association and their component parts, and always I get the vibration that they shy away from any kind of Federal control or Federal aid and they don't want the Federal Government dabbling into any phase of the medical profession.

They don't want that. Here you are testifying then in behalf of a temporary Federal program. Have you considered the whole subject from the standpoint of opening up the gates for Federal aid here and possibly the appetites of the people who have become so accustomed to Federal aid that they will even take you in. Have you explored that at all?

Dr. BLASINGAME. Yes; we have, with considerable concern.

Unfortunately the habits of taxation of this country since 1913 and having been increased through the years have pooled a great deal of the wealth of this nation in Washington. That tendency has left relatively smaller amounts of money at the State and local levels. American medical people look upon this mechanism of financing as potentially dangerous and appreciate your asking that question.

That is why we have definitely felt that if it is to be used at all, it is to be used on a temporary basis and on a limited basis and matched by local funds to assure the local communities and the States of sharing their responsibilities at least to so agree if they don't do it completely.

So that we can have these facilities but at the same time try to have them under conditions that are free of Federal control.

Senator BENDER. If I understand you correctly you then do not advocate substituting Federal aid for State aid?

Dr. BLASINGAME. We certainly do not.

Senator BENDER. And as I understand, you are supporting some kind of a program that would provide for temporary aid because of the medical need; is that the position you take?

Dr. BLASINGAME. That is it. For construction facilities and not for financing that will alter policies of teaching.

The CHAIRMAN. But supporting the program for construction facilities; is that right?

Dr. BLASINGAME. That is right.

The CHAIRMAN. Thank you, sir.

Gentlemen, we want to thank you for coming here and bringing us this very interesting and informative testimony this morning.

We appreciate it very deeply, very much; thank you.

Dr. WIGGINS. I have material, perhaps some of which you will find interesting.

The CHAIRMAN. Fine. Leave that with the committee, please, sir. We appreciate it.

Dr. Ralph Creig and Dr. Shailer Peterson, of the American Dental Association.

Have seats, gentlemen.

Do you gentlemen wish to read your statements or insert them in the record and summarize them for us?

STATEMENT OF DR. RALPH CREIG, AMERICAN DENTAL ASSOCIATION, ACCOMPANIED BY DR. SHAILER PETERSON AND BERNARD J. CONWAY, AMERICAN DENTAL ASSOCIATION

Dr. CREIG. Mine is quite short. May I read it?

The CHAIRMAN. You may proceed.

Dr. CREIG. Mr. Chairman and members of the committee, I am Dr. Ralph E. Creig, of Cleveland, Ohio.

I am a member of the American Dental Association's council on legislation. I shall discuss briefly the association's position in support of Federal aid for dental educational programs and our recommendation to make dental schools eligible for the Federal grants proposed by S. 1323 and part E of S. 434.

I shall then ask Dr. Shailer Peterson, the secretary of the association's council on dental education, to explain for the committee the dental schools' serious need for financial assistance.

Also with me is Mr. Bernard J. Conway, secretary of the association's council on legislation.

The progressively increased demand for dental care coupled with the rapid growth of this Nation's population make it imperative that the supply of dentists and dental auxiliary personnel keep pace with that demand and growth. The dental deans and administrators, in our opinion, have made commendable efforts, particularly during the last 10 years, to increase the number of dentists and dental hygienists. Since 1944, for example, the number of dental schools has increased from 39 to the present 43, an increase of 10 percent. More spectacularly, dental school enrollment has increased from 8,590 in 1944 to 12,601 in 1954, a 47-percent increase; during that same period the number of dental graduates has increased from 2,470 to 3,084, a 25-percent increase.

In addition, the number of schools of dental hygiene has increased from 14 in 1946 to 31 in 1955, an increase of 121 percent. Dental hygiene enrollment has increased proportionately; the number of dental hygiene graduates, moreover, has increased from 399 in 1946 to 850 in 1955, an increase of 103 percent.

The dental hygienist has become one of the most important auxiliaries to the dental profession. She relieves the dentist of essential,

but time-consuming, procedures. She enables her dentist-employer to concentrate his time and efforts on procedures which require his more specialized skills. The dental hygienist, by performing her main function, oral prophylaxis, makes it possible for more people to receive that important preventive service regularly.

The dentist who employs a dental hygienist is able to see more patients and, therefore, is in a position to offer complete dental care to more people.

Although funds for the construction and expansion needs of dental schools are most urgently needed, it would be desirable to make schools of dental hygiene eligible for the cost of instruction grants which this committee is considering.

The policymaking body of the American Dental Association, the house of delegates, declared its support of Federal grants for dental educational programs in 1949.

That policy declares:

Resolved, that the American Dental Association approve the policy that Federal funds, with justification, might be appropriated in support of dental educational programs, provided that such funds when appropriated should be accepted only 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.

In 1950 the American Dental Association supported H. R. 5940 and S. 1453, 81st Congress. Those bills would have established a grant program for schools of dentistry and dental hygiene similar to the programs proposed by S. 1323 and part E of S. 434 for schools of medicine.

In 1951 the American Dental Association offered its support for S. 337, 82d Congress. That bill also included grants to schools of dentistry and dental hygiene for costs of instruction and for construction and improvement of educational facilities.

S. 1323, in substance, would establish a 5-year \$250 million program of grants on a matching basis for medical schools to assist them in the construction of new buildings and in the expansion, remodeling, and alteration of existing facilities. S. 1323 contains the safeguards against Federal interference with school administration policies as recommended by the American Dental Association.

Senator BENDER. Mr. Chairman, does your bill provide for that?

The CHAIRMAN. No; it does not. I understand that is what the doctor is asking for now. That the dental schools be included. That is what he is coming to now, Senator.

Dr. CREIG. The association urges this committee to extend the grant authority contained in S. 1323 so that schools of dentistry may receive sorely needed funds for expansion and improvement of their facilities and equipment and for construction of new facilities.

Congressman John E. Fogarty, a member of the House of Representatives from Rhode Island, has introduced a bill, H. R. 4667, which is a counterpart of S. 1323, as far as medical education grants are concerned. That bill, however, would establish a separate grant program for dental schools. Mr. Fogarty's bill would authorize a 5-year \$50 million matching grant program for schools of dentistry.

Senator BENDER. Are you correct about the \$50 million?

Wasn't it \$10 million in Congressman Fogarty's bill?

Dr. CREIG. I thought it was \$10 million a year over a 5-year period.

The grants for dental schools would, under H. R. 4667, be available for construction and expansion of dental school facilities in the same manner and under the same conditions proposed by S. 1323 for medical school grants. We recommend that this committee extend the grant authority proposed by S. 1323 to include schools of dentistry in the manner and in the amount suggested by H. R. 4667, 84th Congress, which is now before the Committee on Interstate and Foreign Commerce of the House of Representatives.

We also recommend that the agency which would be created by S. 1323 to assist the Public Health Service Surgeon General in administering the grant program be named the "Council on Medical and Dental Educational Facilities," and that the Council include appropriate dental representation. Again, the association's recommendations are in accord with the pertinent language of H. R. 4667.

Part E of S. 434 would establish two distinct types of grants to be made available to schools of medicine and schools of nursing education. The first type of grant is designed to help schools of medicine and nursing meet the cost of instruction and other operating costs. The second type would help those schools meet the cost of new construction and expansion of existing facilities.

The construction and expansion grants would be provided on a matching basis. The cost of instruction grants would be based upon the number of enrolled students, with a bonus for increases in enrollment.

The American Dental Association has in the past supported a similar system of assisting schools of dentistry and dental hygiene to meet their sharply increasing costs of instruction and operation.

A survey of the financial status and needs of dental schools, sponsored by the Public Health Service in 1952, revealed that the median basic operating expense per student for all 40 dental schools surveyed was \$1,316 for the school year 1949-50.

That amount was at least \$800 more than the median of tuition charges (about \$500) assessed by the reporting schools during the same school year.

At least that differential between operating expense per student and the tuition he pays prevails on the average today. The Public Health Service survey also disclosed that the median basic operating expense per student in schools of dental hygiene affiliated with dental schools amounted to \$525 for the school year 1949-50.

That amount was about \$200 more than the median of tuition charges (about \$300) assessed by those schools during 1949-50. Again, at least that differential between operating expense per student and tuition paid by the student prevails on the average today.

The American Dental Association recommends that this committee extend the cost of instruction grants as proposed by part E of S. 434 to include schools of dentistry under the system and in the same amounts proposed for schools of medicine.

The association also recommends that this committee include schools of dental hygiene within the cost of instruction grants under the system and in the same amounts proposed for schools of nursing which provide basic or advanced training leading to a degree in nursing. Our position on grants for construction and expansion of dental school facilities has already been expressed; we urge this committee

to support the program of construction and expansion grants for dental schools proposed within H. R. 4667, 84th Congress.

In order that the committee may have the most expert testimony on the present and future financial needs of the dental schools, I shall ask Dr. Shailer Peterson, the secretary of the association's council on dental education, to present that material.

Dr. Peterson is a specialist in the field of education having obtained his doctorate in that field. His long experience with the council on dental education has established him as a recognized leader in the field of dental education.

The CHAIRMAN. All right, Doctor, we would like to hear from you.

Dr. PETERSON. All right, Senator. I would like to read this. This is relatively short. The bulk of the material consists of tables and charts.

The CHAIRMAN. All right, Doctor.

Dr. PETERSON. At the outset I would like to assure this committee that the American Dental Association through its council on dental education will continue to cooperate with the State dental societies, State governments, regional groups, and private groups which are interested in establishing new schools of dentistry and dental hygiene.

I can report that 3 new dental schools will begin admitting students in the next 18 months.

Two will be located in New Jersey and one in West Virginia. Within the next 24 months we expect a fourth school to be started in Puerto Rico.

We can anticipate that by 1961 the number of graduating dentists will have increased from the 1954 total of 3,084 to 3,319, an increase of almost 8 percent. That also represents an increase of 34 percent over the 1944 total of dental graduates.

In addition, 5 new dental hygiene schools are expected to be in operation within the next 2 years, and perhaps a total of 39 will graduate classes by 1961.

This could increase the number of dental hygiene graduates to about 1,014, an increase of 31 percent over the 1954 number.

There appears to be an adequate supply of qualified applicants for both dental and dental hygiene training. Every reasonable effort will be made to make places available in the schools for those who apply and meet the qualifications.

I shall devote the remainder of my presentation to an evaluation of the present and future financial needs of the schools of dentistry and dental hygiene. The staff of the council on dental education recently conducted a survey of past expenditures and the immediate financial needs of the dental schools. That survey discloses that the schools have spent over \$40 million during the last 5 years for new buildings, for remodeling and expansion of buildings, for new equipment, and for replacing and repairing equipment.

About 75 percent of the \$40 million was spent for new buildings.

Senator BENDER. You are talking about private schools?

Dr. PETERSON. Both private and also State-supported.

Senator BENDER. Regional schools?

Dr. PETERSON. Yes, sir.

All of the past expenditures reported were made by the schools out of their own resources; to our knowledge no outside assistance was provided.

During that 5-year period the number of students graduated from the dental schools increased from 2,565 to 3,084, an increase of 20 percent.

Incidentally, we have 43 dental schools, and 18 of those receive all or part of their funds either from the State or the Federal Government. The dental school that the Federal Government supports is the one at Howard University here in Washington.

The dental schools also reported their need for additional funds for construction of new buildings, for expansion and remodeling of existing facilities, for new equipment, and for replacing and repairing present equipment.

The schools reported that they had an immediate need for \$40 million in additional funds. It should be emphasized that most of the schools based their estimates upon their needs for the next year, rather than for a 5- or 10-year period. It should be kept in mind, too, that the estimates were given without any knowledge that outside financial assistance might be available.

Despite the conservative estimates of construction, expansion, and equipment needs, the survey disclose that the dental schools could expect to enroll 314 additional applicants if those minimum needs were met.

As you are no doubt aware, the council on dental education serves as the official accrediting agency for the dental schools.

In my capacity as secretary to the council I have visited all of the dental schools and am aware of their long-range needs.

Nine of the schools have physical plants which are reasonably adequate; they do, however, require some minor expansion of physical facilities and additional equipment. Three schools have modern plants but require additional facilities to provide for their present enrollment and for the increased enrollment which they wish to make possible. The remaining 31 of the 43 schools need considerable funds for new buildings to modernize their total facilities.

Conservatively, it can be estimated that each of the 31 schools requiring new buildings will need about \$1.5 million to modernize its facilities.

Each of the three schools which must expand its present facilities needs \$1 million or thereabouts. Additional equipment needs for all 43 schools would amount to about \$10 million.

The 43 dental schools now in operation, therefore, need at least \$60 million during the next 5 years.

If you will recall, I mentioned that 4 new dental schools will be accepting students within the next 18 months or 2 years. A minimum estimate of their financial requirements for buildings and equipment would be \$10 million.

The additions needed for the several new dental hygiene facilities would probably require an additional 3 to 5 million dollars, depending, of course, upon the size of classes and the actual number of schools that will be opening within the next 5-year period.

It is reasonable to expect that a source of Federal grants will bring forth the necessary matching funds not now available. It may likewise stimulate a further increase in the number of new schools of dentistry and dental hygiene. The feasibility of establishing schools of dentistry in Colorado, Oklahoma, and South Carolina has been given intensive study and consideration. A regional dental school for the New England area has been proposed and has received strong support. It would be well, then, for this committee to consider making provision for new dental schools other than the four which are certain to open within the next few years; \$20 million might eventually be required for additional new schools.

I wish to assure the committee that the approximately \$100 million estimate of funds needed to support our dental educational program over the next 5-year period is conservative.

I believe it is imperative that the schools of dentistry continue to improve their programs. That means, of course, that the schools must have the best available facilities and equipment. I would like to stress, for example, the serious need for additional research facilities and equipment in the dental schools. Research is a highly important part of the dental-school curriculum; it is an essential discipline for the practicing dentist as well as for the teachers and dental scientists which the dental schools must supply.

We are submitting for the record the results of the 1955 Council on Dental Education survey of the immediate financial needs of the dental schools. We also submit for the record a series of charts depicting the healthy increase in the number of students enrolled in the dental schools and in the number of graduates over the past 10 years.

The charts also illustrate the enrollment goals for which the dental schools are aiming during the next 5 years.

This committee and Congress can make certain that those goals are reached and exceeded.

The CHAIRMAN. These charts will appear in the record following your statement.

(The documents referred to are as follows:)

SURVEY OF NEEDS FOR DENTAL SCHOOLS, CONSTRUCTION AND EQUIPMENT, 1955¹

CHART 1.—Existing physical facilities are adequate for the present enrollment in terms of—

School	Class-rooms	Science laboratories	Research laboratories	Offices and conference rooms	Clinics	Other
1	No	No	No	No	No	No.
2	Yes	Yes	Yes	Yes	Yes	Yes.
3	Yes	No	No	Yes	No	Yes.
4	No	No	No	No	No	No.
5	No	No	No	No	No	Yes.
6	No	No	No	No	No	No.
7	No	No	No	No	No	No.
8	Yes	Yes	Yes	Yes	Yes	Yes.
9	No	No	No	No	No	No.
10	No	No	No	No	No	No.
11	Yes	Yes	No	No	Yes	No.
12	Yes	Yes	No	Yes	Yes	Yes.
13	No	Yes	Yes	No	Yes	No.
14	No	No	No	No	No	
15	Yes	No	No	No	No	No.
16	Yes	No	No	No	Yes	
17	No	No	No	No	No	No.
18	No	No	No	No	No	No.
19	Yes	No	Yes	No	No	Yes.
20	No	No	No	No	No	No.
21	Yes	No	Yes	No	No	No.
22	No	Yes	Yes	No	No	No.
23	Yes	No	Yes	No	No	Yes.
24	No	No	No	No	No	Yes.
25	No	No	No	No	No	No.
26	No	No	No	No	No	No.
27	Yes	Yes	No	No	No	No.
28 ²						
29	Yes	Yes		Yes	Yes	Yes.
30	No	No	No	No	No	No.
31	No	No	No	No	No	No.
32	No	No	No	No	No	No.
33	No	No	No	No	No	No.
34	Yes	Yes	Yes	Yes	Yes	Yes.
35	No	No	No	No	No	No.
36	No	No	Yes	No	Yes	Yes.
37	No	Yes	No	No	No	No.
38	Yes	Yes	No	No	Yes	Yes.
39	Yes	Yes	No	Yes	Yes	Yes.
40 ²						
41	Yes	Yes	No	No	Yes	
Total:						
Yes	16	13	9	7	12	13.
No	23	26	29	32	27	23.

¹ From data collected by the Council on Dental Education in a survey of dental schools.² No answer for present class size.

CHART 2.—Existing equipment is adequate for the present enrollment in terms of—

School	Visual aids	Audio aids	Demonstration equipment	Student laboratory equipment	Research equipment	Office equipment	Clinic equipment
1	Yes	Yes	No	No	No	No	No
2	Yes	Yes	Yes	Yes	No	Yes	Yes
3		No	No	No	No	No	No
4	No	No	No	No	No	No	No
5	No	No	No	No	No	No	No
6	Yes	No	Yes	Yes	No	No	No
7	Yes	Yes	No	No	No	Yes	No
8	Yes	No	No	Yes	No	Yes	Yes
9	Yes	Yes	No	Yes	No	Yes	Yes
10	No	No	No	No	No	No	No
11	No	No	Yes	No	No	No	
12	No	No	No	Yes	No	Yes	Yes
13	Yes	No	No	Yes	Yes	Yes	No
14	Yes	Yes	Yes	No	No	Yes	No
15	No	No	No	No	No	No	No
16	Yes	Yes	Yes	No	No	No	Yes
17	No	No	No	No	No	No	No
18	No	No	No	No	No	No	No
19	No	No	No	No	No	No	No
20	No	No	No	No	No	No	No
21	No	No	No	No	No	No	No
22	No	No	No	Yes	Yes	No	No
23	No	No	No	No	Yes	No	No
24	Yes	Yes	Yes	Yes	No	Yes	No
25	No	No	No	No	No	No	No
26	No	No	No	No	No	No	No
27	No	No	No	Yes	No	No	Yes
28 ¹							
29	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	No	No	No	No	No	No	No
31	No	No	No	No	No	No	No
32	Yes	Yes	Yes	No	No	No	No
33	Yes	Yes	Yes	No	No	No	No
34	Yes	Yes	No	Yes	No	Yes	Yes
35	No	No	No	No	No	No	No
36	No	Yes	Yes	Yes	Yes	Yes	No
37	Yes	No	No	No	No	No	No
38	Yes	Yes	No	Yes	No	Yes	Yes
39	No	No	No	No	No	No	No
40	Yes	Yes	Yes	Yes	No	Yes	Yes
41	Yes	Yes	Yes	Yes	No	No	
Total:							
Yes	18	15	12	15	5	13	10
No	21	25	28	25	35	27	28

¹ No answer for present size class.

CHART 3.—Amounts needed and on hand for construction and purchase of equipment

School	Amount needed for construction	Amount needed for equipment	Amount on hand	School	Amount needed for construction	Amount needed for equipment	Amount on hand
1	\$800,000	\$50,000	\$200,000	22	1,500,000	50,000	
2		200,000	None	23	500,000	300,000	None
3	40,000	100,000	None	24	300,000	475,000	None
4	560,000	100,000	150,000	25	800,000	200,000	(³)
5	209,480	250,084	16,000	26	1,000,000	500,000	200,000
6	3,000,000	1,000,000	4,000,000	27	260,000	275,000	None
7	900,000	600,000	¹ 50,000	28 ⁴			
8		20,000	None	29			
9	1,500,000	(²)	None	30	1,065,000	560,000	50,000
10	750,000	250,000	None	31	300,000	150,000	100,000
11	280,000	132,000	None	32	2,500,000	100,000	500,000
12	150,000	100,000	20,000	33	750,000	440,500	None
13	100,000	115,000	65,000	34		10,000	None
14	1,500,000	250,000	None	35	2,000,000	500,000	100,000
15	149,000	313,204	25,000	36	160,000	100,000	10,000
16	400,000	100,000	None	37	900,000	500,000	70,000
17	4,000,000	900,000	400,000	38	150,000	100,000	50,000
18	250,000	200,000	None	39	81,000	664,650	415,000
19	600,000	70,710	100,000	40		100,000	
20	3,000,000	700,000	None				
21	320,000	96,000	25,000	Total	29,944,480	10,602,238	6,546,000

¹ Per year.² Included in column 1.³ Bank loan.⁴ No answer for present class size.

CHART 4.—Amount needed for construction and equipment by schools anticipating the possibility of an increased enrollment ¹

School	Increase in number of students accepted	Amount needed for construction	Amount needed for equipment	School	Increase in number of students accepted	Amount needed for construction	Amount needed for equipment
1.....	27		\$200,000	11.....	11	350,000	525,000
2.....	21	\$800,000	150,000	12.....	15	1,000,000	500,000
3.....	21	250,000	150,000	13.....	9	1,200,000	500,000
4.....	8	160,150	334,794	14.....	21	650,000	90,000
5.....	10	1,100,000	300,000	15.....	4	1,000,000	550,000
6.....	11	4,000,000	1,090,000	16.....	13	450,000	250,000
7.....	25	2,000,000	164,450	17.....	3	81,000	664,450
8.....	48	4,500,000	1,600,000	18.....	34		100,000
9.....	18	2,000,000	250,000				
10.....	15	1,850,000	675,000	Total.....	314	21,391,150	8,003,694

¹ Many schools reported that an increase in enrollment would not be possible within the next few years.

CHART 5.—Amounts spent by dental schools within the past 5 years for building, remodeling, and equipment

School	New buildings	Remodeling or expansion of buildings	New equipment	Replacing or repairing equipment
1.....		\$100,000	\$20,000	\$5,000
2.....	\$1,500,000	250,000	350,000	25,000
3.....	1,051,000	50,000	513,000	50,000
4.....	1,300,000	75,000	250,000	25,000
5.....	1,750,000	6,000	9,000	2,500
6.....		10,000	10,000	25,000
7.....	7,500	135,000	45,000	30,000
8.....		2,100,000	365,000	35,000
9.....		20,000	1,000	3,000
10.....	2,164,773		(²)	300,000
11.....	1,000,000		443,730	
12.....	1,400,000		1,500,000	25,000
13.....		300,000	75,000	50,000
14.....		10,000		
15.....		30,000	50,000	15,000
16.....		20,000	60,000	2,500
17.....		25,000	35,000	20,000
18.....	300,000	50,000	12,500	5,000
19.....		296,931	114,870	(³)
20.....		26,000	350,000	45,000
21.....		62,970	44,507	10,933
22.....	1,3,276,253	27,000	27,500	(⁴)
23.....	260,000	65,000	95,000	20,000
24.....	None	25,000	20,000	18,000
25.....	1,300,000	90,000	25,000	15,000
26.....		30,000	10,000	4,000
27.....		30,000	300,000	25,000
28.....	20,000	114,000	30,000	41,725
29.....		88,088		182,380
30.....	150,000	125,000	10,000	35,000
31.....		20,000	15,000	5,000
32.....	300,000	150,000	130,000	20,000
33.....		120,000	40,000	
34.....	700,000		350,000	
35.....	996,917	57,792	254,348	19,267
36.....	1,200,000	30,000	(⁵)	(⁵)
37.....	99,424		97,697	
38.....	1,500,000	100,000	600,000	25,000
39.....	2,200,000	20,000	100,000	100,000
40.....	4,253,135	17,132	136,363	(⁴)
Total.....	28,329,002	4,675,913	5,495,943	1,187,210

¹ Includes amount spent by dental and medical school.

² Included in col. 1.

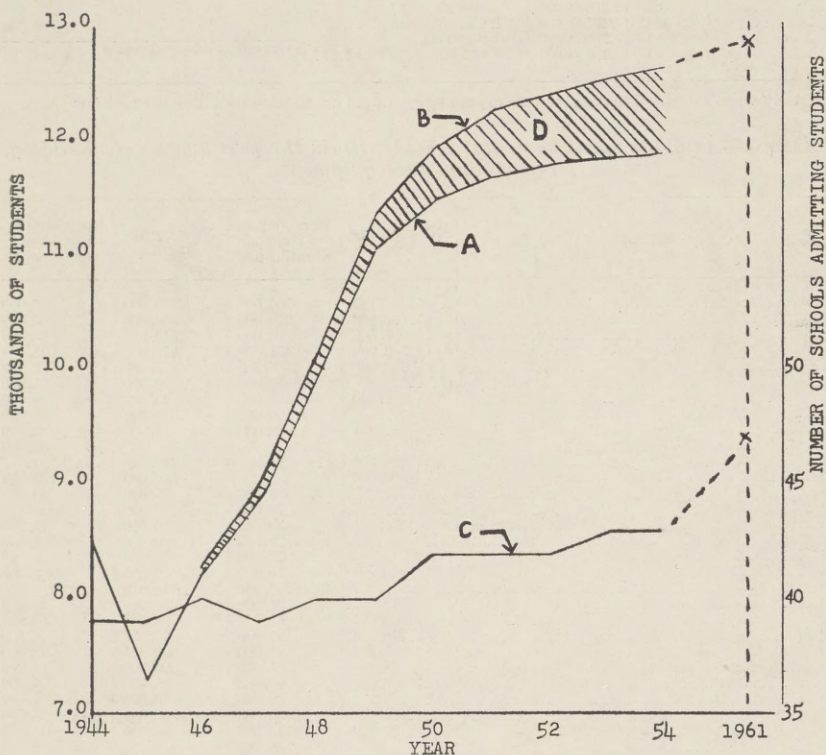
³ Included in cols. 2 and 3.

⁴ Included in col. 3.

⁵ Included in col. 2.

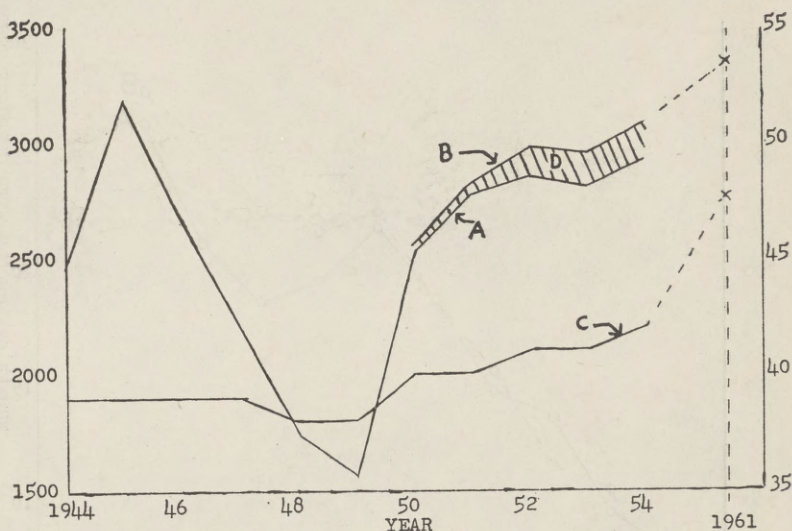
ENROLLMENT OF DENTAL STUDENTS 1944 - 1954

Source: Dental Students' Register for indicated years

LEGEND

- A Enrollment of schools in operation at end of WW II
- B Enrollment of all schools (including those opened since WW II)
- C Number of schools admitting students
- D Increment in enrollment due to new schools (shown by area between curves A and B)
- X Indicates estimated figures for 1961, at which date a number of additional schools will have graduating classes

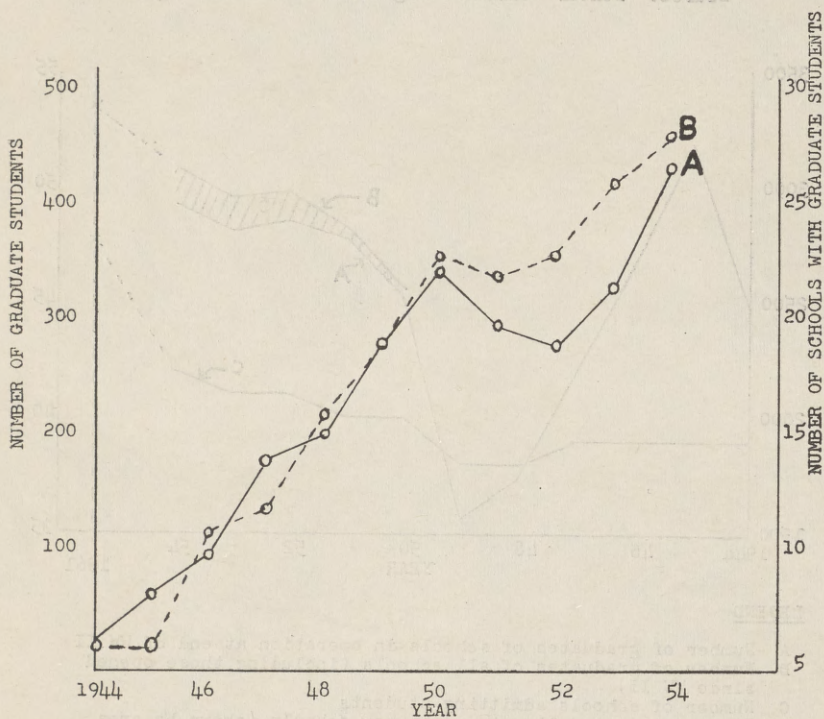
GRADUATES FROM DENTAL SCHOOLS 1944 - 1954
 Source: Dental Students' Register for indicated years



LEGEND

- A Number of graduates of schools in operation at end of WW II
- B Number of graduates of all schools (including those opened since WW II)
- C Number of schools admitting students
- D Increment in enrollment due to new schools (shown by area between curves A and B)
- X Indicates estimated figures for 1961, at which date a number of additional schools will have graduating classes

ENROLLMENT OF GRADUATE STUDENTS IN DENTAL SCHOOLS 1944 - 1954
 Source: Dental Students' Register for indicated years

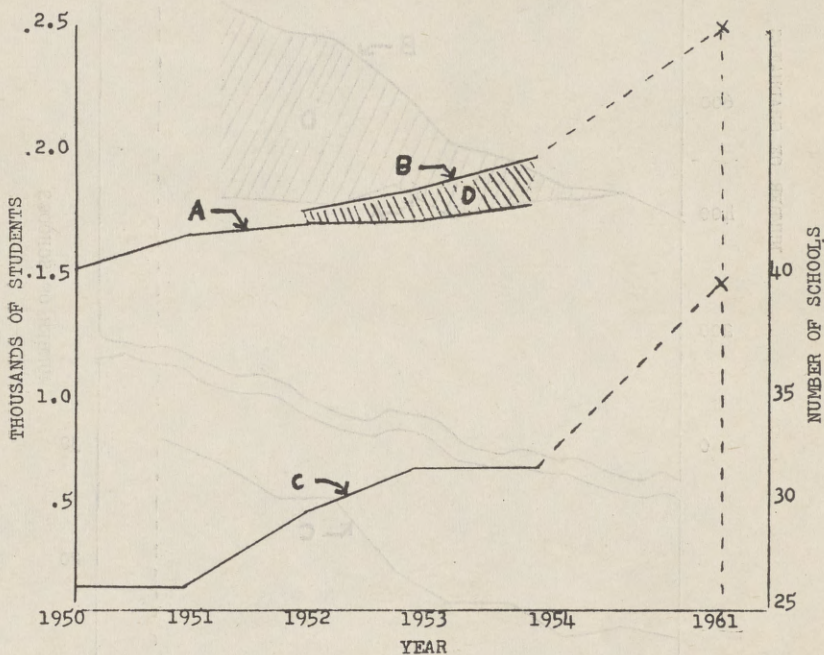


LEGEND

- A Enrollment of graduate students
 - - - B Number of schools having graduate students

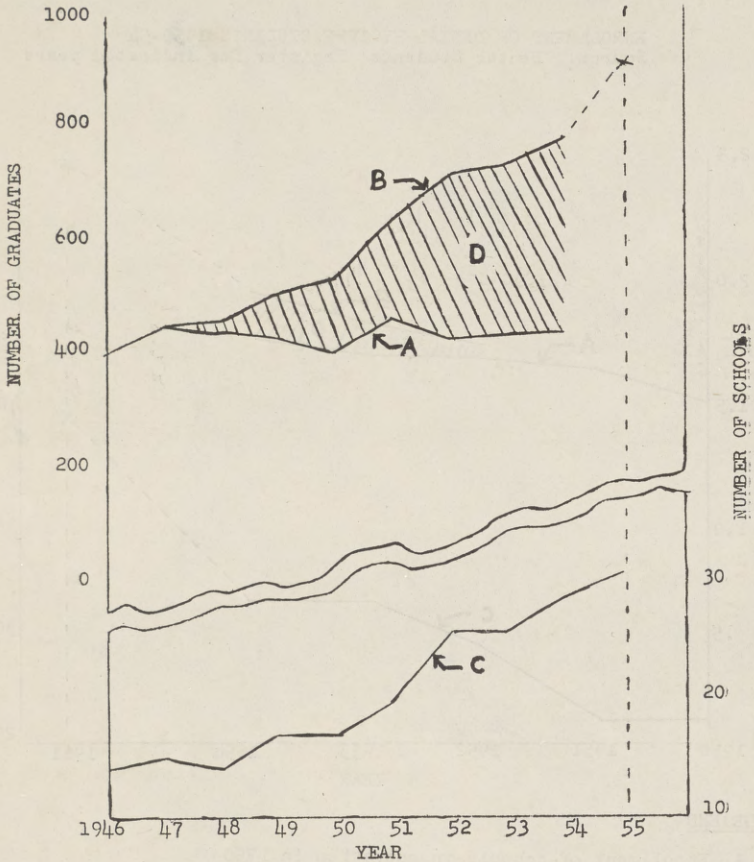
ENROLLMENT OF DENTAL HYGIENE STUDENTS 1950-54

Source: Dental Students' Register for indicated years

LEGEND

- A Enrollment of schools in operation in 1950
- B Enrollment of all schools (including new schools opened since 1950)
- C Number of schools in operation
- D Increment in enrollment due to new schools (shown by area between curves A and B)
- X Indicates estimated figures for 1961, at which date a number of additional schools will have graduating classes

GRADUATES FROM DENTAL HYGIENE SCHOOLS 1946-54
 Source: Dental Students' Register for indicated years



LEGEND

- A Number of graduates from schools in operation at end of WW II
- B. Number of graduates of all schools (including new schools opened since WW II)
- C, Number of schools graduating students
- D Increment in enrollment due to new schools (area between curves A and B)
- X Indicates estimated figures for 1955

Dr. PETERSON. I shall be happy to answer any questions which the committee desires to ask.

In behalf of the American Dental Association I wish to thank the committee for the opportunity to express the association's position on this important legislation.

The CHAIRMAN. Any questions?

Senator BENDER. Dr. Peterson, or Dr. Creig, either of you may answer. These bills of course do not require State matching Federal funds, and Federal funds, as I understand it, do not go to the State government, they go directly from the Federal Government to the school.

Do you think the aid should go through or not go through State authorities?

Mr. CONWAY. I shall answer that question.

The CHAIRMAN. Will you identify yourself?

Mr. CONWAY. Mr. Bernard J. Conway, American Dental Association.

Most of the dental schools are private institutions and to provide those funds to those schools, it would be necessary to provide that directly to the schools, in our opinion.

Senator BENDER. That is not through the State government or any other governmental agencies, but directly from the Federal Government, which is quite a departure that has never happened except in the case of Howard University. You are aware of that?

Mr. CONWAY. That is correct.

Dr. CREIG. Senator, if we got some through Columbus, it would never come up to Cleveland through Western Reserve.

Senator BENDER. I can understand that, of course.

The CHAIRMAN. We don't have a dental school in every State, do we?

Dr. PETERSON. No; 26 States have them.

The CHAIRMAN. At least 26 State dental schools supply dentists for the entire United States?

Dr. PETERSON. That's right. There are some regional schools that have been established.

The CHAIRMAN. They also supply the dentists for the Armed Forces, Public Health Service, and the other governmental agencies, is that correct?

Dr. PETERSON. That is correct.

Senator BENDER. You don't believe that adoption by the Federal Government of such a program there will be a disposition on the part of the legislative branch of the Government or the administrative branch to want to have something to say about the courses of study, and so on?

Dr. PETERSON. That has been my impression from reading the bill that that was not that thought behind the bill certainly.

Senator BENDER. I appreciate that.

I know that was in the distinguished chairman's mind.

He does not want Federal control.

The CHAIRMAN. The truth is, Doctor, that we have had long experience with Federal aid, have we not, in land-grant colleges, vocational education, large donations of land?

Dr. PETERSON. That is certainly true.

The CHAIRMAN. As I recall, the State of Ohio received the largest grants of Federal lands to any of the States. I am glad they did. It is a great State.

Senator BENDER. You see what happened as a result of that.

Mr. CONWAY. I might mention the disposition of Hill-Burton funds to the hospitals has not resulted in interference with the administration of the hospitals. We are certain the Government would place the same limitation upon these funds to dental education.

Senator BENDER. In your thinking regarding Federal control of the medical profession or dental profession or any phase of medicine or nursing and so forth, do you feel as strongly now as you did before on that phase, that you don't want Federal control? You want Federal money but not control?

Dr. PETERSON. That is correct, sir.

Mr. CONWAY. We believe where Federal grants-in-aid can be justifiable to spend for improvement of dental programs and improvement of dental educational programs where there is definite need, where it's shown the State or local communities cannot supply the necessary funds.

The CHAIRMAN. Any further questions?

If not, we certainly want to thank you gentlemen. You have been very helpful to us. You brought us a lot of good and interesting information. We appreciate it very, very much.

Thank you.

Dr. CREIG. Glad to do it.

The CHAIRMAN. Dr. J. S. Denslow, secretary, American Association of Osteopathic Colleges.

Do you have a prepared statement, Doctor?

STATEMENT OF DR. J. S. DENSLOW, SECRETARY, AMERICAN ASSOCIATION OF OSTEOPATHIC COLLEGES

Dr. DENSLOW. I have a statement. I think it will save the time of the committee if I read that statement.

The CHAIRMAN. All right, sir.

Dr. DENSLOW. Mr. Chairman and members of the subcommittee, I am J. S. Denslow, D. O., director of research affairs, Kirksville College of Osteopathy and Surgery, and secretary-treasurer of the American Association of Osteopathic Colleges, and appear here representing the American Osteopathic Association.

My background in research may be objectively illustrated in a listing of contributions to nonosteopathic scientific literature, which I ask may be inserted at the end of my remarks.

The American Association of Osteopathic Colleges comprises all existing colleges of osteopathy and surgery, each of which is approved by the American Osteopathic Association.

The American Osteopathic Association has a membership of approximately 9,000 osteopathic physicians or surgeons out of a total of some 12,000 who are licensed and practicing in all the States of the United States.

We very much appreciate the opportunity of expressing our views on S. 1323, cited as the "Medical Educational Facilities Construction Act of 1955."

S. 1323 recognizes the need for Federal assistance to medical schools for construction of facilities urgently needed to enable the schools to carry out their responsibility for the quality and number of physicians being trained, for the education of teachers and research workers, and for the conduct of needed research.

Osteopathic physicians are licensed and practicing in all the States. Approximately 90 percent of the profession is located in States (three-fourths of the States) granting licenses to engage in the general practice of the healing art, including major surgery, drug therapy, and obstetrics.

Some 12,000 osteopathic physicians or surgeons are engaged in general or specialty practice. As stated in the guidance leaflet on osteopathy, prepared by the United States Office of Education, such specialties include:

Anesthesiology, diagnostic roentgenology, internal medicine, neurology and neurosurgery, obstetrics, obstetrics and gynecology, obstetrical and gynecological surgery, ophthalmology and otorhinolaryngology, orthopedic surgery, pathology, pediatrics, psychiatry, radiology, roentgenology, surgery and urological surgery.

In excess of 300 hospitals are staffed by osteopathic physicians or surgeons. Eighty-five hospitals are approved for intern or residency training.

There are six colleges of osteopathy and surgery, all nonprofit, tax exempt, approved by the American Osteopathic Association, the Veterans' Administration, and the Public Health Service.

Chicago College of Osteopathy, Chicago, Ill., established 1902.

College of Osteopathic Physicians and Surgeons, Los Angeles, Calif., established July 14, 1896.

Des Moines Still College of Osteopathy and Surgery, Des Moines, Iowa, established June 8, 1898.

Kansas City College of Osteopathy and Surgery, Kansas City, Mo., established 1916.

Kirksville College of Osteopathy and Surgery, Kirksville, Mo., established 1892.

Philadelphia College of Osteopathy, Philadelphia, Pa., established January 24, 1899.

Senator BENDER. Do any of them now or have any of them in the past received any Federal or State aid?

Dr. DENSLOW. Yes; I will get to that, Senator Bender, shortly.

In the fall of 1954, 1,867 students were enrolled in the osteopathic colleges. The freshman class (487) received preprofessional training in colleges and universities in 38 States and the District of Columbia.

These matriculants had preprofessional college training as follows: 72 percent had baccalaureate or advanced degrees, 98 percent had 3 or more years, and the remainder had 2 or 2-plus years. A minimum of 3 years of preprofessional training is required for the class entering in 1955. The professional course is 4 years. There were 449 graduates in 1954. During the past 5 years an average of 462 have graduated. Most graduates take 1 or more years of intern training.

The average tuition is \$700 a year. The student in paying this yearly tuition of \$700 is paying less than one-third of the actual cost of his education. The average osteopathic college spends approximately \$2,400 per year per student in conducting the type of educational program which the profession has insisted upon.

The difference between undergraduate tuition and fees and the school budgets is made up as nearly as possible by indebtedness, hospital, clinic, and graduate course fees, grants, such as cancer and heart teaching grants from the National Institutes of Health, and gifts.

That is the comment I was going to make. These grants are both for teaching in the field of heart disease and cancer.

Senator BENDER. These grants are from public——

Dr. DENSLOW. From the Public Health Service, the National Institutes of Health.

In addition to those teaching grants we have in our institution been operating under research grants from the Public Health Service since 1947.

Senator BENDER. These bills cover a different field entirely. These are bills providing for construction.

Dr. DENSLOW. That is right, sir.

What I have been trying to point out is that—or will try to point out—that if funds for construction are made available, the money that it frees in the college budget can be used to improve and extend the operational procedure.

In 1943, a continuing Osteopathic Progress Fund (nonprofit tax-exempt) was established through which the individual members of the profession and others make annual contributions to the colleges.

These contributions total in excess of \$5 million to date.

Senator BENDER. Just a brief interruption. You state that your college is in Kirksville, Mo.; is that a State school?

Dr. DENSLOW. No, sir. All the osteopathic institutions are private, nonprofit institutions, all six of them.

A survey of the demonstrable needs of the colleges for additional teaching space, which was conducted last November, showed needs in excess of 182,500 square feet at an estimated cost of \$3,535,000, and none of the colleges has funds to proceed with the construction.

These figures do not include necessary additional space for expanding research programs. Although the bureau of research of the American Osteopathic Association had meritorious applications for research projects totaling nearly \$100,000 for 1953-54, and \$100,000 for 1954-55, grants were able to be made in the amounts of \$52,750 and \$66,100 for the 2 years, respectively.

At my own college in Kirksville, Mo., we are optimistically proceeding with preliminary plans for the construction of urgently needed additional facilities to house our research program, but actual construction of the facilities will be impossible in the current financial situation of the college without major Government assistance.

The research carried on at the college has been made possible by grants from the American Osteopathic Association, the United States Public Health Service, the Bureau of Naval Research, and various trust funds, and individual contributions.

The problem of space for research programs was succinctly stated in the July 1954 annual report of the bureau of research of the association as follows:

One of the major problems in establishing research programs in osteopathic institutions is lack of space that can be assigned for this purpose. There is also the problem of accumulation of the basic equipment to convert such space, when found, into a research laboratory. It is permissible to expend part of grant moneys for major scientific equipment, but it is not permissible to make plant

alterations or buy and install basic laboratory furniture and utilities. If the AOA did not have to appropriate large amounts for the major support of the research programs, it could be in a position to assist the colleges in setting up essential laboratory facilities that would help attract assistance from outside granting agencies.

The cancer and heart teaching grants provided to the osteopathic colleges by the National Cancer Institute and the National Heart Institute not only help tremendously to emphasize the impact of cancer and heart disease and the methods of detecting and dealing with them, but help also to kindle and channel the investigative interest of students who have aptitude for scientific research in their direction. Stimulation of interest and discovery of aptitude in students for research must be followed by training in scientific methods. Such training requires not only qualified supervision, but adequate laboratory space and equipment.

Mr. Chairman, participation in the program under this bill would enable the osteopathic colleges to improve and expand their teaching and research facilities and increase to some extent their output of physicians.

However, the bill as written makes no provision for schools training physicians who are doctors of osteopathy.

Therefore, the following amendments which are designed to include osteopathic schools are respectfully submitted:

1. Page 4, lines 5 and 6, strike "the degree of doctor of medicine" and substitute "a degree of doctor of medicine or osteopathy."

2. Page 4, lines 7, 8, and 9, strike the words "after he has obtained the advice and recommendation of the Federal Council on Medical Educational Facilities created under section 703."

3. Page 4, line 21, strike the period after the word "health" and insert a comma and the words "including persons active in each of the fields of professional education concerned."

The Federal Council on Medical Education Facilities, which is provided for in the bill, and which should have representation as proposed in our amendment, should serve as adviser to the Surgeon General in connection with grants and with respect to regulations relating thereto.

Our proposed amendments follow the form adopted by the Senate Committee on Labor and Public Welfare in previous projected legislation. I refer to S. 1453 of the 81st Congress and S. 337 of the 82d Congress, both of which provided in part for construction grants for schools of osteopathy.

The War Manpower Commission in 1942 certified that the practice of osteopathy was vital to war production and the support of the war effort, and an activity the maintenance of which was necessary to the health, safety, and welfare of the Nation, and that there were serious shortages of persons trained, qualified, or skilled to engage in the critical occupation of osteopathy (Selective Service Occupational Bulletin No. 41, December 14, 1942).

In 1950 the United States Department of Labor included osteopathy in its list of critical occupations.

It has continued so listed, including the revised current list of critical occupations issued March 2, 1955.

The list is compiled on the recommendations of the Interagency Advisory Committee on Essential Activities and Critical Occupations.

As you know, the committee consists of representatives of the Departments of Defense, the Interior, Agriculture, as well as Commerce and Labor, and the Selective Service System.

The criteria applied require that occupations listed are those in which there is an overall shortage and in which the occupation is indispensable to the functioning of the activity in which it occurs.

We wish to extend our deep appreciation to the chairman and the committee for their leadership in this extremely important matter.

We feel the basic approach of providing for the constructing of teaching and research facilities on a matching basis is a practical and very worthwhile method.

(The document referred to is as follows:)

CONTRIBUTIONS TO NONOSTEOPATHIC LITERATURE

(By J. S. Denslow, D. O.)

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2. Denslow, J. S., and C. C. Hassett. The central excitatory state associated with postural abnormalities. *Journal of Neurophysiology*, 5: 393-402, 1942.
3. Denslow, J. S., and C. C. Hassett. The polyphasic action currents of the motor unit complex. *American Journal of Physiology*, 139: 4, 1943.
4. Denslow, J. S. An analysis of the variability of spinal reflex thresholds. *Journal of Neurophysiology*, 7: 207-216, 1944.
5. Denslow, J. S., and N. L. Cuthbert. Electride efficiency and subject positioning in electromyography. *Proceedings of the Society of Experimental Biology and Medicine*, 58: 191-193, 1945.
6. Denslow, J. S., I. M. Korr, and A. D. Krems. Quantitative studies of chronic facilitation in human motoneuron pools. *American Journal of Physiology*, 105: 2, 1947.
7. Denslow, J. S. Double discharges in human motor units. *Federation Proceedings*, 6: 1, 1947.
8. Denslow, J. S., and David M. Graham-Service. The spread of muscle action potentials from active to inactive area. *Federation Proceedings*, 7: 1, 1948.
9. Denslow, J. S. Double discharges in human motor units. *Journal of Neurophysiology*, 11: 209-216, 1948.
10. Denslow, J. S., and Olwen R. Gutensohn. Distribution of muscle fibers in a single motor unit. *Federation Proceedings*, 9: 1, March 1950.
11. Denslow, J. S., and Olwen R. Gutensohn. Neuromuscular organization of single motor units. *Federation Proceedings*, 10: 1, March 1951.

THE CHAIRMAN. Any questions?

Doctor, thank you very much for coming.

General Howley and Dr. Donal Sheehan.

Gentlemen, do you want to proceed first?

STATEMENT OF FRANK L. HOWLEY, VICE CHANCELLOR, NEW YORK UNIVERSITY, ACCOMPANIED BY DR. DONAL SHEEHAN, DIRECTOR, NEW YORK UNIVERSITY BELLEVUE MEDICAL CENTER

Mr. HOWLEY. Yes, sir.

The CHAIRMAN. Do you have a prepared statement?

Mr. HOWLEY. We have a prepared statement which we will not read because you already have that.

Senator BENDER. You are an M. D., aren't you?

Mr. HOWLEY. I am an honorary M. D., sir, but I am not a doctor of medicine.

Senator BENDER. Are you an M. D.?

Dr. SHEEHAN. Yes.

Senator BENDER. How do you feel about admitting osteopathy and recognizing that?

Dr. SHEEHAN. I would rather not comment.

The CHAIRMAN. They are here for another purpose.

You are here to address yourselves to a little different problem right now, is that right?

Mr. HOWLEY. Senator Hill, I am Frank Howley, vice chancellor of New York University and this is Dr. Donal Sheehan who is director of New York University Bellevue Medical Center.

We have given a statement of Chancellor Heald, and I will not repeat that statement.

The CHAIRMAN. We will have the statement of the chancellor appear in the record.

(The document referred to is as follows:)

STATEMENT BY HENRY T. HEALD, CHANCELLOR OF NEW YORK UNIVERSITY, IN
SUPPORT OF SENATE BILL 1323

As chancellor of New York University, I strongly advocate the approval of Senate bill 1323, which proposes Federal aid for the building of new facilities for medical education throughout the Nation.

The Nation's health and, indeed, its survival—in peace or war—depend in large measure upon the education opportunities the Nation can offer to young men and women who today—and especially tomorrow—seek careers in medicine.

It has been demonstrated innumerable times in different countries throughout the world that the health of a nation at any time reflects the quality of medical education in the decades immediately preceding.

To provide for the highest type of medical education means building up throughout the Nation our facilities for medical training, for medical research, and for the discovery and use of the newest techniques for the best medical care.

Throughout the country, there is a growing and insistent demand to preserve and protect the health and well-being of the people of the Nation. This demand comes not only from the people themselves but from the Federal Government—from the Armed Forces, the Veterans' Administration, and the health and welfare agencies of the Government.

To meet this demand, new medical centers are springing up. Some are State-supported; others are dependent upon private contributions. But in the long run all are dependent upon the people. The need becomes one not of Federal aid for education but of Federal reimbursement for the contributions of the medical schools directly to national defense and public health.

For the support of day-to-day medical education and research, we can look to the understanding help of our citizens; but in times of emergency, when great demands are made upon us, we need the additional support of our Government. The current pressing need arises from the response we have already made, without Government assistance, to the many health demands of the people in general and of the Government in particular.

We want to remain free and independent; but, in the face of possible atomic war, the medical centers of this country must be built up rapidly and efficiently so that first-class physicians can be educated to serve as the future guardians of the Nation's health.

Bricks and mortar are in themselves not the sole answer, but they are very important initially. They provide a vital link in the chain leading to new discoveries and new methods for care of the sick and the treatment of disease by new generations of well-educated physicians.

Who, for example, can evaluate the gift to mankind in the work of Jonas Salk who only a few years ago was a student in the college of medicine of the university which I serve?

Let me give just one instance, among many throughout the Nation, upon which I base my support of this particular bill and others such as Senate bill 849:

A little over 10 years ago the medical faculty of New York University, realizing their responsibility to the future, laid plans for the development of a new Medical Center in New York City.

The plans included the expansion of the college of medicine, the creation of a postgraduate medical school, and the addition of new hospital opportunities. All of this necessitated an expanded faculty and new facilities. The buildings and land alone required a capital investment of over \$30 million (an investment which seems small now in comparison with Salk's discovery of the polio vaccine). This is a heavy, almost staggering burden on any university. But, despite all difficulties, New York University, a gift-supported institution, has forged ahead on this program, and today 2 of the 5 essential buildings are in active operation and a third is under construction.

During the past 5 years, nearly 600 new physicians have been graduated by the college of medicine, and 6,590 doctors from every State in the Union and from all over the world have come to the postgraduate medical school for advanced medical study.

The faculties of the center's 2 medical schools total 1,381. Of this number, about one-third devotes either all or a major portion of its time to teaching, research, or clinical care in some part of the Medical Center. The physicians and surgeons on the center's faculties are responsible for the medical care of patients in 3,500 beds in 4 metropolitan hospitals affiliated directly with the center. It is in these four hospitals—University Hospital, owned by the Medical Center, and in the city-owned Bellevue, Goldwater Memorial, and Gouverneur Hospitals—that the bulk of the center's activities take place. In addition, important affiliations exist with such hospitals as Beekman-Downtown, Beth Israel, Lenox Hill, New York Eye and Ear Infirmary, St. Vincent's Irvington House, and New York State Rehabilitation Hospital.

Through a special regional hospital plan, the teaching facilities of the Medical Center are extended to 10 rural hospitals within a hundred miles of New York City—another method of bringing the achievements of the center to the community.

The teaching and research programs of the Institute of Industrial Medicine are developing important new skills and techniques to safeguard workers in industry. The Institute of Physical Medicine and Rehabilitation, internationally famous, has brought a new light of hope to the physically disabled and handicapped.

It is difficult to exaggerate the extent of the impact which such a medical center has already had upon the Nation. Yet it is still incomplete. And such an enterprise is but one of many examples throughout the country, waiting for financial support before they can be completed.

It seems to me that we cannot wait much longer. We as a Nation need these medical facilities now so that our country's health will not be in jeopardy. I think it is in this area that the universities of the United States look to the Federal Government for support and help, and it is for this reason that I, as head of one of our largest universities, lend my full support to the bill now before you for consideration.

Mr. HOWLEY. If we may, we would like to make a few very brief remarks on behalf of S. 1323, and incidentally because that is not on the agenda, 849.

We have no comments to make on S. 434.

The CHAIRMAN. Proceed in your own way.

Mr. HOWLEY. I have mentioned 1323 and 849 as being somewhat similar in our thinking because we have found in educational work that in our construction program frequently construction for research purposes and the construction for teaching are very similar.

Frequently it is the same building and frequently that also applies to research being done in a hospital, for example.

At New York we are engaged in a great building program because of the great and dreadful need for facilities.

We found that we can't teach without medical science buildings; where we do research, and so forth, we are grateful to you for allowing us to speak here and New York University was happy to know that the two distinguished Senators from New York are so interested in not only the local phase of health but also the national health which is involved in this.

The national problem as has been indicated by the previous speakers is a tremendous one.

We mention New York University because the problem of health, which is national, is accentuated and sometimes easier to see in its complexities in a greater concentration such as New York City.

Of NYU-managed schools, and there are 16 in the metropolitan area ranging from law to engineering and all of the others, the medical education which is really unavoidable at an institution of higher education is a dreadful financial burden on all other schools.

Of our other divisions they all must share in this burden of doing a great public good of service of training and research and education of doctors. The problem is not local.

Our students—we have in the last 5 years graduated over 600—come from all over the United States.

The graduate doctors who come to perform research and advanced studies in the past 5 years have numbered over 6,000 and again they come from all over the United States. As one simple illustration of the good which comes to the national picture from medical education in any one school is the case of New York University's College of Medicine, of course. Dr. Jonas Salk was a student and graduated from there, and it is needless to point out the great good which has come into every home in America as a result of his discoveries.

The CHAIRMAN. Off the record.

(Discussion off the record.)

Mr. HOWLEY. On the side of the financial burden which the university must carry for the benefit of all of the United States we have a great operating deficit. We normally budget and estimate that our operating deficit will run about a million dollars a year to train these doctors and run the center, normally due to the generosity of benevolent thinking persons and due to other means we cut that deficit down, but there is still always a deficit due to the service which we perform.

At the present time we can normally handle that. We expect to have deficits and to manage that, because our institutions are supported privately.

The building problem, however, is tremendous today, we must have help and we must have help very quickly. At New York University Bellevue project we are engaged in constructing \$30 million worth of buildings and they are buildings which are not those planned for some distant future, they are ones which are desperately needed at the present time.

Therefore, any help which can be given to us for the completion and for the construction of these facilities we would appreciate and we can assure you that the good will be of benefit to all of mankind because we have people from all over the world there and particularly through all States of the United States.

The CHAIRMAN. Don't you get any funds from the State of New York?

Mr. HOWLEY. No, sir. We are not State-supported or federally supported in the sense of land-grant colleges.

We always have certain amounts of money in cancer research and things of that sort which do help a great deal.

The CHAIRMAN. But you do not get any direct support from the government of the State of New York?

Mr. HOWLEY. I would like to ask Dr. Sheehan to answer that.

Senator LEHMAN. I can answer that question. I don't think they do. The State of New York now administers and has set up 2 medical colleges of its own, 1 at Syracuse and 1 in Brooklyn. Those are exclusively State-supported.

Unless the law has been changed since I left the State 12 years ago, I am sure they do not get any grants from the State.

I want to say, Mr. Chairman, if I may, I have watched with amazement and the greatest admiration the development of this great institution. I have watched that and have been familiar with it ever since its creation—I am not talking about the medical school, I am talking of the university as a whole.

I am an honorary officer of the university. This medical school does something which is of special note.

They work in the closest association not only with their own medical school and their subsidiary schools, rehabilitation and otherwise, but they work in the closest association with at least three and possibly more of the city-supported hospitals such as Bellevue, our biggest hospital and the Gouverneur Hospital, and they have very close affiliation with a great number of privately supported institutions, among which are some of our biggest hospitals supported by the public generally.

So they really cover an unusual comprehensive field of activities. I think their job is well done.

The CHAIRMAN. How old is the school?

Mr. HOWLEY. We have two parts. The medical college was founded before the Civil War, 1846; it is one of the oldest schools.

Senator LEHMAN. The combination between Bellevue and New York University is of very recent date.

Mr. HOWLEY. Yes; I would like to mention that on the term of direct support. It is a little difficult to define that. I am most grateful to Senator Lehman for straightening out my thinking of it. We do staff Bellevue, which is city-owned, and we are not compensated. We staff that 65 to 70 percent of the doctors.

We are now staffing more than half, more than half again without compensation that I am aware of, the new veterans' hospital which has been constructed right there in this great center. It is approximately a 1,200-bed hospital; of course, the veterans' is again a national personality. I am emphasizing the national scope of this subject, because all Senators must think in terms of the entire United States as well as their own particular State.

Senator BENDER. Your university has never asked for any State aid for any in construction; is that correct?

Mr. HOWLEY. I believe we are getting some State aid at the present time.

How much are we getting in State construction aid; is it \$250,000 that we received this year?

Dr. SHEEHAN. I am not aware of any that we receive from the State.

Mr. HOWLEY. We are not aware of any direct aid from the State.

The CHAIRMAN. My father was a graduate of New York University medical college. He was always very proud of that fact.

Any questions, gentlemen?

We certainly want to thank you, sir, for coming here.

Would Dr. Sheehan like to file a statement for the record or anything you would like to put in, sir?

Dr. SHEEHAN. No, sir; I don't think so.

Senator LEHMAN. I want to ask the chancellor one question.

I assume you are not afraid of Federal interference if you get these Federal grants for construction?

Mr. HOWLEY. There is one point which I assume you are referring to, the 5-percent increase.

We have not expressed a view on that particular point. This is my own personal comment.

I have not discussed this thoroughly, because we came down rather quickly.

Normally our own program would include, I assume, an increase of 5 percent as facilities are available. In theory I believe it probably would be better not to attach a condition to a grant because it might force some institution that was not ready to increase.

But in our particular case it does not apply. Because with these increased facilities and the availability of good teachers and the availability of good students, because we have so many apply, I believe we would not be particularly concerned about that.

Senator LEHMAN. I was not referring to that in particular. Some fear was expressed here earlier in the day that the Federal Government because they are making these grants would interfere with the curricula, the methods of teaching and with other subjects that apply particularly and should I believe apply exclusively to the management of the medical school.

That was the question which I posed.

Mr. HOWLEY. All educators in medicine and all other branches are very much aware of any outside influence which might determine how they will teach or how they will run the school.

It is part of the long tradition of academic education as you know, sir, and they apply the same thinking even in the present day where we are soliciting aid from big industries.

The educational people always watch very carefully that with the gift does not come interference with their responsibility and they feel, I feel quite rightly so that they are particularly well qualified.

In medicine their ethics are very high and they would be watching very carefully that following the assistance would not come limitations that would interfere with their ideas as to how to train the best doctors.

Senator LEHMAN. I wanted to bring out the fact that there was no indication that the Federal Government because they gave these grants would seek to interfere at all.

In the purely professional matters relating in the hospitals, I don't believe they ever have on any grants of this character that were made.

Mr. HOWLEY. In grants of these bills 1323 and 849 they are particularly free from what we would consider strings, if you will pardon my colloquial expression.

The CHAIRMAN. Thank you, gentlemen. We appreciate your coming down and making this statement and bringing us this information. Thank you.

Senator LEHMAN. Thank you.

The CHAIRMAN. We have with us our good and distinguished colleague from Mississippi, Senator John Stennis.

Senator, would you kindly come around and present our next witness?

**STATEMENT OF HON. JOHN STENNIS, UNITED STATES SENATOR
FROM THE STATE OF MISSISSIPPI**

Senator STENNIS. Thank you very much, Mr. Chairman, and members of the committee. It is a very special pleasure to me to present to this committee Dr. David Pankratz who for 15 years has been dean of our medical school in Mississippi, a 2-year medical school. He is going to go over now into the very first phase of the 4-year medical college down in Jackson, with a teaching hospital.

He will tell you his story but he is very much interested in S. 1323 which is before this subcommittee.

I appreciate very much being here with him. He is an outstanding educator and a man of highest character.

He has done great work and changed the picture in my State of Mississippi in reference to our medical education and medical services for our people.

The CHAIRMAN. Glad to have you here, Senator Stennis, and we are glad to have you here too, Doctor.

Will you be able to stay with us?

Senator STENNIS. Yes. Thank you.

**STATEMENT OF DR. D. S. PANKRATZ, SCHOOL OF MEDICINE,
UNIVERSITY OF MISSISSIPPI**

Dr. PANKRATZ. Might I present this evidence?

The CHAIRMAN. Thank you, if you will proceed in your own way we will be glad to have you do so.

Dr. PANKRATZ. Senator, it is a privilege and pleasure to be here.

I have a prepared statement.

The CHAIRMAN. Fine.

Dr. PANKRATZ. I am Dr. David S. Pankratz, dean of the School of Medicine, University of Mississippi, director of the Medical Center, and chairman of the Mississippi State Medical Education Board. I have served as dean and chairman of the school board since 1946, and have been a medical educator for 30 years, teaching at three different medical schools in this Nation.

First I wish to state that I concur with what has already been so ably stated by members of the Committee representing the American Medical Colleges and other medical educators who have preceded me.

For 52 years Mississippi has operated a 2-year medical school.

Senator BENDER. Doctor, will you identify the schools that you were identified with other than the University of Mississippi?

Dr. PANKRATZ. University of Kansas, University of Tennessee, and now at Mississippi.

I am a graduate of the University of Chicago. Our legislators in 1950 voted to expand our school to a 4-year school, which we plan to open this fall—1955.

It is under construction.

The CHAIRMAN. That will be at Jackson?

Dr. PANKRATZ. That is right.

At the close of World War II, I introduced a program of accepting two freshman classes each calendar year. This was done because of totally inadequate space and faculty, the large number of premedical students, and the doctor shortage. By this method we increased our class from 28 to 56 per year.

The university had a lot of trepidation about that at first.

The CHAIRMAN. That was something new, wasn't it?

Dr. PANKRATZ. It was the only one in this country.

The CHAIRMAN. The only one I heard of.

Dr. PANKRATZ. It was an answer to our backlog of GI's trying to take care of them in Mississippi.

In the medical school now under construction, we plan and can accept a freshman class of 80 per calendar year. And with aid from S. 1323—which I favor—we could take a class of 100 per year. We have found that 100 or more Mississippians enter the study of medicine each year. We have analyzed that for the past 50 years.

Furthermore, we could increase our class of nurses—and this is conservative—from 30 to 100 students, and the various ancillary health personnel from 0 to 50 or 100. That is a conservative statement. We could increase our graduate students from 10—which we now have—to 50, and offer postgraduate medical education to our 1,500 doctors.

The CHAIRMAN. Of course, there is a crying need for these other personnel you referred to?

Dr. PANKRATZ. That is right. As you well know the Hill-Burton program did an excellent job in our State and we are trying to put the hub in the wheel in that program.

The CHAIRMAN. By providing the personnel that you must have with the center?

Dr. PANKRATZ. Yes.

Recently we have been trying to employ a competent clinical faculty for all departments in our expanding program. Many excellent candidates have refused to come because we could not offer them adequate research space for the grants that they already have. To date, our departments of pathology, pediatrics, and psychiatry are without a professor or chairman.

Part of my visit here is to find some professors in this line in the country somewhere.

Mississippi, with its 2,200,000 people and 1,500 physicians, still has a doctor shortage—I want to go on record here—in most rural areas.

I know that southern part of the country and there is a shortage in that area.

We are still in the bottom group as far as ratio of doctors to population is concerned. In recent years Mississippi has lost by death some 40 to 60 doctors each year. We have less than 10 psychiatrists, allergists, endocrinologists or anesthesiologists—and some of the other specialists—in private practice in the whole State.

Our medical-scholarship program has done much to remedy the rural doctor shortage. This is the report on that.

Since 1946 the Mississippi Legislature has appropriated \$2,335,000 for medical scholarships, which could be used anywhere in this Nation. Representatives who spoke here yesterday have been beneficiaries of that scholarship program.

The CHAIRMAN. These scholars had to go to one of the schools outside of Mississippi.

Dr. PANKRATZ. I worked out a program of transfers to over 20 medical schools in this country to take the men and women after 2 years and finish them in the junior and senior years.

This has brought into general practice in Mississippi 226 qualified doctors, with 50 more in internship—and in military service. They get leave when they are called. That is on the back of this little report.

Senator STENNIS. May I request a question?

The CHAIRMAN. Yes.

Senator STENNIS. These scholarships total over \$2 million since 1946. Nevertheless after 2 years these young men are at liberty to practice in other States, are they not?

Dr. PANKRATZ. We have never coerced them to establish in any recommended region. We recommend to them needy areas. I know there is a shortage of doctors in my State.

Senator STENNIS. My point is that other areas in the Nation get the benefit of these scholarships. We require them to stay there only 2 years when we give them a scholarship.

Dr. PANKRATZ. Yes. If they stay in an accepted area in the State 5 years, the whole program is canceled out. It is the leading scholarship program in the Nation. I have said that a number of times and have not been challenged yet. It is the most liberal program in this Nation today.

Senator STENNIS. I know in my hometown where we are blessed with one of the hospitals under your program here, we have these fine young doctors come there and we always have enough, but after they get some experience, they go to Texas or somewhere, you see, where the income is greater.

My point is, in asking to come in on one of these programs we don't want you to get the impression that we train these men and require them to stay in Mississippi.

They go wherever they please after they get this limit.

Senator BENDER. You sent a lot of Mississippians to Ohio but not doctors.

Senator STENNIS. Yes, we hope we can get you some doctors up there.

Dr. PANKRATZ. I believe there are some students in Ohio. Western Reserve is one of the schools. I have sent boys there. Whether they stay there to practice I could not name them right now.

Senator BENDER. Off the record.

(Discussion off the record.)

Dr. PANKRATZ. You have 23 excellent medical schools in the State of Ohio, with which I am well-acquainted.

Jackson is located near the center of the State and is easily accessible to all Mississippians. That might be questioned. I think it is.

Senator STENNIS. Oh, yes.

Dr. PANKRATZ. The State owns a fine large tract of land on the edge of the business area, on which we could develop an adequate health center for our people. In fact we have over 300 acres which the building commission is hanging on to, holding on to for educational purposes and we are so fortunate because the land is worth a great deal of money at present.

Senator STENNIS. If I may ask, just how do you expect or hope to come in on this program of S. 1323. What are the buildings you will need if you can get on this program?

Dr. PANKRATZ. That is on page 2: Additional building program already planned for the medical center in Jackson when funds become available.

In other words the architectural and overall planning committee has planned the present building expandable with expansion possibilities so that it will not interrupt—it won't be just a conglomeration and an adding to of facilities such as many of our hospitals in this country have and make it very difficult to administer.

1. A clinical teaching wing to the medical school: The medical school portion of the present building has been designed strictly for use by the department of the first 2 years of medicine. The departments comprising the last 2 years of medical teaching are to be housed only temporarily in this wing of the building until adequate quarters are available.

No. 2 is really an extension of No. 1.

2. An additional wing to the hospital: The present hospital wing of the building can care for approximately 350 patients. Most medical schools equal in size to our own have hospitals caring for 500 or more patients.

Senator Hill knows that. Your medical center has more than 500 beds available. I was in the center just the other week.

The CHAIRMAN. Yes. We have the fine Jefferson Hospital. We also have that fine Veterans' Hospital right there.

Dr. PANKRATZ. Which we hope is in the making for us.

3. A new psychiatric wing to the hospital: I am sure you men on this committee know what the need in the field of mental disease is. I could speak at length on that, but this is not the time. At present the students will have to be transported mainly to Whitfield for their psychiatric training. This is not as satisfactory as having the psychiatric program immediately under the auspices of the school.

In fact a psychiatrist turned me down last week because we did not have a floor with special beds or at least special facilities for psychiatric teaching.

Senator STENNIS. That is in your effort to get a faculty?

Dr. PANKRATZ. Yes. That is where we come in on S. 1323.

The CHAIRMAN. You so badly need this adequate facility.

Dr. PANKRATZ. Yes.

4. A research wing to the school: A special research wing has been planned for the medical school—there is plenty of area there and could be attached easily on the same unit—that our school can participate in much of the national medical research program. Tremendous quantities of funds are available both from the National Government and from the national health organizations for supporting this research—and our present faculty has such grants—but before we can participate to full extent we need appropriate space for housing the research program, especially with our new clinical faculty that we are assembling now. We have not got them yet. We are supposed to open our hospital July 1 and I am in a jam and we are embarrassed as to some of our services.

We could participate in that program with a floor or two on that research wing. If we had one floor of that research wing, I understand this is a 5-year program.

5. A nurses' home—

The CHAIRMAN. You are outlining what you have there, what your plans call for?

Dr. PANKRATZ. That is right. At present the student nurses and other women employees of the school will have to live in the city of Jackson. This makes it very difficult to man the hospital with adequate nursing care.

6. A student dormitory: We plan this. The students also must now live in the city of Jackson, and no adequate facilities are available within approximately 1 mile of the medical school. Because much of the clinical work carried out on patients is effected by the students, they need to be close at hand and on call within a few minutes' notice.

Present financing of the medical school: The building which is to house the medical school and teaching hospital will cost almost exactly \$9 million. Of this amount, \$4½ million was appropriated by the State Legislature to build the medical school portion of the building.

The hospital portion of the building was built under the Hill-Burton Act, with \$3 million provided by the United States Government and \$1½ million provided by Hinds County.

In addition to these costs, the State has appropriated approximately another half million dollars to build a crippled children's hospital adjacent to the major medical center.

The legislature appropriated approximately \$1 million for the first year of operation of the teaching hospital and \$650,000 for operation of the medical school for the first teaching year, beginning July 1, 1955.

With the above figures in mind, and remembering the financial problems of our State, we feel that the State has done about as much as it can possibly do in supporting medical education without greatly hampering other functions of the State.

The CHAIRMAN. Any questions?

Senator LEHMAN. No questions. It is very interesting.

Dr. PANKRATZ. May I assure you of one thing that was asked here that we as medical educators are more zealous about the standards of our medical products that we turn out than anyone in this country.

May I assure you of that? I think I speak for most of us in this group.

Senator LEHMAN. I got that impression yesterday and today. Man after man who testified said we would not allow our standards to suffer.

Senator STENNIS. They won't yield on that.

The CHAIRMAN. This is off the record.

(Discussion off the record.)

Dr. PANKRATZ. We now lead the Nation with our medical schools, and let's have the most and also the best of the physicians in the world. I think our survival depends on that, to some extent greatly, the health of our people.

The CHAIRMAN. You heard the testimony this morning. I was very much impressed by the testimony from Dr. Blasingame and Dr.

Wiggins, too, as to the quality of our doctors today as compared to doctors in other countries.

That was well illustrated during World War II when our doctors got so much better results from penicillin and other drugs that we now have than were gotten by the doctors in other countries, although they had the medicines that were available to us.

Senator Stennis, and you, Doctor, we certainly want to thank you.

Senator STENNIS. Thank you very much. If I may add this word, the problem there is the cost of the new hospital, the new medical school, the cost of these additional units, the cost of getting that faculty going, and then the cost of running a 4-year medical school, it piles up into many millions of dollars.

A program like this to help get it on its feet would be very, very helpful.

Thank you.

The CHAIRMAN. Thank you. We appreciate your all coming. You have been most helpful to us. Now we have with us Dr. Francis Forrester. He is dean of one of our fine medical colleges right here in the city of Washington, the Georgetown University Medical College. Doctor, we are delighted to have you here. We will be glad to have you have a seat and make any statement you see fit.

In this connection, is it not true that you have just been elected or named president-elect of the American Academy of Neurology?

STATEMENT OF DR. FRANCIS FORRESTER, DEAN, MEDICAL COLLEGE, GEORGETOWN UNIVERSITY

Dr. FORRESTER. That is right, sir.

The CHAIRMAN. That is a fine honor and distinction.

Dr. FORRESTER. Thank you, sir.

The CHAIRMAN. That academy is the representative body of the neurologists throughout the country. We congratulate you.

You may proceed in your own way.

Dr. FORRESTER. I am an alumnus of the University of Cincinnati College of Medicine and had my training after that at Harvard.

I subsequently had my training at Pennsylvania Hospital and was on the faculty of Harvard and at Yale, Boston University, Jefferson Medical College, and now at Georgetown.

I am here, sir, in favor of this bill for medical education, and I would like to point out first why I think it is necessary, and, second, the results of this bill if it became activated.

Insofar as the needs are concerned, in the past 25 years there has been a tremendous growth in the curriculum of medical schools.

There have been brand new departments, such as rehabilitation, there has been a direct growth of departments, such as neurology, psychology, and neurosurgery.

In addition to that, largely from the impetus you gentlemen have given to science, there has been development in the field of infectious diseases and new departments, such as the department on medical education for national defense, which we added this year at Georgetown; this is not only a teaching service, this is a community service.

These have grown within the schools, yet within the last 25 years there has been relatively little growth of the structures in the schools.

We are operating in the same building that was built in 1931, at the time when there were 30 men in the school class. Now we have 100 men in the class. There were then 50 men in the faculty and now we have 500. So there has been this growth in students and faculty and in curriculum without any real addition to buildings.

Actually the construction of new facilities for medical schools is almost the exception rather than the rule. I think this is because of the financial status of the medical schools. I came yesterday from the budget hearings of my own university and came away bleeding with a quarter of a million dollar deficit. This can't long be supported by the university. It is difficult to obtain funds from the university for construction when we are unable to operate any closer to a level.

The universities themselves, as you so well know, are having their own difficulties.

Senator BENDER. Mr. Chairman, I say this with great respect to Georgetown, but I am wondering how a bill of this kind involving public funds could benefit it.

Is there any legal restriction that might be invoked here as a result of this being a church school? How could you benefit from it?

Dr. FORRESTER. Actually, I think this is a rather general concept that the Catholic universities are church schools. They are not really and we do not derive a penny from the church either in this country or anywhere else.

Each of them is operated autonomously. They are operated for instance—Georgetown is operated by the Society of Jesus. That university has to stand on its own feet as a separate unit.

Senator BENDER. It is a church school but in reality it is not supported in any way by church funds?

Dr. FORRESTER. That is right. The Catholic University is supported by church funds because it is built that way. But the other universities who have grown up to serve the needs of the community and are really private, they happen to be backed and pushed by the priests who put in their own efforts for gratis in order to do this community service.

But we do not receive any aid from the church as such nor from any other part of the church. Georgetown stands or falls alone, sir.

Senator BENDER. A great many people, of course, do not know that you are operating that way. They are under a misapprehension.

Dr. FORRESTER. It is impossible to acquire more funds from tuition. We are all cognizant of that in medical education. We don't want to price ourselves into the business of teaching only wealthy boys. Because many of us who are in education ourselves came up earning our own way and if tuition goes up much more than it is now it will make the selection of students on a monetary basis which is not what we want.

The private funds are difficult to come by. We are in a particularly difficult situation here. There is no possibility of State aid because we are not in a State, being in the District of Columbia. There are no large industries here, as there are elsewhere who might be inclined to support medical education. So this for us is terrifically important.

The CHAIRMAN. In other words it might have features of urgency for you that it might not have for some other school; is that correct, Doctor?

Dr. FORRESTER. Right, sir. Looking at the results of this, if these funds were made available, I know that the point of increase of students is one that has come up at these hearings.

When I became dean 2 years ago I cut back the admission of students from 125 to 100 students per class. I felt we did not have the facilities to take care of 125 students. In good conscience, I did not feel it was right.

If this bill was passed and the funds were available for construction we could go back to our previous figure of 125.

It wasn't easy to cut back 25 potential doctors in a time of shortage. I would rather turn out 100 better trained men than 125 not so well trained.

Senator LEHMAN. You have no fear if this grant is made the the Federal Government will seek to interfere in a way that will lessen the effectiveness of the training program, the quality of the teaching?

Dr. FORRESTER. No, sir. I look on this bill, sir, as akin to Senator Hill's other bill, the Hill-Burton bill which in essence has given better medical care and has actually done much to improve the private practice of medicine by making hospitals available and better medical service available in outlying communities.

I think this is a counterpart really. With this bill better doctors will be turned out and perhaps more doctors for the centers that have been built and will be built under the Hill-Burton program and will tend to disseminate more doctors in the rural areas.

As more men come out, they will be able to go to the previously developed facilities.

The CHAIRMAN. Your reducing your enrollment from 125 to 100 in your freshman class is the best possible evidence we can have of the fact that you gentlemen who operate our medical schools put your first emphasis on quality and on giving the best possible teaching and training in education to the young men who are going to be our doctors.

Dr. FORRESTER. Thank you, sir.

I think the results of these funds will increase the quality of teaching, of course, by having more space available and increase the quality and quantities of research because the teacher by nature must be doing some research by the very spirit within him.

With these funds if they are available I would plan to construct a library. Our present library is so short of space the librarian is afraid to call in the books because he does not have the shelf space for them.

I would construct labs for teaching the medical students.

I would like to speak to the matter of endowment which is inherent in the bill. The fact that 20 percent of the funds could be set aside for endowments. This would tend to make the school stand on its own and make the budget hearings before the university a little less ghastly, sir, than they are now.

Thank you.

The CHAIRMAN. Any questions, gentlemen?

Doctor, you are very kind to come here this morning. We appreciate it very much.

We are interested in your school being right here in the city of Washington.

We know your doctors, the products of your school; we know what a splendid school it is.

We appreciate your coming here.

Thank you very much.

Gentlemen, that concludes our hearings.

The subcommittee will stand in adjournment.

(By direction of the chairman, the following is made a part of the record:)

UNIVERSITY OF COLORADO,
Boulder, Colo., April 21, 1955.

Hon. LISTER HILL,
Senate Office Building, Washington, D. C.

DEAR SENATOR HILL: I am writing in the interests of Senate bill 1323 which has been worked out in cooperation with the executive council of the Association of American Medical Colleges and the council on medical education and health of the American Medical Association. The regents of the University of Colorado have studied the bill and have passed a resolution favoring its passage.

We have a particular interest in this bill because the Colorado General Assembly, just adjourned, has passed legislation making it possible for us to make plans for enlarging the medical school and increasing our research facilities. If Senate bill 1323 should be passed and thus provide matching funds for construction and maintenance endowment, we will be in a position to do a much better job than would otherwise be the case.

Lack of teaching and research space is hampering us at every turn, and the matching funds that would be provided in case the bill should become law would play a most important part in increasing our effectiveness.

Sincerely yours,

WARD DARLEY.

[Telegram]

PHILADELPHIA, PA., April 28, 1955.

LISTER HILL,
United States Senate, Washington, D. C.

DEAR SENATOR: The president, trustees, and faculty of the Temple University School of Medicine heartily endorse Senate bill S. 1323. A Federal grant under this bill would enable us to construct new buildings. New buildings would provide additional space and facilities resulting in an improved quality of medical education in addition. It would permit admission of a larger number of students. Much promising research in this institution has been postponed because of lack of space. The building program you are recommending would correct this unfortunate situation. May I express the sincere hope that this worthy bill will be approved by Congress.

Cordially,

ROBERT L. JOHNSON,
President, Temple University.

CHICAGO HOSPITAL COUNCIL,
Chicago 3, Ill., April 25, 1955.

Hon. LISTER HILL,
*Chairman, Labor and Public Welfare Committee,
United States Senate, Washington, D. C.*

DEAR SENATOR: I am writing to enlist your interest in Senate bill 1323, the bill which is designed to offer relief to medical education and research by providing funds for new and expanded facilities.

Mount Sinai Hospital, of which I am director, serves as one of the major teaching hospitals of the Chicago Medical School and I am acutely aware of the serious handicap which exists because of the lack of adequate classroom, laboratory, and other building facilities for the educational program of the school.

As a hospital executive I am also acutely aware of the situation, which seems to be pretty well known among the public, that medical schools in the United States graduate only about one-half as many physicians as are required each year to serve as interns in the accredited hospitals. This shortage is due to a large extent to the lack of space and financial support.

Favorable action on this bill would be of immeasurable help to the health and welfare of the country and I respectfully recommend its support.

Kind regards,

Sincerely yours,

STEPHEN MANHEIMER, M. D.,
President.

[Telegram]

PHILADELPHIA, PA., April 19, 1955.

Senator LISTER HILL,
United States Senate, Washington, D. C.:

The University of Pennsylvania wishes to record its enthusiastic support of S. 1323 as a means of Federal participation in strengthening our system of medical education.

GAYLORD P. HARNWELL, *President.*

OAK PARK, ILL., April 30, 1955.

Hon. LISTER HILL,
*Chairman, Senate Committee on Labor and Public Welfare,
Senate Building, Washington, D. C.*

DEAR SENATOR HILL: This letter is to beseech your influence toward the passage of Senate bill S. 1323. It is apparent to all interested and involved in medical education that such help as is planned by this bill is vitally necessary if our medical schools are to continue improving the quality and amount of their services to medical education.

I still have pleasant memories of an address you made at Tuscaloosa some years ago at a meeting of the International College of Surgeons, at which time I met you in company with my friends, Gilbert Douglas, John Martin, and Otis Jourdan. Feeling confident that your enlightened views on medical education must be still the same I look forward with the majority of my profession to see the passage of this bill.

With kindest personal regards, I am

Yours sincerely,

LOUIS D. RIVER, M. D.

CHICAGO 12, ILL., May 4, 1955.

Senator LISTER HILL,
Senate Office Building, Washington 25, D. C.

DEAR SENATOR HILL: This concerns S. 1323, a bill to come up for consideration by a committee which you head.

As a taxpayer, may I urge you to give favorable consideration to this bill as a means encouraging the improvement of the facilities for medical education by providing funds under certain conditions for the construction of new or reconditioned medical schools.

Very truly yours,

ALICE W. FULTON.

CHICAGO, ILL., May 5, 1955.

Senator LISTER HILL,
*Chairman, Senate Committee on Labor and Public Welfare,
Washington, D. C.*

DEAR SIR: We are writing to urge your support of Senate bill S. 1323.

This bill is of particular interest to us because of the benefit it will offer to the Stritch School of Medicine of Loyola University and its plans for a new medical school. The present facilities are inadequate for the needs of the university.

As a member of the faculty at the Stritch School of Medicine, we are urging favorable action on the bill.

Respectfully yours,

M. K. MILLIKAN, M. D.

[Telegrams]

PHILADELPHIA, PA., May 4, 1955.

Senator LISTER HILL,
Senate Office Building, Washington, D. C.:

The board of the medical education and research of the University of Pennsylvania in favor of Senate bill 1323, and sincerely trusts that your committee will report this favorably.

ORVILLE H. BULLITT, *Chairman.*

CHICAGO, ILL., May 3, 1955.

Hon. Mr. HILL,
Chairman, Committee on Labor and Public Welfare,
United States Senate, Washington, D. C.:

As a medical educator and one who sees ever-expanding horizons for medical and public-health services with unlimited participation by both private and public agencies, I urge you to support S. 1323.

Y. T. OESTER, M. D., Ph. D.,
Loyola School of Medicine.

PHILADELPHIA, PA., April 29, 1955.

Senator LISTER HILL,
United States Senate Building, Washington, D. C.:

Senate bill S. 1323 would provide vitally needed space for the medical schools of the country. The bill is fully approved by the board of corporators of the Woman's Medical College and its passage greatly desired by the faculty and alumnae. We urge your committee support.

BURGESS LEE GORDON, M. D.,
President, Woman's Medical College.

HARRISBURG, PA., April 29, 1955.

Hon. LISTER HILL,
United States Senate, Washington, D. C.:

The Commonwealth of Pennsylvania with its six fine private medical schools assisted with State funds wishes to endorse enthusiastically S. 1323. This bill provides the practical means for Federal participation in an urgently needed construction program for our medical schools.

GEORGE M. LEADER,
Governor of Pennsylvania.

CHICAGO HEIGHTS, ILL., May 2, 1955.

Senator LISTER HILL,
Washington, D. C.:

Please vote favorably for Senate bill S. 1323 granting Federal aid to medical school construction.

PETER D. FAGAN, M. D.

CHICAGO, ILL., May 2, 1955.

Senator LISTER HILL,
Senate Committee on Labor and Public Welfare,
Washington, D. C.:

I earnestly request that you support Senate bill S. 1323.

JOHN P. MAYKA, M. D.

CHICAGO, ILL., May 2, 1955.

Senator LISTER HILL,
Senate Committee on Labor and Public Welfare,
Washington, D. C.:

I earnestly request you support Senate bill S. 1323.

JAMES E. SEGRAVES, M. D.

Senator LISTER HILL,

Senate Committee on Labor and Public Welfare,

Washington, D. C.:

I earnestly request that you support Senate bill S. 1323.

C. GRUSZKA, M. D.

CHICAGO, ILL., May 2, 1955.

Senator LISTER HILL,

Senate Committee on Labor and Public Welfare,

Washington, D. C.:

I earnestly request that you support Senate bill S. 1323.

JAMES J. CALLAHAN, M. D.

LOUISVILLE, KY., May 3, 1955.

Senator LISTER HILL,

Senate Office Building, Washington, D. C.:

The physical plant of the University of Louisville Medical School is bursting at the seams for space for both its teaching and its research activities. Additional space is urgently needed and continued accreditation is in danger of being lost eventually if facilities are not augmented. It is not feasible to find from local sources all the funds needed to do this properly. However, sufficient funds to match the Federal appropriation proposed in S. 1323 can almost certainly be found. Therefore the help which would be made available from your bill S. 1323 now under consideration would be nothing less than lifesaving in this institution. Since it is anticipated that more students will be admitted than currently enrolled I also urge that the clause regarding the matching ratio when enrollment is to be increased 5 percent or more be retained. We appreciate your active support of this bill which would mean so much to this school.

J. MURRAY KINSMAN, M. D.,

Dean, University of Louisville School of Medicine.

TULANE UNIVERSITY,

SCHOOL OF MEDICINE,

New Orleans 12, La., May 5, 1955.

Hon. LISTER HILL,

United States Senate, Washington, D. C.

DEAR SENATOR HILL: I am writing you in regard to Senate bill 1323. You, of course, have had a great interest in the needs of medical education, and I need not tell you how badly funds are needed for the construction of new buildings and for renovation of existing ones.

The non-tax-supported schools in this country are in a particularly serious situation, because they necessarily have to put on intensive financial drives in order to raise money for needed buildings and capital improvements.

I strongly endorse Senate bill 1323, and I hope that the Congress will make these funds available for the purposes indicated.

Respectfully yours,

M. E. LAPMAN, M. D., *Dean.*

EVANSTON, ILL., May 2, 1955.

Hon. Senator LISTER HILL,

Chairman, Senate Committee on Labor and Public Welfare,

United States Senate Building, Washington, D. C.

DEAR SENATOR: I am writing you in reference to Senate bill S. 1323 which comes up for hearing approximately Thursday, May 5.

The medical profession is well informed as to the need of Government funds in assisting in construction of medical school buildings, and renovation of older ones.

As a graduate of Northwestern University Medical School and a faculty member of Stritch School of Medicine, Loyola University, and a urologist practicing that specialty in Evanston for 35 years, I believe Federal aid to medical schools will help to solve acute problems of medical education, to improve the quality of medical care and overcome the shortage of physicians throughout the United States.

The Very Rev. James T. Hussey, S. J., president of Loyola University, will appear before the Senate Committee on Labor and Public Welfare in support of this bill. May I join with many other physicians of the United States in asking your support.

Sincerely yours,

BEN FILLIS.

UNIVERSITY OF MINNESOTA,
THE MEDICAL SCHOOL,
Minneapolis 14, April 29, 1955.

Senator LISTER HILL,
United States Senate, Washington 25, D. C.

DEAR SENATOR HILL: I wish that I could accept your invitation to testify before your committee in support of S. 1323, the bill to provide Federal aid to expand and improve facilities for medical education. Unfortunately my appointment as a member of the United States delegation to the World Health Assembly, which meets in Mexico City, will prevent this. I am, therefore, accepting your second best invitation to send you a brief memorandum of my views concerning this proposed legislation.

Incidentally, my opinion concerning the needs in this area is not without foundation since, during World War II, I served as a member of the Directing Board of the Procurement and Assignment Service for Physicians, Dentists, and Veterinarians of the War Manpower Commission, and I am currently serving as Vice Chairman of the Health Resources Advisory Committee of the Office of Defense Mobilization and chairman of the American Medical Association's council on national defense.

As I have written you before, I feel that this legislation is basic to the improvement and expansion of medical education of this country; and, as the Director General of the World Health Organization says in his report for 1954, "Health can be improved only to the extent to which the level of medical education is raised, both in quantity and in quality."

Actually many medical schools are today accepting more students than they should accept with present facilities, and enlargement of classes is out of the question until these facilities can be expanded.

Take my own medical school of the University of Minnesota as an example—a school which is recognized as one of the leading medical schools of the country. We recently completed and moved into a splendid addition to our facilities, called the Mayo Memorial. Everyone who sees this building cannot fail to be impressed. Yet our basic science departments of anatomy, pathology, physiology, physiological chemistry and pharmacology are in buildings which were constructed more than 40 years ago with teaching laboratories for 75 students per class, laboratories which are basically the same today as when they were originally constructed but which we are now using for about 120 medical students per class, as well as for dental students, nurses, medical technicians, and other medical service groups. Portions of our university hospital are also 40 years old and in need of extensive remodeling. And we are seriously handicapped both in our medical teaching and in medical research by the lack of a medical library. I have talked with many medical school deans about this and find that our situation is typical of most of the better medical schools, and far better than average.

Our plans at Minnesota call for a medical library building and for remodeling of our basic science teaching laboratories and our university hospital so that we can accept up to 150 medical students per class. Toward this program for the next 2 years the university presented requests to the legislature, just adjourned, for \$875,000 for the medical library, \$330,000 for partial remodeling of our basic science building, and \$1 million for remodeling of the university hospital. The house approved these requests but the senate, which was parsimonious on all State building requests this year, allowed nothing for our library, \$150,000 for the basic science building, and \$325,000 for hospital remodeling. The conference committee followed the senate pattern on buildings. However, just before adjournment, I was able to get a copy of S. 1323 to them, on the basis of which they added \$400,000 to the State building bill for the medical library.

I cite this not only to show how a school such as ours really needs the assistance provided by S. 1323 but also as an illustration as to how Federal funds on a matching basis will stimulate the provision of local funds, and I am sure that

the effect will be the same whether such local funds be from public or from private sources.

So, I am convinced that the enactment of this legislation will:

1. Improve the quality of medical education in many schools.
2. Make possible the enlargement of medical classes in many schools. Incidentally, in my judgment the incentive provision in the bill to increase the size of classes is a realistic recognition of the interest of the public in the training of more physicians and, at 5 percent, is not a danger to the quality of medical education.
3. Have a favorable influence on dental and nursing education, since in most universities the same basic science laboratories are used for teaching all of these groups; and the same clinical facilities for the training of physicians, nurses, medical technologists, physical and occupational therapists and other health personnel.
4. Improve and expand facilities also for medical research, because in every medical school medical education and medical research overlap to such an extent that it is impossible to say where one begins and the other leaves off. In fact, in our medical school I do not know of any research facilities which do not have an impact on medical education. I hope therefore that the interpretation of the bill, if passed, will be sufficiently liberal to permit the use of these matching funds for facilities which may be primarily for medical research and only secondarily for education and training.

There are some other points which I would discuss if I could talk with your committee, but this letter is long enough already.

In conclusion, I want to congratulate you and the other authors of this bill upon a proposal which is a sound forward step in better medical care for our people. I hope that Congress enacts it into law.

Sincerely yours,

HAROLD S. DIEHL.

LOYOLA UNIVERSITY,
STRITCH SCHOOL OF MEDICINE,
Chicago 12, Ill., April 28, 1955.

HON. LISTER HILL,

*Chairman, Senate Committee on Labor and Public Welfare,
Senate Office Building, Washington 2, D. C.*

MY DEAR SENATOR HILL: Senate bill S. 1323, now under consideration by your committee, the Senate Committee on Labor and Public Welfare, has the whole-hearted endorsement of the administration of the Stritch School of Medicine of Loyola University.

This school, like many other private medical schools in this country, is badly in need of new facilities. For several years we have been engaged in a campaign for funds for a new medical school building. The response of our alumni, of philanthropic individuals, and of industry has been extremely encouraging. A notably generous donation has been made by the Archdiocese of Chicago under the sponsorship of His Eminence Samuel Cardinal Stritch. Nevertheless, we are still far short of our goal of about \$5 million.

In my opinion, Senate bill S. 1323 is superior to similar bills previously proposed or under deliberation in Congress at the present time. As you are aware, a great deal of money is available for the support of research—in particular from private fund-raising organizations and the United States Public Health Service's National Institutes of Health. More urgently needed now are funds to support the instructional budgets of the medical schools and to permit the renovation of existing medical school buildings or the replacement of antiquated medical school facilities by new ones. The medical schools must furnish the physicians without whom the fruits of medical research are of little value. Furthermore, the training of research medical scientists to replace our present pool and to provide for the expansion of our supply of manpower in this area must be fostered for the common good. This function the medical schools alone can perform. Bills such as Senate bill S. 849, while commendable and probably popular because of present-day appreciation of the value of research, may aggravate the situation by providing research facilities without providing for the production of future research workers to staff them.

May I compliment you on your keen insight into the needs of the medical schools of this country and on your initiative in introducing this bill for action by the United States Senate.

Sincerely yours,

JOHN F. SHEEHAN, M. D., Dean.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., May 2, 1955.

S. 1323 regarding medical educational facilities construction.

HON. LISTER HILL,
Chairman, Senate Committee on Labor and Public Welfare,
Washington, D. C.

DEAR MR. CHAIRMAN: Dean James M. Faulkner of the School of Medicine of Boston University wrote me on April 29, 1955, strongly supporting this bill. A copy of his letter is enclosed.

I understand that hearings are about to take place before the Subcommittee on Health of the Senate Committee on Labor and Public Welfare, of both of which committees you are chairman, and should appreciate it if Dean Faulkner could be recorded in support of the bill and his letter made a part of your records voicing such support.

Yours sincerely,

LAURENCE CURTIS.
BOSTON UNIVERSITY,
SCHOOL OF MEDICINE,
Boston, Mass., April 29, 1955.

HON. LAURENCE CURTIS,
House Office Building, Washington, D. C.

DEAR SIR: Senate bill S. 1323 (H. R. 4743 is the identical bill in the House) providing grants for construction of facilities for medical education and research offers possibilities for the expansion of existing privately supported medical institutions in Massachusetts which would make unnecessary the establishment of a tax-supported medical school in the Commonwealth.

Boston University School of Medicine is the smallest of the three medical schools and is capable of the largest expansion. It is forced by the limitations of its basic science teaching facilities to restrict its entering class to 72 students although it has about 1,200 applicants each year. On the other hand, its hospital facilities are ample for a class of approximately 120 students.

If we could break the bottleneck of inadequate space for teaching the basic sciences by getting Federal assistance in the construction of a new building, we believe we could provide the Commonwealth with almost the equivalent of a new school at relatively small cost to the taxpayer.

Many of the privately supported medical schools across the country are in dire need of the kind of assistance which Senate bill S. 1323 would furnish. I urge that you give it favorable consideration.

Respectfully yours,

JAMES M. FAULKNER, M. D., *Dean.*

STATE OF ILLINOIS,
DEPARTMENT OF PUBLIC WELFARE,
St. Charles, Ill., May 2, 1955.

HON. LISTER HILL,
United States Senator,
Capitol Building, Washington, D. C.

DEAR SENATOR HILL: As a physician and as a member of the faculty of the Department of Surgery of the Stritch School of Medicine of Loyola University, I can fully appreciate the urgent need of additional and expanded facilities for the training of future physicians of this country.

I would urge and do appreciate your support of Senate bill S. 1323 for the aid in construction and renovation and expansion of the medical schools in the United States.

Very sincerely,

G. A. WILTRAKIS, M. D.,
Surgical Consultant.

THE CHICAGO MEDICAL SCHOOL,
Chicago, Ill., April 29, 1955.

HON. LISTER HILL,
The United States Senate, Washington, D. C.

DEAR SENATOR: On behalf of the Chicago Medical School, I should like to respectfully submit to you our thoughts on Senate bill S. 1323, concerning

Federal aid to medical education, which, I understand, is presently under consideration by the Congress. The recent announcement of Dr. Jonas Salk's outstanding contribution to the health of the American public has brought forward a host of suggestions for funds for additional research in medicine. I should like to submit that progress of this kind can only continue if the basic training of physicians in the medical schools of America is maintained on a high scientific level. The complexity of the science and art of medicine is so great that it requires extensive, costly facilities to train the physicians who are to become the guardians of one of America's most cherished possessions, health.

The passage of bill S. 1323 would be a step of considerable importance in achieving the goals of medical education, and we urge your support of this bill in Congress.

Respectfully yours,

DOUGLAS D. VOLLAN, M. D.,
Dean of Faculty.

TUNICA, MISS., April 25, 1955.

HON. LISTER HILL,

United States Senate, Washington 25, D. C.

DEAR SENATOR HILL: Thank you very much for your letter of April 21 with reference to Senate bill 1323.

I will be more than glad to prepare statements setting forth my views as to the benefits of this bill and I will do my best to get this off to you within the next 2 weeks.

Again, let me thank you for your letter.

Most sincerely,

ELLIS T. WOOLFOLK.

TUNICA, MISS., April 29, 1955.

HON. LISTER HILL,

United States Senate, Washington, D. C.

DEAR SENATOR HILL: Attached is my statement for presentation to the committee on Senate bill 1323.

For your information, I am president of the Mid-South Chemical Co., Inc., whose home office is in Memphis, Tenn., and have rather large agricultural interests in Mississippi. I have always been interested in public health from the standpoint of the preservation of the United States and our system of government, and our economic system, as I believe it is fundamental and basic to everything in which we in America believe.

I hope that this statement will give a layman's idea of its need, and will be of some help to the committee. Thank you very much for allowing me to send it.

Most sincerely,

ELLIS T. WOOLFOLK.

STATEMENT OF ELLIS T. WOOLFOLK, RE S. 1323—A BILL TO AUTHORIZE A 5-YEAR PROGRAM OF GRANTS FOR CONSTRUCTION OF MEDICAL EDUCATIONAL AND RESEARCH FACILITIES

Medical colleges generally are greatly in need of additional space for instruction and for research. Colleges dependent upon income from endowment are having grave difficulty in meeting operating costs and are unable to accumulate reserves for buildings. Publicly supported colleges have enlarged their plants, or are enlarging them, but they are required by State legislatures to increase enrollment of undergraduate students to such an extent that new buildings are crowded when opened.

Simultaneously with the unprecedented pressure for the admission of more and more students, there has arisen an equally insistent pressure for more and more medical research. The success of the polio vaccine will undoubtedly redouble this pressure. Expanded enrollment and expanding research now give rise to constant competition between research and instruction for the limited space available—with increasing crowding and impediment to good work both in teaching and in research.

In nearly every area of medical research more money is available than can be profitably employed. The chief impediment to expanding research is scarcity of trained personnel to do the work. This applies to chief investigators and to technical assistants as well. The relief of this situation must begin with provision of adequate work space. Qualified persons, who generally can devote

themselves to highly remunerative private practice, are discouraged by lack of facilities or crowded space both for teaching and for research.

One of the serious problems of medical colleges is the maintenance of staffs for teaching and for research. Good teachers simultaneously carry on research in their fields. It is through interest in research that younger men are stimulated to become teachers and investigators.

The substantial expansion of space for teaching and for research will enable medical colleges to attract more able men to teach and permit these men to inaugurate or to expand their research. Such research, going on side by side with the training of hundreds of young men, attracts some fraction of them to become undergraduate assistants, graduate students, investigators and teachers. Only when such a program is put into operation successfully will it be possible to expand medical research and focus effective effort on the solution of many medical problems awaiting intensive study.

Of importance also is the training of auxiliary personnel for medical service and for research. Technicians in great variety, anesthetists, bacteriologists, virologists, chemists, and others are in great demand and short supply for physicians, hospitals, Government services, and investigators. The training of these assistants is grossly neglected because the resources of medical colleges are not adequate to meet their primary obligations.

The substantial increase of the physical plant of medical colleges is a necessary first step toward enabling the colleges to meet their obligations to the country in training doctors well, in carrying on most of the fundamental medical research, and in facilitating a steady production of trained personnel for future medical service, teaching, and research.

MERCY HOSPITAL INSTITUTE OF RADIATION THERAPY,
Chicago, Ill., May 4, 1955.

Senator LISTER HILL,
Chairman of the Senate Committee on Labor and Public Welfare,
United States Senate, Washington, D. C.

DEAR SENATOR HILL: We, as a medical group, are highly in favor of legislation concerning Federal aid for the construction of new medical school buildings—namely Senate bill 1323. We hope you will make every effort to see that this bill, Senate bill 1323, is passed.

Sincerely yours,

THE HENRY SCHMITZ MEDICAL GROUP,
ROBERT L. SCHMITZ, M. D.

Chicago, Ill., May 5, 1955.

Hon. LISTER HILL,
Senate Office Building, Washington, D. C.:

Please support Senate bill 1323 in the interest of construction of a new building for Loyola University Stritch School of Medicine. Thank you.

PETER PAUL LEDEN, M. D.

UNITED STATES SENATE,
COMMITTEE ON THE JUDICIARY,
May 10, 1955.

Hon. LISTER HILL,
Chairman, Senate Committee on Labor and Public Welfare,
United States Senate, Washington, D. C.

DEAR SENATOR: I want to take this opportunity to express to you and the members of your Subcommittee on Health my deep interest in and strong endorsement of both the intent and scope of S. 1323, which you introduced and which justifiably enjoys the bipartisan sponsorship of 12 of our colleagues, to authorize a 5-year program of grants for construction of medical educational and research facilities. I have reviewed this legislation carefully, and I am convinced that it is humanitarian in its concept and sound in principle.

As I see it, the bill projects a double-pronged approach to the Nation's health problem by creating additional facilities for training medical personnel with a view to alleviating the critical shortage of doctors which reached serious proportions during the early war years and, at the same time, by providing financial

assistance to medical institutions for the construction of research plant facilities wherein an integrated program of medical research may be carried on in coordination and cooperation with a program of medical instruction.

While opinions of experts may differ somewhat on the absolute magnitude of the shortage of medical personnel, all are agreed that efforts to maintain and expand present medical training facilities are urgently needed if we are to overtake the existing demand and prevent a more serious future shortage. According to reliable estimates—and on an extremely conservative basis—our expanding population and increasing proportion of aged point to a likely deficit by 1960 of 42,000 physicians not to mention related nursing, dental, and hygienic personnel. While I realize that the problem in the field of education for the health professions requires expanded enrollments if we are to turn out an increasing rate of graduates, it involves first the encouragement of the construction of educational and training institutions to accommodate expanded medical enrollments. Federal financial assistance, therefore, is essential medical enrollments. Federal financial assistance, therefore, is essential if we are to expand our facilities and increase our medical training capacity.

I am particularly concerned with the aspect of this proposed bill which will encourage the expansion of medical research laboratories in conjunction with and supplemental to the medical training facilities. I am sure there is little need for me to emphasize to you here the tremendous hope and promise which medical research holds in the way of human betterment, nor need I cite the important role which this field of endeavor has played in the dramatic decline in our mortality rate or its substantial contribution in creating fuller and longer lives for the American people—so substantial, in fact, that no one can righteously disclaim the responsibility of our Federal Government to assist and encourage the expansion of this worthwhile endeavor.

Missouri is proud of its record in the field of medical research and the noteworthy and outstanding achievements of such fine institutions as the schools of medicine at the University of Missouri, St. Louis University, and Washington University.

It is the opinion of eminent physicians that medical research cannot achieve a solid foundation or an operating continuity unless it is tied in closely with the mainstream of medical education. They maintain that the spirit of research must permeate the teaching of medicine and that the teaching function in turn must broaden the sights of the investigator—that research which is cut off from the mainstream of teaching and practice becomes sterile. From a practical point of view, the advantage of proximity makes possible correlated on-the-spot research with a thoroughly integrated teaching program which makes the most efficient possible utilization of building facilities and available competent faculty personnel.

The American people are acutely aware of the enormous dividends to be reaped from intensified medical research. They are equally aware of the serious and critical shortage of qualified practitioners. I can think of no more effective and practical answer to these needs than a program of Federal financial assistance in the construction of medical training and research facilities as envisioned in S. 1323. I earnestly hope that your committee will see its way clear to acting promptly and favorably on this measure and recommend its immediate approval by the Senate.

With best regards, I am

Sincerely yours,

THOMAS C. HENNINGS, Jr., U. S. S.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
OFFICE OF THE MAJORITY LEADER,
Washington, D. C., May 5, 1955.

HON. LISTER HILL,
Senate Office Building, Washington, D. C.

DEAR LISTER: I enclose a letter which I received from Dr. James M. Faulkner, dean, School of Medicine, Boston University, in support of S. 1323 which I know you will be glad to receive and to note.

With kind regards, I am

Sincerely yours,

JOHN.

BOSTON UNIVERSITY,
SCHOOL OF MEDICINE,
Boston, Mass., April 29, 1955.

Hon. JOHN W. McCORMACK,
House Office Building, Washington, D. C.

DEAR SIR: Senate bill S. 1323¹ providing grants for construction of facilities for medical education and research offers possibilities for the expansion of existing privately supported medical institutions in Massachusetts which would make unnecessary the establishment of a tax-supported medical school in the Commonwealth.

Boston University School of Medicine is the smallest of the three medical schools and is capable of the largest expansion. It is forced by the limitations of its basic-science-teaching facilities to restrict its entering class to 72 students, although it has about 1,200 applicants each year. On the other hand, its hospital facilities are ample for a class of approximately 120 students.

If we could break the bottleneck of inadequate space for teaching the basic sciences by getting Federal assistance in the construction of a new building, we believe we could provide the Commonwealth with almost the equivalent of a new school at relatively small cost to the taxpayer.

Many of the privately supported medical schools across the country are in dire need of the kind of assistance which Senate bill S. 1323 would furnish. I urge that you give it favorable consideration.

Respectfully yours,

JAMES M. FAULKNER, M. D., *Dean.*

PHILADELPHIA, PA., April 13, 1955.

Senator LISTER HILL,
United States Senate, Washington, D. C.:

The trustees of Hahnemann Medical College and Hospital wish to record their enthusiastic support of S. 1323 as a practical means of maintaining and expanding the education of physicians so vital to the health and welfare of our Nation.

HARRY C. BARNES, *President.*

CHICAGO, ILL., April 27, 1955.

Senator LISTER HILL,
Senate Office Building,
Washington, D. C.:

Fully endorse Senate bill 1323. Earnestly request support for passage this bill.

JAMES T. HUSSEY, S. J., *Loyola University.*

CHICAGO, ILL., May 5, 1955.

Hon. LISTER HILL,
Chairman, Senate Committee on Labor and Public Welfare,
United States Senate, Washington, D. C.

DEAR SIR: In the interest of medical education, I strongly urge passage of Senate bill S. 1323, which provides for the furnishing of funds by the Federal Government for the construction of new medical school buildings or the renovation of old ones up to 50 percent of the total cost of such construction and up to a total sum of \$3 million.

Thank you for your kind attention.

Sincerely yours,

EDWARD J. O'DONOVAN, M. D.

(Whereupon, at 12:20 p. m., the subcommittee adjourned.)

¹ H. R. 4743 is the identical bill in the House.

