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PERSONNEL TRAINING—1970**

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**HEARING**  
BEFORE THE  
**SUBCOMMITTEE ON**  
**PUBLIC HEALTH AND WELFARE**  
OF THE  
**COMMITTEE ON**  
**INTERSTATE AND FOREIGN COMMERCE**  
**HOUSE OF REPRESENTATIVES**

NINETY-FIRST CONGRESS

SECOND SESSION

ON

**H.R. 16808**

A BILL TO AMEND THE PUBLIC HEALTH SERVICE ACT TO  
EXTEND FOR ONE YEAR THE PROGRAMS OF ASSIST-  
ANCE FOR TRAINING IN THE ALLIED HEALTH PROFES-  
SIONS, AND FOR OTHER PURPOSES

AND

**H.R. 13100**

A BILL TO AMEND THE PUBLIC HEALTH SERVICE ACT TO  
EXTEND FOR THREE YEARS THE PROGRAMS OF ASSIST-  
ANCE FOR TRAINING IN THE ALLIED HEALTH PROFES-  
SIONS, AND FOR OTHER PURPOSES

JUNE 8, 1970

**Serial No. 91-58**

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## ALLIED HEALTH PROFESSIONS PERSONNEL TRAINING—1970

MONDAY, JUNE 8, 1970

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON PUBLIC HEALTH AND WELFARE,  
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,  
*Washington, D.C.*

The subcommittee met at 10 a.m., pursuant to notice, in room 2322, Rayburn House Office Building, Hon. Paul G. Rogers presiding (Hon. John Jarman, chairman).

Mr. ROGERS. The subcommittee will please be in order.

The hearings today are on H.R. 16808, introduced by the chairman for himself and Mr. Springer at the request of the administration, and H.R. 13100, which I introduced, which are bills to amend and extend the Allied Health Professions Personnel Training Act.

This act was initially enacted on November 3, 1966, as a 3-year program, and was extended for one additional year by Public Law 90-490.

The act authorizes grants for construction of new or expanded teaching facilities, provides basic improvement grants and special improvement grants to upgrade the quality of training programs at schools training allied health professionals, and authorizes advanced traineeship grants and developmental grants.

Unfortunately, appropriations for this program have been at levels substantially below authorizations in recent years, with the result that progress has not been as great as was initially hoped; however, the basic concept of the legislation appears sound. Through the use of persons trained under these programs, it is possible to stretch scarce medical manpower, thereby improving the quality of health care of the American people.

The authorization for the program is due to expire on June 30, so it is essential that we act expeditiously, and we hope that legislation extending this program can become law at an early date.

(The text of H.R. 16808 and H.R. 13100 and departmental reports thereon follow:)

[H.R. 16808, 91st Cong., 2d Sess., introduced by Mr. Staggers (for himself and Mr. Springer) on April 7, 1970]

A BILL To amend the Public Health Service Act to extend for one year the programs of assistance for training in the allied health professions, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Allied Health Professions Training Amendments of 1970".*

## GRANTS FOR CONSTRUCTION OF TEACHING FACILITIES FOR ALLIED HEALTH PERSONNEL

SEC. 2. (a) Paragraph (1) of subsection (a) of section 791 of the Public Health Service Act (42 U.S.C. 295h) is amended by striking out "and" before "\$10,000,000" and by inserting before the period at the end thereof "; and such sums as may be necessary for the fiscal year ending June 30, 1971".

(b) Paragraph (1) of subsection (b) of such section is amended by striking out the first sentence thereof.

## GRANTS AND CONTRACTS TO IMPROVE THE QUALITY OF TRAINING OF ALLIED HEALTH PERSONNEL

## AUTHORIZATION OF APPROPRIATIONS

Sec. 3. (a) Effective with respect to appropriations for the fiscal year beginning July 1, 1970, subsection (a) of section 792 of such Act (42 U.S.C. 295h-1) is amended to read:

"(a) There are authorized to be appropriated such sums as may be necessary for the fiscal year ending June 30, 1971, for basic improvement grants under subsection (b)."

## Basic Improvement Grants

(b) Effective with respect to grants for appropriations for the fiscal year beginning July 1, 1970, paragraph (1) of subsection (b) of such section is amended by striking out "Subject to the provisions of paragraph (2)", and inserting in lieu thereof "From sums available therefor from appropriations made under subsection (a) and subject to the provisions of paragraph (2)"; and by striking out "June 30, 1970", and inserting in lieu thereof "June 30, 1971".

## Special Improvement Grants

(c) Effective with respect to appropriations for the fiscal year beginning July 1, 1970, subsection (c) of such section is amended to read:

## "Special Projects for Experimentation, Demonstration, and Institutional Improvement

"(c) (1) There are authorized to be appropriated such sums as may be necessary for the fiscal year ending June 30, 1971, for grants and contracts for special projects under this subsection.

"(2) The Secretary is authorized, from sums available therefor from appropriations made under this subsection, to make grants to public or nonprofit private agencies, organizations, and institutions, and to enter into contracts with individuals, agencies, organizations, and institutions, for special project related to training or retraining of allied health personnel, including—

"(A) planning, establishing, or developing new programs, or modifying or expanding existing programs, including interdisciplinary training programs;

"(B) developing or establishing special programs, or adapting existing programs, to reach special groups such as the economically or culturally deprived, returning veterans with experience in a health field, or persons re-entering any of the allied health fields;

"(C) developing, demonstrating, or evaluating new or improved teaching methods or curriculums;

"(D) developing, demonstrating, or establishing interrelationships among institutions which will facilitate the training, retraining, or utilization of allied health manpower;

"(E) developing, demonstrating, or evaluating new types of health manpower;

"(F) developing, demonstrating, or evaluating techniques for appropriate recognition (including equivalency and proficiency testing mechanisms) of previously acquired training or experience; and

"(G) developing, demonstrating, or evaluating new or improved means of recruitment, retraining, or retention of allied health manpower."

## Applications for Grants

(d) Effective with respect to grants from appropriations for the fiscal year beginning July 1, 1970, subsection (d) of such section is amended as follows:

(1) paragraph (1) of such subsection is amended by striking out "basic or special improvement grants" and inserting in lieu thereof "basic improvement or special project grants";

(2) paragraph (2) of such subsection is amended by inserting "in the case of a basic improvement grant," directly after "(A)"; and

(3) paragraph (3) of such subsection is amended to read:

"(3) In considering applications for grants under subsection (c), the Secretary shall take into consideration the relative effectiveness of the applicant's plan in carrying out the purposes of such subsection."

## TRAINEESHIPS FOR ADVANCED TRAINING OF ALLIED HEALTH PERSONNEL

SEC. 4. (a) Subsection (a) of section 793 of such Act (42 U.S.C. 295h-2) is amended by striking out "and" before "\$5,000,000" and by inserting "and such sums as may be necessary for the fiscal year ending June 30, 1971;" after "June 30, 1970;"

(b) Effective with respect to grants from appropriations for the fiscal year beginning July 1, 1970—

(1) Subsection (b) of such section is amended by striking out "training centers for allied health professions" and inserting in lieu thereof "agencies, organizations, and institutions".

(2) Subsection (c) of such section is amended by striking out "centers" and inserting in lieu thereof "public or nonprofit private agencies, organizations, and institutions".

## TECHNICAL AMENDMENTS

SEC. 5. (a) Effective with respect to the fiscal year beginning July 1, 1970, part G of title VII of the Public Health Service Act is amended by repealing section 794 and section 798.

(b) Effective with respect to the fiscal year beginning July 1, 1970, section 797 of such Act is amended by striking out "793 or 794", and inserting in lieu thereof "or 793".

[H.R. 13100, 91st Cong., 1st Sess., introduced by Mr. Rogers of Florida on July 24, 1969]

A BILL To amend the Public Health Service Act to extend for three years the programs of assistance for training in the allied health professions, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. (a) Paragraph (1) of subsection (a) of section 791 of the Public Health Service Act (42 U.S.C. 295h(a)(1)) is amended (1) by striking out "and" after "June 30, 1969;" and (2) by striking out the period and inserting in lieu thereof a semicolon and the following: "\$20,000,000 for the fiscal year ending June 30, 1971; \$30,000,000 for the fiscal year ending June 30, 1972; and \$40,000,000 for the fiscal year ending June 30, 1973."

(b) Paragraph (1) of subsection (b) of such section is amended by striking out "July 1, 1969" and inserting in lieu thereof "July 1, 1972".

SEC. 2. Effective with respect to appropriations under subsection (a) of section 792 of the Public Health Service Act (42 U.S.C. 295h-1(a)), such section is amended as follows:

(1) Subsection (a) of such section is amended—

(A) by striking out "and" after "June 3, 1968;" and

(B) by striking out "for grants under this section" and inserting in lieu thereof "\$15,000,000 for the fiscal year ending June 30, 1971; \$15,000,000 for the fiscal year ending June 30, 1972; and \$15,000,000 for the fiscal year ending June 3, 1973; for basic improvement grants";

(2) Subsection (b) of such section is amended by striking out "June 30, 1970" in paragraph (1) and inserting in lieu thereof "June 30, 1973".

(3) Subsection (c) of such section is amended to read as follows:

"(c) There are authorized to be appropriated \$15,000,000 for the fiscal year ending June 30, 1971, \$20,000,000 for the fiscal year ending June 30, 1972, and

\$30,000,000 for the fiscal year ending June 30, 1973, for special improvement grants to assist training centers for allied health professions in projects for the provision, maintenance, or improvement of the specialized function which the center serves. Such projects may include projects to plan, develop, or establish new programs, or modifications of existing programs, for training or retraining of allied health professions personnel; to effect significant improvements in curricula; to expand training capacity; or to establish curricula and special programs to reach special groups such as the economically and culturally deprived, returning veterans with training in the health fields, and persons reentering the allied health fields."

SEC. 3. Subsection (a) of section 793 of the Public Health Service Act (42 U.S.C. 295h-2(a)) is amended (1) by striking out "and" after "June 3, 1969;"; and (2) by inserting after "June 30, 1970;" the following: "\$8,000,000 for the fiscal year ending June 30, 1971; \$10,000,000 for the fiscal year ending June 30, 1972; and \$12,000,000 for the fiscal year ending June 30, 1973;".

SEC. 4. Section 794 of the Public Health Service Act (42 U.S.C. 295h-3) is amended (1) by striking out "and" after "June 30, 1969;"; and (2) by inserting after "June 30, 1970;" the following: "\$10,000,000 for the fiscal year ending June 30, 1971; \$20,000,000 for the fiscal year ending June 3, 1972; and \$30,000,000 for the fiscal year ending June 3, 1973;".

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EXECUTIVE OFFICE OF THE PRESIDENT,  
BUREAU OF THE BUDGET,  
Washington, D.C., May 19, 1970.

HON. HARLEY O. STAGGERS,  
*Chairman, Committee on Interstate and Foreign Commerce,*  
*House of Representatives,*  
*Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your requests for the views of the Bureau of the Budget on H.R. 13100, a bill "To amend the Public Health Service Act to extend for three years the programs of assistance for training in the allied health professions, and for other purposes," and H.R. 16808, a bill "To amend the Public Health Service Act to extend for one year the programs of assistance for training in the allied health professions, and for other purposes."

H.R. 16808, which is the same as a bill submitted by the Secretary of Health, Education, and Welfare, would extend and strengthen the present authorities in the Public Health Service Act for the support of training in the allied health professions. This bill would make the allied health training authorities coterminous with the other health manpower authorities in the Act and at the same time allow a more flexible approach toward allied health training in the next fiscal year. The proposed one-year extension will permit the Department of Health, Education, and Welfare to conduct a comprehensive review and evaluation of all the health manpower authorities and to develop legislative recommendations concerning them.

Accordingly, we recommend that your Committee give favorable consideration to H.R. 16808 in lieu of H.R. 13100. Enactment of H.R. 16808 would be consistent with the Administration's objectives.

Sincerely,

WILFRED H. ROMMEL,  
*Assistant Director for Legislative Reference.*

---

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,  
Washington, D.C., May 4, 1970.

HON. HARLEY O. STAGGERS,  
*Chairman, Committee on Interstate and Foreign Commerce,*  
*House of Representatives,*  
*Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your request of April 9, 1970, for a report on H.R. 16808, a bill "To amend the Public Health Service Act to extend for one year the programs of assistance for training in the allied health professions, and for other purposes."

This bill which may be cited as the "Allied Health Professions Training Amendments of 1970," embodies the provisions of a draft bill submitted to the Congress by this Department on April 1, 1970. The details of the bill are explained in a letter of the same date to the Speaker of the House of Representatives, a copy of which is enclosed.

For the reasons stated in the enclosed letter to the Speaker, we recommend prompt and favorable consideration of H.R. 16808.

We are advised by the Bureau of the Budget that enactment of this bill would be consistent with the Administration's objectives.

Sincerely,

ROBERT H. FINCH, *Secretary.*

Enclosure.

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,  
Washington, D.C., Apr. 1, 1960.

HON. JOHN W. MCCORMACK,  
*The Speaker, House of Representatives,*  
Washington, D.C.

DEAR MR. SPEAKER: I am enclosing for your consideration a draft bill to amend the Public Health Service Act to extend for one year the programs of assistance for training in the allied health professions, and for other purposes.

In April 1969, I transmitted a report to the President and the Congress on the Allied Health Professions Personnel Training Act of 1966. Implicit in that report was the challenge to move fast enough in the training and preparation of allied health personnel to catch up and to keep up with the revolutionary changes that are taking in the health care field. That report recommended a one-year extension of the allied health authorizations.

The legislation we are proposing would extend the allied health professions program through fiscal year 1971 and permit the initiation of vital new efforts in the coming year. I urge the Congress to act upon this legislation at the earliest possible date to assure the extension of the authorization for this program which are due to expire June 30 of this year.

Other health manpower authorizations in the Department of Health, Education, and Welfare programs are due to expire June 30, 1971. In addition, the President has recently proposed, in his message of March 19 on higher education, a Career Education program starting in fiscal year 1972, which should contribute to the supply of allied health personnel. Accordingly, we believe a one-year extension of this legislation is the appropriation course at the present time. Such an extension will make the present allied health program authorizations coterminous with the other health manpower authorizations, and will permit an assessment of the potential role of the proposed Career Education program in relation to the allied health program.

We are making an across-the-board assessment of health manpower programs in terms of their interrelationships and their impact on the health needs of the Nation. We consider such an assessment to be absolutely essential if we are to fulfill our responsibilities to the Nation to increase not only the number of health service personnel, but the breadth and quality of their services. Our examination will take into account the programs of other Federal agencies which are contributing to meeting health manpower needs.

We shall continue our review of the allied health program as part of this overall assessment and, upon its completion, we will present to the Congress our legislative recommendations relating to all the health manpower authorities. In the interim, however, the changes we are proposing in the attached bill will enable us to move forward without delay toward the achievement of certain urgent allied health manpower objectives.

For the coming fiscal year, the proposed legislation would:

- (1) extend the authority for basic improvement (formula) grants for training centers for allied health professions;
- (2) separate the special improvement grant authority from its present dependence on the basic improvement grant;
- (3) replace the present section 792(c) authority for special improvement grants with new broad, flexible authority for special projects for experimentation, demonstration, and institutional improvement, and consolidate the authorities of section 794 of the Public Health Service Act (developmental grants) into the new section 792(c);
- (4) extend the authority for advanced traineeships, and broaden the eligible institutions to include other agencies, organizations, or institutions

which provide such training, in addition to currently eligible training centers;

(5) extend the authority for construction of teaching facilities for training centers for allied health professions.

The new consolidated special authority provides broad authority for experimentation and demonstration which will allow support of such activities as the development of new types of health manpower, new teaching methods, new or improved means of recruiting, retraining, or retention of allied health manpower.

This authority will also provide a start toward more effective and flexible means for assisting institutions to maintain, expand, and improve their existing programs and to plan and develop additional programs so that significantly greater numbers of allied health personnel will be prepared to provide increasingly effective health services. Under this broadened authority, we will be able to reach special groups such as the economically or culturally deprived, returning veterans with experience in the health fields, or persons re-entering any of the allied health fields.

The shortages of competent faculty in training programs at all levels constitute one of the greatest obstacles to the improvement and expansion of training programs for the allied health professions. As training programs enlarge and new programs are added, the demand for teachers mounts. We are proposing extension of the authority for advanced traineeships for preparation of teachers, supervisors, and administrators in the allied health field, and are broadening the eligible institutions to include, not only training centers for allied health professions, but other institutions and agencies which provide such advanced training.

There are now major unmet needs for health manpower. Indeed, the lack of allied health manpower is a most serious problem as we aspire to bring the full potential of modern medicine to all members of our society. We must expand the training and use of allied health personnel, develop new types of health personnel, recruit from many different kinds of potential health manpower pools, and increase the availability of trained allied health personnel.

Enactment of this proposed bill would provide the necessary legislative authority for such efforts in fiscal year 1971, pending our overall assessment of health manpower programs.

We shall appreciate it if you will refer the enclosed draft bill to the appropriate committee for consideration.

The Bureau of the Budget advises that the enactment of this legislation would be consistent with the Administration's objectives.

Sincerely,

ROBERT H. FINCH, *Secretary.*

Mr. ROGERS. Our first witness this morning is Dr. John Zapp, the Acting Deputy Assistant Secretary for Health and Manpower in the Department of HEW. You might identify those who are accompanying you. We welcome you to the committee.

**STATEMENT OF DR. JOHN S. ZAPP, ACTING DEPUTY ASSISTANT SECRETARY FOR HEALTH AND MANPOWER, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE; ACCOMPANIED BY DR. KENNETH M. ENDICOTT, DIRECTOR, BUREAU OF HEALTH PROFESSIONS EDUCATION AND MANPOWER TRAINING; THOMAS D. HATCH, ACTING DIRECTOR, DIVISION OF ALLIED HEALTH MANPOWER; DAVID C. BAYER, DIVISION OF STUDENT-FINANCED AID, OFFICE OF EDUCATION; AND DR. ALBERT L. ALFORD, ASSISTANT COMMISSIONER, OFFICE OF LEGISLATION, OFFICE OF EDUCATION**

Dr. ZAPP. Thank you.

It is a pleasure to be here. Accompanying me this morning is Dr. Kenneth Endicott, Director of the Bureau of Health Professions

Education and Manpower Training; Mr. Thomas Hatch, the Acting Director, Division of Allied Health Manpower; and we have two Office of Education witnesses with us not seated at the table, Mr. David C. Bayer and Dr. Albert Alford.

Mr. ROGERS. If you would like to have them at the table, we would be glad for them to come up and take a chair at the table.

Of course, we also welcome Dr. Endicott and Mr. Hatch.

Dr. ZAPP. Mr. Chairman and members of the subcommittee: It is a pleasure to be here this morning to testify on H.R. 13100 and H.R. 16808, bills which would extend and significantly broaden and strengthen the Allied Health Professions Personnel Training authorities of Part G of Title VII of the Public Health Service Act. These authorizations are due to expire June 30, 1970. These bills evidence a serious concern for the health of the American people and a commitment to prepare the manpower necessary to provide needed health services.

There are now major unmet needs for health manpower. Indeed, the lack of allied health manpower is a most serious problem as we aspire to bring the full potential of modern medicine to all members of our society.

Efforts to increase medical, dental and nursing manpower have received major attention for a number of years. Relatively little attention, however, has been given until recently to the essential contributions of allied health personnel to the provision of modern health services.

Their effectiveness is already clearly demonstrated in many settings where health care is provided. Improvement in the utilization of health manpower can be effected through greater use of capable supportive personnel in the delivery of vitally needed health services. This is now done to only a very limited extent in the American health-care system. More general use of allied health manpower in this country requires effective utilization of our present training capacities and experimentation and development of new and improved ways of training and increasing the effective use of allied health personnel.

The Allied Health Professions Personnel Training Act of 1966 (Public Law 89-751) was approved November 3, 1966. This law was enacted in recognition of the increasing importance of personnel in the allied health professions and technical occupations as essential elements in the provision of health services. It authorized four types of grants-in-aid to "training centers of allied health professions": grants for the construction of teaching facilities; basic and special improvement grants (formula and special project grants) for the expansion and improvement of allied health curriculums; traineeships for advanced training of allied health personnel to become teachers, administrators, supervisors or specialists; and grants for the development of new methods for the training of new types of health technologists.

Only modest appropriations (\$3.7 million) were available for these programs in the first year of operation, fiscal year 1967, and at the time of the Health Manpower Act of 1968 there had been only very limited experience on which to base recommendations for modifications of the legislation. That act extended the legislative authorities for the allied health programs for one year (through fiscal year 1970)

and also included a provision requiring the Secretary of Health, Education, and Welfare to submit to the President and the Congress a report on the administration of the Allied Health Professions Personnel Training Act of 1966, an appraisal of programs thereunder in the light of their adequacy to meet the needs for allied health personnel, together with his recommendations.

In April 1969, pursuant to that directive, a report was transmitted to the President and the Congress on the Allied Health Professions Personnel Training Act of 1966. Implicit in that report was the challenge to move fast enough in the training and preparation of allied health personnel to catch up and to keep up with the revolutionary changes that are taking place in the health care field. That report recommended a 1-year extension of the allied health authorizations.

Consonant with that recommendation, the administration has submitted a bill, H.R. 16808, which would extend the allied health professions program through fiscal year 1971 and permit the initiation of vital new efforts in the coming year. This request for a short extension must not be construed as an indication of lack of interest or commitment to this vital area of health manpower. Quite the contrary, our concern is with providing a strong legislative framework for the conduct of health manpower activities.

As you are aware, the Health Professions Educational Assistance Act and the Nurse Training Act are due to expire June 30, 1971. In addition, the President has recently proposed, in his message of March 19 on higher education, a career education program starting in fiscal year 1972 which should contribute to the supply of allied health personnel. Accordingly, we believe a 1-year extension of this legislation is the appropriate course at the present time. Such an extension will make the present allied health program authorizations coterminous with the other health manpower authorizations, and will permit an assessment of the potential role of the proposed career education program in relation to the allied health program.

Moreover, we are currently making an across-the-board review of health manpower programs to determine their interrelationships and impact on the health needs of the Nation. Our examination will take into account the programs of other Federal agencies which are contributing to meeting health manpower needs. The proposed 1-year extension would give us an opportunity to complete our review of these programs in light of overall health manpower requirements and to develop a coordinated and comprehensive health manpower proposal.

The substantive changes which the administration bill proposes are so crucial to the success of the allied health manpower effort that we could not justify delay, even for 1 year, in obtaining a legislative flexibility which is essential in this rapidly changing field. We strongly urge enactment of the extension proposed in the administration bill, H.R. 16808.

The enactment and subsequent implementation of the Allied Health Professions Personnel Training Act of 1966 focused national attention on a vast pool of health manpower, which provides a multitude of health services. The resources available to accomplish the purposes of this act have been extremely limited. However, the experience and

the effort to date represent a modest beginning in dealing with a complex and important field.

Although construction monies have been appropriated in only two years of the program, we have been able to fund six projects for the construction of teaching facilities with new spaces for nearly 1,000 students.

The largest proportion of total money available for the allied health programs has been spent on the formula grants for basic improvement of allied health curriculums in baccalaureate and associate degree programs in junior colleges, colleges and universities. In fiscal year 1969 577 allied health training programs in 258 institutions received formula grant assistance.

As you know, special improvement grants are authorized to be made to training centers having approved applications for basic improvement grants from sums remaining available after full funding of the formula grants. Because of this statutory interrelationship between the basic improvement and the special improvement grant authorities, the special improvement grant authority has never been funded.

One of the most important programs authorized is that for traineeships for advanced training of allied health personnel to be teachers, administrators, supervisors, or specialists in the allied health professions. In fiscal year 1969 awards were made to 77 training programs for advanced traineeships for about 400 trainees. With the rapid increase in numbers of training programs, it is imperative that faculty be prepared and that administrators and supervisory personnel be trained to make the optimum use of significantly expanded numbers of trained personnel.

Under the authority for development and evaluation of new types of health personnel, a dramatic beginning has been made in spite of the modest funds available. Under this authority we are supporting 18 projects which are experimenting with such new types of personnel as orthopedic assistant, child health associate and physical therapy assistant.

The bills we are considering here today would broaden and significantly strengthen the authorities under which to conduct a national effort in the allied health manpower field. The allied health professions and occupations are undergoing rapid changes. These bills provide a legislative flexibility which is essential in this rapidly changing field.

Patterns of education and training in the allied health field are still changing and developing (in methodology and content, as well as the settings in which training takes place). As different patterns of care emerge, and as better ways of preventing illness are devised, as technologies change, and as demands increase, training resources must be assisted to keep pace with the ever-increasing demands that scientific and social change are placing on them.

It is of utmost importance that as our efforts to produce increased numbers of allied health personnel are sustained and enhanced, simultaneous support must be given to a wide variety of activities directed toward priority areas in the allied health field.

Both H.R. 13100 and the administration bill, H.R. 16808, would extend the existing authorities of part G, title VII of the Public Health Service Act for: (1) construction of teaching facilities for training

centers for allied health professions, (2) basic improvement (formula) grants for training centers for allied health professions, (3) advanced traineeships for allied health personnel, and (4) developmental grants.

In addition, both bills separate the special project grant authority from its present dependence on the basic improvement grant authority and replace the special improvement grant authority with broad and flexible authority for special projects. Separation of the appropriations authorizations for the project grants from dependence upon appropriations for the formula grants will provide one important element of legislative flexibility essential in the rapidly changing field of allied health training.

Both H.R. 13100 and the administration bill, H.R. 16808, would provide for significant broadening of the purposes to which efforts may be directed under the special project authorities. Under both bills, projects could be undertaken to plan, develop or establish new programs or modifications of existing programs, for training or retraining of allied health professions personnel; to effect significant improvements in curriculums; to expand training capacity; or to establish curriculums and special programs to reach special groups such as the economically and culturally deprived, returning veterans with training in the health fields, and persons reentering the allied health fields. The administration bill, H.R. 16808, would amplify and clarify some of these purposes and would authorize the use of both grants and contracts for their accomplishment.

Under H.R. 13100, as under the present law, special improvement grants could be made only to junior colleges, colleges or universities that already have on-going allied health training programs and that meet the requirements of "training centers for allied health professions" as defined in section 795 of the Public Health Service Act. This eligibility is too restrictive, especially in view of the broadened purposes of the proposed special project authority. For example, only those academic institutions which already have on-going allied health training programs could, under that bill, be used to plan, develop or establish additional training programs. If the new and broadened special project purposes are to be implemented rapidly and effectively, it is imperative that institutional eligibility be made more flexible so that the capabilities of a variety of institutions, organizations, and agencies may be utilized.

The administration bill, H.R. 16808, would provide greater flexibility in the types of institutions which could be eligible for special projects. It would broaden the eligibility for special project grants to include not only training centers for the allied health professions, but also other institutions, agencies, or organizations with the potential for accomplishing these purposes. The administration bill would provide further flexibility by consolidating with the new special projects the proposed broadened authorities for developmental grants—section 794 of the Public Health Service Act—which are described later in this testimony.

H.R. 13100 would extend without change, except for increased appropriation authorizations, the authority for grants to cover the cost of traineeships for advanced training of allied health personnel to serve as teachers, supervisors, administrators, or in allied health specialties. The shortage of competent faculty in training programs at all

levels constitutes one of the greatest obstacles to the improvement and expansion of training programs for the allied health professions. Under present law, traineeship grants can be made only to training centers for the allied health professions as defined in section 795 of the Public Health Service Act. The administration bill would broaden the eligibility to include other institutions, agencies, or organizations which provide such advanced training. We recommend extending institutional eligibility as proposed in the administration bill in order to utilize the training competencies of other institutions as well as those of allied health training centers.

H.R. 13100 would also extend without change, except for appropriation authorizations, the authority for grants for development of new methods. The administration bill would broaden this authority to include grants or contracts. It would clarify existing authority for projects to develop, demonstrate, or evaluate new or improved teaching methods, new or improved curriculums, and new types of health manpower. It would add new authority for projects to develop, demonstrate, or evaluate techniques for appropriate recognition—including equivalency and proficiency testing mechanisms—of previously acquired training or experience, and for projects to develop, demonstrate, or evaluate new or improved means of recruitment, retraining, or retention of allied health manpower.

Equivalency and proficiency mechanisms have far-reaching implications for the health occupations. They can be used to accelerate the formal academic programs for allied health personnel—by advanced placement. They can serve as a sound basis for occupational mobility. They can make it possible for many allied health workers to undertake additional advanced training with appropriate recognition of the principles and techniques they have mastered. This is particularly true in the case of the returning veteran who has had training and experience in a health field while serving in the Armed Forces.

It is imperative that we be able to tap new sources of allied health manpower and to make optimum use of persons with previous experiences in the health fields, including returning veterans with experience in the health fields who could use their training and experience in the civilian health sector, and former practitioners who have left the field and could return if refresher courses were available.

The administration bill would also consolidate these broadened experimentation and demonstration authorities with the proposed new special project authorities which would replace the present special improvement grant authority of section 792(c) of the Public Health Service Act. The proposed consolidation of these two special project authorities will make possible a more effective and flexible means for coordinated and concerted efforts, and will reduce the number of separate Federal assistance programs in the allied health field. We strongly recommend enactment of the more flexible, consolidated authority for "Special Projects for Experimentation, Demonstration and Institutional Improvement," as proposed in the administration bill, H.R. 16808, in lieu of the two separate special improvement and developmental sections of H.R. 13100.

#### EXTENSION

Mr. Chairman, H.R. 13100 would extend the present allied health authorities for 3 years (fiscal year 1971 through fiscal year 1973).

The administration bill would extend the allied health authorities for 1 year—through June 30, 1971. Our reasons for requesting this 1-year extension have already been expressed.

#### APPROPRIATION AUTHORIZATIONS

The administration bill in each instance authorizes appropriations of "such sums as necessary" for the effectuation of its purposes. We strongly urge this authority as the most desirable in health manpower legislation to prevent unrealistic expectations, on the one hand, and to permit us to secure funds enabling us to move as rapidly as the economy will allow toward the achievement of essential national manpower goals and objectives, on the other.

In summary, we are in accord with many of the objectives of H.R. 13100. However, for the reasons stated above, we recommend enactment of the administration bill, H.R. 16808, in lieu of H.R. 13100, as providing a stronger and more flexible legislative authority for fulfilling those objectives. We urge its favorable consideration at the earliest possible date to assure continuity of the allied health program.

Mr. ROGERS. Thank you very much, Dr. Zapp, for your statement.

Mr. Skubitz?

Mr. SKUBITZ. I have no questions.

Mr. ROGERS. What are the proposed figures that the Department recommends for a 3-year program?

Dr. ZAPP. Proposed figures?

Mr. ROGERS. Yes. This committee never approves open-ended authorizations and I wonder what your proposed figures would be.

Dr. ZAPP. The only proposed figures on the authorization level would be the ones we submitted in 1970. We, of course, have a budget request, but I think you were talking about our authorization level.

Mr. ROGERS. Yes.

Dr. ZAPP. We had in 1970 an authorization level of construction of \$10 million; improvement grants, \$20 million; advanced traineeships, \$5 million; and new methods, \$4.5 million.

Mr. ROGERS. And the budget figures are comparable to that or what?

Dr. ZAPP. The budget figures are below that, \$9.75 million in the improvement grants.

Mr. ROGERS. No funds for construction?

Dr. ZAPP. No, sir, no funds requested for construction in the budget for 1971.

Mr. ROGERS. For educational improvements?

Dr. ZAPP. For educational improvement grants, this would be the \$9.75 million.

Mr. ROGERS. The Department requested \$20 million in authorizations and the budget \$9.75 million?

Dr. ZAPP. Yes, sir.

Mr. ROGERS. Advanced traineeships?

Dr. ZAPP. The budget is \$3.75 million.

Mr. ROGERS. \$5 million was requested? Somehow I thought that figure was \$1.5 million in the budget.

Dr. ZAPP. \$1.5 million for the appropriation level for advanced traineeships in 1970.

Mr. ROGERS. For 1971 it is what?

Dr. ZAPP. \$3.75 million.

Mr. ROGERS. And the new methods?

Dr. ZAPP. For the new methods the budget request is \$4,495,000.

Mr. ROGERS. You are asking the full amount from your authorization figure?

Dr. ZAPP. Yes, sir.

Mr. ROGERS. And your authorization requests for 1971 are the \$10, the \$20, the \$5 and the \$4.5 million, or was that just for 1970?

Dr. ZAPP. That was 1970. We had made no authorization request for 1971. We would be willing to submit the same authorization request that we have in 1970.

Mr. ROGERS. In other words, you would just advance those figures, \$10 million for construction?

Dr. ZAPP. \$10 million for construction.

Mr. ROGERS. For 1971, \$20 million for educational improvements, \$5 for advanced traineeships and \$4.5 million for new methods. Would that be correct?

Dr. ZAPP. Yes, sir, that would be the 1971 authorization and our request, of course, is for such funds as necessary. But asked to comment on the authorizations for 1971, those would be the figures we would want forwarded.

Mr. ROGERS. What about for 1972?

Dr. ZAPP. I would have to say the same figure, sir.

Mr. ROGERS. And for 1973?

Dr. ZAPP. The same.

Mr. ROGERS. So you see no increase in activity in this area for the next 3 years, is that basically what you are telling me?

Dr. ZAPP. I would certainly hope, Mr. Chairman, there would be an increase in the activities of these areas. We first have to be in a position to fund up to levels of authorization, which is something that we have not been able to do up to this point.

Mr. ROGERS. With the health crisis and the change of Secretaries, this might be possible, don't you think?

Dr. ZAPP. I obviously can't comment on the levels that the President's budget might bring. I think you mentioned the switch in Secretaries. I personally regret to see our Secretary leave the department, but we do feel in the HEW aspect that he is in a position to advise the President of the things in higher levels and for this we are grateful.

Mr. ROGERS. I remember Secretary Richardson before when he served in the capacity of an Assistant Secretary of HEW. As I recall, his background is very much intertwined with his medical field. His father, I think, was a doctor.

So I think, too, he will be vitally concerned with health and I would hope begin to give some impetus to health in the department. I presume that will be so. I would hope so.

Now, what is the need for personnel in the allied health field?

Dr. ZAPP. In specific terms I would refer that to Mr. Hatch.

Mr. HATCH. Mr. Rogers, with the changing numbers and requirements for people in these fields we find it difficult to give specific deficits in requirements for years ahead because of the changes we expect to see in these fields. However, we estimate that in 1967 a level

of just over 800,000 persons were working in these professional and technical fields. I would like to point out that this number represents active employment in allied health occupations at a variety of work levels. The 800,000 includes persons trained in baccalaureate and associate degree programs like those presently supported under the allied health professions law; in less-than-degree academic programs; and those who have had formal or informal preparation in hospitals and other service settings.

By 1975 we expect the requirements to rise to something around 1.5 million workers in these fields.

Our deficits as we estimate then are approximately 230,000 now and we would expect about 320,000 deficit by 1975.

Mr. ROGERS. Have you any breakdown of these categories?

Mr. HATCH. I can give you some breakdown by categories, although again it is difficult to be very precise in many of these fields. The allied health categories are undergoing rapid changes and functions are not well defined. We have very little data about persons now employed, their distribution, education and training, the ways their skills are being used or could be better used, and new types of workers keep emerging. All of these factors make it difficult to project supply or requirements.

We have more precise data for dental auxiliaries than for many other allied health occupations. For example, our supply of dental hygienists in 1967 was about 15,000. We expect the number in 1975 to be somewhere around 23,700 and with a deficit of about 6,600 in that year.

Mr. ROGERS. What is the present deficit you estimate?

Mr. HATCH. As to the present deficit in dental hygiene, I don't have that figure with me right at the moment. I could supply that for the record.

Mr. ROGERS. Would you have any idea right off and you can correct the figure for the record.

Mr. HATCH. I would guess it is about 5,000.

(The following information was received for the record:)

ESTIMATED SUPPLY AND REQUIREMENTS FOR DENTAL HYGIENISTS

	1967	1975
Supply .....	15,000	23,700
Requirements .....	20,000	30,300
Shortage .....	5,000	6,600

Mr. HATCH. In the medical laboratory field—and here I include not only medical technologists and medical laboratory technicians but also certified laboratory assistants, cytotechnicians, and so on—I don't have the number in current supply, but in 1975 we expect the supply to be about 175,000 with a deficit of about 45,000. We have estimated a deficit of about 30 percent for 1975 for all allied health manpower—medical-allied, dental-allied, and environmental-allied health.

Mr. ROGERS. Do you have a figure for current deficits? Is it about 30 percent now?

Mr. HATCH. It is about 30 percent now, yes, sir.

Mr. ROGERS. Is it more than 30 percent now?

Mr. HATCH. I would guess it is around 30 percent and again the figures are so fluid that would be about the best estimate that I could make on deficits.

Mr. ROGERS. Do you have any idea how many there are in the medical laboratories now?

Mr. HATCH. No, sir, I don't have that figure with me at the moment. I would guess it is about 150,000.

Mr. ROGERS. You can furnish the correct figure for the record.

Mr. HATCH. Yes, sir.

(The following information was received for the record:)

The estimates of supply are: 100,000 in 1967, and probably about 125,000 now.

Mr. ROGERS. What other categories are there?

Mr. HATCH. Another example would be in the radiologic technology field—this includes radiologic technologists, X-ray technicians, and radiation therapy technicians where there is a current supply of about 100,000. We expect the supply in 1975 to be about 120,000 with a deficit of around 30,000.

Mr. ROGERS. The current deficit would be about what?

Mr. HATCH. That would be about 21,000.

Mr. ROGERS. If the current trends continue, it would be about 36,000 in 1975 if you used the 30 percent figure, correct?

Mr. HATCH. I used the 30,000 figure for 1975. It would be under 30,000 now with about 30,000 by 1975.

Mr. ROGERS. The 30,000 figure?

Mr. HATCH. Yes, in round numbers it would be about 30,000, I would guess, in 1975.

Mr. ROGERS. If you use your 30-percent average, it would be about 36.

Mr. HATCH. It would be that high if you calculate them on the overall average, yes.

Mr. ROGERS. What other categories do you have?

Mr. HATCH. In the dental assisting area, we—

Mr. ROGERS. That is dental assistants?

Mr. HATCH. Yes, sir, dental assistants. We have a current supply of about 95,000 and by 1975 we estimate about 108,000 with a deficit of about 28,000.

Mr. ROGERS. What is the current deficit?

Mr. HATCH. The current deficit is about 19,000.

Mr. ROGERS. What other categories do we have? I would like to go down them all, if we could.

Mr. HATCH. I don't have with me any other specific breakdowns. We could supply you additional ones for the record. I would say that in one broad field—environmental allied health manpower—we estimated a supply of about 218,000 in 1967, 313,000 in 1975, and a shortage of about 114,000 at that time.

Mr. ROGERS. What is the current shortage which you have?

Mr. HATCH. I would guess about 89,000.

Mr. ROGERS. So the need is 300,000 or is that the current number?

Mr. HATCH. The number is 218,000 for 1967, the need is something around 300,000 for the same year.

Mr. ROGERS. And that is consistent with the figures you have given me all the way through?

Mr. HATCH. Yes. As I say, there may be some variations in the shortages by discipline. We estimate across the board about an average deficit of 30 percent.

Mr. ROGERS. Are these the main categories now, dental hygiene, medical laboratory, radiological technician and dental assistants and environmental health personnel?

Mr. HATCH. In breaking down our supply and requirements, we usually define them in three broad areas: medical-allied, dental-allied, and environmental-allied health. Medical laboratory and radiologic technology are examples of large groups within the medical-allied; the dental assistant is one of those in the field of dental-allied; and environmental allied health is of course that general category.

Mr. ROGERS. Would you supply for the record a complete breakdown of all of the personnel in the more specific breakdown?

Mr. HATCH. Yes, sir, we can supply you with some additional breakdowns. In some of the disciplines it is awfully difficult to be very precise in terms of requirements now or for future years, but we will supply you with whatever information we can.

Mr. ROGERS. I can see how it perhaps would be difficult, but why is it more difficult to do in some and not in others?

Mr. HATCH. It is more difficult in some of the smaller groups where the figures would indicate more precise shortages than we really are able to derive with the data that we have available to us. In addition to that is the problem of defining the various categories by occupational title when the types and levels of personnel are so varied across the country.

Our data is just not that precise.

(The following information was received for the record:)

#### ESTIMATES OF ALLIED HEALTH MANPOWER SUPPLY AND REQUIREMENTS

Estimates of current and future allied health manpower supply and requirements are based on assumptions that differ for the medical-allied, dental-allied, and environmental health fields. These assumptions are discussed in detail in Health Manpower Source Book 21 (PHS Pub. No. 263, section 21).

Any discussion of requirements for allied health manpower must recognize that the assumptions underlying an analysis of supply versus demand are not agreed upon, and that much essential data are not available. The most important lack is an objective against which our present ability to provide health services can be measured. These difficulties are especially apparent in attempting to determine or forecast requirements for medical and dental allied manpower, since requirements are related more to rising standards and demands for health care than to simple growth in population.

There are, however, a number of estimates of national needs for allied health manpower which, while not based on uniform assumptions or definition of requirements, are in sufficient agreement to allow some general conclusions to be drawn. Among these concepts or approaches to the determination of present requirements for allied health manpower are: budgeted vacancies, ratios to total population, professional judgments of need, ratios to patient populations, requirements per unit of service, and staffing patterns.

Since the production and employment of trained allied health manpower over the next decade are of immediate interest and importance, "requirements" is given the special meaning of the number of workers who could find employment without major changes in the health system, in manpower utilization patterns, or in the economics of health care. The term is not used here to represent the number of health workers that would be necessary in order to have a fully effective or adequate health system, or to achieve some improved level of national health.

In an assessment of our current situation it is possible to draw some general conclusions about the extent to which requirements for allied health manpower exceed employment. Any attempt to project these requirements into the future obviously involves uncertainties of considerable magnitude.

Projections of future supply and requirements cited in the accompanying table do not take into account a number of important factors. These factors include (1) the extent to which increasing specialization will be efficient and desirable, (2) the extent to which duties and responsibilities can be successfully delegated to lower-level personnel, and (3) the extent to which technological change will alter personal services requirements in the health industry. However, it is not possible to anticipate requirements for types of allied health manpower which are not yet developed. Utilization of new types may increase or reduce requirements for some of the occupations we now recognize.

Requirements in 1975 for medical allied health manpower have been estimated by applying the 1967 supply requirements ratio to the estimated 1975 supply. For dental allied manpower substantial expansion in the utilization of auxiliaries in relation to dentists is anticipated by 1975. Requirements for environmental health manpower represent professional judgments of staffing required to decrease environmental health hazards in the face of an expanding problem.

Both supply and requirements of allied health manpower will, in addition, be affected by the economics of the health industry. The problem is not one of numbers alone, however. The extent to which a given number of people meet the needs will be determined in large part by the kind of education and training they receive and the settings in which they work. This table does not, therefore, necessarily reflect the total extent of educational and training needs, nor does it indicate the relative magnitude of these needs among occupational categories.

ESTIMATES OF ALLIED HEALTH MANPOWER SUPPLY AND REQUIREMENTS: 1967 AND 1975

Occupational category	1967			1975		
	Supply	Requirements	Shortage	Supply	Requirements	Shortage
Total allied manpower.....	806,500	1,034,200	227,700	1,144,000	1,466,000	322,000
Medical allied manpower.....	451,500	561,500	110,000	670,000	836,000	166,000
Medical laboratory personnel <sup>1</sup> .....	100,000	124,000	24,000	175,000	218,000	43,000
Radiologic technology personnel <sup>2</sup> .....	85,000	106,000	21,000	120,000	150,000	30,000
Medical record personnel <sup>3</sup> .....	37,000	46,000	9,000	54,000	67,000	13,000
Dietetic and nutritional personnel <sup>4</sup> .....	36,000	45,000	9,000	54,000	67,000	13,000
Physical therapy personnel <sup>5</sup> .....	20,000	25,000	5,000	30,000	37,000	7,000
Occupational therapy personnel <sup>6</sup> .....	11,500	14,000	2,500	17,000	21,000	4,000
Other personnel <sup>7</sup> .....	162,000	201,050	39,500	220,000	276,000	56,000
Dental allied manpower.....	137,000	165,700	28,700	161,000	203,000	42,000
Dental hygienist.....	15,000	20,000	5,000	24,000	31,000	7,000
Dental assistant.....	95,000	113,800	18,800	108,000	136,000	28,000
Dental technician.....	27,000	31,900	4,900	29,000	36,000	7,000
Environmental health manpower.....	218,000	307,000	89,000	313,000	427,000	114,000
Environmental engineers, scientists and technologists.....	54,500	105,000	50,500	80,000	135,000	55,000
Environmental technicians and assistants.....	64,000	79,000	15,000	110,000	138,000	28,000
Environmental aides.....	99,500	123,000	23,500	123,000	154,000	31,000

<sup>1</sup> Includes scientists (e.g., clinical chemists, microbiologists), technologists (e.g., medical technologists, blood banking technologists), technicians (e.g., medical laboratory technicians, cytotechnicians), and aides (e.g., certified laboratory assistants, histologic technicians).

<sup>2</sup> Includes radiologic technologists, X-ray technicians and radiation therapy technicians.

<sup>3</sup> Includes medical record librarians, technicians, and clerks.

<sup>4</sup> Includes dietitians, nutritionists, dietary technicians and aides, and food service supervisors.

<sup>5</sup> Includes physical therapists, and physical therapy assistants and aides.

<sup>6</sup> Includes occupational therapists, and occupational therapy assistants and aides.

<sup>7</sup> Includes those in administration, biomedical engineering, health education, specialized rehabilitation services, inhalation therapy, and various other health services.

Source: Health Manpower Source Book 21. Allied Health Manpower Supply and Requirements: 1950-80. PHS Pub. No. 263, sec. 21. Washington, D.C., Government Printing Office, 1970. Also unpublished data.

Mr. ROGERS. What is being done to improve that data?

Mr. HATCH. We are making some efforts to do this. We have just recently completed an updating of the 1966 hospital personnel survey and some data from that will be available very shortly. We are making other efforts to improve the data base as we are able to.

Mr. ROGERS. How many schools, colleges, institutions are now training allied health professions?

Mr. HATCH. It is difficult to say precisely how many. In 1970, we are supporting allied health training programs under formula grants in 302 junior colleges and universities.

(The following table was received for the record:)

BASIC IMPROVEMENT GRANT SUPPORT BY TYPE OF CURRICULUM TO 302 TRAINING CENTERS—FISCAL YEAR 1970  
(ALLIED HEALTH PROFESSIONS EDUCATIONAL IMPROVEMENT PROGRAM)

Programs of study	Number of students	Number of curriculums
<b>Baccalaureate or higher degree—228 schools:</b>		
Medical technologist.....	7,909	195
Optometric technologist.....	123	8
Radiologic technologist.....	334	19
Medical record librarian.....	2,557	105
Dietitian.....	2,093	37
Occupational therapist.....	3,225	62
Physical therapist.....	396	21
Sanitarian.....	943	22
Dental hygienist <sup>1</sup> .....		
Total.....	17,580	469
<b>Associate or equivalent degree—74 schools:</b>		
Medical laboratory technician.....	666	29
Optometric technician.....	6	1
Dental hygienist <sup>1</sup> .....	1,849	59
Dental laboratory technician.....	276	16
Dental assistant.....	632	29
X-ray technician.....	848	47
Medical record technician.....	138	14
Inhalation therapy technician.....	352	28
Ophthalmic assistant.....	80	3
Dietary technician.....	271	13
Occupational therapy assistant.....	101	6
Sanitarian technician.....	38	3
Total.....	5,257	248
Grant total.....	22,837	717

<sup>1</sup> 19 training centers offer both the baccalaureate and associate degree programs.

Mr. HATCH. There are many others that are either starting to train these kinds of personnel or are already doing it that are not being supported under the basic improvement grants. I would rather not make a guess at the exact number of schools that have some of these.

Mr. ROGERS. If there is any way to furnish that for the record, I think it would be helpful for us to know.

Mr. HATCH. At the present time this information is incomplete and fragmentary. I would add we are this year undertaking inventories of 2-year and 4-year institutions to try to determine in more precise terms the numbers of educational program programs in these fields that they do offer.

Mr. ROGERS. I just wonder if perhaps Mr. Bayer or Dr. Alford could give us some specifics on this. Surely you must know what institutions have what students and what courses. Do you have that information?

Mr. BAYER. I am not sure, Mr. Chairman, that we get down to that

kind of detail. We know relative to our programs this kind of data, but we are dealing with something in the range of 2,500 institutions of higher education or secondary education.

Mr. ROGERS. They don't give a breakdown of students enrolled in what categories?

Dr. ALFORD. We get students enrolled, but not by specific allied health categories. We have some generalized data in this area by broad occupational or professional areas and that sort of thing. I am not sure that we have the kinds of detail that you need here. We can examine and see what we could supply in terms of material for the record.

Mr. ROGERS. I think that would be helpful.

(The following information was received for the record:)

VOCATIONAL EDUCATION—ENROLLMENT BY INSTRUCTIONAL AREA IN HEALTH OCCUPATIONS—FISCAL YEARS 1966-69

	1966		1967		1968		1969	
	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent
Dental assistant (C.D.A.).....	6,304	7.5	6,742	5.8	8,374	5.8	10,850	6.1
Dental hygienist (R.D.H.).....	935	1.1	1,312	1.1	1,545	1.1	2,972	1.7
Dental laboratory technician...	3,356	4.0	1,337	1.1	1,280	.9	2,085	1.2
Medical laboratory assistant (C.L.A.).....	976	1.2	4,818	4.1	3,994	2.8	6,214	3.5
Nurse associate degree (R.N.).....	4,215	5.0	9,554	8.2	14,812	10.3	25,430	14.4
Practical nurse (L.P.N.).....	47,990	57.4	58,721	50.2	62,734	43.7	68,740	39.0
Health assistants.....	10,122	12.1	22,802	19.5	27,873	19.4	32,487	18.4
Hospital food services supervisor.....	186	.2	1,444	1.2	1,380	1.0	2,272	1.3
Inhalation therapy technician. Medical X-ray technician (M.X.T.).....	38	(1)	38	(1)	353	.2	1,309	.7
Surgical technician.....	541	.6	1,683	1.4	1,982	1.4	2,570	1.5
Occupational therapy assistant (C.O.T.A.).....	327	.4	472	.4	621	.4	1,052	.6
Other.....	8,687	10.5	8,142	7.0	18,468	12.9	19,871	11.3
Total enrollment.....	83,677	100.0	117,073	100.0	143,552	100.0	176,344	100.0
Expenditure <sup>2</sup> .....	\$21,777,000		\$33,387,000		\$46,626,000		\$60,840,000	

<sup>1</sup> Less than 0.1 percent.

<sup>2</sup> Includes Federal, State and local expenditures.

Source: Office of Education unpublished data.

MANPOWER DEVELOPMENT AND TRAINING ACT—ENROLLMENT IN INSTITUTIONAL TRAINING IN HEALTH OCCUPATIONS

	Cumulative to May 31, 1970		Fiscal year 1970 <sup>1</sup>		Fiscal year 1969		Fiscal year 1968		Fiscal year 1967		Fiscal year 1963-66	
	Enroll- ment	Per- cent	Enroll- ment	Per- cent	Enroll- ment	Per- cent	Enroll- ment	Per- cent	Enroll- ment	Per- cent	Enroll- ment	Per- cent
Health occupations, total.....	108,100	100	13,000	100	15,100	100	18,200	100	21,000	100	40,800	100
Licensed practical nurse and therapist..	44,000	41	4,600	35	7,700	51	7,100	39	8,000	38	16,600	41
Nurse aide, orderly, hospital attendant...	46,900	43	4,300	33	4,500	30	6,600	36	10,100	48	21,400	52
R.N. refresher.....	11,400	11	900	7	2,300	15	4,000	22	2,300	11	1,900	5
Environmental health occupations.....	1,100	1	1,100	9								
Miscellaneous health occupations.....	4,700	4	2,100	17	600	4	500	3	600	3	900	2

<sup>1</sup> 11 months. Does not include individual referrals. Does include RAR training. HEW fiscal year 1970 obligation \$10,500,000.

Mr. ROGERS. We really don't know the extent of the problem then, do we?

Dr. ZAPP. I think we would have to be honest and say in the entire health field, Mr. Rogers, this is a problem and certainly when we get into the allied health fields where they are trained in such a variety of institutions, many of them locally supported, which only get their Federal funds through grants to States who then disburse it and so forth, that we don't have a complete assessment.

Mr. ROGERS. Wouldn't this be rather easy to do simply by contacting your State educational office and asking that they advise how many students in which areas? I would not think this would be very difficult.

Dr. ALFORD. I might comment here that in higher education particularly we do not always have this kind of connection at the State level. For elementary and secondary schools you have a State department of education which can supply this kind of data, but institutions of higher education have been independent and many of them are private and as a consequence you do not always have a good source of data.

Mr. ROGERS. Don't most of them belong to associations or else you have some contact with them through grants?

Mr. HATCH. If I might comment on that, Mr. Rogers, this is the approach we are taking with our inventories now. We are working with the American Association of Junior Colleges and the Association of Schools of Allied Health Professions to undertake this kind of inventory. I would hope that within another six months to a year we should have some fairly precise data on this kind of activity. For example, the data will include geographic locations of training programs, enrollment, graduates, training capacity, constraints on the expansion and the like. We have been working closely with the office of education in developing this.

Mr. ROGERS. I am somewhat amazed that this has not already been done. This program has been going since 1966 and we don't even know who is training what or who. I don't know how we will ever get on top of it unless we know what has been done. I realize you gentlemen have just come in and I don't know why those in the Department before you haven't done something on this. In other words, I think we are spending so much of our money and time on studies and planning that we are never getting down to do anything to really produce personnel and I want to begin to see some action.

I think the committee does. I don't see any urgency in meeting the problem and yet we have these fantastic shortages. I don't see any real budget request coming in and I didn't before. In other words, we are just not putting any emphasis in these areas where we claim all these great results can come.

We say, "Oh, yes, allied health, we are going to be able to use our doctors, we are going to be able to meet this health problem" and then we come in and we are going to do it with the great program, no construction, \$10 million for educational improvement, \$3 million for advanced traineeships and \$4.5 million for developmental and that is only hopefully so.

I just don't see how we will ever get on top of the health manpower problem if we are going to pursue it in this low-keyed business-as-

usual manner. I think the committee will be concerned about this because with rising health costs the only way I see to begin to bring it down is to use more allied health personnel where you don't have to use the most expensively trained person to give all of the care.

Now we claim we can do it. I will bet you we have approved \$100 million in studies on delivery of health care, probably a billion dollars over the years. I am getting those figures just to find out, but I will bet you it is at least \$100 million. We know we want these personnel, we know we are going to need them, we even know what the shortages are even though we don't have the specific figures, and what are we doing about it, nothing.

I am amazed that there is such little emphasis being placed on it when we know what we need and still we want to do all of these studies and experiments. I think we ought to just go on and produce the people we know we can produce now without maybe doing so many studies and using up the time of the experts studying when they can be turning out personnel.

Dr. ENDICOTT, let me ask you this. What is our situation in the field of cancer, heart, and stroke on allied health personnel? What are we doing?

Dr. ENDICOTT. There are great shortages there, too. There are shortages, for example, in radiation therapy. In 1960 there were only 12 physician residents in radiation therapy in the United States.

Mr. ROGERS. Twelve?

Dr. ENDICOTT. Twelve. We launched a program in the Cancer Institute to train radiation therapists and there are now about 120 in training.

Mr. ROGERS. What is the need, would you think?

Dr. ENDICOTT. I think we probably will catch up with the need in another 6 or 7 years.

Mr. ROGERS. Which would be what? What was your projected number?

Dr. ENDICOTT. If I recall correctly, the projection is about 700.

Mr. ROGERS. 700 right now?

Dr. ENDICOTT. No, that is the projected need. I think the number at the present time is on the order of 350.

Mr. ROGERS. That is of what is needed now?

Dr. ENDICOTT. Right, so we are about 350 short. But we were losing ground in 1960. There were more retiring and dying than were in training. Now that is a special case.

Another shortage area in the cancer field is cytotechnologists to do pap tests. I don't have the specific numbers in that area, but the situation is such that there are not enough trained personnel to examine the pap tests even if the women submitted themselves to the tests.

Mr. ROGERS. You could not handle it?

Dr. ENDICOTT. We couldn't handle it.

Mr. ROGERS. And this is one way to avoid cancer, early detection, isn't it?

Dr. ENDICOTT. Yes. We have had in the cancer control program a very active training program. I think they have been supporting something on the order of 60 to 70 different training programs scattered around the country. We are catching up in that area, too.

Mr. SKUBITZ. What is the reason for these shortages, Doctor? Why aren't people getting into this field when there is such a need for it?

Dr. ENDICOTT. Well, sir, I think probably the most important single factor has been that the pay scales in all of the fields of allied health have been so low that men don't go into these areas. For the most part young women, high school graduates, go into these areas with the expectation of having a job until they get married and something perhaps to supplement their husband's income with later on.

Mr. SKUBITZ. Who establishes the pay scales?

Dr. ENDICOTT. Many of them, of course, are employed in hospitals and the hospitals have not been notorious as big spenders for personnel. I think, as you know, they make extensive use of volunteers and so on because most of them are operating or have been operating over the years in a deficit.

Mr. SKUBITZ. You mean the hospitals?

Dr. ENDICOTT. Yes.

Mr. SKUBITZ. I have heard that a lot of times but I have my doubts. I have some of the bills sent me by people. In an effort to get information from the hospitals, specific information asking for an explanation of their charges I have run into a stone wall. Silence seems to be golden. Yet administrators, wanting help always volunteer, "Any time you folks want this information, we will give it to you."

Dr. ENDICOTT. I think that real strides are being made at the present time, and this is a consequence of insurance programs, because insurance programs will pay the cost usually or nearly pay the cost, and this has had the effect of a rapid increase, very rapid increase in the pay scale in hospitals.

It does run up a bill, but it is going to work ultimately to attract more people into the field. It is a market operating here.

Mr. SKUBITZ. It is a little off the subject, but hospital costs worry me. The complaints that I get are not about doctors, it is about hospital bills and the medicinal costs are second.

I don't know whether their charges are fair or not and I can't find out until the administrators provide the information. Some tell me labor costs have gone up and you say, "Well, now, let's just take a look at your labor costs," yet when one asks for a breakdown, you can't get it. Another explanation is that the cost of equipment has gone up, yet when you ask them, "What new equipment have you purchased in the last 3 years?" No response.

Dr. ENDICOTT. Over the years in the Cancer Institute we had to reimburse a number of hospitals for patient costs and we audited their hospital costs and they are bona fide costs.

One thing that impresses me is that in addition to an increased pay scale as medicine becomes more complex, the number of employees per patient keeps increasing. There are so many new and different technical things to be done.

Mr. ROGERS. I think we have put in a provision that may be helpful to the committee. We put in a requirement that any hospital who is getting a modernization grant or construction grant must supply to their State agency, the Hill-Burton agency, their cost figures of operating, what it costs and so forth. I think we can begin to get at this problem because it is disturbing.

Now how many of these cytotechnologists have you trained?

Dr. ENDICOTT. I would have to supply that for the record.

Mr. ROGERS. Could you give me an estimate?

Dr. ENDICOTT. I don't recall.

Mr. ROGERS. That will be all right to supply that.

(The following information was received for the record:)

#### CYTOTECHNOLOGISTS TRAINING REQUIREMENTS AND PUBLIC HEALTH SERVICE ASSISTANCE

Laboratory personnel specially trained to assist physicians in detecting and diagnosing disease through morphological study of exfoliated cells are called cytotechnologists. Without their services, the number of persons who could be screened for asymptomatic cervical cancer would be very small.

It has been determined that a person with 12 academic hours of college level biological science can become proficient in cytotechnology by training for a year in a laboratory that has adequate cytologic specimens, equipment and instructors. These are found in large hospital laboratories.

From 1961 to 1970, the Cancer Control Program of the Public Health Service maintained a program of grants to assist cytology laboratories in training.

In 1968, at its peak, the program aided 74 of these small programs. The peak number of grant-aided training positions was 500 per year, which seemed to be keeping up with the growth in the use of cytology at the time. The total number of trainees who completed training under grants awarded from 1961 through 1968 was 2116.

Source: Health Services and Mental Health Administration.

Mr. ROGERS. When did this program start, do you recall?

Dr. ENDICOTT. About 1961.

Mr. ROGERS. What about this heart or stroke, could you let us have those figures if you don't have them with you?

Dr. ENDICOTT. I would have to supply those for the record.

(The following information was received for the record:)

#### REGIONAL MEDICAL PROGRAMS—CONTINUING EDUCATION FOR ALLIED HEALTH PERSONNEL

Regional Medical Programs seek to improve generally the health manpower and facilities available to the nation and to speed the adoption of the latest relevant medical advances through grants which support the establishment of regional cooperative arrangements for research, training and demonstrations of patient care in the fields of heart disease, cancer, stroke and related diseases. Continuing education for allied health personnel is an area of increasing activity in the 55 Regional Medical Programs. Over 9,000 allied health personnel have already participated in a variety of RMP supported training programs, and almost half of these personnel have been trained in the area of heart disease. In addition, over 1,000 have received training in stroke related activities. Included have been such professionals as physical, occupational and speech therapists, inhalation therapists, LPNs and many others.

Examples of the type of continuing education and training programs underway for allied health personnel include the stroke rehabilitation activity of the New Mexico Regional Medical Program, where multi-professional stroke teams are visiting community hospitals to demonstrate rehabilitation techniques and give on-sight, short-term training to hospital personnel. Many registered nurses have been trained in this activity as well as an equal number of allied health personnel who have received training in early rehabilitation of stroke patients. Almost 100 physical and occupational therapists and therapy assistants, over 50 home health aides, as well as many others have already benefited from this program.

In the Intermountain Regional Medical Program, the cardiopulmonary resuscitation project has a large element of training allied and related health personnel in techniques of reviving cardiac arrest victims. A total of 11,725 medical, allied and related health personnel have already been trained under this project. The RMP effort has been directed at training instructors to in turn teach other persons in the life-saving techniques of mouth-to-mouth resuscitation

and external heart massage. For example, an intensive course was conducted for 41 representatives of fire and police departments and ambulance service personnel in how to instruct other police, fire and ambulance personnel. They in turn returned to their communities to conduct courses. In addition, physician-nurse teams have been trained as instructors and travel to the community hospitals in the Region instructing staffs of these hospitals including orderlies and nurses aides in cardiopulmonary resuscitation techniques.

(Prepared in Regional Medical Programs Health Services and Mental Health Administration.)

Mr. ROGERS. You are Director of the Bureau of Health Professions, Education and Manpower Training. What do you see as the picture, Dr. Endicott?

Dr. ENDICOTT. Well, sir, I have great hopes and aspirations in terms of getting more adequate funding, particularly in the areas of allied health and nursing. I am anxious to emphasize these areas because I am sure we can increase our number of physicians and dentists, given enough leadtime and funding. But there is no way to shorten the time to make much of an impact in the area of physicians or dentists, particularly physicians.

If you doubled the entering class this year, it would be somewhere between 8 to 10 years before the freshman this year would actually be qualified as a specialist and engaging in practice.

Mr. ROGERS. Unless you are going to begin to stress family practitioners instead of all specialists and I hope we are going to be able to give some help here to begin to turn out some family doctors where they don't have to go on to that additional training for specialties, where you can cut maybe the 4 years down to 3, as some colleges have already started, and begin to turn out some family practitioners who can at least give general health care and refer to specialists.

The way it is we have gotten where we want to specialize, so that we are in great shortage, as I understand it, of just the plain family doctor. Is that true?

Dr. ENDICOTT. Yes, sir; it is true, but the belief on the part of the profession is that the man supplying primary care should probably receive considerably more training than they used to when I graduated 30 years ago when they went into practice immediately after an internship.

Mr. ROGERS. We may have to rethink our approach to get some doctors out.

Dr. ENDICOTT. I am sure, Mr. Rogers, that the period of training can be compressed and what appears to be essential is that a single institution accept the responsibility for the premedical, the medical, and the postdoctoral training so that they can be coordinated, duplication eliminated and irrelevant material cut out of the curriculum.

I am satisfied that a very substantial improvement can and will be made in that regard, but the point I wanted to make, sir, is that it doesn't take so very long to train nurses and allied health personnel. My feeling is that about the only thing in sight for the next decade other than improvement in the system of health care is to increase auxiliary personnel and get them to work.

Mr. ROGERS. Do you have a program and a goal of turning out so many each year?

Dr. ENDICOTT. Yes, sir; we have made some projections as to what we think is possible.

Mr. ROGERS. I mean of what you want to accomplish, the Department of Health. I want to know from you, and I realize you may not have it this morning. I would hope you would, but you may not. I want to know where you say this is a shortage and we have initiated this program to do this to supply that shortage. Otherwise, we are just talking in hopes and, well, if we can just encourage everybody.

We have to do more than just encourage people. We have to have a specific program. It has to be funded and you have to give some direction here to get some specific classifications filled. Don't you agree?

Dr. ENDICOTT. Yes, sir.

Mr. ROGERS. Could you let us have that?

Dr. ENDICOTT. Yes, sir; I would be delighted to.

(The information requested was not available to the committee at the time of printing.)

Mr. ROGERS. I want to start emphasizing that and I think this committee does. We have got to do something. We are not even beginning to approach the problem, we are just talking about it in theoretical terms and since 1966 we have turned out what? We have finally built new space, as you say, for a 1,000 students which is six projects, and I presume they have not been turned out. They may be just ready to start, is that correct?

Mr. HATCH. Yes, sir.

Mr. ROGERS. What is the situation on that?

Mr. HATCH. I believe the first project went to contract about a year ago.

Mr. ROGERS. The first one?

Mr. HATCH. Yes.

Mr. ROGERS. So this is still all in planning?

Mr. HATCH. Yes, sir; although one project is partially constructed.

Mr. ROGERS. When will we be actually ready to go ahead with the 1,000, when can they enter?

Mr. HATCH. It would be hard to say. It will depend on when the projects go to contract. The last awards were made about 9 months ago and it takes sometime for these to get to contract.

Mr. ROGERS. What would be the time element, generally?

Mr. HATCH. I would say perhaps within 2 years.

Mr. ROGERS. Two years?

Mr. HATCH. Yes, sir.

Mr. ROGERS. Well, I don't even know that we could claim we have done much for the 1,000 yet, have we?

Mr. HATCH. Well, sir, the projects are ready to go now.

Mr. ROGERS. Would you let us have a breakdown of those six and just what stage they are in and how many they will take, each one?

Mr. HATCH. Yes, sir.

(The following table was received for the record:)

## SUMMARY OF ALLIED HEALTH CONSTRUCTION PROJECTS

School	Award	Contract awarded	Disciplines	Increased student places
Louisiana Polytechnic Institute, Ruston, La.	\$233,747	Not awarded	Medical technology	32
			Occupational therapy	20
			X-ray technician	22
			Medical record librarian	38
			Radiologic technologist	33
			Subtotal	145
Mount Sinai Hospital, Miami Beach, Fla.	702,384	Mar. 27, 1970	Medical technician	28
			Respiratory technician	23
			Medical records technician	15
Subtotal	66			
New Hampshire Technical Institute, Concord, N.H.	194,373	June 5, 1969 (62 percent completed).	Dental hygiene	26
			X-ray technician	12
			Subtotal	38
Ohio State University, Columbus, Ohio.	1,791,920	July 19, 1969	Medical technology	139
			Medical dietetics	27
			Occupational therapy	9
			Physical therapy	106
			Radiologic technology	26
			Medical records administrator	10
Inhalation therapy	20			
Subtotal	337			
Temple University, Philadelphia, Pa.	451,124	Not awarded, bid opening June 17, 1970.	Medical records science	40
			Medical technology	86
			Physical therapy	73
			Occupational therapy	69
Subtotal	268			
Vermont, University of, Burlington, Vt.	1,426,452	Not awarded	Medical technology	35
			Dental hygiene	7
			Radiologic technology	17
			Physical therapy	72
Subtotal	131			
Total	4,800,000			985

Mr. ROGERS. There are a thousand we hope to have going in 2 years. Now what about the 400 trainees, you made awards to 77 training programs for advanced traineeships for 400. What state are they in?

Mr. HATCH. We made our first awards for traineeships in 1967 and those students are already completed and are in the field.

Mr. ROGERS. How many was that?

Mr. HATCH. We made 64 awards in 1967, in the first year. That was in the last half of the year. They were second-semester students.

Mr. ROGERS. How long did they have to stay in training?

Mr. HATCH. Normally a year, some stay for 2 years. These are mostly 1-year master's degree programs. Since 1967 we have made awards for about 1,100 traineeships.

Mr. ROGERS. Since the program has been going?

Mr. HATCH. Yes, sir.

Mr. ROGERS. How many of those are out now in the field, of the 1,100, would you estimate?

Mr. HATCH. I would say probably about 600 of the more than 700 individuals who have received traineeships.

Mr. ROGERS. About 600?

Mr. HATCH. Yes, sir.

Mr. ROGERS. What other programs that we know we can tie to are there where we have turned out additional personnel?

Mr. HATCH. In the schools which have been supported under the basic improvements grants—and we started with 192 in 1967 and in 1970, 302 schools are participating—the enrollments have risen from about 11,000 students when this program started in 1967 to nearly 23,000 this year.

Mr. ROGERS. To 23,000?

Mr. HATCH. Yes, sir. I would say the enrollments in the schools that have been supported under this program have increased significantly.

Mr. ROGERS. The increase is 12,000 as a result of this program, you feel?

Mr. HATCH. I think it would be difficult to pinpoint it precisely to this program.

Mr. ROGERS. Why? We give them a specific amount. Don't they have to show us that they are going to take additional students?

Mr. HATCH. Yes, sir, but the enrollment increase requirement for 2.5 percent or three students is far below the enrollment increases that they have actually taken.

Mr. ROGERS. Should we take credit for half?

Mr. HATCH. I would like to be able to take credit for half, but I am not sure that I could say we have.

Mr. ROGERS. Maybe a third, a fourth, a fifth, a sixth, a tenth?

Mr. HATCH. I would find it hard to pin it to any particular percentage of the enrollment increases, but I will say I think these grants have been a stimulus to these schools, even though the amounts most have been receiving have not been great.

Mr. ROGERS. I don't see us doing too much. Maybe we have helped, maybe we haven't, and I think we need to start showing. I realize you have come into the program here, this is so with the other administration as much as with this. What was actually required to be increased by the law? Certainly we can say we brought that 5 percent about, 2.5 or 5 percent?

Mr. HATCH. It would be 2.5 percent of the increase.

Mr. ROGERS. So 2.5 percent of 12,000 is what we really know?

Mr. HATCH. That is what we could say.

Mr. ROGERS. Without question?

Mr. HATCH. Yes, sir.

Mr. ROGERS. Well, let's see, how much is that?

Mr. HATCH. 300.

Mr. ROGERS. So that gives us an additional 300. Now are there any other phases of the program that you think have produced allied personnel?

Mr. HATCH. The other phase of the program remaining is the developmental grants. The purpose of that particular program is not to produce personnel, but to develop programs and improve curriculum and so on.

Mr. ROGERS. How many new categories have we been responsible for?

Mr. HATCH. We have supported 18 projects over the past 4 years.

Mr. ROGERS. Go down those 18 for me, would you, and tell me what they are.

Mr. HATCH. The development and implementation of a curriculum in community practice of occupational therapy, radiopharmacists, ad-

vanced medical technology, orthopedic assistant, child health associate, junior college level health care administrator, physical therapy assistant, hospital and medical systems, nuclear medical technology, electroencephalography technician, a second physical therapy assistant program, diagnostic microbiology technologist, a baccalaureate level administrator of health services, biomedical photography toxicology, extracorporeal circulation specialist, hospital pharmacist technician, and a baccalaureate program in health planning.

Mr. ROGERS. Those are the 18 projects now?

Mr. HATCH. Yes, sir.

Mr. ROGERS. Tell me the extent of those projects, how much money is involved, how many people, and what is the time element involved?

Mr. HATCH. Six of these projects were originally approved and funded in 1967. They were funded for 3 years. Then additional projects were begun in 1968 and two more have recently been funded in 1970. The amount that was awarded for the first 16 projects was \$2.2 million.

Mr. ROGERS. The total?

Mr. HATCH. Yes, sir. The total for the 3 years 1967-69 would be \$2.2 million. So far in 1970 we have funded two more projects.

Mr. ROGERS. For the 3-year period?

Mr. HATCH. Yes.

Mr. ROGERS. How many people were involved?

Mr. HATCH. Do you mean faculty and people involved in the activities? I don't have that.

Mr. ROGERS. How many students, do you have that?

Mr. HATCH. No, some of these did not take students for the first year or so as they were developing their curriculum, so there would be a small number of students involved in the first year.

Mr. ROGERS. What has been done with the results?

Mr. HATCH. In the case of the physical therapy assistants, for example, this is a program that is now being encouraged by the profession for schools, junior colleges to undertake this kind of training to turn out physical therapy assistants.

Mr. ROGERS. How are they encouraging it, who is doing the encouraging? Are we?

Mr. HATCH. Yes, sir, we are.

Mr. ROGERS. What are we doing?

Mr. HATCH. As we meet with schools and discuss programs they might undertake, we suggest various kinds of activities they might become involved in. I would say the profession itself is doing more to encourage these by developing curriculum essentials and working with schools in the establishment of these programs and are now beginning to get these off the ground.

Mr. ROGERS. I would like to have a rundown of the results and where they are being applied.

(The following table was received for the record:)

## ALLIED HEALTH PROFESSIONS DEVELOPMENTAL GRANTS (APPROVED AND FUNDED)

Grantee and project title	Year	Award amounts	Number supported by grant funds		Summary and results	Total enrolled to date	Total grads to date
			Faculty	Other supportive personnel			
Ohio State University: School of extracorporeal circulation specialists.	1967	\$50,455	1.0	2.0	Program was developed and has been awarded B.S. degree status by the university. Faculty has been recruited and trained in overall perspectives of the program. Graduates will be capable of operating extracorporeal systems and various types of monitoring and recording equipment used clinically and in medical research laboratories and will be functioning in the fields of cardiopulmonary bypass, renal dialysis, isolated organ storage and transplantation, perfusion of chemotherapeutic agents in the treatment of cancer and extracorporeal circulatory assist devices.	6, Autumn 1969	1st graduates anticipated in 1973.
	1968	84,043	1.0	4.0			
	1969	73,010	1.0	5.0			
University of Kentucky: Electroencephalography technician training program.	1967	24,603	1	1.0	Curriculum has been developed at the 2-year AA degree level for training EEG technicians for service, teaching, and research.	6	1 anticipated 1970; 2 anticipated 1971.
	1968	11,801	1	1.2			
	1969	12,452	1	1.1			
	1967	16,917	.625	.50			
Montana State University: Diagnostic Microbiology technologist.	1968	19,085	.625	.80	A curriculum to provide specialized training in diagnostic microbiology for selected senior students in the microbiology curriculum has been developed as a modification of the existing curriculum leading to a B.S. in Microbiology. The graduate of the program is prepared to design and implement control procedures to evaluate the work of a laboratory, determine whether it has an adequate level of efficiency and accuracy and to pinpoint and correct the deficiencies of inadequate laboratories. This is in addition to being able to perform and teach all of the routine and specialized tests.	6	2, 1970 AA degree; 65, certificate of completion of evening course.
	1967	23,868	1.0	1.0			
	1968	50,388	2.0	1.0			
St. Petersburg Jr. College (Florida): Health care administrator program (mid-management).	1967	23,868	1.0	1.0	A continuing education program for nursing home administrators currently engaged in operating nursing homes has been established through evening course offerings. The course was structured to provide a formalized program of education to produce a nursing home administrator on the basis of accepted education standards. Voluntary certification is provided to those completing the on going evening course in health-care management. A basic program granting the associate degree in health-care management has been developed. Both the certificate and AA degree programs will be used as models to establish courses in 5 other junior colleges in Florida.	6, August 1968 AA degree candidates; 2, August 1969 AA degree candidates; 171 in evening courses (84, 1968; 49, 1969; 38, 1970).	2, 1970 AA degree; 65, certificate of completion of evening course.
	1969	25,357	1.0	1.0			

## ALLIED HEALTH PROFESSIONS DEVELOPMENTAL GRANTS (APPROVED AND FUNDED)—Continued

Grantee and project title	Year	Award amounts	Number supported by grant funds		Summary and results	Total enrolled to date	Total grads to date
			Faculty	Other supportive personnel			
San Francisco State College (California): Development of advanced medical technology education and training program.	1967	\$15,535	.35	1.25	A study by means of a questionnaire was conducted to determine the need for advanced training in many areas of medical technology. After analysis of the data, a center for advanced medical technology was established as an administrative unit within the department of microbiology at San Francisco State College. Courses in medical electrophoresis, immunofluorescent methods, and laboratory instrumentation and electronics have been established in the center. The entire curriculum is being phased into operation over a 3-year period with the expectation that the full curriculum will be offered in the fall of 1971. 5 courses were offered in the fall of 1969 as both regular and extension courses.	26, 1969	Full curriculum will not be offered until fall 1971.
	1968	182,112	1.12	9.0			
	1969	428,093	2.67	11.0			
Georgia Institute of Technology: Program in hospital and medical systems.	1967	68,488	4.5	2.0	A unique educational program has been developed consisting of a new curriculum for the training of industrial engineers who are being prepared to enter the health field as a permanent career environment. Emphasis in this developmental project has been upon graduate education in hospital management systems at the master's level, but some attention has been given to complementary curricula, including doctoral work in hospital management systems, as well as educational opportunities in interdisciplinary areas for students in both engineering and health professions. The program is jointly administered by the Georgia Institute of Technology and the Medical College of Georgia. The program in hospital and medical systems is designed to meet educational needs within that interdisciplinary field concerned with improvements in the management of health services through industrial engineering, operations research, and management science.	21, 1967; 25, 1968; 20, 1969 (at graduate level);	5, 4.
	1968	87,077	5.1	4.2			
	1969	95,005	4.6	5.2			

In addition to the above graduate students, a number of other students in fields such as architecture, industrial management, information science, other health professions, and practicing health personnel have enrolled in courses in the hospital and medical systems curriculum and in short course offerings.

St. Mary's Junior College (Minnesota): Physical therapy assistant program.	1968 1969 1970	34,137 31,639 32,367	1.0 2.3 3.3	----- ----- -----	11,1968; 16,1969; 26,1970 (plus anticipated 28 to 30 freshmen in fall 1970).	11,1969; 12,1970.
Rochester Institute of Technology (New York): Associate degree program for the training of biomedical photographers.	1968 1969 1970	24,505 119,880 52,207	1.0 1.0 1.8	5 .6 .5	14,1969; 24,1970 (anticipated for freshman class).	1st graduates anticipated in 1971.
University of Colorado: Research in development of new child health professional.	1968 1969 1970	73,179 73,179 65,960	3.35 8.30 7.95	5.0 5.0 4.0	1968, 0; 1969, 9; 1970, 13 (Class starts July 1970).	1st class to graduate in 1972.
St. Petersburg, Jr. College (Florida): Pilot physical therapy assistant program.	1968 1969 1970	38,772 41,722 38,161	1.0 2.0 2.0	1.0 1.0 1.0	1968, 8; 1969, 20 freshmen; 6 sophomore; 1970, 20 to 25 anticipated.	6 expected in June 1970.
University of Southern California: Specialist in radiopharmaceuticals (radiopharmacist).	1968 1969 1970	35,780 49,032 40,988	1.15 1.38 1.0	1.0 1.0 1.0	1968, 0; 1969, 13; 1970, 21 (applicants—not actually enrolled).	1st class graduates in 1971.
City College of San Francisco (California): Development of orthopedic assistant training and certification program.	1968 1969 1970	78,122 133,162 80,109	3.20 2.81 4.58	1.0 1.5 .5	1968, 0; 1969, 24; 1970, 23 (as of Mar. 2, 1970).	None.

One of the 1st physical therapy assistant programs in the country was initiated in the fall of 1967. The curriculum for the AA degree program was developed in consultation with physical therapy consultants on a local and national level and provides a foundation of physical, biological, and social sciences as well as liberal arts.

A 2-year program leading to the degree of associate of applied science was developed and implemented for training biomedical photographers to provide complete photographic services required by a medical institution.

This program purposed to develop a new type of allied health professional, the pediatric associate, who after completion of training would be qualified to perform 80 to 90 percent of all services now being given by pediatricians. To date, the basic program format has been developed and implemented. This included a feasibility study to determine the scope of the program and duties of the graduates. State licensure of the participants has been achieved. Studies to ascertain the effectiveness of the training are being conducted. Other studies include the degree of acceptance of the graduate by the professional community and public, curriculum evaluations and character evaluations of the program participants.

A curriculum at the associate of arts degree level has been developed and implemented to meet the needs for supportive personnel in the area of physical therapy through a new health field program to educate physical therapy assistants.

The aim of this program was to develop a curriculum resulting in a specialist in radiopharmaceuticals at the M.S. level who would be capable of functioning in the area of nuclear medicine as a technical assistant. A basic curriculum for this program was designed and implemented after conference with and concurrence of various experts in the field. Overall organization of program such as the manner in which courses were to be presented and internship students were reviewed and resolved. Recruitment of students was initiated and is being conducted. A plan to evaluate the curriculum was developed and carried out. The program was approved by the university and allowed to award the M.S. degree.

Purpose of the program was to develop a 2-year community college curriculum to train orthopedic assistants. A curriculum committee was formed and developed the courses offered in the new program. In addition, a task analysis was conducted to ascertain the scope of activity to be performed by this individual. Recruitment of candidates is being conducted. An evaluation of the program has been planned and will be performed. A subcommittee concerned with relations between hospitals and orthopedic surgeons in the area has been formed and is functioning.

## ALLIED HEALTH PROFESSIONS DEVELOPMENTAL GRANTS (APPROVED AND FUNDED)—Continued

Grantee and project title	Year	Award amounts	Number supported by grant funds		Summary and results	Total enrolled to date	Total grads to date
			Faculty	Other support-students			
St. John's University (New York): Baccalaureate program in toxicology.	1968	\$13,986	3	1.0	Program attempted to develop a suitable undergraduate curriculum in toxicology. Then to establish a 4-year program to train toxicologists at an undergraduate level. To date, timetable for program course of action has been established and recruiting campaign initiated. Program began on schedule with 4 of the 6 initial applicants participating. Program scheduled, accepted and given B.A. degree status by the New York State Education department. The program was one which planned to introduce changing concepts of the role of occupational therapists to incorporate the philosophy of entering the community for the delivery of services due to the current delay in hospitals to release patients as soon as possible. Courses demonstrating their new role have been developed and introduced into the basic curriculum at the University of Albany. Other courses offered on campus were screened to determine their relevance to the project. Programs in the geographic region as well as in other sections in the country have been studied. An evaluation process of program has been developed and started.	1968, 0; 1969, 4 (fall semester); 1970, 6 (new applicants).	Do.
	1969	50,891	3	1.0			
	1970	50,086	1.9	1.85			
University of Alabama: Development and implementation of a curriculum in the community practice of occupational therapy.	1968	29,214	1.20	5	This proposal was an attempt to develop a B.S. curriculum for nuclear medical technologists. To implement such a program a basic curriculum format was developed and introduced. A subject matter syllabus is being written and partially complete. Program is being studied through an evaluation questionnaire. A task analysis of the professional area is being conducted. Coaching laboratory has been developed and partially equipped. Counseling potential candidates in sophomore class is being conducted. This proposal proposed establishment of a 4-year B.S. program which emphasizes health and business administration. Opportunities for vertical advancement from the A.A. degree level through graduate degrees were built into program. A formal advisory council was established which assisted in the development of curriculum, internship affiliations, training procedures, student recruitment policies, as well as accreditation, evaluation and placement. Student recruitment using various means was begun. Formal courses were started.	1968, 0; 1969, 10 (junior students); 1970, 10 to 14 (estimated fall semester.)	9 expected in June 1970.
	1969	29,214	1.15	1.0			
	1970	13,357	1.10	1.0			
University of Iowa: A developmental grant for nuclear medical technology.	1968	22,959	1.68	2.0	This proposal was an attempt to develop a B.S. curriculum for nuclear medical technologists. To implement such a program a basic curriculum format was developed and introduced. A subject matter syllabus is being written and partially complete. Program is being studied through an evaluation questionnaire. A task analysis of the professional area is being conducted. Coaching laboratory has been developed and partially equipped. Counseling potential candidates in sophomore class is being conducted. This proposal proposed establishment of a 4-year B.S. program which emphasizes health and business administration. Opportunities for vertical advancement from the A.A. degree level through graduate degrees were built into program. A formal advisory council was established which assisted in the development of curriculum, internship affiliations, training procedures, student recruitment policies, as well as accreditation, evaluation and placement. Student recruitment using various means was begun. Formal courses were started.	1968, 7 (junior students); 1969, 6; 1970, 5 to 6 (anticipated).	7; 6 estimated in June 1970.
	1969	23,706	1.70	2.0			
	1970	16,844	1.70	2.0			
Ithaca College (New York): Administrator of health services.	1968	29,347	1.0	1.3	This proposal proposed establishment of a 4-year B.S. program which emphasizes health and business administration. Opportunities for vertical advancement from the A.A. degree level through graduate degrees were built into program. A formal advisory council was established which assisted in the development of curriculum, internship affiliations, training procedures, student recruitment policies, as well as accreditation, evaluation and placement. Student recruitment using various means was begun. Formal courses were started.	1968, 24; 1969, 12; 1970, 9; 21 estimated for fall semester.	None, 1st class June 1971.
	1969	55,316	2.14	1.3			
	1970	48,115	3.5	1.3			

University of Cincinnati pharmacy technicians.	(Ohio): Hospital	1970	75,180	3.0	1.0	The project will seek to determine which of the hospital pharmacist's functions may be safely and appropriately delegated to a trained hospital pharmacy technician and, if such delegation is found appropriate to determine the type of education and training and the system of controls necessary for the pharmacy technician to carry out the delegated functions. If such delegation is found inappropriate, the remainder of the project will not be implemented.	None-----	None.
Pennsylvania State University: Baccalaureate program in health planning.	Baccalaureate	1970	68,137	3.66	1.0	A 4-year baccalaureate program in health planning is being developed in the college of human development to help meet the need for health planners who are comprehensively trained. Response to the pressing need has heretofore been at the graduate level. Widespread adoption throughout the nation of planning, programming, budgeting systems and of new programs with heavy planning components have intensified the need for more rapid training of competent health planners.	None-----	Do.

<sup>1</sup> Expressed in man-year equivalents.

Mr. ROGERS. Are all of these categories recognized and licensed?

Mr. HATCH. Many are not recognized yet if you mean licensed or accredited, sir.

Mr. ROGERS. Do they have to be before they can be used?

Mr. HATCH. No, sir, many personnel in these categories are not licensed.

Mr. ROGERS. So you feel this is no drawback or impediment to getting these people used?

Mr. HATCH. I would say it might be an impediment in some instances and not in others. Factors of academic or professional recognition or licensure which might affect utilization are of course taken into consideration throughout the developmental process.

Mr. ROGERS. Could you give us those specifics, for the record, if you want.

Mr. HATCH. I would rather submit that for the record, if I could. (The following information was received for the record:)

Of the 16 programs which have had sufficient time in operation for some assessment to be made regarding the recognition of graduates, the following observations are made:

- 14 of the programs have received approval by the parent institution to award either an associate, baccalaureate, or advanced degree,
- 1 program is designed to modify the curriculum of an already recognized discipline, and
- 1 program has been recognized for State licensure of the graduates.

Mr. ROGERS. What have you done about the medics, bringing in these young men who are being discharged from the services? How are they being tied into the allied health profession field?

Dr. ZAPP. We have a joint program with the Department of Defense, MEDIHC, which means military experience directed into health careers. We call it MEDIHC and it is a program jointly sponsored between ourselves and the Department of Defense where contact is made with all military personnel who have had training or experience in health 90 days before their anticipated release.

They are given a questionnaire, they have consultation in the transition offices in the different services and at that time they state what they would like to do. Would they like to go out and work in a region, would they want to go back to school, not interested, whatever the case might be. This then goes to our regional HEW offices. We started the program in February and I think by the end of this month over half of the States in the country will have designated State coordinators for the MEDIHC programs.

These cards go into the State, at which time the agency that has been designated by the Governor to be the one which best knows the health educational and work opportunities in the State. We try to get to each individual 30 days prior to his discharge the opportunities available for work or training would be in the State, in the area where he wants to go back.

So if the possibilities don't meet his expectations, at least we have an opportunity to have another shot of working something else out for him. But the whole idea here is to try to get some placement for these military-trained people prior to their separation.

The problem is once they get out and get involved in other employment, it is difficult to recruit them for the health field. So for the

length of time this program has been going, we feel it is a rather rewarding one in getting the States to take this obligation on.

Mr. ROGERS. It has only been going since February?

Dr. ZAPP. February, yes, sir.

Mr. ROGERS. How many have actually been brought into health jobs?

Dr. ZAPP. With this short length of time I would have to supply that for the record, but I would be glad to get this from our MEDIHC coordinator.

(For information requested see p. 43, this hearing.)

Dr. ZAPP. Our big challenge at this point has been to establish and get commitments on the part of all of the States out of Governors' offices to designate a key State agency to be the coordinator on this and we are well ahead of our time schedule on that part, by having half of them designated in this short period of time.

We started out with a pilot program in February in the State of Texas and thought we would pick up maybe a half-dozen or so before the end of this fiscal year, but it has gone so well we expect half of them in now.

The previous figures that existed indicates that only 19 percent of the health occupation trained personnel in the Military Forces were going into civilian health occupations. Of those that didn't 60 percent indicated an interest either in going directly into work or into some type of an educational advancement in health occupations.

Mr. ROGERS. How many?

Dr. ZAPP. Sixty percent; 19 percent were already going into health occupations when they were discharged, but of those that didn't, 60 percent indicated they would like to if the opportunity presented itself.

Mr. ROGERS. What do you do to provide the opportunities? What program is there? Suppose a young man says, "I want to go into medical school, I want to become a therapist or an assistant doctor, what do you do?"

Dr. ZAPP. He would be put in contact with the State coordinator in the State that he designates he wants to go to or if he is not sure and just wants to go to a region, he would be in contact with two or three State coordinators that could tell him what opportunities were available for work or training based on his past experience.

Some military courses have been accredited by the civilian groups. If he has gone to one that isn't the thing that we hope and one of the things to accomplish under this bill is the establishment eventually of equivalency and proficiency examinations.

Certainly one of the great losses to the health occupation are the people who have had training, but it has not been the type of training in all cases which allow these men to go out and use it. He can't use all of his health occupation training and usually society loses the benefit of his training and experience in the health field and he goes into some other occupation that he does not have to have a degree or certificate for.

Mr. ROGERS. Are we doing a sufficient amount here?

Dr. ZAPP. I think we are tilling some untilled soil from the past as far as going into these traditional health occupations and saying we do want equivalency and proficiency examinations and we do

want to set up some standards so we don't lose this valuable resource of health occupation training. That is one of the authorities we are requesting to have a program now that we are supporting under the administration's present legislative proposal.

Mr. ROGERS. Why couldn't a lot of these young men be brought into the commissioned corps and used?

Dr. ZAPP. If there were positions available, I would have to defer comment on that. There is no question about the distribution and utilization problem we have in health manpower nationally. It is even more complex than our numbers problem.

Mr. ROGERS. Are you going to submit legislation, do you know, regarding using Commissioned Corps people in areas where there is no health personnel?

Dr. ZAPP. I believe Dr. Egeberg has testified that we have a task force studying this particular problem. It is something that has been discussed in the Department for some time. Of the three manpower problems we have nationally—numbers, utilization of the people and distribution—without question, the distribution is the most difficult one we have to solve.

Mr. ROGERS. I hope we can put in some legislation quickly and do something to give you the necessary authority to do it. I think it is needed.

Dr. ENDICOTT. I was going to comment, sir, that some help is available through the GI bill which in many instances is adequate to take them through at least an associate degree program. The ones who have the hard row to hoe are the ones who did not complete college before they went into the military and who aspire to become physicians.

I am very much impressed with a program which the Navy has just inaugurated under which they commission candidates for medical degree and have them on active duty during the time they are in the medical school. I have proposed that we explore this as a device in the Public Health Service. We already have the authority. The principal question, of course, would be the funds.

Mr. ROGERS. How would it work now?

Dr. ENDICOTT. You would commission them, put them on active duty as medical students and continue them through their training and then require a period of active duty service afterward.

Mr. ROGERS. Have any proposals been made like that, by the Department?

Dr. ENDICOTT. I just made the proposal to the Department a couple of weeks ago.

Mr. ROGERS. What about the Commissioner of Education's Office, what is being done there on allied health, anything or is it all left to the health?

Mr. BAYER. Primarily it is left to the health, but our programs are largely of general support; in other words, to post-secondary students. And in that line we are not directing the students into particular areas, but providing them funds that they can use if they choose to go into those areas.

I think that is, in essence, our position on this.

Dr. ZAPP. I would like to give the Office of Education a little more credit, something I wanted to interject a few moments ago, Mr. Rogers.

I do feel on a national basis if we look at the total production of our health occupation personnel across the country, that we get a

tremendous assist on producing actual numbers from the Office of Education as we see it here federally and on the State and local levels. This is where the numbers really come from.

Our responsibility is something a little different as far as being able to direct, guide, stimulate. The Office of Education did support a conference this year in New Orleans on health occupations, the first one held in ten years, with State and regional planners and coordinators coming in to encourage them to set up programs within their State.

It is true the Office of Education gives their money to the States and they set up their own plans on how it is used. But I think the conference that they held in New Orleans with State representatives trying to encourage them to incorporate more health occupations into their State plan was something I would like to give you the Office of Education a little more credit for. I think it was helpful.

MR. ROGERS. I would like to have a rundown on this and what is being done. What conferences are we initiating to encourage greater training in this area?

DR. ZAPP. As far as conferences, I would say there are so many organizations in the allied and other health occupations, I think probably the biggest contribution we have been able to make is by constantly going to and spending time with these professional groups including the allied health occupation groups.

We spend a lot of time with them. I think we have to give them what I would call some real moral stimulation besides the financial support.

MR. ROGERS. I don't think that the Congress has understood the importance of this field and the appropriations indicate that and that is why the department has to put forth greater emphasis to impress the Congress. They have no conception, I think, of the importance, and this committee is going to try to impress those who write appropriations bills.

They have no conception yet of the extent of this problem. We have to have some real push to get it done.

For instance, I don't see any point in putting this thing in for 1 year. You can't get a college or a junior college to come in where you have only a 1-year program.

Now you can reorganize this thing and come in along with everything else next year and there is no reason why we can't go ahead and change whatever you want. But they ought to be given some assurances that we think this is an important field just as we did in the schools of public health.

They said we can't run a program only having it 1 year, and I think there is some validity to this. Then you can come in and this committee is going to want to do everything we can to help and I would hope the department would go back and review its position on this and let us have a letter to see about an extension of 3 years and then come in with your program, whatever new program you may have next year.

This committee certainly will give a sympathetic hearing and encouragement. We want something done in this area, but I think we need a base to at least move from and not say we are going to cut it off and with the way things have been going lately, somebody may

say, "Well, you may never get it started again." I think this would be cause for some concern.

Now let me ask you what are you going to do? You say the administration has submitted a bill which would extend the allied health professions program through fiscal year 1971 and permit the initiation of vital new efforts in the coming year. What are the "vital new efforts" going to be?

Dr. ZAPP. As we see it, the most significant one, is the separation of the formula and the special improvement grants, so that we are able to get beyond the formula and be able to get more targeted money into programs where we feel we can get more payoff.

I think this is probably the most significant thing. We look at the total amount of Federal dollars involved and I think we are seriously going to have to substantiate to ourselves and evaluate the use of the formula in its relationship to the special project or improvement grants and exactly how we are going to get the most from our Federal dollar, which is our concern.

We felt that if we have not been able to have sufficient funds to go above our obligation in the formula field, we had to develop a mechanism that would allow us to get something done in allied health fields through something besides the formula. I was active in local community college movements. One or two new community colleges are opening up in the country every week and this has been going on for a number of years.

The community colleges potentially can all become eligible. What we can give them on a formula basis would become less and less, I would think, for each program. We felt it imperative to have another funding mechanism, another way we wanted to find a better use for our dollar in the allied health field besides just a continuation of the straight granting formula grant support.

Mr. ROGERS. I think the committee has no objection to that, to changing to use any techniques that we can. But I think that what we really have to do is to start emphasizing this program and the necessity for it and to begin to ask for funding up at a level that really is going to make an impact. Even this bill I introduced doesn't have enough impact.

We have to really move on this. I don't see any effort in doing that. I would hope this would change.

Now also it looks to me like over the life of this program we have attacked this problem by producing maybe 2,000, planning for 2,000, which doesn't even make a dent in it.

Mr. SKUBITZ. Will the gentleman yield?

Mr. ROGERS. Surely.

Mr. SKUBITZ. I would like to get into the amount of money that this committee has authorized, how much money the Department has requested and how much has been appropriated. I would like to find out whether you are to blame or whether the administration is to blame.

Now, for example, in the field of construction, I believe in fiscal 1967, 1968, 1969, and 1970 the totals are \$35.5 million, is this correct?

Mr. HATCH. Yes, sir.

Mr. SKUBITZ. How much did you request in 1967 of the executive branch and how much was in the budget?

Mr. HATCH. In 1967 the authorization was \$3 million, the appropriation was zero, primarily I think in that first year because the law was enacted so late in the year that it would have been difficult to get the program off the ground.

In 1968 the authorization was \$9 million, the appropriation was \$3 million.

Mr. SKUBITZ. How much did you request that year and how much did the budget ask us to appropriate?

Mr. HATCH. The appropriation request and the recommendation of the President's budget were both the same; \$3 million was asked for in the President's budget and \$3 million was appropriated.

Mr. SKUBITZ. In other words, then, we met our responsibility, we gave you just what you asked for. You may have asked for \$9 million and the budget allowed \$3 million, is this correct or not?

Mr. ROGERS. What was the departmental request?

Mr. HATCH. I don't have that figure with me, but I could furnish it for the record.

Mr. SKUBITZ. Can you furnish that?

(The following information was received for the record:)

DEPARTMENT'S BUDGET REQUEST FOR CONSTRUCTION—FISCAL YEAR 1968

The Department request to the Bureau of the Budget for construction of allied health educational facilities for 1968 was \$9,000,000.

Mr. SKUBITZ. Now let's go to the next year, 1969.

Mr. HATCH. The appropriation authorization for construction in 1969 was \$13.5 million and the appropriation was \$1.8 million.

Mr. SKUBITZ. Now how much did your Department request?

Mr. HATCH. I believe the President's budget request and the appropriation were the same.

Mr. SKUBITZ. That isn't my question. Could you give me what you requested?

Mr. HATCH. We will supply that for the record.

(The following information was received for the record:)

DEPARTMENT'S BUDGET REQUEST FOR CONSTRUCTION—FISCAL YEAR 1969

The Department request to the Bureau of the Budget for construction of allied health educational facilities in fiscal year 1969 was \$6 million.

Mr. SKUBITZ. I am trying to figure out whether the Congress is at fault of whether the fault for inadequate funds rests upon someone else's shoulders. What about 1970?

Mr. HATCH. The authorization was \$10 million. There were zero funds requested in the President's budget for construction 1970.

Mr. SKUBITZ. In other words, we allowed \$10 million, but the President has not requested anything?

Mr. HATCH. That is correct.

Mr. SKUBITZ. You can't expect us to do much under those circumstances unless you fellows can develop a case for us.

Dr. ZAPP. This was not an isolated construction appropriation limitation for allied health. It was part of an overall administration concern about inflation.

Mr. SKUBITZ. I want you to insert in the record what your agency asked for each year and what the administration requested.

(The following information was received for the record:)

## ALLIED HEALTH PROFESSIONS TRAINING GRANTS PROGRAMS APPROPRIATION HISTORY FISCAL YEAR 1967-70

	1967	1968	1969	1970
<b>Construction Grants:</b>				
Authorization.....	\$3,000,000	\$9,000,000	\$13,500,000	\$10,000,000
Request to Department.....	3,000,000	9,000,000	6,000,000	3,000,000
Request to Bureau of Budget.....	3,000,000	9,000,000	6,000,000	3,000,000
Request to Congress.....		3,000,000	1,800,000	
Appropriation.....		<sup>1</sup> 3,000,000	1,800,000	
<b>Educational improvement grants:</b>				
Authorization.....	9,000,000	13,000,000	17,000,000	20,000,000
Request to Department.....	9,000,000	13,000,000	17,000,000	12,862,000
Request to Bureau of Budget.....	9,000,000	13,000,000	17,000,000	12,000,000
Request to Congress.....	9,000,000	9,750,000	17,000,000	9,750,000
Appropriation.....	3,285,000	9,750,000	9,750,000	9,750,000
<b>Advanced training grants:</b>				
Authorization.....	1,500,000	2,500,000	3,500,000	5,000,000
Request to Department.....	1,500,000	2,500,000	3,500,000	2,756,000
Request to Bureau of Budget.....	1,500,000	2,500,000	3,500,000	2,500,000
Request to Congress.....	1,500,000	1,500,000	2,500,000	1,550,000
Appropriation.....	250,000	<sup>2</sup> 1,500,000	1,550,000	1,550,000
<b>Development of new methods grants:</b>				
Authorization.....	750,000	2,250,000	3,000,000	4,500,000
Request to Department.....	750,000	2,250,000	2,100,000	3,675,000
Request to Bureau of Budget.....	750,000	2,250,000	2,100,000	2,500,000
Request to Congress.....	750,000	1,000,000	2,100,000	1,238,000
Appropriation.....	200,000	<sup>3</sup> 1,000,000	1,225,000	<sup>4</sup> 1,837,000

<sup>1</sup> \$1,000,000 was placed in reserve and carried over to 1969. This reduced the money available for construction grants in fiscal year 1968 to \$2,000,000 and increased the amount available in fiscal year 1969 to \$2,800,000.

<sup>2</sup> Reserves necessitated by the cost reduction program reduced the funds available for obligation to \$1,204,000.

<sup>3</sup> Reserves necessitated by the cost reduction program reduced the funds available for obligation to \$800,000.

<sup>4</sup> Reserves necessitated by the cost reduction program reduced the funds available for obligation to \$1,238,000.

Mr. SKUBITZ. Now take the improvement grants. The total was \$59 million. As I look at this thing here, actually we authorized \$35.5 million for construction and there was \$4.8 million that was actually appropriated and that is all the budget asked for.

Mr. HATCH. That's right.

Mr. SKUBITZ. That totals \$59 million for improvement grants for the fiscal years 1967, 1968, 1969 and 1970. Now what was the authorization for each of those years, how much did the budget ask for and how much did we allow you?

Mr. HATCH. The authorization in 1967 for educational improvement grants was \$9 million, \$3,285,000 was appropriated.

Mr. SKUBITZ. How much was requested?

Mr. HATCH. The 1967 appropriation is rather complicated because it was a supplemental appropriation.

Mr. SKUBITZ. Then let's forget 1967.

Mr. HATCH. In 1968 the authorization for improvement grants was \$13 million, the appropriation was \$9,750,000, and if my memory serves me correctly, that was the President's budget request.

Mr. SKUBITZ. Let's go to the next year.

Mr. HATCH. I may have to correct that in the record. As I recall, that was the situation.

In 1969 the authorization was \$17 million, the President's budget—if I remember correctly—was \$9,750,000—but I would like to check that—and the appropriation was \$9,750,000.

(The following information was received for the record:)

The correct information is as follows:

Appropriation authorization.....	\$17,000,000
President's budget.....	17,000,000
Appropriations.....	9,750,000

Mr. SKUBITZ. What was it for 1970?

Mr. HATCH. In 1970 the authorization was \$20 million, the President's budget was \$9,750,000 and the appropriation was \$9,750,000.

Mr. SKUBITZ. Now let's go to the trainee program.

Mr. HATCH. Shall I start with 1968?

Mr. SKUBITZ. Again here we have what, about \$31 or \$32 million actually appropriated and \$59 million authorized, is that right?

Mr. HATCH. Yes. On the educational improvement grants, \$59 million authorized, \$32.5 million appropriated for the 4-year period.

Mr. SKUBITZ. Now go to the advanced traineeship program.

Mr. HATCH. Shall I start with 1968?

Mr. SKUBITZ. Yes.

Mr. HATCH. The authorization was \$2.5 million, the appropriation was \$1.5 million.

Mr. SKUBITZ. The budget?

Mr. HATCH. The budget was the same. For 1969 the authorization was \$3.5 million, the appropriation was \$1.55 million, and if I recall correctly that was the the President's request. I may have to correct that for the record.

(The following information was received for the record:)

The correct information is as follows:

Appropriation authorization	\$3,500,000
President's budget	2,500,000
Appropriation	1,550,000

Mr. SKUBITZ. You got less than half then, but the Department itself, the Budget Bureau cut it to more than a half and Congress allowed this amount.

Go to the next year, 1970.

Mr. HATCH. The authorization for advanced traineeships was \$5 million, the President's budget and the appropriation were \$1.55 million.

Mr. SKUBITZ. That is a little better than a third. What about the funds for the new methods program.

Mr. HATCH. The 1968 authorization was \$2.25 million, the appropriation was \$1 million, and I believe that was the President's budget.

The authorization for new methods was \$3 million in 1969, the appropriation and I believe the President's budget request were both \$1,225,000. I may have to correct that for the record.

(The following information was received for the record:)

The correct information is as follows:

Appropriation authorization	\$3,000,000
President's budget	2,100,000
Appropriation	1,225,000

Mr. SKUBITZ. For 1970.

Mr. HATCH. In 1970 the authorization was \$4.5 million, and the amount appropriated was \$837,000; the amount requested was \$1,225,000.

Mr. SKUBITZ. We gave you more that year than the budget?

Mr. HATCH. Yes, sir.

Mr. SKUBITZ. It appears that the Congress has allowed most of the money that has been requested by the Bureau of the Budget for these programs so we have a right to ask what have you done? It seems to

me that perhaps the reason for the breakdown lies in your inability to sell your program to the Bureau of the Budget.

You have friends here and I think perhaps one of your strongest supporters is Mr. Rogers. Unless you provide us with more ammunition, I don't see how we can ask Congress to appropriate funds.

Mr. ROGERS. I think the gentleman makes an excellent point and that is what was developed in our questioning today. There just has not been the emphasis put on this field that there should be. A lot of it is up to you. We want to try and cooperate and help in every way, but I hope you will take that message back to the Secretary.

Dr. ZAPP. We will, I can assure you.

Mr. ROGERS. We are going to get so far behind that we are going to have a real disaster in the health field unless something is done.

Mr. SKUBITZ. May I add one more point. I feel this way. Here is a program in which this committee is vitally interested. Unless you demonstrate more interest and do a better selling job to the Bureau of the Budget, funds will not be forthcoming.

Personally, I would sooner give you more money and do a job or take it all away from you and forget the program and try to get it in some other area. I get a little weary of more conferences and more studies and no action.

Mr. ROGERS. Don't you think that probably the greatest area of manpower that would quickly be brought into this allied health field comes from the armed services?

Dr. ENDICOTT. No, sir; I don't think so.

Mr. ROGERS. They are discharging 30,000 to 35,000 per year who have had experience in the health field.

Dr. ENDICOTT. I think with an appropriate recruiting program we could do much more than that in the civilian sector.

Mr. ROGERS. What should we do? And why aren't we? Is it money alone or is it the fact that we have not drawn up the programs to do it?

Mr. ZAPP. I think it is a number of things. I think what we are starting in the military program that we mentioned is one factor. Another is, I think, we have to work with the professions because we are talking about the use of a lot of new occupations and people performing new functions, which is one of the big payoff things in providing more patient care.

I think that we again have to use all resources. I think we have to put some of this on the professions and get them to work with us and in the recruitment efforts and in the full utilization of people in whatever capacity they can perform on a patient as long as the patient is guaranteed that he will get quality care and not get so hung up on so many of the traditions that have come into the health occupations.

Mr. ROGERS. How many in your health professions education program, how many family physicians are you finding, would you say?

Dr. ENDICOTT. Well, sir, the nature of the legislation is such that we support their training only up to the time they receive the M.D. degree, and as to the preparation, the internship, and the other advanced training, we have no mechanism for supporting that or really no device with which to control it.

What we have done is to encourage and support the establishment of family practice developments in the medical schools, so that at

least the students are exposed to this during their medical school days and hopefully a number of them are recruited into it. But we do not have what I consider to be an effective leverage.

Mr. ROGERS. Shouldn't we have?

Dr. ENDICOTT. Probably should, probably we should.

Mr. ROGERS. Could you present some plan, a change in legislation, if it is necessary, to begin to do this? I think we have just waited for things to happen. I think we need to give some direction where we know definite shortages exist and I think it will have to come from you to get it coordinated nationwide.

I would hope you would do that and let this committee know what you think is the proper approach for doing that.

Would you answer these questions for the record? What effort has HEW made to coordinate their allied health recruiting facilities with MEDIHC, the armed services program for bridging the transition of the military man into a health-oriented civilian job after release?

What is the approximate number of medical personnel released to civilian life a year who permanently remain in the allied health field?

Are medical personnel who have been released from the military services finding it difficult to be licensed or certified by States to enter into allied health services professions?

How many medical personnel cannot be certified and licensed based upon their military training and experience each year?

What is being done to establish special allied health training programs for ex-military personnel so they can more readily meet State certification and licensing standards?

(The following information was received for the record:)

#### MEDICAL MANPOWER IN ARMED SERVICES—OPERATION MEDIHC

1. Enlisted medical services personnel (12/31/68) in the armed services—109,027; 111,036—June 30, 1969.
2. Medical services personnel released each year—30,000 to 35,000.
3. Current number of enlisted medical personnel entering directly into health jobs after release from the armed services, per year—6500; 10,000 according to Nathan Assoc. Study.
4. Current number of enlisted medical personnel entering into combination work/education programs per year—7,700.
5. Allied medical services manpower need—over 100,000.

#### QUESTIONS

What efforts has HEW made to coordinate their allied health recruiting activities with MEDIHC, the armed service's program for bridging the transition of the military man into a health oriented civilian job after release?

What is the approximate number of medical personnel released to civilian life each year who *permanently remain* in the Allied health field?

Are medical personnel who have been released from the military services finding it difficult to be licensed or certified by states to enter into allied health services' professions?

How many medical personnel cannot be certified or licensed based upon their military training and experience each year?

What is being done to establish special allied health service training programs for ex-military personnel, so that they can more readily meet state certification and licensing standards?

#### OPERATION MEDIHC

OPERATION MEDIHC is a joint DHEW-DOD program. A focal point for coordinating all DHEW efforts in this area was established in the Office of Health Manpower, OASHSA in December, 1969. The DHEW MEDIHC Coordinator works in concert with the DOD MEDIHC Coordinator and maintains

liaison with the Veterans Administration, the Department of Labor and extra-governmental organizations such as the American Hospital Association, the American Medical Association, the National Committee for Careers in Medical Technology, etc., as well as with the DHEW Regional Offices. The program description, marked ATTACHMENT 1 delineates clearly the role of each Department and the method of implementation.

The work of counselling, referral, and placement is done at the State level. As of July 1, 32 States, as a result of DHEW initiatives, will have an operating MEDIHC Agency. However, it is equally important to understand that as of that date, only 9 States will have been operational for as long as 3 months. Although preliminary reports from these States on their success in placement is highly encouraging, it is too early to make predictions as to whether or not the system known as OPERATION MEDIHC will in fact overcome most of the perceived barriers to medically trained service personnel entering into civilian health careers. One of the fundamental purposes of the pilot effort being conducted by the State of Texas is to determine accurately the nature and extent of these barriers.

The latest available data (Nathan Associates Study done for the Department of Labor) show that one-third of the medically-trained separatees now transfer into civilian health jobs. At an annual discharge rate of 30,000, this translates into 10,000 per year. The same data show that three years after discharge, two-fifths of the career enlisted men with medical skills were employed in civilian health, while only one-fifth of the noncareer men were so employed.

These same studies also show that another one-third said they planned to transfer but did not. The reasons they gave for non-transference were: low pay; job responsibilities that underutilized their training and skills; and problems of certification and accreditation. The numbers lost to this combination of stated reasons is between 8,600-11,000 men per year, depending on the annual number of separations. OPERATION MEDIHC is designed to see if this wastage can be avoided.

At this point in time, there is no reason to believe that the existing education/training programs for health occupations education cannot absorb the returning servicemen (an estimated 14,000 annually) who say they wish further education for a career in health. Both the Office of Education and the Bureau of Health Professions Education and Manpower Training, Public Health Service, are working with the educational institutions to facilitate such educational placement.

The undertaking of special efforts to develop programs for ex-military personnel so that they can more readily meet State certification and licensure standards is a matter which requires approaches on several fronts. It should be pointed out, that many of the problems which face ex-military personnel in this regard are similar to those faced by other individuals who have developed competence either through on-the-job experience or in other than formerly recognized training programs.

First is the development of means by which recognition can be given for specific training received in the military as prerequisite to taking registration or certification examinations or direct entry into practice. Some military training in specific specialties is amenable to this approach. For example, the newly developing program for medical laboratory technicians makes provision whereby some military personnel who have received laboratory training while in the service will be eligible to take the registry examination. Development and application of proficiency examinations, however, is necessary where direct relatedness is not possible.

A second effort which is required is the development of test mechanisms to measure educational equivalency on which to base consideration for advanced placement in academic programs, and promoting the recognition of such measures by educational institutions.

Some equivalency examinations in general academic subjects are already available and are utilized by some 400 institutions around the country. Development of equivalency examinations for specialized allied health curriculum areas, however, is in the beginning stages. The Division of Allied Health Manpower is currently examining the possibility for development of equivalency examinations for four subject matter fields in the medical laboratory field.

Several of the programs for the development of new types of health personnel being supported by the Department are concentrating on the recruitment of ex-military corpsmen because of their unique background. These include the Orthopedic Assistant program at San Francisco City College, the Child Health

(Pediatrics) Assistant program at the University of Colorado; and "MEDEX" at the University of Washington.

Important modifications proposed in the Administration Bill (HR 16-808) would make provision for the undertaking of special projects to accelerate the various efforts required to move faster in this area by making it possible, through grants or contracts, to support efforts to develop, demonstrate or evaluate techniques for recognition (including equivalency and proficiency mechanisms) of previously required training or experience. Both HR 16-808 and HR 13-100 would authorize support of projects to develop or establish special programs adapted to reach returning veterans with experience in a health field.

## ATTACHMENT I

## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

April 1970

OPERATION MEDIHC

## PURPOSE.

MEDIHC, which stands for Military Experience Directed Into Health Careers, is designed to assist the serviceman or woman trained in medical skills while in the service in finding a career in the health field upon return to civilian life. Realizing that the 30-35 thousand medically trained and experienced personnel who leave the Armed Forces each year constitutes a valuable and relatively untapped national resource, MEDIHC is designed to encourage them to investigate the opportunities available in civilian health careers prior to their departure from the service.

## ORGANIZATION.

MEDIHC is a cooperative effort by the Department of Health, Education, and Welfare and the Department of Defense.

The Department of Defense through its TRANSITION Program, which is operational at more than 200 installations throughout the United States, and through educational and personnel channels overseas, identifies, contacts and counsels medically trained personnel 90 or more days prior to their release from military service. Those not interested in continuing a military career are counseled and encouraged to fill out a brief Qualification/Referral Card which outlines their previous civilian/military training and experiences and area(s) of interest for employment, continued education or both in the civilian health sector. These cards are forwarded directly to a Regional or State MEDIHC Coordinator corresponding to the place(s) where he intends to reside. Assisted by the MEDIHC Guide, a compilation outlining military medical training parameters and job responsibilities, the Coordinator assesses the individual's qualifications and interests and assists him in finding placement in an appropriate civilian health occupation or health education program.

The Department of Health, Education, and Welfare through its Regional Offices, has undertaken the task of development and designation of a single point of contact within each state to serve as a clearing house for MEDIHC applicants. An agency must have the capability of meeting the following HEW requirements before being selected as the state MEDIHC Coordinator:

1. Understand the manpower needs of all parts of the total health system.
2. Have ready access to both educational and health institutions within the State.
3. Have or can develop the capability for keeping abreast of health employment and education opportunities.
4. Will provide for educational and/or employment counseling services to back up the initial interest identified by the military counselors.
5. Will make an initial response to every man within two weeks after his card is received.
6. Will provide periodic reports on results of educational and/or employment placement efforts.
7. Can fund the program from existing resources.
8. Can coordinate interagency activities (Federal, State, and local) concerned with "OPERATION MEDIHC" in that State.

Such capabilities are considered essential to successful accomplishment of the MEDIHC mission.

#### TARGET POPULATION.

The program is aimed primarily at those individuals with training and experience in the medical/health field. These personnel represent a national investment with the capability to help meet our growing health manpower needs. A concerted

effort is therefore necessary to make them aware of the MEDIHC opportunity. All such individuals from the first term enlistee to the retiree are eligible and encouraged to participate. It is realized that some members of this target population are trained to perform medical duties because of service requirements rather than individual interest in such pursuits as a lifelong career. There are others serving in unrelated military fields who might welcome the opportunity to pursue a civilian health career upon discharge. The program does not exclude or discourage such individuals from participation in MEDIHC. In short, although MEDIHC is geared towards the service medically trained individual, everyone leaving the service and interested in pursuing a civilian health career is welcome to participate.

#### SCOPE.

The MEDIHC Program consists of three basic components: identification, counseling, and placement/referral.

a. Identification. With the assistance of computers, military installations obtain rosters of medically trained personnel 3-6 months prior to separation. Using this information, these individuals are contacted by their TRANSITION office concerning MEDIHC participation. Where no TRANSITION office is available, contact is established by mail, or other means.

b. Counseling. Initial counseling is accomplished by the TRANSITION counselor to determine if the individual's qualifications, aptitudes and interests are suited to a health career and to apprise him of the opportunities and challenges in the more than 200 civilian health fields.

At installations with a high concentration of medically trained servicemen and women, follow up-in depth counseling is provided by the state agency serving as MEDIHC Coordinator. Less intensive information assistance is supplied via mail to other MEDIHC applicants in the state.

The outcome desired is to have interested and qualified individuals skillfully assisted in their health career choice and placement.

c. Placement. The responsibility for proper placement rests with the MEDIHC Coordinator of the state in which the applicant wishes to reside. Assisted by the initial TRANSITION counseling and the subsequent in-depth counseling by the MEDIHC staff of the state where the individual is stationed, the MEDIHC applicant's Qualification/Referral Card should be an accurate reflection of the man's abilities and career desires. Using the Q/R card, the state MEDIHC Coordinator matches the individual with health opportunities/requirements within the state. The end result should be placement in a proper job or education program.

It is the role of the State MEDIHC Coordinator to bring the MEDIHC applicant together with appropriate employers, educational institutions or both.

#### SUMMARY.

The MEDIHC Program is designed to help alleviate the growing scarcity of qualified health personnel while at the same time providing a meaningful career continuation for medical personnel trained while in military service.

To take maximum advantage of its potential, both military and civilian institutions will have to examine their requirements to see where greater flexibility is possible. Examples in this area would be accreditation and licensing requirements.

As the program evolves the Veterans Administration, Department of Labor, and other interested agencies and institutions will participate in MEDIHC and increase their efforts to interest veterans in health careers.

The medically trained serviceman and woman is a prime health manpower resource. The skills taught and practiced in the military cover the entire spectrum of medical specialties, including the dental field. The retiree brings with him years of experience in health management in a wealth of different circumstances and environments. Men and women separating with less service generally are mature and have a positive attitude towards doing their best in their chosen health career.

MEDIHC hopes to serve the nation by making the transition from a military to civilian health career as smooth and meaningful as possible for these capable individuals.

#### FURTHER INFORMATION

Further information concerning the military aspects of MEDIHC may be obtained by writing to:

DOD MEDIHC Coordinator  
OASD(M&RA), Room 3D252  
The Pentagon  
Washington, D.C. 20301

Additional information concerning the specifics of the civilian side of MEDIHC can be obtained from the appropriate Regional HEW MEDIHC Coordinator shown on the attached list, or for national programs from:

DHEW MEDIHC Coordinator  
OASHSA(HM), Room 5062, HEW North Bldg.  
330 Independence Avenue, S.W.  
Washington, D.C. 20201

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
REGIONAL MEDICAL COORDINATORS

Region I	- Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	Daniel DeMatties/PHS John F. Kennedy Federal Building Government Center Boston, Massachusetts 02203 A.C. 617--223-6817
Region II	- Delaware, New Jersey, New York, Pennsylvania	Rees Jones/PHS 26 Federal Plaza, Room 815 New York, New York 10007 A.C. 212--264-2542
Region III	- District of Columbia, Kentucky, Maryland, North Carolina, Virginia, West Virginia, Puerto Rico	Dorothy Carroll/PHS 220 - 7th Street, N. E. Charlottesville, Virginia 22901 A.C. 703--296-1270
Region IV	- Alabama, Florida, Georgia, Mississippi, South Carolina, Tennessee	Eddie Sessions/PHS 50 Seventh Street, N. E. Room 404 Atlanta, Georgia 30323 A.C. 404--526-5673
Region V	- Illinois, Indiana, Michigan, Ohio, Wisconsin	James Lore, Ph.D./PHS Room 712 New Post Office Building 433 West Van Buren Street Chicago, Illinois 60607 A.C. 312-353-5236
Region VI	- Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	Arthur Kramish, Ph.D./PHS Federal Office Building 601 East 12th Street Kansas City, Missouri 64106 A.C. 816--374-5191
Region VII	- Arkansas, Louisiana, New Mexico, Oklahoma, Texas	M. Estelle Hunt/PHS 1114 Commerce Street Dallas, Texas 75202 A.C. 214--749-2622
Region VIII	- Colorado, Idaho, Montana, Utah, Wyoming	J. Joseph Stevens, Ed.D./PHS 9017 Federal Office Building 19th and Stout Street Denver, Colorado 80202 A.C. 303--297-3176
Region IX	- Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington	Ruth Sumner, Ph.D./PHS Federal Office Building 50 Fulton Street San Francisco, California 94102 A.C. 415--556-5812

Mr. ROGERS. Now let me ask you this and I am going to conclude very shortly. What have you done to get the Armed Services to train these people where they will be trained sufficiently to go out into the field?

Dr. ZAPP. I can only speak for the experience of Dr. Egeberg recently in a number of discussions that he has had with the people in the Department of Defense relative to what are, in many cases, minor adjustments in their programs which could be helpful.

Mr. ROGERS. If they made major adjustments, it could serve the civilian population when they come out if they are trained to a certain degree, which could increase their capacity in the Armed Services and still may not affect their time element.

Dr. ZAPP. If I might add something, Mr. Rogers, what I have done with some outside groups, I think, will have even more payoff and many of them have become entrenched with the fact that these programs have to meet the traditional standards. It has to be 2 years of class work.

We are encouraging them to go in there and take a look at those programs and realize it has not only been 9 or 12 months of training, but 2 years or more of extremely valuable experience after that, and that this individual should have an equivalency so he can be certified or she can be certified when they come out. Some of these people come and may be even more competent than the ones who have gone through a strictly academic program for the traditional 2 years. There are so many of those programs that the professions could help immediately, because these people have the training and the ability. It has not been the Government, it has been the outside health institutions who have really said no.

Mr. ROGERS. Why don't you let us know this? We had trouble with accreditation with junior colleges, the nurses didn't even want to bring them in. They have great problems there and I still don't think it has been solved, but we gave the Secretary, through the Commissioner, the right to accredit an organization and I think they have turned it over to regional authorities some, but at least they have made progress.

I think we ought to have your suggestions and ought to get them quickly. Also, I don't know why the Public Health Service can't be used as a training course to develop new personnel categories and we will put in a law saying that they can practice anywhere if they meet these standards in the public health course.

We may have to do something like that. We have to get to the problem.

Now another thing I hope you will be giving some thought to in the Department and I hope the new Secretary will give thought to this administering the health programs of medicare and medicaid through health people and not Social Security. I think the sooner this is brought about, you will really have some money to operate with if you cooperate and combine all of these programs with the money spent for medicare and medicaid.

They put in \$2 billion more in there this year and what effect is it having on our delivery and these innovative things we ought to be doing? They said to reorganize over there, as this committee has suggested before, and begin to get all of the health functions and the health decisions under the health authorities.

I hope this can be done. It is a difficult problem and we don't mean to center it on you. We know you are within the limitations you operate under and try to do the best you can. But I do think more emphasis needs to be given.

We will try to help, this committee will, and we really want something done about allied health personnel and we would like your suggestions immediately so we can incorporate them in the law if we have to.

Thank you very much.

Dr. ZAPP. Thank you very much.

MR. ROGERS. The committee stands adjourned. The record will be open 5 days for those who might want to put in additional remarks and for the answers we have asked for.

(The following letters and statements were received for the record :)

AMERICAN MEDICAL ASSOCIATION,  
Chicago, Ill., June 17, 1970.

HON. JOHN JARMAN,  
*Chairman, Subcommittee on Public Health and Welfare,  
Committee on Interstate and Foreign Commerce,  
U.S. House of Representatives, Washington, D.C.*

DEAR CONGRESSMAN JARMAN: On behalf of the American Medical Association, I would like to take this opportunity to submit Medicine's support of H.R. 13100 now pending before your Committee. It is our understanding that this bill would extend, for three years, the program of grants for the construction of new facilities for training centers for the allied health professions and basic improvement grants for such training centers. Also provided for are special improvement grants to allied health professions training centers, grants for traineeships, and grants to public or nonprofit organizations for projects to develop, demonstrate, and evaluate curricula and methods for training health technologists.

From every section of this country comes the call for more physicians and more health care. If we are to respond to this call and make high quality of care available to every American, it is essential that the highest priority be given to supporting and expanding those programs which will produce the trained physicians and allied health personnel so much in short supply today. While heroic efforts are being presently made to increase the supply of physicians, an equal effort must be made to supply the Nation with an increased number of trained allied health professionals.

The American Medical Association has long supported the training of allied health personnel and has implemented this support in its communications with the Congress, the medical profession, and the public. In February 1969, the AMA's Council on Medical Education published a statement, "Federal Support for Education for Allied Health Personnel," which sets out the Association's recommendations concerning the training of the allied health professions. A copy of this statement is attached for the information of the Committee.

We believe that the extension of the Allied Health Professions Training Act is an essential ingredient in the National effort of bringing the highest possible level of health care to all Americans. We would urge that your Committee and the Congress support this important program.

We appreciate the opportunity of submitting our views on this legislation and request that our letter be included in the record of your hearings.

Sincerely,

ERNEST B. HOWARD, M.D.,  
*Executive Vice President.*

STATEMENT ON FEDERAL SUPPORT FOR EDUCATION FOR ALLIED HEALTH PERSONNEL  
(American Medical Association Council on Medical Education—February 1969)

INTRODUCTION

The AMA recognizes that it has great responsibility and that it must be actively aware of, and related to, all the allied fields for one extremely important reason: that all of the allied health workers find their focus, indeed their reason for existence, in the care of the patient; and where the care of the patient is concerned, the physician ultimately has legal, moral and ethical responsibility. As the major professional organization for physicians, the American Medical Association feels this responsibility keenly and believes that it must increasingly be involved in coordination, guidance and direction of the multiple, increasingly fragmented components of the health care team, through which the care of the patient is provided.

More and better education is required to develop the necessary proficiency for the increasingly complex responsibilities of all members of the health care team. In addition to reorganizing assignment of responsibilities and other improvements to increase the productivity of all health workers, large numbers of allied health personnel are needed to help meet the growing demands for health care services.

An encouraging beginning in federal financial support has been made in the \$9,750,000 awarded during fiscal year 1968 to 230 colleges and universities as allied health professions basic improvement grants awarded under the Allied Health Professions Personnel Training Act of 1966. However, much more needs to be done.

RECOMMENDATIONS

Major costs of allied medical education should not be borne by hospitals or other clinical facilities and result in increased charges to patients, but should be budgeted as a part of the cost of higher education. In addition to local and state financial support for the education of allied health personnel, it is necessary for the federal government to increase its contributions. Broadening the tax base is the most practical way to provide the substantial monies needed, and the geographic mobility of students and health workers makes the cost of allied health education a national as well as a state and local problem. However, State Boards—for Higher Education, for Junior College Education, and for Vocational and Technical Education—should become more involved in administering the programs of federal financial aid; among the advantages are an established system that has ready access to the State Legislatures, providing greater permanency to the educational program.

Greatly expanded federal support for education of allied health personnel is required, including substantial grants for:

1. *Facilities.* In addition to remodeling and expanding existing facilities, the construction of new allied health facilities for higher education is necessary. The construction of additional new teaching laboratories, and properly equipped classrooms and study centers is essential. A substantial proportion of the money needed for new construction must come from the federal government.

2. *Centers.* Special improvement grants should be made for centers of allied health education programs: schools and colleges consisting of several allied health study programs. Basic improvement grants could be supplemented by special grants for specific programs. Future members of the health team will work together, so they should learn together. The economies and other advances, and the fact that each educational program for individual allied health tags of multiple uses for expensive specialized resources, the benefits of core areas can enhance the others all substantiate the need for effective financial support to stimulate and strengthen institutions conducting several allied health professional programs.

3. *Educational Programs.* The rapid growth and development of educational programs for allied health personnel makes necessary basic improvement grants for the orderly and most effective organization of didactic and clinical instruction. Unique and difficult courses of study make special demands upon the administrators of educational programs, and essential clinical affiliations include strict requirements which must be met in developing curricula for allied health professions. Rather than limit funds only to specific fields, there is also a compelling need to allocate funds which can be used by the institution to expand and

improve other allied health programs and initiate new programs and studies. A project grant for allied health educational categories or programs could provide for university administrative determination of specific programs. The needs for innovation and core courses emphasize advantages for fiscal judgement by the administrators of the institution. Enrollment minimums could be waived on new programs by specifying a minimum enrollment to be reached within three to five years. For existing curricula, an average enrollment for the previous five years plus current increases would be a realistic measure for the size of a student group.

4. *Lower Division Traineeships.* One-year and two-year programs of study for allied health technicians require an expansion of the support they have been receiving at junior colleges and other colleges and universities. However, financial support for students in these programs should be budgeted separately, so this rapidly growing segment of allied health education does not exhaust the entire budget. Furthermore, the traineeships for such education should contribute substantially to the financial support of the clinical portions of the educational program.

5. *Upper Division Traineeships.* There is a major need for assistance to the many qualified undergraduate students who have serious financial problems in completing their education leading to a baccalaureate degree. High priority should be given to multiplying the totals of grants available for study leading to baccalaureate degrees in the allied health professions. In addition to helping to elevate standards of performance of allied health personnel, traineeships for undergraduates will support upward mobility in the allied medical professions. To assure that an appropriate portion of the monies made available for fellowships are, in fact, kept available for students working for baccalaureate degrees this should be budgeted separately from lower division traineeships.

6. *Graduate Fellowships.* The health professions tend to require either very few or very many years of formal higher education. This results in a dearth of health professionals who have taken graduate work and who have earned master's degrees. The shortage is seen as a lack of qualified college instructors, allied medical education research workers, and administrative heads for clinical educational programs. The leadtime required to prepare teachers makes all the more urgent the need to expand the number of graduate fellowships, and substantially increase the amounts of money available.

7. *Research.* Serious consideration should be given to the need for expanded research, development and experimentation in the training and utilization of allied health personnel. Among the areas in which research and development are needed are the following:

(a) Development of methods for identification and analysis of performed tasks which may serve as the basis for realignment of existing occupations or establishing new allied health occupations.

(b) Development of criteria by which educational equivalency credit or value can be assigned for on-the-job experience.

(c) Design and testing of teaching programs which utilize audio-visual aids, including television, computers, and programmed instruction in the allied health fields.

(d) Development of health occupations curricula adapted to the training of the economically disadvantaged, ex-military corpsmen, minority groups, technologically displaced persons, and others in new and emerging health specialties.

(e) Identification and description of areas for continuing education and retraining.

(f) Studies involving health care systems to determine most effective means of utilization of manpower.

(g) Experimentation with core courses and the most desirable mix between didactic and clinical training.

(h) Studies on the effects of increased vertical mobility on recruitment and turnover as well as the factors affecting geographic mobility of allied health manpower.

(i) Investigation of effects of certification, registration, and licensure on quality of service.

(j) Facilities design research.

8. *Regulations.* Federal legislation is a beginning: the Regulations and the appropriations are also of critical importance. In addition to the substantial increases in appropriations recommended above, there is need for judicious revision of the Regulations.

#### CONCLUSION

The American Medical Association strongly supports a rapid increase of federal financial support for allied medical education opportunities to help meet growing national needs for more and better health services.

#### STATEMENT OF THE AMERICAN DENTAL ASSOCIATION; THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS; THE AMERICAN DENTAL HYGIENISTS' ASSOCIATION; AND THE AMERICAN DENTAL ASSISTANTS ASSOCIATION

Mr. Chairman and Members of the Committee, This is the first year our organizations have presented their views jointly before a Congressional Committee. We do so today not only to conserve the time of the Committee but to indicate to you that we share an identical concern and commitment to the Allied Health Professions Training Amendments of 1970.

At the beginning, we wish to express our gratification that both of the bills before you are directed toward extension and improvement of the present law.

If we are to narrow significantly the present gap between need for dental care and ready accessibility of such care, then we must greatly increase the number of dentists and allied personnel who give that care. To do this requires intensified support, from all sources, of the training facilities needed to teach the necessary number of dentists, dental hygienists, dental assistants and dental laboratory technicians.

As this Committee well knows, the drive to produce more dentists is complicated by the time lag, as much as 12 years in duration, between the planning stage of a new dental school and the year it graduates its first class. A time lag of such duration does not occur with supportive personnel in the dental field. In addition, there is increasing understanding within dentistry of the fact that the hygienist and the assistant can and should perform additional functions. Concentration on programs within the purview of the Allied Health Professions Personnel Training Act, then, is both professionally and pragmatically desirable.

Certainly, as the hearings have made clear, the need is great. The following facts demonstrate this with respect to dentistry.

At the present time, there are some 18,000 full-time (or full-time equivalent) dental hygienists in practice. Since there are presently some 96,000 dentists engaged in chairside care, this gives a ratio of one hygienist for every five or six dentists. At a minimum, the ratio ought to be one hygienist for every two dentists.

Given the increase in number of chairside practitioners, this means that by 1980 we will need 56,000 hygienists.

It is estimated that some 8,000 of the hygienists currently in practice will still be pursuing a career in 1980. Thus, 48,000 new hygienists must be graduated in the present decade. The current graduation rate, however, will give us only 23,000. The net deficit, then, is 25,000.

The numerical shortage of trained dental assistants is even more severe. Presently, there are some 103,000 dental assistants in practice, giving a ratio of approximately 1.1 dental assistants for every dentist. It is agreed by those expert in the field that a minimally desirable ratio is two assistants for every dentist. By 1980, then, we will need some 220,000 dental assistants. It is expected that some 55,000 dental assistants in today's work-force will still be active in 1980; thus, we need to graduate 165,000 during the coming ten years. Current graduating classes will give us 28,000 of this number, leaving a deficit of 137,000.

Available figures for dental laboratory technicians indicate similar problems. We should today be graduating at least 700 technicians annually in order to meet the known needs we will be facing in 1980; in fact, we are graduating barely half that number.

The financing required in the very near future if we are to have any hope of meeting the stated goals is obviously considerable. Dental hygienists can serve as an example of this.

In order to reach the desired ratio of hygienists to dentists by 1980, we should be graduating some 2,500 more hygienists a year than we are presently. This is the equivalent of 63 new, two-year dental hygiene schools with 40 students in each class. One-time construction costs for 63 schools, excluding capital purchases, would range from \$37-\$42 million. Annual operating costs would be some \$200,000 per school or \$12.6 million as an annual total for all 63 schools.

What we are citing, of course, are total figures to which private sources, tuition payments and non-federal public sources will contribute. Nonetheless, we believe these illustrations indicate graphically the dimensions of the need to which the Health Professions Personnel Training Act must address itself.

The Administration, thusfar, has not indicated an understanding of the seriousness of the situation. Though the executive branch of the federal government has been most vocal about the need for redressing shortages in the auxiliary fields, its actions have lagged far behind its words, its appropriations have lagged far behind the present authorizations.

Appropriations for basic improvement grants, as an example, have been barely half the authorizations; those for construction have been little more than one-tenth of the authorizations.

As a result, in fiscal 1969, of the 102 accredited dental hygiene schools then in existence, 62 were eligible for basic improvement grants and received, on the average, \$18,200. Parallel figures for dental assisting are 20 of 100 schools with an average grant of \$13,750 and, for dental laboratory technology, 12 of 23 schools received some \$11,000 each. Such figures fall far short of what we believe the level of federal participation should be.

Despite this paucity of funding, the dental auxiliary fields have managed to show significant growth. (Statistics are shown in an appendix to this statement.) Considerable credit for this, we believe, should be given to the universities, medical centers, non-federal public authorities and private health organizations.

More realistic federal support is, however, essential if growth is to accelerate, much less continue. In addition to the contribution federal support can make directly, experience with the Health Professions Educational Assistance Act clearly demonstrates that the very presence of a realistic level of federal funds stimulates the states and private institutions to find ways to increase their participation.

It is, we believe, time for the executive branch of the federal government to align its actions more closely with its exhortations. Renewal and extension of the law you are considering is an appropriate place to begin.

As we have noted, both of the bills before you offer extension and improvement of this law. They do differ, however, in a number of important ways. Our organizations would like, if we may, to suggest some guidelines that the Committee may wish to consider when making its final choices as to the nature of the bill it will report.

The first guideline has to do with length of extension. Our organizations believe the law should be extended for three years, as provided in H.R. 13100; or for even a longer period such as five years. A one-year extension, we understand, is preferred by some on the grounds that it would bring this law into timing with the Health Manpower Act and thus permit an overall review and revision of all health field legislation at the same time. The motivation is understandable, but surely this possibility is not foreclosed by reason of a longer extension; there is ample precedent throughout federal legislative history for the revision of the law, where appropriate, prior to its expiration date.

On the more positive side, a three or five year extension gives forthright notice to all non-federal agencies involved that the federal government appreciates fully the necessity for this program and is committed to it on a long-term basis. Such notice is always welcome. It is especially important, we think, in this instance since the experience under the law thusfar may well have given rise to doubt in some minds as to the dependability of the federal intent.

A second guideline we would suggest is that the bill reported by the Committee should contain specific funding levels for the various programs authorized. It is this Committee that has the membership and staff expertise in the area. It is this Committee that holds hearings and receives testimony from outside experts. The legislation it takes to the floor should be as precise as possible not only to guide and inform the House as a whole but also the Appropriations Committee that must subsequently vote funds to implement the programs. Dollar authorizations serve this purpose and ought to be included. In addition, realistic dollar amounts again underscore the fact that Congress understands the dimensions and urgency of the problem.

The bills before you are similar in detaching basic improvement grant funds from other grant funds included in the law that are intended for specialized purposes. We agree with this and with the proposal that potential beneficiaries of special grants be broadened beyond just training centers. The bills differ, however, in that one would place all special project funds into a single section. This has the virtue of simplicity but also the failing of obscuring the distinct nature of, and vital need for, these varied activities. We would suggest that the Committee separate these special purposes by category as is done in H.R. 13100, thus helping to assure that each will receive the attention it deserves during the appropriations process.

We believe further that H.R. 13100 should be amended to require that special project support be limited to educational programs that are approved by recognized accrediting agencies.

Two of the bills recently considered by the Senate Labor and Public Welfare Committee propose beginning some new programs not now in the law, such as scholarship grants, capital contribution loans and a revolving loan fund. We urge the enactment of these programs. Their establishment will provide a steady, stable source of financial support enabling talented young people of modest means to pursue careers in these health auxiliary fields where their ability and energy is so badly needed.

The most unsatisfactory situation being presently experienced by professional health school students with respect to the Office of Education guaranteed loan fund makes us most dubious of suggestions that the students in the allied health field should also be forced to seek help solely from that source. There is an obvious, distinct, high priority need for financial help to students in this area. We do not believe that the availability of such help should be tied to the unavoidable fluctuations of the national money market.

As a last comment, our organizations should like to make special note of the traineeship provisions of the law. In many ways, continued and expanded support of this activity is the most critical aspect of the entire legislation. The production of more teachers and administrators is an essential key to a more generous supply of health care personnel.

Finally, before concluding our testimony, the American Dental Association and the American Association of Dental Schools would like briefly to comment on that section of S. 3586 that would amend the Health Professions Educational Assistance Act. The provision would authorize institutional operating grants for new schools not yet in operation.

We would agree that the question of funding support of new schools during their pre-operative phase needs sympathetic attention. We would, however, be concerned over any action that would tend to reduce the present level of operating grants, already too low, for existing, operative health professions schools. Since general revision of the Health Professions Educational Assistance Act will be the subject of legislative attention in the near future, we would suggest that unless a separate funding authority is provided, this provision be deferred until Congress considers the extension of the Health Professions Education Assistance Act.

## APPENDIX

## (I) INCREASE IN NUMBERS OF GRADUATES DURING PAST DECADE

	1960	1969
Dental hygienists.....	1,219	2,269
Dental assistants.....	658	2,704
Dental laboratory technicians.....	95	360

## (II) AVERAGE AMOUNTS RECEIVED UNDER BASIC INSTITUTIONAL GRANTS

	Fiscal 1967			Fiscal 1968			Fiscal 1969		
	Total schools	Number receiving grants	Average grant	Total schools	Number receiving grants	Average grant	Total schools	Number receiving grants	Average grant
Hygiene.....	81	51	\$9,300	101	53	\$22,260	102	62	\$18,200
Assistant.....	100	17	7,150	171	18	16,630	179	20	13,740
Laboratory technician.....	15	4	7,110	19	10	14,250	23	12	11,140

## (III) GRADUATION INCREASES NECESSARY TO MEET FUTURE NEED

[Present ratios: 100 dentists to every 17 hygienists and 101 assistants, desired ratios: 100 dentists to every 40 hygienists and 200 assistants]

(1) Hygienists:		
(a)	Hygienists needed by 1980.....	56,000
(b)	Current hygienists expected to be still active in 1980.....	8,000
(c)	Number of hygienists who must be graduated in next 10 years.....	48,000
(d)	Expectable graduates based on current rates.....	23,000
(e)	Deficit.....	25,000
(2) Assistants:		
(a)	Assistants needed by 1980.....	220,000
(b)	Current assistants expected to be still active in 1980.....	55,000
(c)	Number of assistants who must be graduated in next 10 years.....	165,000
(d)	Expectable graduates based on current rates.....	28,000
(e)	Deficit.....	137,000
(3) Technicians:		
(a)	Technicians needed by 1980.....	50,000
(b)	Current technicians expected to be still active in 1980.....	21,500
(c)	Number of technicians who must be graduated in next 10 years.....	28,500
(d)	Expectable graduates based on current rates.....	5,000
(e)	Deficit.....	23,500

STATEMENT OF DR. JACOB FISHMAN (M.D.), PRESIDENT, UNIVERSITY RESEARCH CORP.; DR. RUSSELL A. NIXON, COLUMBIA UNIVERSITY; AND DR. SHELDON STEINBERG, EXECUTIVE VICE PRESIDENT, UNIVERSITY RESEARCH CORP., WASHINGTON, D.C.

Extension of the Allied Health Professions Personnel Training Act in 1970 comes at an extraordinarily critical stage in the health services system. It is a time of change, a time of growth, a time of serious problems and needs, and a time of enormous opportunity. Congressional action in going beyond mere extension of the 1966 Act to add new content and magnitude to our national program of developing health manpower is of crucial importance.

## HEALTH MANPOWER DEMAND AND SUPPLY

In the 1970 *Manpower Report of the President* the current situation is described:

"The Demand for medical care has outstripped the Nation's health manpower resources throughout the 1960's. Shortages of physicians and nurses, the subject of wide public concern, have led to rapidly increased utilization of auxiliary health workers and thus to intensified labor shortages in the supporting health occupations. Personnel shortages are acute in virtually all segments of the "health services industry"—hospitals, nursing homes, offices of medical practitioners, and medical laboratories."

The President in his report emphasized the crisis of inadequate health care resulting from these manpower shortages.

Moderate projections into the future emphasize that health manpower shortages will become even more critical in the decade ahead. The U.S. Department of Health, Education, and Welfare expects a 40 percent increase in allied health manpower needs by 1975. These trends are made even more challenging by added and changing service dimensions in the health care system. There is new emphasis on community health services, on outreach and new service to the poor and disadvantaged in both rural and urban areas. New service areas such as preventive medicine and environmental health services are proliferating in such a degree as to change both the quantity and quality demands for health manpower.

Under these circumstances of extreme health manpower shortages and growing and changing health service demands we urge that *The Allied Health Professions Personnel Training Act* be extended and amended to provide special projects to develop the training and employment of new sources of health manpower through "New Careers" programs which will provide unemployed or low-income persons with jobs leading to career opportunities in the health services. Such a career development program, including especially the utilization of ex-Army and Navy medical corpsmen, is an absolutely essential component of any program to meet health manpower needs. Considerable experience with New Career type programs in the health services have already demonstrated program feasibility and warrant specific inclusion of New Careers in the Allied Health Professions Training Act.

## NEW CAREERS LEGISLATION

Since its original adaption as an Amendment to the Economic Opportunity Act in 1966, Congress has reaffirmed and extended its support of New Careers as a basic component of our human service manpower system. As restated in the 1969 OEO amendments, "Title II—Special Work and Career Development Programs" provides:

"A special program to be known as 'New Careers' which will provide unemployed or low-income persons with jobs leading to career opportunities, including new types of careers, in programs designed to improve the physical, social, economic, or cultural condition of the community or area served in fields of public service, including without limitation health, education, welfare, recreation, day care, neighborhood redevelopment, and public safety, which provide maximum prospects for on-the-job training, promotion, and advancement and continued employment without Federal assistance, which give promise of contributing to the broader adoption of new methods of structuring jobs and new methods of providing job ladder opportunities, and which provide opportunities for further occupational training to facilitate career advancement."

In taking this action, Congress stated that "The Congress finds that . . . the 'New Careers' program providing jobs for the unemployed and low-income persons leading to broader career opportunities are uniquely effective; . . . and that, while these programs (including Mainstream) are important and necessary components of comprehensive work and training programs, there is a need to encourage imaginative and innovative use of these programs, to enlarge the authority to operate them, and to increase the resources available for them."

Congress has enacted specific New Careers provisions in the Vocational Rehabilitation Amendments of 1968, the Vocational Education Act Amendments of 1968, and the Juvenile Delinquency and Youth Control Act. Special provisions for career development and use of non-professionals have also been included in basic education legislation, in crime and corrections and welfare legislation. HEW has set up a special office of New Careers. The Department of Labor in its major Public Service Careers Program has expanded the essential elements of the New Careers program into Federal, State, and local civil service employment.

While the New Careers program is still in a demonstration and developmental stage, it has been established beyond any question that—

1. New Careers personnel, unemployed or underemployed, and many on welfare rolls, have the capacity and motivation to perform valuable human services and to qualify for career advancement in that work.
2. New Careers workers add a new and highly desirable dimension and quality to human services, especially for the poor and disadvantaged.
3. Job opportunities can be created through public service employment which creates economic independence for those formerly unemployed and those on public welfare.
4. Professional and technical manpower shortages can be alleviated by New Careers personnel and the job analysis and job engineering of the New Careers program.
5. Job reconstruction and engineering, the creation of realistic career ladders, and the rearrangement of training and education on the job with new curriculum and educational procedures are all feasible features of New Careers. These steps have been successfully implemented.

## NEW CAREERS IN HEALTH SERVICES

The health services have been the largest single area of New Careers development. As a result a wide variety of New Careers programs are still under way in hospitals, community health centers, nursing homes, clinics, vocational rehabilitation and mental health facilities. For many different health occupations, career ladders have been at least provisionally defined, credentials barriers analyzed, curriculum designed, and educational and training processes implemented.

For example, the Office of Economic Opportunity through the Health Services of its Community Action Programs is funding a "Health Services Mobility Study" which will produce a thorough and scientific service and job analysis of New York hospitals. Sponsored by the Research Foundation of the City University of New York, this three year project when completed in 1971 will provide the knowledge base for effective manpower and career development in a

major segment of the health system. The techniques of job analysis developed by this project will facilitate job redesign, curriculum design, performance evaluation, and delineation of career ladders in all hospitals. Another example: District Council 37, of the American Federation of State, County and Municipal Employees, AFL-CIO, under a contract from the Manpower Administration, U.S. Department of Labor, has been carrying on a very successful "Nurses Aide to Licensed Practical Nurse Upgrading Program". Board of Education, the NYC Health Services Administration, and other City agencies, this Project is having significant success in a process that is moving people from welfare rolls to jobs as Nurse Aides and, onto career ladders leading to Licensed Practical Nurse positions, and college training for jobs as Registered Nurses. Such examples can be multiplied many times in the health services system.

#### NEW CAREERS AND HEALTH MANPOWER LEGISLATION

Most of the New Careers program development relating to health manpower so far has been based on general anti-poverty and manpower legislation. It is now time to integrate the New Careers program specifically in all health manpower legislation and to make this new method of utilizing new manpower resources a central component of the health services delivery system.

1. The Public Health Service Act, Sec. 304(a) (c) now authorizes the Secretary of HEW to make grants or contracts for "projects for research and demonstration in New Careers in health manpower and new ways of educating and utilizing health manpower" (Partnership for Health Amendments of 1967—P.L. 90-174). In similar fashion, it should be made specific that New Careers programs are intended in the references in both H.R. 16808 (Staggers and Springer) and H.R. 13100 (Rogers) to "new programs . . . for training or retraining of allied health professions personnel . . . or to establish curricula and special programs to reach special groups such as the economically and culturally deprived, [and] returning veterans with training in the health field . . ."

2. In addition to Research and Demonstration New Careers projects, it is necessary to develop continuing *operating* programs for significant additions of New Career manpower in health services.

3. Special support should be given to programs that will assist the health system administrations and professionals to develop and utilize New Careers health manpower effectively.

4. Adequate funds must be authorized and appropriated if these New Careers programs are to be put into effect.

5. Finally, failure to achieve maximum utilization of some 30,000 armed services medical corpsmen discharged each year is an inexcusable waste of human resources and a tragic loss for the health services. This failure can be erased by combining the New Careers program and the returning veterans program. Health manpower legislation should link these two programs as a major new method of providing the health services required by our society.

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AMERICAN HOSPITAL ASSOCIATION,  
Washington, D.C., June 22, 1970.

HON. HARLEY O. STAGGERS,  
*Chairman, Interstate and Foreign Commerce Committee,*  
*U.S. House of Representatives,*  
*Washington, D.C.*

DEAR MR. CHAIRMAN: This letter will set forth the views of the American Hospital Association with respect to H.R. 16808 and H.R. 13100, bills presently pending before your committee which would extend and broaden the Allied Health Professions Personnel Training Act of 1966, as amended.

This statute, which will soon expire, provides grants-in-aid to training centers of allied health professions for (1) the construction of teaching facilities; (2) the expansion and improvement of allied health curricula; (3) traineeships for advanced training of allied health personnel to become teachers, administrators or supervisors; and, (4) the development of new methods for the training of new types of health technologists.

H.R. 16808, introduced by you and Congressman Springer, would extend the existing allied health authorities for one year and would authorize appropriations of "such sums as may be necessary." H.R. 13100, introduced by Congress-

man Rogers, would extend the program for three years at increased levels of funding.

The severe shortage of qualified allied health personnel, the paucity of qualified trainers and training facilities, and, the acknowledged need for improved curricula and student support all attest to the wisdom of the original legislation and underscore the merit in continuing and expanding this Federal assistance program. We believe that educational and training institutions would hesitate to involve themselves too vigorously in a one-year effort, however, because of the many uncertainties which attend any such limited endeavor. Further, we are concerned that such inhibitions would seriously hinder the program's full implementation and would, in fact, retard its proper development for the year. Accordingly, we strongly recommend that the program be extended for at least a three year period.

We also feel that specific dollar authorizations are highly desirable and would generally commend the proposed funding levels contained in H.R. 13100 as reasonable and appropriate to the task to be accomplished.

One facet of today's operations which warrants remedy is the dependence of special project grants upon the availability of monies remaining after full funding of the basic-formula grants. This dependence, as your committee is undoubtedly aware, has inevitably denied the financing of special projects. We are pleased that both bills would correct this anomaly by providing appropriation authorizations for the basic improvement grants and separate appropriations for the project grants.

H.R. 16808 and H.R. 13100 would also broaden the scope of special project authority and would include projects to plan, develop or establish new programs, or modifications of existing programs, for training or retraining of allied health professions personnel; to effect significant improvements in curricula; to expand training capacity; or to establish curricula and programs to reach special groups such as the economically and culturally deprived, returning veterans with training in the health fields and persons reentering the allied health fields. Each of these efforts should prove effective in bringing sizable numbers of qualified candidates into allied health vocations.

While H.R. 16808 and H.R. 13100 contain a number of similar provisions, a very important difference exists in the eligibility of institutions for special project grants and traineeship grants for advanced training of allied health personnel. H.R. 13100 would continue the present law which restricts special project grants and traineeship grants to junior colleges, colleges, or universities that already have on-going allied health training programs. H.R. 16808, on the other hand, would broaden the eligibility for both special project and traineeship grants to include not only the aforementioned allied health professions training centers but, also, all other agencies, institutions, or organizations with the capacity for fulfilling program objectives. We heartily endorse extending institutional eligibility to include all qualified public and private nonprofit training sources and strongly urge the committee's adoption of this provision. While we recognize the real need for good quality control in the matter of grantee eligibility, the present restrictions have arbitrarily excluded many qualified training institutions which have contributed significantly to the supply of allied health manpower over the years. A large number of accredited hospitals, for example, have demonstrated their unique capacity for training a wide variety of needed health personnel. The shortages of allied health personnel are of such dimensions that we firmly believe all such qualified facilities and talents must be utilized.

H.R. 16808 also contains authority for the use of contracts in addition to grants. We believe this provision will enhance operating effectiveness and strengthen the program.

Manpower shortages in virtually all of the allied health professions not only prohibit adequate delivery of health care today but, ironically, prevent a number of other Federal programs, which have been developed to better meet the health needs of the people, from reaching real fruition. So, too, such future health goals for the nation as comprehensive health care for all are unlikely of fulfillment without appreciable increases in health manpower. Programs for the training of existing categories of health manpower must be greatly expanded and new categories must be developed and personnel trained. Because we share your committee's great concern over this vital matter, we would like to add a further comment on a related Senate bill.

As you are most likely aware, on June 10 last, the Senate Labor and Public Welfare Committee approved the Health Training Improvement Act of 1970. In addition to extending the allied health training programs for a period of five

years and generally increasing the levels of appropriation authorizations, it separates basic formula and special project grants and broadens institutional eligibility for advanced traineeships and special project grants. The bill also authorizes a number of activities which are aimed at identifying, and thereafter encouraging, prospective eligibles, such as the disadvantaged and returning veterans with experience in the health field, to enter allied health training programs.

Of special significance are several new programs which would assist needy enrollees by providing grant authorities for scholarships, work-study programs, and low-interest student loans. These proposed new grant-in-aid programs are particularly appealing because they will provide the personal financial assistance which an otherwise qualified candidate might need to enter the allied health professions. We strongly endorse these programs and recommend their inclusion in any extension of the Allied Health Profession Personnel Training Act.

We appreciate the opportunity of expressing our views on these bills and request that this statement be made a part of the record of your committee's hearing.

Sincerely,

KENNETH WILLIAMSON,  
*Deputy Director.*

(Whereupon, at 12:05 p.m. the subcommittee adjourned.)



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