GRADUATE PUBLIC HEALTH TRAINING AMENDMENTS OF 1964

HEARING

BEFORE THE

SUBCOMMITTEE ON PUBLIC HEALTH AND SAFETY

OF THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

EIGHTY-EIGHTH CONGRESS

SECOND SESSION

ON

H.R. 10043

A BILL TO AMEND THE PUBLIC HEALTH SERVICE ACT TO EXTEND THE AUTHORIZATION FOR ASSISTANCE IN THE PROVISION OF GRADUATE OR SPECIALIZED PUBLIC HEALTH TRAINING, AND FOR OTHER PURPOSES

APRIL 22, 1964

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GRADUATE PUBLIC HEALTH TRAINING AMENDMENTS OF 1964

WEDNESDAY, APRIL 22, 1964

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

The subcommittee met at 2 p.m., pursuant to call, in room 1334, Longworth Building, Hon. Kenneth A. Roberts (chairman of the subcommittee) presiding.

Mr. ROBERTS. I might state at the outset that we are going ahead with hearings today on H.R. 10043, introduced by the distinguished chairman of this committee, Mr. Harris of Arkansas.

(H.R. 10043 and reports follow:)

[H.R. 10043, 88th Cong., 2d sess.]

A BILL To amend the Public Health Service Act to extend the authorization for assistance in the provision of graduate or specialized public health training, 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 "Graduate Public Health Training Amendments of 1964".

SEC. 2. (a) Subsection (a) of section 306 of the Public Health Service Act (42 U.S.C. 242d), relating to traineeships for professional public health personnel, is amended by striking out "seven" and inserting in lieu thereof "twelve".

(b) Subsection (e) of such section is amended by adding at the end thereof the following new sentence: "The Surgeon General shall, between June 30, 1967, and December 1, 1967, call a similar conference, and shall submit to the Congress, on or before January 1, 1968, a report of such conference, including any recommendations by it relating to the limitation, extension, or modification of this section."

SEC. 3. (a) Subsection (a) of section 309 of the Public Health Service Act (42 U.S.C. 242g), relating to project grants to schools for graduate public health training, is amended by striking out "June 30, 1965" and inserting in lieu thereof "June 30, 1964, $2,500,000 for the fiscal year ending June 30, 1965, $4,000,000 for the fiscal year ending June 30, 1966, $5,000,000 for the fiscal year ending June 30, 1967, $7,000,000 for the fiscal year ending June 30, 1968, and $9,000,000 for the fiscal year ending June 30, 1969".

(b) Effective in the case of grants from appropriations for any fiscal year beginning after June 30, 1964, such subsection (a) is amended by striking out "and to those schools of nursing or engineering which provide graduate or specialized training in public health for nurses or engineers, for the purpose of strengthening or expanding graduate public health training in such schools" and inserting in lieu thereof "and to other public or nonprofit private institutions providing graduate or specialized training in public health, for the purpose of strengthening or expanding graduate or specialized public health training in such institutions".

(c) Subsection (b) of such section is amended by striking out "schools" wherever it appears therein and inserting in lieu thereof "institutions".

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., April 27, 1964.

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

DEAR MR. CHAIRMAN: This is in reply to your request for the views of the Bureau of the Budget on H.R. 10043, a bill to amend the Public Health Service Act to extend the authorization for assistance in the provision of graduate or specialized public health training, and for other purposes.

This bill will extend and expand the present authority of the Public Health Service to improve the training of professional public health personnel, support the education of students in public health schools, and strengthen those institutions. This proposal and the Nurse Training Act of 1964, H.R. 10042, are the measures needed to supplement the Health Professions Educational Assistance Act of 1963 and were recommended by the President in his health message.

Enactment of this legislation would be in accord with the program of the President.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, March 13, 1964.

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

DEAR MR. CHAIRMAN: This letter is in response to your request of February 27, 1964, for a report on H.R. 10043, the proposed Graduate Public Health Training Amendments of 1964.

This bill embodies a legislative proposal submitted to the Congress by this Department on February 10 to carry out recommendations of the President contained in his recent health message. A copy of the letter to the Speaker, and of the cost estimates submitted therewith, is enclosed herewith for your convenience.

For the reasons stated in our letter to the Speaker, we urge enactment of this bill.

Sincerely,

ANTHONY J. CELEBREZZE, *Secretary.*

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., February 10, 1964.

Hon. JOHN W. MCCORMACK,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: I am enclosing for your consideration a draft bill to extend and improve existing legislation relating to graduate and specialized training in public health. The authorization for public health traineeships contained in section 306 of the Public Health Service Act will expire on June 30, 1964. The authorization in section 309 of that act for project grants to schools of public health, schools of nursing, and schools of engineering for public health training will expire on June 30, 1965.

The proposed legislation would extend the authorization of section 306 for 5 years, and the authorization for section 309 for 4 years. These complementary programs would then carry identical expiration dates of June 30, 1969.

The bill would also strengthen and improve the program of project grants for public health training by amending the provisions of section 309 of the Public Health Service Act to—

(*a*) Broaden the eligibility for project grants to include other types of institutions and agencies which provide graduate or specialized public health training, in addition to schools of public health, schools of nursing, and schools of engineering;

(*b*) Broaden the purpose of the project grants to include the strengthening and expansion of specialized training in public health, in addition to the presently authorized graduate training in public health; and

(c) Increase the annual appropriation authorization from its present level of $2 million to a maximum of $9 million for fiscal year 1969.

The bill would also provide for a conference to be called by the Surgeon General between June 30 and December 1, 1967, to consider and make recommendations on further extension or modification of the traineeship program. A report of the conference would be submitted to the Congress on or before January 1, 1968. Similar conferences were held in 1958 and 1963 during the terminal fiscal years of the earlier authorization periods for these programs.

In conformance with the requirements of section 306 of the Public Health Service Act, the Second National Conference on Public Health Training was held in August of 1963. The 80 conferees were selected on the basis of their authoritative knowledge of public health programs, public health training, and public health manpower needs. The Conference evaluated the adequacy of the existing national public health manpower pool and public health training programs in relation to current and future needs. It concluded that there must be an increasing number of adequately prepared personnel capable of utilizing past, present, and developing knowledge to adapt health organizations and other social institutions to the solution of existing and emerging health problems. It also concluded that the requirements of application of new knowledge in public health programs can only be met through improved graduate and specialized training programs in institutions and agencies which provide public health training. The proposed bill is based upon recommendations made by the Conference in these regards.

The Conference report stresses the effectiveness of public health traineeships as a means of increasing the number of trained professional public health personnel and of the project grants in improving the quality of public health training in institutions eligible to receive them. The report provides soundly conceived, practical guidance for designing and carrying out measures to increase the qnantity and improve the quality of the Nation's professional public health manpower.

Under the provisions of the draft bill, the Public Health Service would continue to support individuals engaged in long- and short-term graduate or specialized training in public health by making traineeship awards directly to individuals and through grants to institutions for this purpose. These traineeships will be used to increase the supply of critically needed professionally trained public health personnel, and to equip members of all professional health disciplines to serve more effectively the needs of modern public health programs.

Project grants would continue to be made to schools of public health, engineering, and nursing. However, the national potential for public health training would be significantly enhanced by making such grants also available to other public or nonprofit educational institutions, operating agencies, or professional associations which could and should be encouraged to provide graduate or specialized training in public health. Examples of educational institutions which are now ineligible for project grants are such professional schools as medicine, dentistry, social work, and pharmacy. The Conference placed much stress upon the need to improve the capability of departments of preventive medicine in schools of medicine to increase and update the public health content in their instructional programs. The need to maintain the currency of professional education is made even greater by the vast expansion of scientific knowledge. Refresher courses, seminars, and other proven methods of short-term instructions for professional health personnel are needed to fill this void. The Conference emphasized the importance of making project grants for this purpose to schools of medicine, dentistry, social work, to some health agencies, and professional associations, as well as to schools now eligible for these grants.

Extension and expansion of these training activities along the lines recommended by the Conference and provided for in this proposed legislation would significantly contribute to alleviation of the critical shortage of adequately trained professional public health manpower.

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

In compliance with Public Law 801, 84th Congress, there is enclosed a statement of estimated costs and personnel requirements which would be entailed by enactment of the proposed legislation.

The Bureau of the Budget advises that enactment of this legislation would be in accord with the program of the President.

Sincerely,

ANTHONY J. CELEBREZZE, *Secretary.*

GRADUATE PUBLIC HEALTH TRAINING AMENDMENTS OF 1964

Estimate of additional cost, 1965–69

[In thousands of dollars]

Item	1965	1966	1967	1968	1969
Appropriation requirements:					
Public Health traineeships	4,500	7,000	8,000	10,000	10,000
Project grants	[1] 500	4,000	5,000	7,000	9,000
Administration [2]	153	223	298	368	443
Total	5,153	11,223	13,298	17,368	19,443
Expenditures:					
Public Health traineeships	4,500	7,000	8,000	10,000	10,000
Project grants	500	4,000	5,000	7,000	9,000
Administration	153	223	298	368	443
Total	5,153	11,223	13,298	17,368	19,443
Man-years of employment	12	20	27	33	40

[1] Increase over $2,000,000 authorized for fiscal year 1965 under existing law.
[2] Increase over fiscal year 1964 appropriation level of $272,000.

Mr. ROBERTS. There seems to be little if any opposition to this bill, which, as you know, will extend the authorization for public health traineeship. This is now carried under section 306 of the Public Health Service Act.

We will have special permission to sit this afternoon, and we are going to try our best to complete the list of witnesses, so that we can try to get this bill in executive session at a very early date.

I believe this authorization will expire on June 30, 1964, so it is imperative that we get along with our work.

Our first witness, I believe, today, is Dr. William L. Fleming, assistant dean, School of Medicine, University of North Carolina at Chapel Hill, representing the Association of Teachers of Preventive Medicine.

Dr. Fleming.

STATEMENT OF WILLIAM L. FLEMING, M.D., CHAIRMAN, DEPARTMENT OF PREVENTIVE MEDICINE AND ASSISTANT DEAN FOR EDUCATION AND RESEARCH, SCHOOL OF MEDICINE, UNIVERSITY OF NORTH CAROLINA

Dr. FLEMING. I am William L. Fleming, chairman of the Department of Preventive Medicine, and assistant dean for education and research, School of Medicine, University of North Carolina.

I am testifying on behalf of the Association of Teachers of Preventive Medicine, of whose executive committee I am a member, in the temporary absence from the United States of Dr. Henry J. Bakst, president of the association. The Association of Teachers of Preventive Medicine represents the departments of preventive medicine in almost all of the medical schools of the United States and Canada and has a total of almost 500 individual memberships.

I would like to urge passage of the Graduate Public Health Training Amendments of 1964, H.R. 10043, which would extend and strengthen sections 306 and 309 of the Public Health Service Act.

The serious shortage of trained public health personnel in meeting present demands in the United States has been amply documented by the U.S. Public Health Service and other agencies. This shortage is

all the more serious because it is intensified by the ever-increasing need for the expansion of public health and related community health activities due to population growth and development of more adequate health facilities.

The Public Health Service Act has already strengthened training in this area in schools of public health, engineering, and nursing. H.R. 10043 would further augment training activities in these schools and would in addition strengthen public health training in other institutions, particularly schools of medicine.

Since I am most familiar with medical schools, I would like to spend most of my time on this aspect.

Trained public health personnel of diverse types are needed, but few would question the particular need for, and the particular shortage of, properly qualified public health physicians. While the Public Health Service Act has helped to prevent a bad situation from becoming even worse, there are actually fewer public health physicians employed by State and local agencies now than in 1950.

Departments of preventive medicine in medical schools have varied responsibilities, but their more essential ones include: training physicians going into practice in preventive measures and community health needs, interesting a sufficient number in the career possibilities of academic and preventive medicine, public health, and other community health activities, and giving postprofessional training to some in these latter groups and recruiting others for training in schools of public health.

It has been recognized for some years that research and associated graduate training activities of departments of preventive medicine were weaker than those of most medical school departments, and that this has seriously hampered training physicians for academic preventive medicine as well as indoctrinating future practicing physicians in the importance of prevention and recruiting and training physicians for public health careers.

Preparations of the Association of Teachers of Preventive Medicine over a period of several years culminated in a workshop conference of the association at Saratoga Springs, N.Y., in June 1963 on research, graduate education, and postdoctoral training in departments of preventive medicine.

The 5-day conference was attended by the chairmen of departments of preventive medicine and key resource individuals from medical schools, schools of public health, the U.S. Public Health Service, private foundations, and other agencies. We felt that the conference, which I had the honor to serve as cochairman along with Dr. Tom F. Whayne of the University of Kentucky, accomplished a great deal.

One of the specific recommendations of the conference brought up by several of the workshops and approved in plenary session is stated in the preliminary conference report in the November 1963 issue of the Archives of Environmental Health as follows:

> It was felt highly desirable to broaden the Public Health Service Act to provide support to all institutions engaged in the training of public health workers. Such changes should potentiate departmental efforts in securing funds to strengthen training programs.

This recommendation was taken to the Second National Conference on Public Health Training, convened at the direction of the Congress, in August 1963 and one of the recommendations of this conference

provided for making schools of medicine eligible for project grant and traineeship support in public health training.

Passage of H.R. 10043 should help departments of preventive medicine to strengthen their staffs, to develop more effective research programs needed for dynamic development and use in ongoing public health training programs, to improve the training in preventive practices of future practicing physicians, to help recruit more medical students for academic preventive medicine and for public health, to train in public health young physicians in the departments themselves, in schools of public health or in institutions, like ours, which have both schools of medicine and public health, in programs which combine the efforts of schools of medicine and public health.

Finally, we will all have to work at it, by expansion of training opportunities and in many other ways, if we are going to put into effect the aphorism of the famous surgeon and author, Dr. Harvey Cushing, which goes as follows:

> Dr. Pound of Cure Lane is being superseded by his young disciple, Dr. Ounce of Prevention Street.

Thank you.

Mr. ROBERTS. Thank you, Dr. Fleming.

I have no questions. I appreciate very much your taking the time out of your busy life to come here to testify in behalf of this very worthwhile legislation.

Dr. FLEMING. Thank you, Mr. Chairman.

Mr. ROBERTS. Dr. Prather, commissioner of health, Baltimore, Md., representing the Association of the State & Territorial Health Officers.

STATEMENT OF PERRY F. PRATHER, M.D., COMMISSIONER OF HEALTH, BALTIMORE, MD., REPRESENTING ASSOCIATION OF STATE & TERRITORIAL HEALTH OFFICERS

Dr. PRATHER. Thank you, Mr. Chairman.

I am Dr. Perry F. Prather, commissioner of health of the State of Maryland, and a member of the legislative committee of the Association of State & Territorial Health Officers.

I was a general practitioner of medicine from 1925 to 1946 and have been a health officer since then—5 years a local health officer and 12 years a State health officer. I am a member of the faculty of the Johns Hopkins School of Hygiene and Public Health and a consultant to the Surgeon General on medical, hospital, and rehabilitation facilities and community mental health services.

I speak here today not only as a public servant of Maryland, but I also represent officially the health officers of the 50 States and 3 territories. Our views are shared by those directing health departments in cities, counties, and towns.

As "consumers" of the product of educational institutions that train health professionals, we are seriously affected by the critical shortage of health personnel. In our work we are keenly aware of the need to extend the scholarship and grant program to train more students.

In the face of rapidly increasing responsibilities of State and local health agencies for a wide range of environmental and community health problems, there is a tremendous need for well-trained public health personnel from a variety of professional groups.

At present this is due to shortages of the manpower pool in this field. The present law has been effective in helping us to recruit and train local health officers, public health nurses, health educators, and other public health personnel. I strongly support the provisions to extend this traineeship program for 5 years.

In addition to the official health agencies there are others who are vitally concerned with the shortage of trained health personnel, others who are employing in increasing numbers specially trained persons in public health; for example, industry, hospitals, large volunteer health agencies, Army, Navy, and Air Force, U.S. Public Health Service, departments of public welfare who have responsibility for medical care programs, universities, and medical schools that teach preventive medicine.

In Maryland, as well as in many other States, we feel that specialized training in public health is so important that many job specifications are written to require this training before employment.

Everyone is familiar with the fact that a new doctor just out of medical school is not ready to practice surgery, pediatrics, or other medical specialties until he has undergone specialized training. Likewise, the medical specialty of public health calls for specialized training in a school of public health after medical school.

I would like now to mention some of the more important emerging problems in public health which must be met but to do so requires especially trained personnel. Health departments will not be able to meet their obligations in these and other areas without such qualified personnel.

In the field of environmental health which has to do with the air we breathe, the water we drink, the food we eat, and where we live, we are involved in such things as radiation health, industrial health, air pollution, provision of safe and adequate water and sewage, especially in the rapidly growing metropolitan areas, and we are now confronted with the problems of pesticides and detergents.

To cope with these problems, we need especially trained engineers, physicists, chemists, and sanitarians.

Mental health: The use of the tranquilizers and other modern treatment methods has made it unnecessary for many patients to remain in mental hospitals for long periods of time. The large State mental hospitals are outmoded. More patients could be returned to their community and treated at home or on an out-patient basis in clinics, day care facilities, et cetera.

Persons trained in public health administration play an important role in the development of these community facilities.

Mental retardation: The development of community facilities, close to the home of patients, is the order of the day with the management of the mentally retarded.

The aging population: The problems concerning this group who need special housing, rehabilitation, and various medical care services are increasing at a rapid rate.

Increased appropriations from Congress for maternal and child care programs will require increased public health trained personnel as well as increased interest and funds for the prevention of mental retardation.

We in the United States were once prideful that we were among the top nations in low infant mortality rate. We are now 11th. To recapture our former position will require the efforts of trained public health personnel.

Venereal disease, which we thought was well under control a few years ago, is on its way back, and we must now concentrate on this problem.

Accident prevention: Public health is becoming increasingly involved in this, especially with motor vehicle accidents. The schools of public health are doing important research into the causes and the means of preventing accidents in the home, in industry, and in transportation, and are developing teaching programs to prepare specialists in accident prevention to staff our health departments.

The high cost of hospital care is one of the most acute problems in this country today. I do not believe the per diem costs of general hospitals will come down—if anything, they are apt to rise.

In order to make effective use of these high-cost facilities and to ease the financial strain on patients, their families, and the sources of public assistance, people should not remain hospitalized longer than absolutely necessary, especially if they can be cared for in less costly facilities, such as home-care programs, convalescent and rehabilitation centers, and nursing homes.

It is a responsibility of public health officials to assist in the development of these supporting facilities.

Medical care for indigent and/or medical indigent: The administration of medical care for the low-income group of our citizens takes especially trained people.

We must take steps now to insure a steady supply of physicians, nurses, sanitarians, and others who are trained in preventive medicine and in public health, otherwise our ability as public health agencies to cope with the issues I have mentioned will be weakened.

The State and Territorial Health Officers Association, which I am representing, strongly endorses H.R. 10043 as very necessary legislation to help in solving the problem of public health personnel shortage.

Among other things, this legislation carries out recommendations which were strongly urged by the Association of State and Territorial Health Officers as far back as October 1960, at their annual meeting in San Francisco.

Thank you, Mr. Chairman.

Mr. ROBERTS. Thank you, Dr. Prather.

I appreciate your attendance and the support of your fine association for this legislation.

I was quite pleased that you brought to our attention the new approaches being made in the mental health and mental retardation fields. I am hoping that we will be able to swing into action in new approaches to these twin problems.

I recently had the opportunity of visiting in Denmark, and I was quite impressed with the effort that is being made in that small country. Of course, they have a much smaller laboratory, I might say. Their people do not move around as much as we do.

But I visited one of their installations outside of Copenhagen, Montebello, and I was really quite taken with the way they handled their patient load.

Dr. PRATHER. What is the name of it?

Mr. ROBERTS. Montebello.

Dr. PRATHER. The reason I ask is because my deputy just came back from a trip over there, too, Mr. Chairman.

Mr. ROBERTS. Is that right? Well, I was of course quite pleased with what I saw at this institution, which was small, and they had three resident psychiatrists.

Of course, the thing that seems to impress you is the fact they have a plentitude of trained personnel, and they have a much better situation, I think, than perhaps we will ever have, really, because of the small country as compared to this large number of people that we have.

But I think that we perhaps have institutions in this country that do just as good or better jobs. This just happened to be one of the applications that I saw that I believe could work in almost every community in our country.

I think that we are just beginning, really, to get into this problem. We are late. But I think that your statement that the large concentrated mental hospital is outmoded and is on its way out is correct.

I recognize, too, that we have people there who work hard and are doing, under the older approach, a good job, as good as they can do under the circumstances. But I am glad to see that your association is thinking about these problems, and I am also pleased to see the emphasis you placed on accident prevention.

This has been a concern of our subcommittee for many, many years. We felt many, many times that our efforts were frustrated and that we were not making a great deal of headway. But I think that we have served one purpose, and that is to try to keep this problem before the American people, and while we are still not making the progress that was hoped for, I think we are beginning to get people to choose up and take sides and to try to put some emphasis on this terrible problem, which is so expensive as far as the young people of the country are concerned.

I recently introduced a bill trying to set standards in the field of automobile tires. We are finding a lot of these tires that are on the market today are not adequate, are not safe, and we believe that we can do the same thing with this as we have done in other fields, of setting standards where the consumer will know what he is buying, and that we are getting a product that has passed at least a minimum safety set of standards.

I did not mean to get off on that, but I do appreciate your appearance.

The gentleman from Texas?

Mr. PICKLE. I enjoyed the testimony, Doctor.

What is the increase of the appropriations you are asking this year? Are you familiar with the figure?

Dr. PRATHER. The bill calls for an extension, inserting $2½ million for the fiscal year ending June 30, 1965, $4 million for the fiscal year 1966, $5 million for the fiscal year ending 1967, and $7 million for 1968, and $9 million for the year ending June 1969.

That is I think considerably more than at present. That is to the best of my knowledge. I am not too familiar with that part of it, but I would guess that this proposal is certainly adequate.

Mr. PICKLE. This would make an increase of $17½ million over the present level of expenditures. Is that correct?

Dr. PRATHER. I am sorry. I did not add it up.

The total increase?

Mr. PICKLE. Yes, not the total amount, but the total increase.

Dr. PRATHER. I have not added it up.

Mr. ROBERTS. If the gentleman will yield, we will have Mr. Jones, who will be the Department witness, on his way up here, and I believe he will probably be able to answer the gentleman's questions.

Dr. PRATHER. Someone from the service, here, would be better able to answer as to this part of it.

Mr. PICKLE. The only other statement I would venture at this point: I notice in your testimony that you say you need this program because of the very strong shortage of trained health officers. Within the last month or two, we have had testimony from nurses that there is a great shortage in that field, and indeed, most medical fields.

It concerns me that in your program, as in all these others, you are coming to the Congress because of this shortage of personnel, and asking for the specific help of the Government, sometimes separate and apart from the State program.

I do not think your case is exactly the same as the nursing situation, because your officers, I assume, are all graduates of medical schools.

Dr. PRATHER. Our health officers, yes, sir.

Mr. PICKLE. So your availability, your supply, would be much more restricted than in other fields. So I would say this would be an exception in that respect.

I would just say it looks to me like the general allied medical fields are not putting on proper public relations programs of their own and are relying too much on the Congress to furnish the funds, and perhaps the program.

I do not know what the answer is, but I just think we are becoming too dependent on the Federal level rather than the State level.

Mr. ROBERTS. I think the comment the gentleman from Texas has stated is true—I agree with him—that we are called on every year to provide additional people. However, it is also true, is it not, Doctor, that these people, actually, if they want to go into private medical work or want to work as practitioners, general practitioners, or for corporations, or for private enterprise, would be able to make many times more, even in salary, than they make in the public health field? That is generally true, is it not?

Dr. PRATHER. That is right. At least for our health officers who are physicians. In many States, and particularly in my own State, our specifications say that a man in order to be a health officer must have this special training.

In other words, he must at least have his M.D., have his license to practice in the State, and in addition to that, he must have a master of public health degree, which means he must have this special education before we can employ him. These are part of our specifications

We have found this program in the past to be very helpful for a physician who is thinking in terms of wanting to be a health officer, because he perhaps wants to be a public servant, but knowing that his financial rewards would not be as great. With this program, we have been able to attract a number of young physicians to be our health officers, because this enables them to get that special education that we require before we can employ them.

And we have had a number to whom it has been quite helpful. That is why I very strongly recommend that this program be extended.

Mr. ROBERTS. Well, I think just as a general proposition, this same thing is true all along. The President has asked for salary increases. Some of the members of this body just cannot make it on the salaries they receive, and the same thing is quite true when you get to specialized fields of Government.

It is a very difficult thing to keep young people, particularly, in the Public Health Service. I am in touch with people out at the National Institutes, and a young doctor, unless he is tremendously interested in doing research, would not necessarily be interested in staying in Government, because the other fields are so much richer.

If he is interested in really accumulating money—and there is a lot of dedication in private practice, too. I do not mean by that that there is anything wrong with making a large amount of money in practice.

That is all I have.

Mr. ROBERTS. Miss Walsh I believe is our next witness, of the American Nurses' Association, accompanied by Miss Julia Thompson.

STATEMENT OF MISS PATRICIA WALSH, R.N., AMERICAN NURSES' ASSOCIATION; ACCOMPANIED BY MISS JULIA THOMPSON, WASHINGTON REPRESENTATIVE

Miss WALSH. I am Patricia Walsh, director of public health nursing of the Washtenaw County Health Department, Ann Arbor, Mich. I am also a member of the board of directors of the American Nurses' Association, the national professional organization of registered nurses.

With me is Miss Julia Thompson, Washington representative of our association.

I welcome the opportunity to appear here today on behalf of the American Nurses' Association to support H.R. 10043, the Graduate Public Health Training Amendments of 1964, and to urge you to give the bill your prompt and favorable consideration.

I wish to add here that I speak primarily as an employer of public health nurses in an agency providing nursing care and health instruction to residents of a community.

My focus is similar to that of a large group of nurse administrators in this country.

In addition to providing service, we offer opportunities for students to obtain experience as part of their educational programs in a community agency. We see a continuing need for well qualified public health nurses to do a variety of things in communities.

One of these is to maintain present programs of health care, and to plan for the future to meet the health needs of a growing population.

Mr. PICKLE. Will you let me interrupt you?

Are you reading from your script?

Miss WALSH. No, I asked if I might add. This was not in the script.

I wanted to point out some of the things that public health nurses do, particularly in community health programs.

Another is to help people in the community understand how to use the services that are available to improve their health, to help improve

standards of care in their own homes, as well as in nursing homes, and with the growing number of persons in the aged group and with chronic disease, this is a particular need.

To extend the care that is available, and to make best use of facilities, to give care to mothers and infants, both to give nursing care and health instruction, in a variety of areas, particularly in stressing the area of accident prevention, which is an important one with infants and young children.

Public health nurses also incorporate mental health information into all their programs.

We are interested in the continuing established programs, such as communicable disease control and work in relation to infant health, because of their value in preventing long-term illness.

And I did wish to ask you to keep some of these in mind as I comment on the provisions of this bill.

I am picking up in line 10 of the testimony that has been printed and is before you.

H.R. 10043 proposes to extend the public health traineeships program for an additional 5 years, to continue authorization for project grants to educational institutions providing public health training for an additional 4 years, to strengthen the project grants program by expanding authorization to schools not presently eligible for grants, such as schools of medicine, dentistry, social work, and pharmacy, to increase the appropriation ceiling for the project grant program to $2.5 million for fiscal 1965, $4 million for fiscal 1966, $5 million for fiscal 1967, $7 million for fiscal 1968, and $9 million for fiscal 1969.

The public health traineeship program established under the Health Amendments Act of 1956 provided financial assistance to physicians, engineers, nurses, and other professional personnel undertaking graduate training in public health.

The number of persons preparing for public health positions declined 50 percent between 1947 and 1955, and it was the intent of Congress to reverse this trend and increase the number of adequately prepared public health specialists so urgently needed by State and local health agencies and by agencies of the Federal Government.

A total of 4,281 public health traineeships were awarded during the 7 years of the program. Fifty-eight percent of these went to professional personnel without previous public health experience, an indication of the impact the program had in recruiting individuals for training.

Although the traineeships contributed to increasing the number of prepared public health personnel, the increase has not kept pace with the population growth nor with the demands made on public health agencies to add new programs to meet new needs.

Many important programs authorized by the Congress are implemented in part through local health agencies. The 1960 amendments to the Social Security Act encouraged States to set up programs of medical assistance for the aged and to improve existing programs or initiate new programs of medical care for recipients of old-age assistance.

If States elected to participate, Federal matching funds were provided for a wide range of services, including care of the sick at home on a part-time basis. The Community Health Services and Facili-

ties Act of 1961 provided funds to stimulate State and local health departments to improve and extend community health services for the aged and chronically ill outside the hospital. The mental retardation legislation passed in 1963 provided for grants to establish comprehensive maternal and child health services for low-income families where the incidence of retardation is greater because of insufficient health supervision.

The success of all these programs depends to a great degree on increasing the number of qualified public health nurses, nurses who must be prepared in college and university schools of nursing.

Although nurses are the largest group of professional workers in public health, and half of the public health traineeships were awarded to nurses preparing for public health staff positions, the need for more and better prepared nurses is acute.

A generally accepted minimum standard for public health work in a local area is one public health nurse to 5,000 population, a figure which does not provide for care of the sick at home. At this level, 43,000 qualified public health nurses would be needed in 1970.

An additional 43,000 registered nurses would be needed if agencies provided a program for care of the sick at home. ("Toward Quality in Nursing," report of the Surgeon General's Consultant Group on Nursing, U.S. Department of Health, Education, and Welfare, Public Health Service, 1963.)

The present number of nurses employed in public health agencies is approximately 34,000, but only 36 percent are fully qualified for public health nursing practice. ("Facts About Nursing," 1962–63 edition, American Nurses' Association.)

Public health nurses carry increasing responsibilities. In addition to working with other disciplines to further community health and provide direct service to individuals and families in the home, school, clinic, and in industry, they must also train and supervise the large numbers of registered nurses, practical nurses, and nursing aids now being employed by public health agencies.

As one means of insuring effective and safe community and individual health services, we urge the Congress to act favorably on the extension of the public health traineeship program.

Another means of increasing the supply of public health nurses is through the enactment of H.R. 10042, the Nurse Training Act of 1964, which this committee is now considering.

As of January 1, 1964, all accredited baccalaureate programs in nursing prepare students for beginning public health nurse positions. (National League for Nursing, Department of Baccalaureate and Higher Degrees.)

The public health traineeship program recruits nurses already registered and practicing into the field of public health. Proposals in H.R. 10042 for construction grants to collegiate schools of nursing and for scholarships and loans to students entering baccalaureate programs would permit the schools to enroll more students and attract college-bound young people into nursing.

It would result in an appreciable increase in the pool of qualified public health nurses ready for employment in local, State, and national health services. The American Nurses' Association strongly supports H.R. 10042 and urges its prompt enactment.

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H.R. 10043 proposes to continue project grants to schools of public health and to schools of nursing and engineering offering specialized public health training. These were first authorized in 1960. The purpose of these grants was to assist the schools in meeting the needs of public health programs, and have been used to enrich curricula, strengthen training programs, and develop improved methods of training.

Fifty-seven grants have been awarded to schools of nursing. In addition, nurses have participated in projects in schools of public health.

The grants have established programs for preparing faculty for teaching in college and university schools of nursing, for identifying the contribution of nursing in the provision of comprehensive medical care services, for preparing at the post-master's level nurse practitioners and teachers in the fields of chronic illness and gerontology, and for studies of the most effective way to provide content and public health experience for students in baccalaureate programs in nursing.

We strongly support the continuation of the project grant awards in sufficient quantity and of such amounts that their purpose of improving education of public health personnel will be realized. Improving the preparation of practitioners results in improved health services.

To conclude, the participation of Federal and State Government in the financing of training programs for professional public health personnel was established with the passage of the Social Security Act. It was recognized then that if public health agencies were to perform their necessary functions in protecting and promoting the health of the people of this country, they must have prepared professional staff.

In authorizing the public health traineeship program in 1956 and in 1959, Congress was instrumental in increasing the number of qualified public health personnel.

Additional prepared workers are needed if public health agencies are to expand their programs to meet present and emerging health needs. We therefore again urge you to continue the public health traineeship program.

On behalf of the American Nurses' Association, may I thank the committee for the privilege of presenting our views on this legislation.

Mr. ROBERTS. Thank you very much, Miss Walsh.

I am sorry I had to step out of the committee while you were testifying, but I want to thank you for your statement and for your support of this legislation.

I have no questions.

The gentleman from Texas?

Mr. PICKLE. You made the statement, Miss Walsh, that when they passed this previous act, it was the intent of Congress to reverse the trend of shortage in the public health nursing field, and I assume by your statement that in that 7-year period they graduated some 4,281 public health trainees. Is this correct? Are there that many nursing graduates?

Miss WALSH. We said on page 2 that about 58 percent of those 4,281 traineeships went to professional personnel without previous public health experience.

I do not believe I have the figure on the number of those awarded to nurses. Were you asking that, Mr. Pickle?

Mr. PICKLE. Yes, in the time the present program has been going, how many nurses have you actually turned out to work in that field?

Miss WALSH. Do you have that figure?

Miss THOMPSON. About half the traineeships went to public health nurses.

Mr. PICKLE. About half of this figure here?

Miss THOMPSON. Yes.

Miss WALSH. Mr. Pickle, the figure is 2,513 trainees in nursing.

Mr. PICKLE. And you would say, based on this total of 2,513, that there is still a continued shortage, and that is why you need to continue this program?

Miss WALSH. With a step-up level due to population growth; primarily population growth and new programs.

Mr. PICKLE. Now, I want to ask you this: You endorse the Professional Nurse Training Act?

Miss WALSH. Yes.

Mr. PICKLE. Which is before our committee now. And you apparently hope to draw from that source nurses who will be interested in entering the public health nursing field.

Now, under your present program, can they go to one of these schools, under the apprenticeship training program? Can they go to one of your schools and take a regular course? They do not have to go to regular nursing school first, do they?

Do we have two different kinds of program? That is what I am driving at.

Miss WALSH. We do have programs for the nurse who goes right out of high school into a 4-year college program to become a nurse, to become a graduate nurse. And she can learn public health nursing there.

Mr. PICKLE. She is just a regular RN?

Miss WALSH. Yes, a registered nurse, with a baccalaureate degree.

Then you have a program for nurses who graduate from a 3-year program, a hospital school—maybe you are familiar with that terminology. If they wish to obtain preparation for public health nursing, they would need the provisions of H.R. 10043 which we are considering now. They would be covered by the provisions in this bill.

Now, one of the provisions in the bill which we mentioned, H.R. 10042, prepares the teachers and the supervisors in public health nursing; teachers, administrators, and supervisors. So there is need for both proposals.

I am afraid I have not made it clear.

Mr. PICKLE. You stated you had 2,513 in this 7-year time who were nurses specifically trained?

Miss WALSH. For public health. Right.

Mr. PICKLE. Of that number, were they previous graduates?

Miss WALSH. They were previous graduates.

Mr. PICKLE. You do not take yours from high school and give them a 4-year course and train them just for public health. You take them from the R.N. field. Is that right?

Miss WALSH. They can be prepared in two ways. They can be prepared after they become RN's in a school of nursing under this type of a program, or they can go through a 4-year program and come out prepared for public health nursing as well as other nursing.

And I think we refer to that here in one of the pages of the testimony, if I might find that.

Mr. PICKLE. I might make this observation, and it is just strictly an observation, because I certainly do not support it now by facts.

If the total of public health traineeships were 4,281 in a 7-year period, and of that number 2,513 were public health nurses, it looks to me that as fast as we train nurses, regular registered nurses, some allied field will grab them up other than the hospitals.

It looks to me like this is true of public health. It looks to me like it might be true of the Veterans' Administration. And it might be true of many other governmental agencies. And I am not sure but what that is one of the main reasons for the shortage of nurses.

Is that correct, or do you have any feeling about that?

Miss WALSH. Well, we do need them in all of these places you mentioned. We need them in the hospitals as well as in the public health field. And we are concerned that we are not attracting a sufficient number of the 18-year-old girls into nursing when they finish high school. We still have to attract a good many more of them, because we need them in a variety of areas.

Mr. PICKLE. Well, we are getting a little afield from the purpose of this bill, Mr. Chairman.

I thank you very much for the comments.

Mr. ROBERTS. I thank the gentleman from Texas.

Thank you very much, Miss Walsh, for your statement and for your appearance, and Miss Thompson, also.

Mr. ROBERTS. Mr. Boisfeuillet Jones, special assistant to the Secretary, Department of Health, Education, and Welfare, accompanied by Dr. Luther L. Terry, Surgeon General, Public Health Service.

It is always a pleasure to welcome you here, and we are glad to have you.

You may proceed with your statement.

STATEMENT OF BOISFEUILLET JONES, SPECIAL ASSISTANT TO THE SECRETARY, HEALTH AND MEDICAL AFFAIRS, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE; ACCOMPANIED BY DR. LUTHER L. TERRY, SURGEON GENERAL, PUBLIC HEALTH SERVICE; AND PAUL Q. PETERSON, ASSOCIATE DIRECTOR FOR OPERATIONS, BUREAU OF STATE SERVICES, PUBLIC HEALTH SERVICE

Mr. JONES. Thank you, Mr. Chairman.

As you have indicated, I am accompanied by Dr. Luther L. Terry, Surgeon General of the Public Health Service, and by Dr. Paul Q. Peterson, who is Associate Director for Operations of the Bureau of State Services of the Public Health Services.

Mr. Chairman and members of the committee, I appreciate the opportunity to appear before this committee on behalf of Secretary Celebrezze and the Administration in support of H.R. 10043, the Graduate Public Health Training Amendments of 1964.

This bill, which was introduced by the chairman of the House Interstate and Foreign Commerce Committee, would carry out the recommendations of President Johnson in his health message for

strengthening and improving graduate and specialized training in public health.

The success of modern health program at all levels of government and in a wide variety of public and private agencies is dependent on the availability of an adequate supply of highly trained professional personnel. Furthermore, the provision of health services to the American people involves a close relationship between public health organizations and members of the practicing health professions. Professional personnel at all levels must be highly skilled if the potential benefits of modern science are to be translated into better health for all Americans.

The Congress has recognized the seriousness of the shortage of public health manpower and has authorized programs aimed at its reduction. Section 306 of the Public Health Service Act, which was first enacted as title I of the Health Amendments Act of 1956, authorizes a program of traineeships to support physicians, engineers, nurses, and other professional health personnel in graduate or specialized public health training.

Section 309, which became law in 1960, authorizes the Surgeon General to make project grants for the purpose of strengthening or expanding graduate public health training to schools of public health and to those schools of nursing or engineering which provide graduate or specialized training in public health for nurses or engineers.

The authorization for public health traineeships contained in section 306 of the Public Health Service Act will expire on June 30, 1964. The authorization in section 309 of that act for project grants to schools of public health, schools of nursing, and schools of engineering for public health training will expire on June 30, 1965.

The proposed legislation would extend the authorization of section 306 for 5 years, and the authorization for section 309 for 4 years. These complementary programs would then carry identical expiration dates of June 30, 1969.

The bill would also strengthen and improve the program of project grants for public health training by amending the provisions of section 309 of the Public Health Service Act to—

(*a*) broaden the eligibility for project grants to include other types of institutions and agencies which provide graduate or specialized public health training, in addition to schools of public health, schools of nursing, and schools of engineering;

(*b*) broaden the purpose of the project grants to include the strengthening and expansion of specialized training in public health, in addition to the presently authorized graduate training in public health; and

(*c*) increase the annual appropriation authorization from its present level of $2 million to a maximum of $9 million for fiscal year 1969.

The bill would also provide for a conference to be called by the Surgeon General between June 30, 1967, and December 1, 1967, to consider and make recommendations on further extension or modification of the traineeship program. A report of the conference would be submitted to the Congress on or before January 1, 1968.

Similar conferences were held in 1958 and 1963 during the terminal fiscal years of the earlier authorization periods for these programs.

At the conference on public health training held in August of 1963, the authoritative knowledge of 80 leaders in the fields of public health and public health training was focused on public health manpower problems. The conference measured the adequacy of the rate at which trained personnel are being developed by evaluating the staffing of health agencies over the past 10 years.

It is clear that the supply of trained health professionals is not keeping pace with population growth. It was also found that the present rate of training barely offsets attrition and program expansion, permitting little gain against the backlog of more than 20,000 inadequately trained personnel.

For example, in 1958, slightly less than half of all professional personnel in State and local health departments had received the training necessary to qualify them fully for their public health responsibilities. In 1963, 5 years later, only 51 percent were adequately trained. In addition, more than 5,000 budgeted positions are now vacant.

To maintain even the present inadequate staffing pattern in State and local health departments in relation to population growth and to offset attrition, at least 17,000 more trained workers must be produced by 1970.

Many more will be needed by voluntary health agencies and Federal agencies, such as our Department, the Department of Defense, and other departments which have health responsibilities and international health programs.

An additional critically important basic need is to overcome the acute shortage of teachers, so that the faculties of the schools which must train these workers may be augmented.

The activities which have been carried out under the two current programs are described in some detail in the report of the conference. I will, therefore, only summarize them briefly.

Under the traineeship program, more than 5,000 traineeships have been awarded since 1957 to support individuals in long-term public health training. In addition, grants have already been made during the last 2 years to support approximately 3,500 trainees in short-term continuation training.

Included among the short courses which these individuals have attended with such traineeships are courses in chronic diseases, dental public health, accident prevention, patient care in nursing homes, and public health training for physical therapists.

Trainees under these programs have come from all of the States, Puerto Rico, Guam, and the Virgin Islands. They have attended a total of 12 schools of public health, 71 schools of nursing, and 83 other schools, including schools of engineering, departments of nutrition, microbiology, and others.

One of the goals of this program is to bring new people into public health. The fact that 58 percent of all trainees had not previously been employed in public health attests to the effectiveness of these traineeships in recruiting students into the field.

Under the project grant program authorized by section 309, the Public Health Service has supported nearly 100 different projects to strengthen or expand public health training in 60 schools of public health, engineering, and nursing.

These projects have enriched and improved many different curriculum areas important to public health, such as chronic disease services, nutrition, accident prevention, gerontology, metroplitan health planning, and epidemiology.

By making possible the addition of faculty members and the acquisition of scientific and teaching equipment, these grants have contributed significantly to increasing the quantity and quality of public health training available to students in these schools.

The conference found that although the current programs have accomplished all that could be expected of them at their present levels of operation and within the framework of the current authorization, their full potentials have not been realized.

The conference recognized in these two programs the essential approaches needed to overcome the critical public health manpower shortage. With appropriate extension and expansion, these programs can increase the number of trained professional health personnel, improve the quality of training, and increase national resources for providing the training.

Mr. Chairman, with the committee's permission, I should like to have the conference report included in the record of this hearing.

Mr. ROBERTS. Without objection.

(Conference report referred to follows:)

SECOND NATIONAL CONFERENCE ON PUBLIC HEALTH TRAINING

August 19–22, 1963

Report to The Surgeon General

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Washington, D.C., 20201

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LUTHER L. TERRY, M.D.
The Surgeon General
Public Health Service

DEAR DR. TERRY:

I am transmitting herewith the report of the Second National Conference on Public Health Training which you called pursuant to Section 306(e) of the Public Health Service Act. Included are the recommendations of the Conference for your transmittal to the Congress.

The responsibility for public health training is shared by many agencies, institutions, and organizations in addition to the Federal Government. Although the Conference considered and discussed the requirements for public health training in the broadest context, formal recommendations are presented only on issues in which the Federal Government was considered to have significant responsibility.

I trust that the recommendations and considerations of the Conference will be as useful to the Public Health Service and the Congress as the opportunity to reflect upon and discuss the many facets of public health training was beneficial to us as conferees.

Sincerely yours,

William R Willard

WILLIAM R. WILLARD, M.D., *Chairman.*

SEPTEMBER 30, 1963.

Contents

I. Charge to Conference

The Second National Conference on Public Health Training was charged by the Congress under Section 306(e) of the Public Health Service Act with the responsibility of—

1. Appraising the effectiveness of the traineeships in meeting the needs for trained public health personnel;
2. Considering modifications in the legislation, if any, which may be desirable to increase its effectiveness; and
3. Considering the most effective distribution of responsibilities between Federal and State Governments with respect to the administration and support of public health training.

Preparations for the Conference began early in 1962. The 14 members of the National Advisory Committee on Public Health Training served as the Steering Committee. Four pre-Conference Study Committees composed of 25 consultants participated in planning the agenda of the Conference, and in the preparation of a Conference Working Paper and a Background Data book. Eighty conferees—32 of whom were involved in some aspect of the pre-Conference activity—attended the Conference held Monday through Thursday, August 19–22, 1963, in Washington, D.C.

The conferees were selected by the Surgeon General of the Public Health Service in consultation with the Steering Committee. They came from all sections of the Nation and were "broadly representative of the professional and training groups interested in and informed about training of professional public health personnel." They represented State and local health departments and other official agencies with health responsibilities; schools of public health, nursing, medicine, engineering, dentistry, veterinary medicine, social work, hospital administration, and other university departments; research organizations, hospitals, health insurance plans; and other voluntary national and community health agencies. The Conference pursued its task through seven concurrent discussion groups, drafting of recommendations by four groups meeting simultaneously, and final synthesis of these recommendations into their present form by the Conference Executive Committee, utilizing the records of the working groups, recommendation groups, and the plenary sessions.

Throughout its deliberations, the Conference sought to evaluate the effectiveness of the program with reference to the continuously changing

role of public health in society. The conferees considered the issues within the scope of the growing complexities and widening dimensions of public health problems and responsibilities. Training was also evaluated within the context of a changing society: growth and changes in the character of the population; geographic mobility; urbanization; a rising standard of living; higher educational attainments; more sophistication in matters pertaining to health; the vast growth in numbers and kinds of community health services, encompassing both public and private organizations and institutions; and the constantly changing environment characterized by expanding industry, developing technology, and new health hazards.

The population of the United States is expected to increase by approximately 35 million persons during the current decade, with the highest increases among the groups which are the highest utilizers of health services—children under 9 years and persons 65 years of age and over. The population profile is characterized further by a relative contraction in the proportion of individuals between the ages of 20 and 64 years—a fact of special significance since most professional and technical services are provided by individuals in these age groups. All of these factors were considered to have implications for public health programs and resulting manpower requirements.

The Conference recognized that in a dynamic field such as public health, success tends to be transitory, since each achievement presages new challenges. Accordingly, there must be increasing numbers of adequately prepared public health personnel capable of utilizing past, present, and developing knowledge to adapt health organizations and other social institutions to the solution of existing and emerging health problems.

In view of the scope, content, and responsibilities of public health, the Conference reaffirmed the necessity for comprehensive and coordinated education and training. Accordingly, the Conference considered the responsibilities of State and local health departments, national and community voluntary health agencies, colleges and universities, professional associations, and other organizations which are providing and must continue to provide initiative, economic resources, and personnel. Only through a cooperative effort on the part of many organizations and institutions, including the Federal Government, will sufficient health manpower be developed to meet the health needs of all citizens in the years ahead.

Since the charge to the Conference was concerned specifically with an existing Federal program, the recommendations of the Conference were confined to the conduct of that program. The recommendations represent a consensus concerning the necessity for continuing the program, with pertinent expansions and modifications designed to increase its effectiveness.

II. Review of Program

Title I of the Health Amendments Act of 1956 authorized public health traineeships which support "professional health personnel" in "graduate or specialized training in public health." Title II of this act authorized advanced training for professional nurses to prepare them as teachers, supervisors, and administrators.[1] In 1958, Congress authorized the award of formula grants to schools of public health in recognition of their unique character, special needs, and national responsibility for comprehensive training in public health. The award of project grants to strengthen or expand graduate public health training in schools of nursing, engineering, and public health was authorized in 1960. All of these provisions have served to strengthen the Nation's resources for public health training and to increase the numbers of critically needed health manpower.

PUBLIC HEALTH TRAINEESHIPS[2]

Public health traineeships provide for the award of financial aid either directly to individuals or through grants to training institutions. Traineeships in schools of nursing have been and are awarded through more than 60 institutions with accredited programs in public health nursing. Originally, traineeships to support students in the 12 schools of public health were awarded directly to individuals and in a few instances through institutional grants. Beginning in fiscal 1963, all such traineeships are awarded through these institutions. The Public Health Service continues to award traineeships directly to various categories of personnel who elect training offered by other university departments or schools; e.g., schools of engineering, departments of nutrition, and programs in dental hygiene. During the 7 fiscal years, 1957–63, $15 million has been appropriated to support almost 4,300 trainees.

The initial appropriation in fiscal 1957 of $1 million was increased to $2 million in fiscal 1958. The annual appropriation remained at $2 million until fiscal 1963 when it was increased to $4 million. With this expansion,

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[1] The Division of Nursing of the Public Health Service held an Evaluation Conference as required by law, on the "Professional Nurse Traineeship Programs" (sec. 307 of the Public Health Service Act) on July 17, 18, and 19, 1963, in Washington, D.C.

[2] Sec. 306 of the Public Health Service Act. See app. A for the text of this section.

new activities were inititated to broaden the scope and increase the effectiveness of the traineeship program.

Special Purpose Traineeships are awarded through institutions to individuals desiring training in certain priority programs which the Public Health Service has determined to require emphasis. These programs at present include: medical care administration, environmental health science, and expanding public health programs such as accident prevention and chronic disease control.

Grants for *Short-Term Traineeships*, also in fiscal 1963, were made available to public and private nonprofit institutions to assist in increasing the competence of professional health personnel presently employed. These programs are designed to bring the personnel up to date in knowledge and skills related to their professional responsibilities and to decrease the lag between discovery and application in the field of public health.

PROJECT GRANTS [3]

Since 1960, project grants have been awarded to schools of public health, nursing, and engineering for projects to strengthen or expand graduate or specialized public health training. Project grants are made to assist the schools in meeting the needs of changing and emerging public health programs, and may thus be used to enrich curricula, strengthen training programs, and develop improved methods of training. They may also be used to enlarge faculties and supporting staff needed as a result of increased enrollment. Grants are made for 1 year, but are renewable up to 4 years contingent on the availability of funds and the satisfactory development of the project. During the first 3 years of the program, $5.4 million has been awarded through 233 grants covering approximately 100 projects in 21 different curriculum areas. Training programs in the increasingly important areas of air and water pollution, radiological health, accident prevention, chronic diseases, health economics, and medical care administration have received and are receiving support under this section of legislation.

FORMULA GRANTS [4]

Formula grants to public or nonprofit accredited schools of public health have been in effect since 1958. In 1961, the authorization ceiling was raised from $1 million to $2.5 million per annum. These grants are intended to support the provision of public health training in schools of public health by offsetting a portion of the difference between income from tuition and the cost of instruction of federally sponsored students. Therefore, in the allocation of funds by the Surgeon General, primary consideration is given to the number of federally sponsored trainees

[3] Sec. 309 of the Public Health Service Act. See app. A for text of this section.

[4] Sec. 314(c)(2) of the Public Health Service Act, as amended. See app. A for the text of this section.

enrolled in such schools of public health. The effect of the grants is to expand and improve the public health training offered by these schools, and to enable them to accept increased enrollments.

The institutions which meet the legal qualifications at the present time are the 12 schools of public health accredited by the American Public Health Association for granting the degree of master of public health. It is to these schools that the Nation must look for the formal training of the basic cadre of professional public health personnel, broadly prepared in the biological, physical, and social sciences. These 12 schools serve not only the 50 States but also have a large portion of students from other countries.

One-third of the grant funds are allotted equally among the 12 eligible schools; the remaining two-thirds are allotted according to a formula based on a 3-year average of the number of federally sponsored students. Funds are made available after approval of an application from an eligible school showing how and to what extent the proposed expenditures represent improvement in existing teaching programs or the initiation of new ones.

During the 5 fiscal years since the inauguration of the formula grants, $5.6 million has been distributed to the 12 schools. The 1963 formula grants distributed totaled $1,900,000, with individual grants varying from $80,100 to $270,800. More than four-fifths of the total moneys budgeted under this program were expended for teaching and other personnel; the remaining one-fifth was expended for special conferences, continuing education, travel, and equipment.

Appropriations for Public Health Training

[Thousand of dollars]

Fiscal year	Legislative authority (PHS Act)		
	Traineeships, sec. 306	Project grants, sec. 309	Formula grants, sec. 314(c)(2)
1957	$1,000	.....	.....
1958	2,000	.....	.....
1959	2,000	.....	$450
1960	2,000	.....	1,000
1961	2,000	$1,430	1,000
1962	2,000	2,000	1,173
1963	4,000	2,000	1,900

III. Evaluation of Program

The Conference evaluation of sections 306, 309, and 314(c)(2) of the Public Health Service Act was based in part on two original questionnaire surveys which were undertaken in the spring of 1963. The first was a survey of the 3,123 title I trainees who received training between the inception of the program in 1956 and the end of the 1961–62 academic year. The second survey concerned the manpower and training needs of official health agencies in the 50 States. Additional data were derived from unpublished official reports, from information made available by non-Federal agencies and private persons, and from published studies.

APPRAISAL OF EFFECTIVENESS

A total of 4,281 title I traineeships have been awarded during the 7 years of the program. Approximately one-half of the trainees have been nurses preparing for beginning staff positions in public health agencies. Of the remaining 14 categories of trainees, 429 were sanitary engineers, 335 were health educators, 311 were physicians, and 252 were sanitarians. Less than 100 trainees comprised each of the remaining categories. There is no question that the 4,281 trainees represent a significant increase in the number of trained public health personnel available for administrative, research, teaching, and service positions. The previously existing downward trend in public health enrollments represented by a 50-percent decrease in the annual number of public health trainees between 1947 and 1955 has been reversed.

Approximately three-quarters of the trainees who were surveyed completed and returned the questionnaire. Of these, 80 percent had entered employment in public health following the completion of the program of study sponsored by this award. Over 90 percent of the trainees who entered public health employment did so within the year following the completion of their traineeship; the remainder did so following an interval of further graduate study or work experience. The majority of those not working in public health are employed by academic institutions or other agencies with some health responsibilities. Less than 5 percent of those employed are in practice, consulting work, or other employment of a strictly private nature. State and local health departments have benefited markedly from the traineeship program, since at present they employ over 60 percent of the trainees who are working in public health.

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The fact that 58 percent of all title I trainees had no previous public health experience is an indication of the impact of this program on the recruitment of individuals into public health training.

MEASURES OF NEED

Although there is little question that this program has contributed impressively toward increasing the numbers of adequately prepared public health personnel, the achievement must be evaluated in terms of the needs, both for the numbers of personnel and the quality of their preparation. The dimensions of need are extremely difficult to define and for the present reliance is placed on the informed opinion of experts in the field. Numerous studies conducted in recent years have shown that the preparation of professional health personnel is not keeping pace with population growth. It is generally accepted by experts that there are even more severe shortages of personnel qualified for leadership and professional service in the Nation's changing and expanding public health programs.

Public health requires personnel with a wide and increasing range of special qualifications. The primary need is for organizational leaders who are drawn from the pool of academically qualified individuals possessing a comprehensive education in the basic disciplines of public health and additional preparation in depth in one of the related substantive areas. Furthermore, the increasing demands for personal health services point to the need for many more community-based programs staffed by physicians, dentists, nurses, therapists, social workers, and other personnel, all of whom need a knowledge of the principles of community health and comprehensive care.

Qualified personnel in the above categories are needed by official agencies with statutory responsibilities for health and welfare at the Federal, State, and local levels. These include departments of health, departments of welfare, crippled children's agencies, mental health agencies, water supply and pollution control agencies, rehabilitation agencies, and others. Personnel are also required by an increasing number of community health programs under voluntary auspices, which are concerned with the financing, planning, and provision of health services. In all of these situations, the full need for personnel is difficult to quantify because most programs have not developed to the fullest extent necessary. Shortages of personnel have inhibited expansion of programs and placed severe restrictions on needed and desirable activities.

The Conference concluded that the information available indicates needs in programs at their present level of operation. The data on needs were further considered to represent an underestimate because, first, they are concerned with the present level of operation, which was considered to be less than necessary; and second, data were available only

from official health agencies, which comprise only a portion of the total of community health programs.

MANPOWER FOR OFFICIAL HEALTH AGENCIES

Examination of the staffing patterns of State and local health departments over the past decade reveals failure to keep pace with population growth. In some areas the departments are either losing ground or virtually standing still. In 1950, there were 2,317 public health physicians and 1,183 engineers employed full time by State and local health departments. By 1954 these figures had declined to 2,085 and 1,030, respectively. This occurred in the face of a national population increase of approximately 12 million. In 1962, there were 2,166 public health physicians and 1,263 engineers employed full time by these agencies. Although this represents an improvement, there are still significant shortages when personnel to population ratios are taken into account. The 2,317 public health physicians and 1,183 engineers employed in 1950 provided services for a population of 151.7 million. The 1962 national population of 186.6 million requires significantly increased numbers of professional public health personnel if the availability of health services is to be commensurate with emerging health needs.

Public health is faced with the necessity of preparing approximately 17,000 additional personnel by 1970 for the staffs of State and local health departments, merely to keep pace with projected population growth and an attrition rate of 4 percent per annum. The needs for physicians can be expected to be even more critical. Since over three-fourths of those presently engaged in public health work are over the age of 45 years, an attrition rate in excess of 4 percent annually is to be anticipated in this category. The necessity to develop programs that will be concerned with newly emerging health problems and older problems which have long been neglected requires many more personnel in all categories.

A study of the 269 official health departments employing 30 or more full time, professional personnel was undertaken in October 1961. Among the 131 departments completing the questionnaire, 11.3 percent of the budgeted positions for professional personnel were vacant. The percentage of vacant positions was 7.2 for engineers, 7.9 for nurses, 9.6 for physicians, and 15.8 for social workers. Counts of budgeted vacancies do not accurately reflect need. Nevertheless, if this proportion of vacancies can be assumed to exist among the categories of professional personnel in all State and local health departments, there were at least 5,000 vacant positions in 1962.

Another dimension of need relates to number and proportion of positions which are being filled with inadequately trained or untrained personnel. A comparison of data from State and local health departments in 1958 and 1963 reveals only a slight increase in the proportion of professional full-time personnel who were considered to have the education and

training necessary for their jobs. While 49 percent had such training in 1958, 51 percent were considered to be adequately prepared in 1963. This slight difference indicates that much more needs to be done toward correcting the deficiency in the level of training of personnel employed in public health.

QUALITY OF TRAINING

The quality, content, and depth of public health training also have been improved as a result of this program. Although it it difficult to evaluate the degree or impact of these changes, it is worth noting the contributions which have been made by the training program. During the past 3 fiscal years, the project grants for graduate training in public health have contributed to improvements in 21 different curriculum areas, through the provision of faculty and program support. This support has been distributed to 47 schools of public health, nursing, and engineering through 63 separate grants in fiscal year 1961; to 58 schools through 87 grants in 1962; and to 55 schools through 83 grants in 1963. The number of individual curriculum areas indicates the breadth of the training needs in public health, as well as the scope of requirements for future development.

Support to enhance the quantity and quality of instruction in public health has been provided through formula grants to the 12 schools of public health. These schools collectively, and in some instances individually, provide instruction in all of the 21 curriculum areas referred to above. During the 5 years that these grants have been made to schools of public health, they have been used in a variety of ways to strengthen the quality as well as the quantity of general training programs in public health. Additional faculty members have been brought in to add new values to teaching, to handle increased numbers of students in the basic courses, and to improve training in a whole series of specialized curriculum areas.

ROLE OF FEDERAL AND STATE GOVERNMENTS

The Conference concluded that it is highly appropriate for Federal resources to be used to support the higher levels of education and training essential for preparation of leadership personnel, without which other public health activities cannot reach full fruition. The primary responsibility of State governments resides appropriately in the area of inservice training where programs can be more adequately tailored to local needs. There is a large area in which responsibilities are shared by the Federal and State Governments, with respect to administration and support of public health training. Accordingly, programs in continuation education, residency training, and field training should and do receive support from both sources. In many situations, programs which are supported primarily with Federal funds are augmented through the contribution of

teaching time and administrative services by professional personnel working in State and local health organizations.

The identifiable expenditures by State health agencies for public health training have increased from $2.8 million in 1956, the year title I traineeships were first awarded, to a high of over $6 million in 1961. The Federal Government expended approximately $11 million for traineeships from fiscal 1957 through 1962. During this same period, State health agencies increased their efforts and expended almost $30 million for public health training, of which $11.5 million was derived from State and local sources. All of the 50 States have had public health workers who have received training under this program. Colleges and universities in 40 States have had trainees enrolled as students.

This endeavor has enjoyed extensive participation of institutions and individuals at Federal, State, and local levels. The relative successes of this program have been largely achieved through this widespread contribution of energy and resources.

IV. Conference Recommendations

The recommendations, offered for the consideration of the Surgeon General and the Congress, are presented in the order in which subjects were discussed at the final plenary session of the Conference. Taken together, these recommendations represent a comprehensive approach to the problem of increasing the numbers of adequately trained public health personnel required to meet the Nation's health needs. The recommendations concern the following areas:

1. Extension of Public Health Training Program
2. Health Manpower Training and Recruitment
3. Public Health Traineeships
4. Project Grants for Graduate or Specialized Training
5. Formula Grants to Schools of Public Health
6. Grants-in-Aid to States
7. Career Development Awards for Faculty
8. Teaching Facilities Construction Aid
9. Training Program Operating Funds

The Second National Conference on Public Health Training recommends that:

RECOMMENDATION 1

The existing Public Health Training Program, as authorized in sections 306, 309, and 314(c)(2) of the Public Health Service Act, be extended at least through 1970, and a third National Conference on Public Health Training be held in 1968, to evaluate progress and to make recommendations as to the subsequent course of the program.

Supporting Statement

The appropriation of approximately $26 million from fiscal 1957 through 1963 under sections 306, 309, and 314(c)(2) of the Public Health Service Act has contributed significantly to increasing the supply of adequately trained public health personnel and improving the quality of their preparation. However, the needs are so great at this time that the Conference could not anticipate a solution to the problem of manpower shortages within the foreseeable future. Accordingly, extension of the program at least through 1970 was recommended. The Conference recognized the implicit desirability of continued review and evaluation, with subsequent public accountability, for a program of this scope and importance. Consequently, the calling of a third National Conference on Public Health Training in 1968 was recommended.

Since the public health traineeships (sec. 306), project grants for curriculum development and faculty support (sec. 309), and the formula grants to schools of public health (sec. 314(c)(2)), are all interrelated and deal with the problem of shortages in manpower for public health, they were considered to be components of a coordinated approach for the correction of these shortages. For this reason, all three sections of the legislation were reviewed and evaluated as a group. Subsequent review and evaluation of these authorizations as a group were recommended.

To insure continuity of the interrelated training program, the Conference urged that there be a review of each of the sections by the Congress at least 1 year prior to expiration of the respective authorizations. The calling of a Conference a year or more in advance of the scheduled expiration of legislative authority would permit earlier review of the program by the Congress and the subsequent implementation of any authorized modifications without a loss in the continuity of training activities.

The Conference recognized that these sections of the Public Health Service Act do not represent all of the public health training activities supported by the Public Health Service. However, they were considered to represent a comprehensive program which is basic to adequate training for public health.

RECOMMENDATION 2

A health manpower unit in the Public Health Service, closely related to operating programs and training activities, be responsible for—

(*a*) Collection and analysis of pertinent data on a continuing basis;

(*b*) Conduct and support of studies and demonstrations related to training and recruitment; and

(*c*) Dissemination of information on all aspects of health manpower.

Supporting Statement

The requirement for qualitative and quantitative data concerning health manpower needs and resources will steadily increase. Rapidly changing characteristics of society, increasing recognition of the importance of health, and vast growth of community health services necessitate the development of accurate and meaningful data to guide intelligent programing for the recruitment and optimal utilization of health manpower. Rational organization and provision of health services require detailed knowledge of factors affecting the supply of health manpower and its deployment in society.

The development of more effective public health training programs requires data concerning the interrelationships among the functions of various professions, the range of skills required to perform certain tasks, and the characteristics of the health services to be provided. Appropriate study of the factors which influence the selection of health careers is of utmost importance at this time, since high birth rates in the 1940's forecast increased numbers of college and graduate students from which to draw candidates for the health professions in the immediate future. Failure to recruit and prepare a significant proportion of these students for careers in the health professions, including public health, will severely handicap health organizations in their efforts to provide sufficient health services of high quality.

Needed activities of the health manpower unit include, but are not limited to—

(*a*) Regular assessment of national needs for health manpower, factors influencing need, and resources for meeting these needs;

(*b*) The support and conduct of (1) studies of the effectiveness of educational and training programs for the preparation and recruitment of health personnel, and (2) evaluation and demonstration of the recruitment potential of specific training programs

for students preparing in the health professions, and special preparation for public health at the prebaccalaureate level; and

(c) Stimulation and support of experimentation with recruitment for training among selected groups by official and voluntary health organizations.

RECOMMENDATION 3

Appropriations under section 306 of the Public Health Service Act be sufficiently increased to permit:

(*a*) Augmentation of the number of traineeships to levels commensurate with the Nation's public health needs;

(*b*) Broadening of the traineeship program to include other types of graduate training, besides those now covered, the basic criterion being adequacy of public health content;

(*c*) Provision of part-time stipends and special traineeships for the supplemental preparation in public health of students at the postbaccalaureate level in the basic health professions;

(*d*) Support of additional persons in extended academic programs and residency training;

(*e*) Forward financing of all traineeships;

(*f*) Reservation at the Federal level of a number of traineeships to be centrally awarded in consultation with State operating agencies; and

(*g*) Restudy and revision of the level of stipends and allowances to trainees, particularly at the postdoctoral level.

Supporting Statement

The Conference concluded that the public health traineeships represent only an impressive beginning in the correction of severe shortages of health manpower. There was unanimity of opinion as to the need for increasing this effort. Conferees from all types of institutions currently responsible for the long-term academic preparation of trainees noted the lack of sufficient traineeships to support all qualified and deserving applicants. This situation exists even with the increase in appropriations from $2 million to $4 million in fiscal 1963.

Recognizing the acutely competitive situation which exists with respect to all professional manpower, the Conference recommended broadening the criteria of eligibility for traineeships to permit the support of supplementary preparation in public health at the postbaccalaureate level for students in the health professions through part-time stipends and special traineeships. This broadening will encourage students in dentistry, medicine, social work, and other of the health professions to supplement their basic professional education with additional preparation in public health.

Broadening was also recommended to include additional postbaccalaureate programs subject to the evaluation of the public health content of the proposed study. This broadening would encourage the utilization of appropriate university departments and graduate schools in such fields as metropolitan planning, hospital administration, and public administration.

The importance of evaluation of the public health content of a program of study was emphasized. At present there are few mechanisms for accrediting or approving the public health content of such programs. Accordingly, extended accreditation mechanisms or careful review by the National Advisory Committee on Public Health Training of individual proposals for the support of such training would need to accompany the broadening of eligibility criteria for traineeships.

The rapid accumulation of scientific knowledge has resulted in the necessity of extended preparation in depth for individuals who will occupy positions of leadership in administration, research, service, and teaching in public health. The Conference noted the desirability of supporting such individuals for 3 or 4 years in those instances where this represents the time required to complete a defined and acceptable program. Such extended preparation would include residency training, approved by the appropriate examining body, and demonstrably relevant to public health; e.g., community dentistry, community medicine, maternal and child health, and occupational health.

An additional nonrecurring appropriation for one or more years was urged in order to forward finance the traineeship program. Forward financing is needed to permit early confirmation of awards to promising individuals who must plan 6 months to a year ahead because of professional obligations, commitments to employing agencies, and family responsibilities. At the present time, a prospective trainee who plans to begin an academic program in September of a given year usually does not receive final confirmation of his award until August of the same year. This delayed notification impedes the recruitment of outstanding candidates and frequently causes a disruption in the services of operating agencies because of the last-minute release of key personnel.

It was deemed advisable that augmentation in the number of traineeships be accompanied by the reservation at the Federal level of a few of these to be awarded centrally in consultation with State operating agencies. This mechanism, in combination with the award of traineeships through grants to academic institutions, would achieve a balance between the priorities for training assigned by schools and operating agencies.

The desirability of creating a uniform schedule of awards among comparable Federal training programs indicated the need for study and, where appropriate, revision of the level of stipends and allowances to trainees. Such a schedule should reflect various factors, including the individual needs of trainees; e.g., age, family size, level of training,

professional position, and cost of living. At present, stipends under this program are higher than those of some Federal programs for certain postbaccalaureate students, but are significantly lower for postdoctoral students. The questionnaire survey of trainees revealed that one-half of the students in this latter category (physicians, dentists, and veterinarians) sustained a considerable reduction in monthly income. These individuals are among the most critically needed in public health. Furthermore, their subsequent careers in public health will at an income significantly below that which they could obtain in private practice.

RECOMMENDATION 4

The authority for project grants for graduate or specialized training in public health be expanded and the appropriation authorization be substantially increased to permit—

(*a*) Continuation of existing projects of high quality, as well as award each year of project grants to meritorious new proposals;

(*b*) Broadening of eligibility for project grants to departments of preventive medicine in medical schools and to other public and nonprofit institutions and agencies, with provision for evaluation of adequacy of the public health content of the proposed training;

(*c*) Making project grants available for the stimulation and development of training programs in interdisciplinary settings;

(*d*) Making project grants available to support continuation education and specialized training jointly developed and sponsored by educational institutions, operating agencies, and professional associations; and

(*e*) Formation of expert review committees, or study sections, for technical review of grant applications prior to final review by the National Advisory Committee on Public Health Training.

Supporting Statement

A higher authorization and increased appropriations are essential if the Public Health Service is to award grants to new and needed proposals, in addition to maintaining these projects which warrant continued Federal support. There are insufficient funds available under the current authorization ceiling and appropriation of $2 million to permit the awarding of any additional grants after fiscal 1963.

The Conference recommended broadening the eligibility for grants to include institutions and agencies, in addition to schools of public health, nursing, and engineering, to which present legislation is limited. Grants to other kinds of organizations would encourage them to expand and strengthen graduate or specialized training in public health and would contribute toward bringing new individuals into the field of public health.

The importance of dramatically strengthening and expanding the public health content of the curricula in professional schools such as dentistry, medicine, social work, and veterinary medicine, from which public health

personnel may be recruited, was repeatedly emphasized. The lack of public health content in the curricula of such schools has resulted in the graduation of dentists, physicians, social workers, and veterinarians whose preparation is so deficient in knowledge of the principles and content of community health services and organization, that these individuals have little stimulation to select careers in public health. Furthermore, increased strength in departments of preventive medicine and departments of community dentistry would provide students with an awareness of public health sufficient to favorably influence their subsequent provision of health services in clinical practice.

Departments of preventive medicine receive specific mention because of the urgent need for recruitment and preparation of physicians for leadership positions in public health. To date, the impact of the public health training program in this respect has been minimal. A 1961 health manpower survey revealed that among physicians 35 years of age and under, only 33 were receiving residency training in public health. Comparable figures for other specialties were 1,827 in psychiatry, 3,718 in general surgery, and 4,375 in internal medicine. Support for programs of public health and preventive medicine in medical schools must receive high priority if this severe imbalance is to be corrected.

Efforts to strengthen and expand academic programs, departments, or schools require stability of funds if competent faculties are to be attracted and held. Accordingly, the tentative commitment of project funds for up to 7 years was recommended, subject to annual evaluation and the demonstration of satisfactory progress, with the possibility of extension beyond this period. A grant of less than 2 years' duration was considered to be unsatisfactory except in very special circumstances.

Critical manpower requirements necessitate an increase in the numbers of specialized ancillary health personnel. There is a significant need for the exploration and design of new training programs concerned with the preparation of individuals to work under professional supervision and to assist in the provision of health services. To this end, the Conference recommended that project grants be made available to public and private nonprofit organizations for the support of specialized training programs.

The Conference recognized the importance of graduate or specialized training in interdisciplinary settings utilizing unique combinations of training resources, and recommended that grants be made available to stimulate the development of interagency, interdepartment, and interuniversity programs. At present most interdisciplinary programs are found in the Nation's 12 schools of public health. These schools are not distributed evenly throughout the United States. However, there is a wide distribution of academic and operating institutions which possess many of the essential resources which could be effectively utilized for the creation of interdisciplinary training programs in public health.

Continuation education is universally accepted as a high priority area, but it lacks a natural habitat. Efforts directed at shortening the lag

period between the development of new knowledge and its application require effective programs of continuing education. Furthermore, the exponential expansion of scientific knowledge necessitates an institutional focus for effective organization and presentation of programs in continuation education. Universities are reluctant to divert their already limited resources from their primary mission of the acquisition of new knowledge and preparation in depth of the full-time student. Likewise, operating agencies generally lack appropriate personnel or sufficient resources to develop programs in continuation education. The availability of project grant funds would stimulate and assist educational institutions, operating agencies, and professional associations to sponsor jointly and to collaborate in the development of programs to meet this need. This approach is comparable to that presented as Recommendation 13 by the First National Conference on Public Health Training.

The role of the National Advisory Committee on Public Health Training at present is twofold: to advise the Surgeon General on policy, administration, and priorities in program areas; and to serve as an expert study group in the review of applications for project grants. The expansion of the project grant program and the necessity for evaluation of the adequacy of the public health content of proposed training would place additional demands for review of projects and conduct of site visits on the time of consultants. The creation of review committees is warranted so that the National Advisory Committee on Public Health Training can devote its efforts to the purpose originally set forth in the Health Amendments Act of 1956; namely, to advise the Surgeon General on policy and administration of the training program.

The Conference further suggested that the Public Health Service consider the desirability of combining trainee stipends with funds for faculty support and curriculum development into *training grants* to institutions. These individual elements are available separately under sections 306 and 309, respectively. A broadening of the legislation to include institutions, in addition to schools of public health, nursing, and engineering, would result in a high proportion of applications which require both program and student support. The availability of *training grants* would relieve the applicant institution of the burden of preparing multiple proposals and would contribute to efficient administration. The Conference specified that *training grants* be limited to the postbaccalaureate level at this time, since this area has needs which require priority attention. It was deemed advisable that the grantee institution be permitted to use a portion of *training grants* funds for the reimbursement of unusual expenses incurred by a student as a result of training, such as travel and additional living expenses connected with field experiences, and the recruitment expenses connected with a training program.

RECOMMENDATION 5

The authorization ceiling for formula grants to schools of public health be increased to at least twice the present level, and there be annual increments in appropriations adequate to reach the proposed authorization by 1970, in order to assist these schools in enriching their curricula and increasing enrollment of federally sponsored students.

Supporting Statement

The 12 schools of public health have unusual needs and limited financial resources. Neither State legislatures nor private endowments alone can keep pace with the high costs of keeping a school strong in the many and varied elements that constitute the current complex public health program. Such strength is essential if these schools are to continue their role as the primary national resource for public health training.

In recommending progressive and substantial increase in authorization and appropriations for formula grants, the Conference recognized the need to compensate the schools of public health in part for the great discrepancy between instructional cost per student and tuition received by the university. Recent figures suggest that, on the average, tuition fees cover less than one-seventh the cost of basic operations and instruction. At present, well over half the students in the schools of public health are federally sponsored. The net costs to these schools on behalf of federally sponsored students exceeded $5 million during the 1962–63 academic year.

Review of the use of formula grants to date indicated that four-fifths of the grant moneys have gone to pay salaries of personnel, mostly academic staff, but also secretarial and other supporting staff. Funds have also been used for essential materials and teaching aids. Documented planning by individual schools shows that current urgent needs are far in excess of the present authorized ceiling. Furthermore, these needs are expected to increase as enrollment grows and initial graduate study is extended beyond 1 academic year. Several programs are already of 2 years' duration, and others contemplate an increase to at least 3 semesters or 18 months in order to encompass sufficient instruction in the ever-widening field of public health.

A reasonable projection of needs, concentrating primarily on necessary increases in professional staff, indicates that a doubling of the present formula grant authorization of $2.5 million to $5 million is the minimum increase required. The Conference recommended annual increments in appropriations to reach the new authorization by 1970, to assure orderly growth of the schools commensurate with increased demands.

RECOMMENDATION 6

Earmarked training and recruitment grants-in-aid be made to the several States, to assist the development of needed training programs geared to local public health requirements. These grants-in-aid would be awarded on a matching basis, with provision for the submission of a State plan for review and approval by the Surgeon General.

Supporting Statement

The primary responsibility of the States for public health training is in the areas of inservice and short-term training not carrying academic credit. The Conference noted, however, that the inauguration of such programs by State health departments was being impeded because of insufficient resources to develop and administer effective training. Grants-in-aid are, therefore, recommended to assist States to meet more effectively their responsibilities for public health training. The initial appropriation should be no less than $4 million, based on an estimate of an average of approximately $80,000 for each of the 50 States, with a basic minimum to each State as has been found practical in other grant-in-aid programs. These moneys would strengthen training programs in State health departments and would enable States where no training programs exist to staff a training and recruitment unit.

The importance of grant-in-aid funds to the States for training was recognized by the First National Conference on Public Health Training in 1958. Subsequent experience has further demonstrated a continuing need. State health departments are faced with the task of correcting the deficiencies arising from the employment of inadequately trained or untrained personnel. At the present time, almost 50 percent of the employees of State health departments have not had adequate public health training. This represents a burden which the States may partially alleviate through extensive inservice training.

Grants-in-aid would assist States in the provision of public health training closely geared to local requirements. Such training would include the supplemental preparation essential for the adaptation of existing personnel to new health programs and specialized training based on an analysis of the skills utilized in the provision of health services. States placing high priority on the midcareer development of an individual through long-term academic training or on prebaccalaureate academic training to meet local needs, would be permitted to elect this use of funds by so indicating in the plan submitted to the Surgeon General.

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RECOMMENDATION 7

Special fellowships and career development awards be initiated to assist in the development of critically needed faculty in the disciplines essential to public health. These awards would be comparable with those now offered by the Federal Government in other fields, and would enhance all public health training.

Supporting Statement

The shortages of competent faculty in the subjects essential to public health training and the need to develop adequate numbers of new training programs without sacrificing quality were two of the most critical problems noted by the Conference. College and university enrollments of 5 to 7 million students are predicted for 1970. A dynamic program of faculty development must be initiated, if a significant number of these students are to be recruited and prepared for careers in public health.

Significant increases in the numbers of faculty were considered essential since seminars, tutorials, research preceptorships, and supervised field experiences must be offered students at the graduate level in approximately 2 dozen different subject areas. The Conference considered such a program to be an important component of any effort to strengthen and expand public health training. The appropriation of funds would permit the award of special fellowships for the career development of faculty in such essential disciplines as community dentistry, environmental health, preventive medicine, and public health nursing.

In addition to keeping pace with needed expansion, faculty development is required for positions in existing programs. As an illustration, a questionnaire survey of departments of preventive medicine during the 1962–63 academic year revealed that among the 62 departments responding, there were 53 full-time budgeted vacancies for assistant, associate, or full professors. A significant portion of the positions for public health faculty in schools of medicine are thus vacant, since departments of preventive medicine are characteristically small. It is not unusual to find a department consisting of only one or two full-time faculty members. Comparable shortages exist for public health faculty in numerous other health professional schools. Moreover, the faculties of such schools are looked to for advice and consultation at local, State, National, and international levels. These demands for public service represent an additional burden on existing faculties and further necessitate an increase in their numbers.

RECOMMENDATION 8

There be authorization and appropriation of sufficient funds on a continuing basis to assist in the construction of needed teaching facilities to accommodate more adequately present and future enrollments in the disciplines essential to public health.

Supporting Statement

The First National Conference on Public Health Training recommended the authorization and appropriation of funds to assist in meeting construction costs of additional teaching facilities for schools of public health and those schools of nursing accredited for the preparation of nurses for public health. The construction section of proposed legislation for health professions educational assistance in 1963 (H.R. 12) incorporated in part the recommendations of the First Conference.

As passed by the House of Representatives on April 24, 1963,* H.R. 12 provided for the appropriation of $175 million for a 3-year period, subject to renewal. The aggregate appropriation includes: (*a*) $105 million for the construction of new teaching facilities for the training of physicians, pharmacists, optometrists, podiatrists, nurses, and other professional health presonnel; (*b*) $35 million for the construction of new teaching facilities to train dentists; and (*c*) $35 million for the replacement or rehabilitation of existing teaching facilities for the training of all health personnel mentioned in (*a*) and (*b*) above.

The Second Conference endorsed H.R. 12 as essential to meeting the pressing demand for additonal teaching facilities in the numerous academic institutions engaged in graduate or specialized public health training. The Conference further recommended that modifications in the authorization be considered by the Congress when renewal of the program is discussed. Needed modifications include a recognition of the growing public health activities in schools of engineering and veterinary medicine by the extension of eligibility for construction aid to the public health phase of such programs. Furthermore, the unique and comprehensive training provided by the schools of public health warrant the consideration of their construction needs in a category apart from the institutions responsible for training other professional health personnel.

* Passed the Senate, Sept. 12, 1963; approved Sept. 24, 1963, as Public Law 88–129.

RECOMMENDATION 9

Adequate funds be appropriated to the Public Health Service to provide for the continued effective operation of this training program in its expanded form and for the utilization of contracts and cooperative agreements to stimulate and support new types of training programs and related recruitment activities.

Supporting Statement

The Conference noted that the administrative procedures evolved by the Public Health Service have resulted in the efficient operation of this program despite a limited appropriation for administrative costs; i.e., less than 2.5 percent of the total appropriation for sections 306, 309, and 314 (c)(2) in fiscal 1963. However, in view of the expansions recommended by the Conference, and the growth of the program over the past several years, it was considered to be essential that additional funds be made available to assure effective program management.

The Conference also recommended the appropriation of direct operating funds to permit the utilization of contracts, cooperative agreements, and other mechanisms to assist in the development of new training programs and related recruitment activities. Such flexibility would enable the Public Health Service to exercise initiative through the support of experimentation in training and related recruitment. Increased operating funds for these purposes would significantly enhance program accomplishments under sections 306, 309, and 314(c)(2) of the Public Health Service Act.

APPENDIX

A. Legislation

1. **Traineeships** (Section 306 of the Public Health Service Act, Public Law 84–911, July 1, 1956; as amended by Public Law 86–105, approved July 23, 1959, and Public Law 86–720, approved September 8, 1960).

To improve the health of the people by assisting in increasing the number of adequately trained professional and practical nurses and professional public health personnel, assisting in the development of improved methods of care and treatment in the field of mental health, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Health Amendments Act of 1956."

TITLE I—GRADUATE TRAINING OF PROFESSIONAL PUBLIC HEALTH PERSONNEL

TRAINEESHIPS

SEC. 101. Title III of the Public Health Service Act (42 U.S.C., ch. 6A, subch. II) is amended by adding at the end of part A the following new section:

"TRAINEESHIPS FOR PROFESSIONAL PUBLIC HEALTH PERSONNEL

"SEC. 306. (a) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1957, and for each of the next two [1] fiscal years, such sums as the Congress may determine, to cover the cost of traineeships for graduate or specialized training in public health for physicians, engineers, nurses, and other professional health personnel.

"(b) Traineeships under this section may be awarded by the Surgeon General either (1) directly to individuals whose applications for admission have been accepted by the public or other nonprofit institutions providing

[1] Amended to read "seven" by Public Law 86–105, approved July 23, 1959. Current authorization expires June 30, 1964.

the training, or (2) through grants to such institutions.

"(c) Payments under this section may be made in advance or by way of reimbursement, and at such intervals and on such conditions, as the Surgeon General finds necessary. Such payments to institutions may be used only for traineeships, and payments under this section with respect to any traineeship shall be limited to such amounts as the Surgeon General finds necessary to cover the cost of tuition and fees, and a stipend and allowances (including travel and subsistence expenses) for the trainee.

"(d) The Surgeon General shall appoint an expert advisory committee, composed of persons representative of the principal health specialties in the fields of public health administration and training, to advise him in connection with the administration of this section,[2] including the development of program standards and policies.[2] Members of such committee who are not otherwise in the employ of the United States, while attending meetings of the committee or otherwise serving at the request of the Surgeon General, shall be entitled to receive compensation at a rate to be fixed by the Secretary of Health, Education, and Welfare, but not exceeding $50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b–2) for persons in the Government service employed intermittently.

"(e) The Surgeon General shall, between June 30, 1958, and December 1, 1958, call a conference broadly representative of the professional and training groups interested in and informed about training of professional public health personnel, and including members of the advisory committee appointed pursuant to subsection (d), to assist him in appraising the effectiveness of the traineeships under this section in meeting the needs for trained public health personnel; in considering modifications in this section, if any, which may be desirable to increase its effectiveness; and in considering the most effective distribution of responsibilities between Federal and State governments with respect to

[2] Amended by Public Law 86–720, approved September 8, 1960, to insert "and section 309," here, and adding at the end of the sentence, before the period, "and including, in the case of section 309, certification to the Surgeon General of projects which it has reviewed and approved."

the administration and support of public health training. The Surgeon General shall submit to the Congress, on or before January 1, 1959, a report of such conference, including any recommendations by it relating to the limitation, extension, or modification of this section.[3]

"(f) Except as otherwise provided in this section, nothing contained in this section shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over the personnel or curriculum of any training institution."

EFFECTIVE DATE

SEC. 102. The amendment made by this title shall become effective July 1, 1956.

2. **Project Grants** (Section 309 (a) and (b) of the Public Health Service Act, Public Law 86–720, approved September 8, 1960).

To amend title III of the Public Health Service Act, to authorize project grants for graduate training in public health and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) part A of title III of the Public Health Service Act, as amended (42 U.S.C., ch. 6A, subch. II), is amended by inserting at the end thereof the following new section:

"PROJECT GRANTS FOR GRADUATE TRAINING IN PUBLIC HEALTH

"SEC. 309. (a) In order to enable the Surgeon General to make project grants to schools of public health, and to those schools of nursing or engineering which provide graduate or specialized training in public health for nurses or engineers, for the purpose of strengthening or expanding graduate public health training in such schools, there are hereby authorized to be appropriated not to exceed $2,000,000 for each fiscal year in the period beginning July 1, 1960, and ending June 30, 1965.

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[3] Amended by Public Law 86–105, approved July 23, 1959, to insert at the end of this subsection, the following: "The Surgeon General shall, between June 30, 1963, and December 1, 1963, call a similar conference, and shall submit to Congress, on or before January 1, 1964, a report of such conference, including any recommendations by it relating to the limitation, extension, or modification of this section."

"(b) Grants to schools under subsection (a) of this section may be made only for those projects which are recommended by the advisory committee appointed pursuant to section 306(d). Any grant for a project made from an appropriation under this section for any fiscal year may include such amounts for carrying out such project during succeeding years. Payment pursuant to such grants may be made in advance or by way of reimbursement, and in such installments as the Surgeon General shall prescribe by regulations after consultation with representatives of such schools."

Approved September 8, 1960.

3. **Formula Grants** (Section 314(c) of the Public Health Service Act, Public Law 85–544, approved July 22, 1958; as amended by Public Law 86–720, September 8, 1960, and Public Law 87–395, October 5, 1961).

To amend section 314(c) of the Public Health Service Act, so as to authorize the Surgeon General to make certain grants-in-aid for provision in public or nonprofit accredited schools of public health of training and services in the fields of public health and in the administration of State and local public health programs.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the last sentence of subsection (c) of section 314 of the Public Health Service Act, as amended (42 U.S.C. 246(c)), is amended by inserting "(1)" immediately after "available", and by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: "and (2) an amount, not to exceed $1,000,000 [1] to enable the Surgeon General to make grants-in-aid, under such terms and conditions as may be prescribed by regulations, for provision in public or nonprofit schools of public health accredited by a body or bodies recognized by the Surgeon General, of comprehensive professional training, specialized consultive services, and technical assistance in the fields of public health and in the administration of State and local public health programs, except that in allocating funds made available under this clause (2) among such

[1] Amended to read "$2,500,000" by Public Law 87–395, approved Oct. 5, 1961. Current authorization expires June 30, 1966.

schools of public health the Surgeon General shall give primary consideration to the number of federally sponsored students attending each such school."

SEC. 2. The amendment made by the first section of this Act shall be applicable only to the fiscal years beginning July 1, 1958, and July 1, 1959.[2]

Approved July 22, 1958.

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[2] Sec. 2 repealed by Public Law 86-720, approved Sept. 8, 1960.

B. Conference Organization

Planning for the Second National Conference on Public Health Training began in April 1962 when the National Advisory Committee on Public Health Training assumed its role as the Steering Committee and held preliminary discussions concerning the scope of the forthcoming Conference. Subsequent meetings of the Steering Committee were concerned with defining the data needed, the methods for its collection and presentation, the selection of conferees, and the formulation of agenda items for discussion at the Conference.

STEERING COMMITTEE

Dr. Paul Q. Peterson, Chairman, Division of Community Health Services
Miss L. Ann Conley, Wayne State University, Detroit
Mrs. Pearl P. Coulter, University of Arizona, Tucson
Dr. Edward Davens, State Department of Health, Baltimore
Dr. John W. Fertig, Columbia University, New York
Dr. John A. Logan, Rose Polytechnic Institute, Terre Haute, Ind.
*Dr. Berwyn F. Mattison, American Public Health Association, New York
*Dr. Malcolm H. Merrill, State Department of Health, Berkeley
Mr. Sewall Milliken, Public Health Federation, Cincinnati
*Dr. Charles E. Smith, University of California, Berkeley
*Dr. Tom F. Whayne, University of Kentucky, Lexington
Dr. Wesley O. Young, Idaho Department of Health, Boise
Dr. Elmer L. Hill, Executive Secretary, Training Resources Branch

The preparations for the Conference assumed increased proportions early in 1963 with the appointment of four pre-Conference Study Committees. Each committee met in March and May 1963. These meetings were devoted to the preparation of the Conference Working Paper and the Background Data book, and the suggestion of agenda items for the consideration of the Steering Committee.

COMMITTEE ON MISSION OF PUBLIC HEALTH TRAINING

*Dr. Myron E. Wegman, Chairman, University of Michigan, Ann Arbor
*Dr. Walter D. Atkins, New Mexico Department of Public Health, Santa Fe
*Dr. Roger Egeberg, Los Angeles County Department of Charities, Los Angeles

*Denotes members of the Executive Committee.

*Dr. George James, New York City Health Department, New York
*Dr. Hugh R. Leavell, Harvard University, Boston
*Dr. Gerard A. Rohlich, University of Wisconsin, Madison
*Dr. Margaret L. Shetland, University of North Carolina, Chapel Hill

COMMITTEE ON TRAINING NEEDS AND RESOURCES

*Dr. Kerr L. White, Chairman, University of Vermont, Burlington
Dr. Franklyn B. Amos, New York State Department of Health, Albany
Mrs. Bess Dana, Council on Social Work Education, New York
Dr. Daniel A. Okun, University of North Carolina, Chapel Hill
Dr. Anthony M.-M. Payne, Yale University, New Haven
Miss Doris R. Schwartz, Cornell-New York Hospital, New York
Miss Jeanette Simmons, American Heart Association, New York

COMMITTEE ON PERSONNEL NEEDS AND RESOURCES

*Dr. David Striffler, Chairman, University of Michigan, Ann Arbor
Mr. Harold Adams, Indiana University, Indianapolis
Dr. Howard L. Bost, University of Kentucky, Lexington
Dr. Ralph Dwork, Pennsylvania Department of Health, Harrisburg
Dr. Cecil Sheps, University of Pittsburgh, Pittsburgh
Miss Jean Stair, Western Reserve University, Cleveland

COMMITTEE ON POLICY AND ADMINISTRATION

*Dr. John D. Porterfield, Chairman, University of California, Berkeley
Dr. Bernard Bucove, Washington State Department of Health, Olympia
Dr. Robert Dyar, California State Department of Health, Berkeley
Dr. Lenor S. Goerke, University of California, Los Angeles
Mr. Don M. Hufhines, American Public Health Association, San Francisco
Mrs. Margaret Shackelford, University of Oklahoma, Oklahoma City

CONFERENCE SCHEDULE

The Conference was called to order at 9:30 a.m., Monday, August 19, 1963, by the Chairman, Dr. William R. Willard, Vice President and Dean, University of Kentucky Medical Center, Lexington. The opening plenary session consisted of remarks by Dr. James M. Hundley, Assistant Surgeon General for Operations; Dr. Aaron W. Christensen, Deputy Chief, Bureau of State Services; and Dr. Willard.

Following the plenary session, the 80 conferees were distributed among seven working groups, such that each working group had representation

*Denotes members of the Executive Committee.

from the Steering Committee and the four pre-Conference Study Committees. The work groups met concurrently for four sessions, totaling approximately 10 hours, during Monday and Tuesday, August 19 and 20, 1963. The Chairmen of the seven working groups were all members of the pre-Conference Committee on Mission of Public Health Training. Two members of the Public Health Service were assigned to each working group as recorders. All groups used the same agenda topics but covered them in different sequence to insure adequate coverage of all topics.

WORKING GROUP CHAIRMEN

I. Dr. Walter D. Atkins
II. Dr. Roger Egeberg
III. Dr. George James
IV. Dr. Hugh R. Leavell
V. Dr. Gerard A. Rohlich
VI. Dr. Margaret L. Shetland
VII. Dr. Myron E. Wegman

On Wednesday, August 21, 1963, the 80 conferees were redistributed among four recommendation groups, such that each recommendation group had equal representation from each of the seven working groups. These groups met concurrently to formulate draft recommendations on separate topics, for the subsequent consideration and discussion by the Conference in plenary session and ultimate synthesis into the final recommendations by the Executive Committee. Again, each group had two recorders from the Public Health Service.

RECOMMENDATION GROUP CHAIRMEN

Administration and Policy—Dr. John D. Porterfield
Academic Training—Dr. Kerr L. White
Nonacademic Training—Dr. Malcolm H. Merrill
Recruitment—Dr. David Striffler

The final plenary session was held on Thursday morning, August 22, 1963, and consisted of reports of the draft recommendations by the Chairmen of the four recommendation groups followed by discussion from the floor. Dr. Robert Dyar, California State Department of Health, delivered a summary of the Conference, and the Conference was concluded with remarks by Dr. David E. Price, Deputy Surgeon General.

The Executive Committee was composed of the representatives of the Steering Committee, the Chairmen of the four pre-Conference Study Committees, who also chaired the four recommendation groups, and the Chairmen of the seven working groups. The Executive Committee, with the Conference Chairman presiding, met Thursday afternoon and evening, August 22, 1963, and Saturday, September 7, 1963, to prepare the Report of the Conference to the Surgeon General.

C. Selected Data

The data presented herein have been selected from the Background Data book because of their pertinence for the evaluation of the public health training program.

Table 1. Demographic Trends in the United States, by Age Group, for Selected Years 1900–1962; Projections to 1970 and 1980

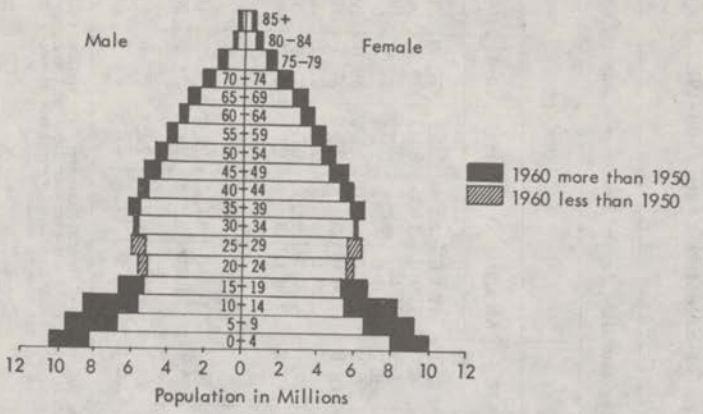
Year	Population of the United States, including Armed Forces overseas, by age											
	Number (millions)						Percent [1]					
	All ages	0–4	5–19	20–44	45–64	65+	All ages	0–4	5–19	20–44	45–64	65+
1900	76.1	9.2	24.5	28.8	10.5	3.1	100.0	12.1	32.1	37.9	13.8	4.1
1910	92.4	10.7	28.0	36.2	13.6	4.0	100.0	11.5	30.3	39.1	14.7	4.3
1920	106.5	11.6	31.7	41.0	17.1	4.9	100.0	10.9	29.8	38.5	16.1	4.6
1930	123.1	11.4	36.2	47.2	21.6	6.7	100.0	9.2	29.4	38.4	17.5	5.4
1940	132.1	10.6	34.7	51.6	26.2	9.0	100.0	8.0	26.3	39.0	19.9	6.8
1950	151.7	16.3	35.1	57.1	30.8	12.3	100.0	10.8	23.2	37.7	20.3	8.1
1960	180.7	20.3	49.2	58.3	36.2	16.7	100.0	11.3	27.2	32.3	20.0	9.2
1961	183.6	20.6	50.8	58.5	36.7	17.0	100.0	11.2	27.6	31.9	20.0	9.3
1962	186.6	20.7	52.3	59.0	37.3	17.3	100.0	11.1	28.0	31.6	20.0	9.3
Projections [2]												
1970:												
II	214.2	25.1	61.5	65.3	42.3	20.0	100.0	11.7	28.7	30.5	19.7	9.4
III	208.9	21.6	59.8	65.3	42.3	20.0	100.0	10.3	28.6	31.2	20.2	9.6
1980:												
II	259.6	32.5	76.3	82.1	44.2	24.5	100.0	12.5	29.4	31.6	17.0	9.4
III	245.7	27.9	67.0	82.1	44.2	24.5	100.0	11.4	27.3	33.4	18.0	10.0

[1] Percents not rounded to add to 100.0.
[2] Projection II based on 1955–57 level of fertility to continue through 1958–60. Projection III based on 1955–57 level of fertility to decline to 1949–51 level by 1965–70.

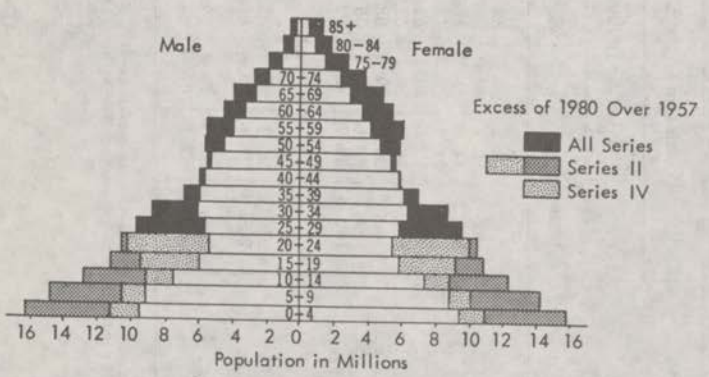
Sources: U.S. Department of Health, Education, and Welfare, Office of the Secretary, *Trends, 1962 Edition*, pp. 3 and 4 for years 1900–1961. For 1962, Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates," Series P-25, No. 265, May 21, 1963.

Table 2. Population of the United States, by Age and Sex, 1950 aud 1960, 1957 and 1980

A. 1950 and 1960



B. 1957 and 1980



NOTE: Series II, 1955–57 fertility rate to 1975–80; Series IV, 1955–57 level down to 1942–44 level by 1965–70, then constant to 1975–80.

Sources: U.S. Department of Commerce, Bureau of Census, Figure A, *Statistical Abstract*, 1961, p. 3; Figure B, *Current Population Reports, Population Estimates*, "Illustrative Projections of the Population of the United States, by Age and Sex, 1960 to 1980, Series P–25, No. 187, Nov. 10, 1958, cover page.

Table 3. Trends in Expenditures for Health and Medical Care in the United States, for Selected Years, 1950–60[1]

Year	Private and governmental expenditures combined				Private expenditures		
	Aggregate expenditures[2] (millions)	Average per capita expenditure[2] (dollars)	Gross national product (billions)	Medical care as a percent of GNP	Total expenditures (millions)	Percent of disposable personal income	Per capita expenditures (dollars)
1950	$12,365	$81.51	$271.4	4.6	$8,645	4.2	$57.56
1955	17,738	107.31	380.3	4.7	12,849	4.7	79.17
1956	19,183	114.05	408.4	4.7	14,288	4.9	86.44
1957	21,008	122.71	431.0	4.9	15,488	5.0	91.97
1958	22,826	131.11	443.7	5.1	16,596	5.2	96.83
1959	24,942	140.68	463.7	5.4	18,020	5.3	103.09
1960	26,503	146.67	493.6	5.4	19,566	5.6	109.80

[1] For private and governmental expenditures combined, fiscal years are used, i.e., from July 1 to June 30: health and medical care expenditures in year ending June 30; population, July 1; GNP average for 2 calendar years. For private expenditures, calendar years are used.

[2] Includes public and private expenditures.

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Community Health Services, Health Economics Branch, *Medical Care Financing and Utilization*, Health Economics Series, No. 1, PHS Pub. No. 947, 1962, tables 2 (p. 4) and 40 (p. 48).

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Table 4. Educational Manpower—Degrees Earned, Selected Years 1948–62

Level of degree by level of study	Academic year (ending June 30)								
	1948	1950	1952	1954	1956	1958	1960	1961	1962
All bachelor's [1]	272, 311	433, 734	331, 924	292, 880	311, 298	365, 748	394, 889	401, 113	420, 485
All master's [1]	42, 449	58, 219	63, 587	56, 823	59, 294	65, 614	74, 497	78, 940	84, 889
All doctor's [2]	3, 989	6, 420	7, 683	8, 996	8, 903	8, 942	9, 829	10, 575	11, 622
Doctor's: [2]									
Education	502	861	1, 146	1, 498	1, 583	1, 638	1, 590	1, 743	1, 900
Engineering	257	417	529	594	610	647	786	943	1, 207
Health professions	[3]	[3]	152	202	144	147	107	133	148
Biological sciences	[3]	[3]	764	1, 077	1, 025	1, 125	1, 205	1, 193	1, 338
Physical sciences	[3]	[3]	1, 720	1, 686	1, 667	1, 655	1, 838	1, 991	2, 122
Social sciences	[3]	[3]	1, 049	1, 195	1, 124	1, 106	1, 237	1, 355	1, 365
All others	3, 230	5, 142	2, 323	2, 744	2, 750	2, 624	3, 066	3, 217	3, 542
Doctor of Medicine [2]	6, 867	5, 612	6, 201	6, 757	6, 853	6, 861	7, 074	6, 986	7, 183
Doctor of Dental Surgery [2]	1, 689	2, 579	2, 918	3, 102	3, 009	3, 065	3, 247	3, 289	3, 209
Doctor of Veterinary Med. [2]	243	803	1, 005	803	910	845	825	821	833
Nursing:									
Diploma, associate [4]	[3]	[3]	[3]	26, 141	27, 080	26, 739	25, 977	26, 228	26, 886
Bachelor's [2]	3, 351	3, 292	4, 137	5, 109	5, 315	6, 052	6, 661	6, 574	6, 370
Master's [2]	200	368	478	482	240	479	599	555	504
Doctor's [2]		2	1	2					
Public health: [2]									
Bachelor's	298	440	327	185	152	211	168	303	251
Master's	467	523	637	455	477	602	527	369	376
Doctor's	74	25	26	29	23	29	24	26	21
Other health professions: [2 5]									
Hospital Administration	[3]	[3]	[3]	[3]	128	177	150	246	243
Social work, Social administration	1, 233	1, 269	1, 075	2, 163	1, 770	1, 994	2, 259	2, 513	2, 986
Pharmacy	2, 104	5, 751	4, 321	3, 885	3, 337	3, 782	3, 492	3, 482	3, 896
Optometry	1, 425	1, 801	844	706	352	334	339	315	291
Physical therapy	[3]	[3]	[3]	[3]	389	441	439	454	500
Occupational therapy	109	[3]	[3]	[3]	385	407	348	318	318

Sources for table 4, Educational Manpower—Degrees Earned, Selected Years 1948–62

[1] Figures for 1948–60 from Office of Education, Department of Health, Education, and Welfare, *Earned Degrees Conferred*, 1959–60, table 1, p. 3 (1962). Figures for 1961 from Office of Education, Department of Health, Education, and Welfare, *Summary Report on Bachelor's and Higher Degrees Conferred During Year 1960–61*, table, pp. 3–7 (November 1962).

[2] Source for degrees earned from Office of Education Annual Summaries, *Earned Degrees Conferred*. Unless otherwise specified, doctor's degrees cover only doctoral degrees in philosophy, education, engineering, etc. Doctoral degrees in the medical professions are listed separately.

[3] Data not available.

[4] Source for nursing diplomas and associate degrees from American Nurses' Association annual publication, *Facts About Nursing*, for years 1948–60. For 1961 and 1962, figures from Public Health Service, Division of Nursing, *Source Book, Evaluation Conference*, May 1963, table 6, p. 94. (Unpublished data). Recipients of diploma and associate degrees are eligible for R.N. licensure.

[5] This level of degree covers first professional degree.

NOTE: These data have been furnished to the Office of Education by the diverse academic and professional institutions and differ in some instances from those in table 8 because of midyear graduations and other variables.

Table 5. 10 Leading Causes of Death in the United States, for Selected Years, 1900 and 1961 [1]

Cause of death	1900 [2]			Cause of death	1961		
	Number	Rate per 100,000	Percent of all deaths		Number	Rate per 100,000	Percent of all deaths
All causes	343, 217	1, 719. 1	100. 0	All causes	1, 701, 522	930. 0	100. 0
Pneumonia and influenza	40, 362	202. 2	11. 8	Diseases of heart	663, 391	362. 6	39. 0
Tuberculosis	38, 820	194. 4	11. 3	Malignant neoplasms	273, 502	149. 5	16. 1
Diarrhea, enteritis, etc	28, 491	142. 7	8. 3	Vascular lesions affecting CNS	192, 951	105. 5	11. 3
Diseases of heart	27, 427	137. 4	8. 0	Accidents	92, 249	50. 4	5. 4
Senility (ill-defined)	23, 463	117. 5	6. 8	Diseases of infancy (selected)	65, 679	35. 9	3. 9
Vascular lesions (intracranial)	21, 353	106. 9	6. 2	Influenza and pneumonia	55, 175	30. 2	3. 2
Nephritis	17, 699	88. 6	5. 2	General arteriosclerosis	35, 388	19. 3	2. 1
All accidents	14, 429	72. 3	4. 2	Diabetes mellitus	30, 098	16. 5	1. 8
Malignant neoplasms	12, 769	64. 0	3. 7	Congenital malformations	21, 922	12. 0	1. 3
Diphtheria	8, 056	40. 3	2. 3	Cirrhosis of liver	20, 737	11. 3	1. 2

[1] Exclusive of still births.
[2] Death registration States.

SOURCES: For 1900 data, Federal Security Agency, Public Health Service, National Office of Vital Statistics, *Vital Statistics*, Special Reports, U.S. Summary, vol. 34, 1948, No. 50, p. 909, table 16.

For 1961 data, U.S. Department of Health, Education, and Welfare, Public Health Service, National Vital Statistics Division, *Vital Statistics of the United States* (Advance Report), "Final Natality and Mortality Statistics," November 1962, table 4. (Processed.)

Table 6. Reduction of Infant Mortality, Selected Countries, 1950–62 or Latest Year

[Rates are deaths under 1 year per 1,000 live births]

Countries ranked on 1962 or latest rate	1962		1950		Percent decrease since 1950
	Rank	Rate	Rank	Rate	
Netherlands	1	[1] 15.3	3	25.2	39.3
Sweden	2	[1] 15.3	1	21.0	27.2
Norway (1960)	3	(1960) 18.9	5	28.2	33.0
Finland	4	[1] 19.2	11	43.5	55.9
Australia (1961)	5	(1961) 19.5	2	24.5	20.4
Denmark	6	[1] 20.1	7	30.7	34.5
New Zealand	7	[1] 20.3	4	27.6	26.5
Switzerland (1961)	8	(1961) 21.0	8	31.2	32.7
United Kingdom	9	[1] 22.1	9	31.4	29.6
Ireland	10	[1] 24.2	13	46.2	47.6
United States	11	[1] 25.3	6	29.2	13.4
Luxembourg (1961)	12	(1961) 26.2	12	45.7	42.7
Canada (1961)	13	(1961) 27.2	10	41.5	34.5
Japan (1961)	14	(1961) 28.6	15	60.1	52.4
Federal Republic of Germany	15	[1] 29.2	14	55.6	47.5

[1] Provisional.

Sources: U.S. Department of Health, Education, and Welfare, Regional and Field Letter, No. 544, Sept. 9, 1963, based on data from United Nations, Statistical Office, and U.S. Department of Health, Education, and Welfare, National Vital Statistics Division.

Table 7. Identifiable Expenditures of State Health Agencies for Public Health Training and Percent Derived From Each Fund Source, for Selected Fiscal Years 1948–62

[In thousands]

Fund source	1948	1950	1952	1954	1956	1958	1960	1961	1962
Total	$2, 102	$3, 153	$3, 185	$2, 596	$2, 862	$4, 355	$5, 396	$6, 029	$5, 382
Percentage from each source:									
State and local funds	21. 9	31. 9	25. 2	27. 1	31. 6	34. 8	48. 7	48. 7	44. 2
Federal funds	78. 1	68. 1	74. 8	72. 9	68. 4	65. 2	51. 3	51. 3	55. 8
Public Health Service	(46. 7)	(48. 6)	(42. 3)	(35. 4)	(27. 0)	(29. 2)	(24. 1)	(27. 5)	(38. 3)
Children's Bureau	(31. 4)	(19. 5)	(32. 5)	(37. 5)	(41. 0)	(36. 0)	(27. 2)	(23. 8)	(17. 5)
Other					(. 4)				(0)

Sources: 1948–56 figures from 1958 National Conference on Public Health Training Source Book, table 5, p. 22; 1958–61 figures from Public Health Service, Bureau of State Services, Office of Grants Management (unpublished), as of Oct. 18, 1962; 1962 figures also from the Office of Grants Management (unpublished), as of July 15, 1963, with a reminder that expenditure reports from the States "do not reflect the total training expenditures, since it is known that funds spent for training activities are sometimes reported as part of the expenditures for specialized programs rather than identified specifically as training projects."

Table 8. Graduates in the Health Professions, for Selected Years, 1948–62

Professional category	Year of graduation								
	1948	1950	1952	1954	1956	1958	1960	1961	1962
Physicians (M.D.)	5,543	5,553	6,080	6,881	6,845	6,861	7,081	6,994	7,168
Physicians (D.O.)	143	373	427	449	467	439	427	506	362
Dentists	1,755	2,565	2,975	3,804	3,038	3,083	3,253	3,290	3,217
Veterinarians	----	695	811	869	----	[1] 851	[1] 826	[1] 824	[1] 819
Professional nurses [2]	34,268	25,790	29,016	28,539	29,591	30,410	30,113	30,267	----
Pharmacists	2,299	5,842	4,247	3,867	3,319	3,683	3,497	3,438	3,699
Optometrists	1,428	1,572	636	674	333	349	317	319	----

[1] Seniors.
[2] Includes students in Hawaii and Puerto Rico since 1950.

Source: Maryland Y. Pennell, Division of Public Health Methods, Public Health Service, July 1963. (Processed.) These data have been furnished to the Public Health Service by the American Association of Medical Colleges and similar organizations for the other health professions.

Table 9. Number of Full-Time Personnel of Different Classifications Employed by State and Local Health Departments, for Selected Years, 1950–62

Classification	1950	1952	1954	1956	1958	1960	1962
Public health physicians	2, 317	2, 148	2, 085	2, 095	2, 088	2, 082	2, 166
Public health nurses	13, 044	14, 055	13, 802	14, 273	15, 223	15, 471	15, 894
Clinic nurses	----------	----------	654	663	743	735	922
Public health dentists	356	380	358	393	423	464	587
Dental hygienists	307	441	411	417	450	451	389
Engineers	1, 183	1, 168	1, 030	1, 037	1, 028	1, 185	1, 263
Professional sanitarians and other sanitation personnel	7, 530	7, 725	8, 037	8, 139	8, 973	9, 705	10, 304
Veterinarians	310	375	363	347	343	299	290
Laboratory personnel	3, 108	3, 099	2, 968	2, 931	3, 149	3, 385	3, 393
Health educators	460	516	494	490	496	527	544
Nutritionists	221	240	233	245	260	281	300
Medical and psychiatric social workers	363	377	340	395	523	607	699
Psychologists	----------	----------	74	91	137	157	205
Analysts and statisticians	237	[1]	364	426	443	483	543
Public health investigators	449	[1]	688	607	622	712	727
X-ray technicians	----------	570	633	641	665	623	584
Physical therapists	----------	[1]	162	186	224	219	234
Administrative management personnel	----------	----------	1, 063	1, 116	1, 217	1, 330	1, 546
Clerks	14, 653	15, 435	14, 843	15, 173	16, 403	17, 147	18, 099
Maintenance, custodial, and service	4, 064	3, 894	3, 636	3, 803	3, 639	4, 252	4, 157
Others	3, 503	3, 248	2, 017	1, 924	2, 693	2, 460	2, 898
Total	52, 105	53, 671	54, 255	55, 392	59, 742	62, 575	65, 744

[1] Included in "Others."

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Bureau of State Services, Office of Grants Management. Unpublished data, as of June 1963.

Table 10. Number of Budgeted Positions—Filled and Vacant—Requiring Specified Education and Training as Reported by 131 State and Local Health Departments, October 1961

Category [1]	Number positions reported			Percent vacant positions
	Filled	Vacant	Total	
Nurse	5, 544	477	6, 021	7. 9
Sanitary inspector	349	38	387	9. 8
Sanitarian	2, 143	102	2, 245	4. 5
Engineer	363	28	391	7. 2
Veterinarian	95	7	102	6. 9
Physician	506	64	570	11. 2
Dentist	46	2	48	4. 2
Health educator	206	21	227	9. 3
Nutritionist	86	13	99	13. 1
Statistician	131	16	147	10. 9
Disease investigator	118	12	130	9. 2
Administrator	153	9	162	5. 6
Laboratory worker	568	62	630	9. 8
Social worker	139	26	165	15. 8
Total	10, 447	877	11, 324	7. 7

[1] Supervisory personnel included.

Source: From unpublished data in the Division of Community Health Services, Oct. 9, 1962. 49 percent (131 of 269) of the health departments eligible under the 30 or more full-time employee requirement responded to the October 1961 questionnaire of Association of Management in Public Health.

Table 11. Age Distribution of Selected Full-Time Medical Specialists, 1961

Category	Total		Age (years)									
			Under 35		35–44		45–54		55–64		65 and over	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Internal medicine	28, 797	100	8, 451	29	9, 732	34	6, 103	21	3, 068	11	1, 443	5
General surgery	21, 987	100	5, 654	26	6, 804	31	5, 146	23	2, 962	14	1, 421	6
Psychiatry	13, 170	100	3, 260	25	4, 280	33	3, 172	24	1, 746	13	712	5
Obstetrics and gynecology	13, 074	100	3, 457	26	4, 417	34	3, 066	23	1, 520	12	614	5
Pediatrics	11, 317	100	3, 507	31	4, 088	36	2, 054	18	1, 096	10	572	5
Radiology	7, 327	100	1, 987	27	2, 625	36	1, 650	22	724	10	341	5
Pathology	5, 396	100	1, 774	33	1, 883	35	1, 065	20	468	8	206	4
Public health	2, 050	100	140	7	350	17	684	33	588	29	288	14
All others	41, 710	100	8, 822	21	12, 397	30	10, 619	26	6, 381	15	3, 491	8
Total	144, 828	100	37, 052	26	46, 576	32	33, 559	23	18, 553	13	9, 088	6
	Percent Distribution											
Internal medicine	19.9		22.8		20.9		18.2		16.5		15.9	
General surgery	15.2		15.3		14.6		15.3		16.0		15.6	
Psychiatry	9.1		8.8		9.2		9.5		9.4		7.8	
Obstetrics and gynecology	9.0		9.3		9.5		9.1		8.2		6.7	
Pediatrics	7.8		9.4		8.8		6.1		5.9		6.3	
Radiology	5.1		5.4		5.6		4.9		3.9		3.8	
Pathology	3.7		4.8		4.0		3.2		2.5		2.3	
Public health	1.4		.4		.8		2.0		3.2		3.2	
All others	28.8		23.8		26.6		31.7		34.4		38.4	
Total	100.0		100.0		100.0		100.0		100.0		100.0	

Source: U.S. Dept. of Health, Education, and Welfare, Public Health Service, *Health Manpower Source Book*, sec. 14, Paul Q. Peterson and Maryland Y. Pennell, "Medical Specialists," p. 15, table 9; all tables C; (D.C., GPO, PHS Publication No. 263, sec. 14, 1962).

Table 12. Total Number and Number in Training of Full-Time Medical Specialists, by Selected Categories, 1961

Category	Total number	Number in training	Ratio of trainees to total number
Internal medicine	28, 797	4, 623	1:6
General surgery	21, 987	4, 024	1:5
Psychiatry	13, 170	2, 435	1:5
Obstetrics and gynecology	13, 074	1, 963	1:7
Pediatrics	11, 317	1, 481	1:8
Radiology	7, 327	1, 256	1:6
Pathology	5, 396	1, 270	1:4
Public health	2, 050	43	1:48

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Public Health Methods, *Health Manpower Source Book*, sec. 14, "Medical Specialists," Paul Q. Peterson and Maryland Y. Pennell, PHS Pub. No. 263, 1962, 233 pp. For total numbers, table 9, p. 15; for numbers in training, table B under each specialty.

Table 13. Degrees in Public Health Awarded by Schools of Public Health in the United States, 1953–62 [1]

Level of degree	Academic year								
	1953–54	1954–55	1955–56	1956–57	1957–58	1958–59	1959–60	1960–61	1961–62
Doctoral degree	29	26	23	17	24	27	31	27	29
Master's degree	396	368	391	502	586	582	517	565	547
Bachelor's degree	105	116	102	122	137	138	108	99	87
Total	530	510	516	641	847	749	656	691	663

[1] Does not include University of Puerto Rico.

Source: Based on questionnaire, dated April 1963, prepared by Conference Staff to the 12 schools of public health in the United States.

Table 14. Number of Trainees, by Professional Category, 1957–63

Professional category	Fiscal years							
	1957	1958	1959	1960	1961	1962	1963 [1]	Total
Nurses	199	367	349	327	299	252	385	2, 178
Health educators	36	60	51	47	52	38	51	335
Sanitary engineers	27	42	68	55	79	78	93	442
Sanitarians	[2] 24	[2] 45	39	35	39	35	35	252
Sanitation field (other)	-----	-----	13	12	9	12	33	79
Physicians	21	51	45	51	42	57	44	311
Laboratory personnel	13	19	11	12	11	14	14	94
Dentists	10	18	13	17	16	16	9	99
Veterinarians	9	15	15	15	6	10	8	78
Dental hygienists	8	6	2	2	1	4	5	28
Nutritionists	6	11	14	18	9	11	21	90
Statisticians	2	9	15	12	15	5	16	74
Medical social workers	1	7	6	1	4	2	6	27
Miscellaneous	7	15	13	20	25	34	80	194
Total	363	665	654	624	607	568	800	4, 281

[1] These figures are as of June 30, 1963. Additional appointments will be made under fiscal year 1963 appropriation.
[2] Includes "Sanitation field (other)" category.

Source: The Training Resources Branch of the Division of Community Health Services in the Public Health Service is the source for all the unpublished data contained in this table.

Table 15. Number of Trainees, by Years of Prior Public Health Experience, 1957–63

Prior public health experience	Fiscal year														Total	
	1957		1958		1959		1960		1961		1962		1963			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
None	172	47.4	349	52.5	358	54.2	338	54.2	355	58.5	367	64.6	523	65.4	2,462	57.5
Some, but less than 2 years	100	27.5	211	31.7	205	31.3	175	28.0	124	20.4	95	16.7	61	7.6	971	22.7
2–5 years	62	17.1	90	13.5	76	11.6	95	15.2	107	17.6	88	15.5	155	19.4	673	15.7
More than 5 years	29	8.0	15	2.3	15	2.4	16	2.6	21	3.5	18	3.2	61	7.6	175	4.1
Total	363	100.0	665	100.0	654	100.0	624	100.0	607	100.0	568	100.0	800	100.0	4,281	100.0

Source: Same as for table 14.

Table 16. Number of Trainees by Age Group, 1957–63

Age group	Fiscal year														Total	
	1957		1958		1959		1960		1961		1962		1963			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 35 years	282	77.7	512	77.0	500	76.5	492	78.8	472	77.7	434	76.4	561	70.1	3,253	76.0
35–45 years	78	21.5	148	22.2	141	21.5	122	19.6	117	19.3	122	21.5	211	26.4	939	21.9
Over 45 years	3	0.8	5	0.8	13	2.0	10	1.6	18	3.0	12	2.1	28	3.5	89	2.1
Total	363	100.0	665	100.0	654	100.0	624	100.0	607	100.0	568	100.0	800	100.0	4,281	100.0

Source: Same as for table 14.

Table 17. Number of Individuals Awarded Public Health Traineeships, by State of Residence and Fiscal Years, 1957–63

State	Number of trainees, by fiscal years							Total
	1957	1958	1959	1960	1961	1962	1963	
Alabama	6	6	9	6	4	7	4	42
Alaska	-----	5	3	1	6	1	1	17
Arizona	2	6	8	1	2	2	8	29
Arkansas	2	6	-----	2	6	4	2	22
California	28	54	78	55	73	74	115	477
Colorado	7	14	12	6	12	5	9	65
Connecticut	9	25	12	10	10	16	18	100
Delaware	-----	1	-----	1	-----	-----	2	4
District of Columbia	5	6	2	2	5	1	2	23
Florida	4	9	11	12	10.	10	11	67
Georgia	1	14	9	12	9	8	7	60
Hawaii	5	5	5	5	2	4	4	30
Idaho	3	4	2	4	5	1	1	20
Illinois	11	18	26	11	23	14	25	128
Indiana	7	8	17	3	11	3	19	68
Iowa	4	8	14	8	6	6	13	59
Kansas	1	5	7	6	2	8	5	34
Kentucky	11	8	10	14	9	8	20	80
Louisiana	2	4	3	2	3	2	2	18
Maine	4	2	3	3	3	1	6	22
Maryland	7	16	11	13	13	7	22	89
Massachusetts	13	31	28	26	24	22	30	174
Michigan	27	34	22	26	23	14	35	181
Minnesota	17	35	36	36	36	29	31	220
Mississippi	2	5	7	2	1	4	5	26
Missouri	6	12	13	10	10	11	11	73
Montana	1	9	7	2	-----	2	2	23
Nebraska	5	3	3	4	3	-----	5	23
Nevada	1	2	-----	1	2	1	1	8
New Hampshire	2	1	1	1	1	1	2	9
New Jersey	3	13	18	15	19	18	14	100
New Mexico	6	10	10	5	4	6	5	46
New York	29	71	60	79	65	74	107	485
North Carolina	17	23	25	25	24	20	23	157
North Dakota	4	2	4	2	4	-----	3	19
Ohio	10	25	22	23	24	26	33	163
Oklahoma	7	11	10	9	10	7	7	61
Oregon	12	10	18	15	8	16	12	91
Pennsylvania	18	37	38	44	41	33	45	256
Rhode Island	-----	4	4	6	6	7	8	35
South Carolina	6	5	5	6	2	4	12	40
South Dakota	3	3	1	6	5	3	1	22
Tennessee	8	17	9	14	13	11	11	83
Texas	8	10	10	19	11	13	17	88
Utah	6	8	4	5	2	2	6	33
Vermont	-----	1	3	1	2	4	2	13
Virginia	6	13	10	12	7	13	13	74
Washington	4	11	12	15	11	13	22	88
West Virginia	2	2	3	3	9	-----	3	22
Wisconsin	11	18	17	17	19	20	22	124
Wyoming	1	2	1	2	-----	-----	-----	6
Guam	-----	-----	-----	1	-----	-----	-----	1
Puerto Rico	5	12	9	14	6	10	15	71
Virgin Islands	1	-----	-----	1	-----	-----	1	3
Canal Zone	1	1	1	-----	1	2	-----	6
Trust Territory	2	-----	1	-----	-----	-----	-----	3
Total	363	665	654	624	607	568	800	4, 281

Source: Same as for table 14.

Table 18. Traineeship Awards to Individuals by Type of School Attended for Training, 1957–63

Type of school	Fiscal year							Total
	1957	1958	1959	1960	1961	1962	1963	
Schools of public health	129	235	224	228	219	231	290	1, 556
Departments of nursing in schools of public health	57	91	86	61	57	46	58	456
Schools of nursing	142	276	263	266	242	206	327	1, 722
Schools of engineering	27	42	68	55	79	78	91	440
Other schools	8	21	13	14	10	7	34	107
Total	363	665	654	624	607	568	800	4, 281

Source: Same as for table 14.

Table 19. Distribution of Project Grants by Type of School, 1961, 1962, 1963

Type of school	Number of schools awarded grants			Number of grants			Amount of grants		
	1961	1962	1963	1961	1962	1963	1961	1962	1963
Public health	10	11	11	21	33	34	$621, 254	$965, 578	$990, 550
Nursing	15	20	19	15	21	21	278, 438	395, 137	435, 134
Engineering	22	27	25	27	33	28	529, 643	639, 224	562, 189
Total	47	58	55	63	87	83	1, 429, 335	1, 999, 939	1, 987, 883

Source: Same as for table 14.

Table 20. Distribution of Project Grants by Curriculum Area, 1961, 1962, 1963

Curriculum area	Number of grants			Amount of grants		
	1961	1962	1963	1961	1962	1963
Air pollution	5	4	3	$102,308	$68,788	$55,911
Accident prevention		2	3		60,261	71,829
Biostatistics and epidemiology	3	3	3	47,530	40,966	42,750
Chronic diseases	3	6	5	87,694	141,599	124,017
Field training	9	12	12	229,375	215,455	233,420
Health economics		1	1		18,441	13,041
International health	1	2	3	46,197	75,573	84,816
Medical care administration	3	5	5	99,219	156,688	159,995
Metropolitan planning	1	1	1	20,110	20,110	20,110
Nutrition		1	1		48,778	39,340
Population problems	1	1	1	38,846	40,765	42,686
Public health administration practice	4	5	6	115,317	168,677	197,223
Public health dentistry	2	2	2	52,469	52,889	53,815
Public health education	1	1	1	12,500	12,176	13,000
Public health nursing	4	5	5	51,634	114,477	111,962
Radiological health	2	3	2	22,081	25,975	8,383
Sanitary biology, chemistry	9	7	7	199,850	170,992	16,453
Sanitary engineering	3	11	11	52,748	264,791	289,204
Short-term	3	4	3	64,854	105,060	113,880
Teacher preparation	3	3	4	52,221	65,553	106,666
Water supply/pollution/resources	6	8	4	134,382	131,925	44,382
Total	63	87	83	1,429,335	1,999,939	1,987,883

Source: Same as for table 14.

Table 21. Distribution of Formula Grants by Specific School of Public Health, for Fiscal Years, 1959–63

School of public health	Fiscal years					Total
	1959	1960	1961	1962	1963	
California (Berkeley)	$51,300	$114,000	$93,000	$118,100	$180,900	$557,300
California (Los Angeles)				43,200	80,100	123,300
Columbia	25,300	56,200	58,000	70,700	121,200	331,400
Harvard	38,300	85,200	80,800	93,300	147,300	444,900
Johns Hopkins	40,800	90,700	85,800	107,000	169,600	493,900
Michigan	63,800	141,900	150,300	162,400	261,400	779,800
Minnesota	60,700	134,900	164,500	169,200	270,800	800,100
North Carolina	51,300	114,000	103,700	126,300	215,300	610,600
Pittsburgh	32,500	72,200	76,800	79,400	127,600	388,500
Puerto Rico	32,400	72,000	61,200	70,400	111,700	347,700
Tulane	29,900	66,300	66,100	72,900	122,700	357,900
Yale	23,700	52,600	59,800	60,100	91,400	287,600
Total	450,000	1,000,000	1,000,000	1,173,000	1,900,000	5,523,000

Source: Same as for table 14.

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Table 22. Formula Grants: Budgeted Figures, by Type of Expenditure, 1959–63

Type of expenditure	Fiscal year					
	1959 [1]	1960	1961	1962	1963	Total
Teaching personnel	$239, 136	$724, 151	$689, 932	$799, 123	$1, 207, 693	$3, 660, 035
Other personnel	35, 500	112, 874	139, 672	194, 616	335, 490	818, 152
Travel	9, 750	29, 100	28, 020	30, 558	41, 700	139, 128
Equipment	124, 819	69, 350	63, 500	48, 172	123, 108	428, 949
Other expenses	71, 035	64, 525	78, 876	100, 531	192, 009	506, 976
Total	480, 240	1, 000, 000	1, 000, 000	1, 173, 000	1, 900, 000	5, 553, 240

[1] Budgeted on basis of requested appropriation; $450,000 actually become available.

Source: Same as for Table 14.

Table 23. Formula Grants: Actual Expenditures, by Type of Expenditure, 1959–62

Type of expenditure	Fiscal year			
	1959	1960	1961	1962
Teaching personnel	$180, 135	$564, 982	$468, 471	$677, 832
Other personnel	23, 558	127, 749	145, 639	202, 515
Travel	3, 118	31, 137	35, 078	32, 102
Equipment	138, 274	117, 877	146, 012	81, 391
Other expenses [1]	38, 844	107, 752	121, 305	123, 063
Total	383, 929	949, 497	916, 505	1, 116, 903

[1] Includes moneys spent for conferences, continuing education, etc.

Source: Same as for table 14.

D. List of Conferees

Mr. Harold Adams
Associate Professor of Sanitary Science
Indiana University Medical Center
Indianapolis 7, Ind.

Dr. Wendell R. Ames
Director
County of Monroe Department of Health
Rochester 2, N.Y.

Dr. Franklyn B. Amos
Director
Professional Education, New York State Department of Health
Albany 8, N.Y.

Dr. Walter D. Atkins
Director
Division of Dental Health
New Mexico Department of Public Health
Santa Fe, N. Mex.

Miss Maude C. Bailey
Director of Public Health Nursing
South Carolina State Board of Health
Columbia 1, S.C.

Miss Eleanor M. Barnett
Professor
School of Social Work
University of Denver
Denver 10, Colo.

Mr. Arthur N. Beck
Chief Engineer and Director
Bureau of Sanitation
Alabama Department of Public Health
Montgomery 4, Ala.

Miss Julia P. Brandeberry
Chief
Public Health Nursing Section
Michigan Department of Health
Lansing 4, Mich.

Mr. James Brindle
President
Health Insurance Plan of Greater New York
New York 22, N.Y.

Mr. Ray E. Brown
Vice President for Administration
University of Chicago
Chicago, Ill.

Dr. Bernard Bucove
Director of Health
Washington State Department of Health
Olympia, Wash.

Dr. Louis J. P. Calisti
Dean
School of Dentistry
Tufts University
Boston 11, Mass.

Mr. J. Douglas Colman
President
Associated Hospital Service of New York
New York 16, N.Y.

Mrs. Pearl P. Coulter
Director
School of Nursing
University of Arizona
Tucson, Ariz.

Dr. James A. Crabtree
Dean
Graduate School of Public Health
University of Pittsburgh
Pittsburgh 19, Pa.

Mr. Norman A. Craig
Assistant Professor
School of Public Health
University of Minnesota
St. Paul, Minn.

Mrs. Bess Dana
Consultant on Educational Services
Council on Social Work Education
New York, N.Y.

Dr. Edward Davens
Deputy Commissioner
State Department of Health
Baltimore 1, Md.

Dr. Robert Dyar
Chief, Division of Research
California State Department of Public Health
Berkeley 4, Calif.

Mr. George H. Eagle
Chief Sanitary Engineer
Ohio Department of Health
Columbus 15, Ohio

Dr. Roger Egeberg
Medical Director
Los Angeles County Department of Charities
Los Angeles, Calif.

Dr. Lloyd C. Elam
Chairman
Department of Psychiatry
Meharry Medical College
Nashville 5, Tenn.

Dr. Fedele F. Fauri
Dean and Professor of Public Welfare Administration
University of Michigan
Ann Arbor, Mich.

Dr. John W. Fertig
Professor of Biostatistics
Columbia University
New York 32, N.Y.

Miss Maxine Geeslin
Director of Nurses
Amarillo Health Department
Amarillo, Tex.

Dr. John C. Glidewell
Director of Research and Development
St. Louis County Health Department
Clayton 5, Mo.

Dr. Lenor S. Goerke
Dean
School of Public Health
University of California
Los Angeles, Calif.

Dr. Robert H. Hamlin
Professor and Head
Department of Public Health Practice
Harvard University
Boston 15, Mass.

Miss Helen E. Hestad
Executive Director
The Visiting Nurse Association of Omaha
Omaha 5, Nebr.

Miss Atha M. Howell
Director of Public Health Nursing
Guilford County Health Department
Greensboro, N.C.

Dr. Harold B. Hubbard
Assistant Professor
School of Veterinary Medicine
The University of Georgia
Athens, Ga.

Mr. Don M. Hufhines
Field Coordinator for Continuing Education Program
American Public Health Association
San Francisco 2, Calif.

Dr. George James
Commissioner of Health
New York City Health Department
New York, N.Y.

Miss B. Genevieve Johnson
Associate Professor and Head of Public Health Nursing
South Dakota State College
Brookings, S.Dak.

Dr. Herbert E. Klarman
Associate Professor
School of Hygiene and Public Health
The Johns Hopkins University
Baltimore 5, Md.

Dr. Hugh R. Leavell
Emeritus Professor of Public Health Practice
Harvard University
Boston, Mass.

Dr. Robert L. Leon
Associate Professor of Psychiatry
The University of Texas
Dallas 35, Tex.

Dr. Glen Leymaster
Associate Secretary
Council on Medical Education and Hospitals
American Medical Association
Chicago 10, Ill.

Dr. Erich Lindemann
Psychiatrist in Chief
Massachusetts General Hospital
Boston 14, Mass.

Dr. Carl J. Marienfeld
Professor and Chairman
Department of Community Health and Medical Practice
University of Missouri
Columbia, Mo.

Miss Florence E. Martin
Assistant Professor
Public Health Nursing
University of Washington
Seattle 5, Wash.

Dr. Berwyn F. Mattison
Executive Director
American Public Health Association
New York 19, N.Y.

Mr. Peter G. Meek
Executive Director
National Health Council
New York 19, N.Y.

Dr. Malcolm H. Merrill
Director of Public Health
State Department of Public Health
Berkeley 4, Calif.

Mr. Sewall Milliken
Executive Director
Public Health Federation
Cincinnati 2, Ohio

Dr. Marion I. Murphy
Director of Public Health Nursing
University of Minnesota
Minneapolis 14, Minn.

Dr. Daniel A. Okun
Professor
Sanitary Engineering
University of North Carolina
Chapel Hill, N.C.

Dr. Theodore A. Olson
Professor
Public Health Biology
University of Minnesota
Minneapolis 14, Minn.

Dr. J. C. S. Paterson
Chairman
Department of Tropical Medicine and Public Health
Tulane University
New Orleans 12, La.

Dr. Anthony M.-M. Payne
Chairman
Department of Epidemiology and Public Health
Yale University
New Haven, Conn.

Mr. Jerome A. Pollack
Professor of Administrative Medicine
Columbia University
New York 17, N.Y.

Dr. John D. Porterfield
Coordinator
Medical and Health Services
University of California
Berkeley 4, Calif.

Mr. Paul W. Purdom
Director
Division of Environmental Health
Philadelphia 46, Pa.

Dr. Dean W. Roberts
Executive Director
National Commission on Community Health Services
Bethesda 14, Md.

Dr. Kenneth D. Rogers
Professor and Chairman
Department of Preventive Medicine
University of Pittsburgh
Pittsburgh 13, Pa.

Dr. Gerard A. Rohlich
Professor of Civil Engineering
University of Wisconsin
Madison 6, Wis.

Dr. Paul R. Schnurrenberger
Chief Public Health Veterinarian
Illinois Department of Public Health
Springfield, Ill.

Miss Doris R. Schwartz
Assistant Professor of Nursing
Cornell University
New York Hospital
New York, N.Y.

Dr. William K. Selden
Executive Director
National Commission on Accrediting
Washington 6, D.C.

Mrs. Margaret Shackelford
Assistant Professor
Department of Preventive Medicine and Public Health
University of Oklahoma
Oklahoma City, Okla.

Dr. Margaret L. Shetland
Professor and Director of Teacher Preparation Programs
University of North Carolina
Chapel Hill, N.C.

Dr. Leslie Silverman
Director of Radiological Hygiene Program
Harvard University
Boston 15, Mass.

Miss Jeanette Simmons
Director of School Health
American Heart Association
New York 10, N.Y.

Dr. Charles E. Smith
Dean
School of Public Health
University of California
Berkeley 4, Calif.

Miss Jean Stair
Associate Professor and Head
Department of Public Health Nursing
Western Reserve University
Cleveland, Ohio

Dr. Ernest L. Stebbins
Dean
School of Hygiene and Public Health
The Johns Hopkins University
Baltimore 5, Md.

Dr. Elizabeth C. Stobo
Associate Professor of Nursing Education
Columbia University
New York 27, N.Y.

Dr. David Striffler
Associate Professor of Public Health Dentistry
University of Michigan
Ann Arbor, Mich.

Mr. John D. Thompson
Director
Program in Hospital Administration
Yale University
New Haven, Conn.

Miss Catherine W. Tinkham
Associate Professor and Chairman
Public Health Nursing Program
Boston University
Boston 15, Mass.

Dr. James L. Troupin
Director of Professional Education
American Public Health Association
New York 19, N.Y.

Dr. Ray E. Trussell
Commissioner
New York City Department of Hospitals
New York 13, N.Y.

Dr. Joseph F. Volker
Vice President for Health Affairs
University of Alabama Medical Center
Birmingham 3, Ala.

Dr. Myron E. Wegman
Dean
School of Public Health
University of Michigan
Ann Arbor, Mich.

Dr. Tom F. Whayne
Assistant Vice President for Medical Center
University of Kentucky
Lexington, Ky.

Dr. Kerr White
Chairman and Professor
Department of Epidemiology and Community Medicine
University of Vermont
Burlington, Vt.

Dr. Muriel B. Wilbur
Staff Consultant
Rhode Island Council of Community Services
Providence 6, R.I.

Dr. William R. Willard
Vice President and Dean
Medical Center
Univeristy of Kentucky
Lexington, Ky.

Dr. Abel Wolman
Consulting Engineer
The Johns Hopkins University
Baltimore 18, Md.

Dr. Wesley O. Young
Director
Child Health Division
Idaho Department of Health
Boise, Idaho

Note: The affiliations of the conferees in this listing are those which were current at the time of the Conference.

E. Conference Personnel

CONFERENCE STAFF

William L. Kissick, M.D.
Executive Secretary

Lucy M. Kramer, M.A.

George E. Kreiner
Elizabeth G. Pritchard
Joseph E. Napolitano
Margaret G. Senter

Selma Freedman, Administrative Assistant

CONFERENCE RECORDERS

Sydenham Alexander, M.D.
Division of Chronic Diseases

George Archambault, Sc.D.
Bureau of Medical Services

Eugene Confrey, Ph.D.
Division of Research Grants

Cecelia Conrath, M.P.H.
Division of Chronic Diseases

Evelyn Flook
Division of Community Health Services

Samuel C. Ingraham, M.D.
Radiological Health Laboratory

Ruth I. Knee, M.A.
National Institutes of Mental Health

Arthur Lesser, M.D.
Children's Bureau

Donald Martin, M.D.
Communicable Disease Center

Fred Mayes, M.D.
Bureau of State Services

Beverlee Myers, M.P.H.
Division of Community Health Services

Loyal C. Peckham, M.P.H.
Environmental Health

Ruth Raup
Division of Public Health Methods

Dorothy Reese, R.N.
Division of Nursing

DIVISION OF COMMUNITY HEALTH SERVICES
TRAINING RESOURCES BRANCH

Elmer L. Hill, M.D., Chief
Raymond F. Dixon, Deputy Chief
James M. Hoeven
Annalu Jeffries
William Koenig

Mr. JONES. Under the provisions of H.R. 10043, the Public Health Service would continue to support individuals engaged in long- and short-term graduate or specialized training in public health by making traineeship awards directly to individuals and through grants to institutions for this purpose.

These traineeships will be used to increase the supply of critically needed professionally trained public health personnel, and to equip members of all professional health disciplines to serve more effectively the needs of modern public health programs.

Project grants would continue to be made to schools of public health, engineering, and nursing. With the increasing complexity of public health problems and the increasing needs and opportunities for utilizing an expanding variety of professional specialists in meeting these problems, it is no longer feasible, however, to look only to these three types of schools for the graduate and specialized training of public health personnel.

We must look also to other types of public and nonprofit training institutions, such as our medical schools, dental schools, operating health agencies, and professional associations to provide part of the necessary graduate and specialized training so essential to the successful accomplishment of public health programs.

The conference placed special stress on the need to improve the capability of departments of preventive medicine in medical schools to increase and update the public health content of their instructional programs. The conference also emphasized the importance of providing training in public health through refresher courses, seminars, and other proven methods of short-term instruction for professional health personnel.

In concluding my statement, Mr. Chairman, I should like to emphasize the urgency of early enactment of H.R. 10043, because of the termination this coming June 30 of the current authorization for the public health traineeship program.

Timely action by the Congress in extending the authorization for this successful program and in approving the amendments proposed to the project grant program for public health training will assure continued improvements in the quantity and quality of professional personnel available for public health program operations.

On behalf of Secretary Celebrezze and the administration, I strongly urge, therefore, that H.R. 10043 be enacted promptly. We shall be pleased at this time to amplify or discuss any points on which the members of the committee may want further information.

Thank you, Mr. Chairman.

Mr. ROBERTS. Thank you, Mr. Jones.

Just to get this bill in its proper perspective, if I am correct, and the staff will correct me if I am wrong, this legislation first came into being as title I of the Health Amendments Act of 1956.

Is that right?

Mr. JONES. That is correct.

Mr. ROBERTS. And if I remember correctly, we had, in all, five titles in that particular bill, and it seems to me that we had held some rather thorough hearings on the general subject of nursing in connection with the Health Amendments Act of 1956.

That was under the chairmanship of Mr. Priest, of Tennessee, and this was, as I said before, under title I, was it not?

Mr. JONES. That is correct. Yes, sir.

Mr. ROBERTS. If I remember correctly, there have been several surveys made, as to whether or not there was a nursing shortage, some of the causes of shortage or shortages.

Now, since the passage of that legislation, in 1956, there was another renewal?

Mr. JONES. In 1959. The authorization was for 3 years, in the 1956 legislation. In 1959, the program was extended for 5 years.

Mr. ROBERTS. So that we are faced now with another renewal of this program.

And, now, since the hearings in 1956, you have had how many surveys of the shortage?

Mr. JONES. We have had two conferences, Mr. Chairman. The first was in 1958, as provided for in the legislation of 1956, and a report of that conference was made available to your committee, which then extended the program for 5 more years, with a provision that a similar conference 1 year prior to the termination of the authorization, be held to review, to evaluate, to make recommendations, and to give you the data you would need to judge the effect, the results and the weaknesses and strengths, of the program.

Another conference was held, in 1963, as provided in the extended legislation, and it is that report that you have permitted to be placed in the record, copies of which have been made available to members of the committee.

It is on the basis of the evaluations in this rather detailed study of the program that the administration has endorsed a continuation for another 5 years of the traineeships, based on the record of accomplishment, and the continuing need that has developed in the subsequent years, with some amendments that would make the program more effective.

There is one other point, Mr. Chairman. In 1960, another feature was added to the program which has to do with project grants to strengthen the quality of training and the quantity of training available. This program would expire next year.

We are asking now for a 4-year extension of that program, so that the two would terminate at the same time, in 1969, if the Congress, in its wisdom, extends both programs.

Mr. ROBERTS. So that the present act that we have before us is really a two-pronged proposition?

Mr. JONES. That is correct.

Mr. ROBERTS. One directed to the traineeships, and the other to the project grants?

Mr. JONES. That is right.

Mr. ROBERTS. And there would be no further staggering of the programs, but they will taper off at the same time?

Mr. JONES. That is correct.

Mr. ROBERTS. Now, why do you think it is necessary that we include other schools; that is, that you broaden the program at this particular time?

Mr. JONES. It is essential, we think, Mr. Chairman, and this judgment is backed by the conference already referred to earlier. De

velopments in the field of public health have been so broad, particularly in recent years, that it would be to the advantage of the whole field of public health that those going into this field professionally have an opportunity to be trained other than just by the three schools to which the program has been restricted heretofore.

This is important because in new areas of health, the sophistication, the competence, rests in, say, departments of preventive medicine of medical schools or in other specialized areas, where the instruction, if given to trainees for the purposes of the legislation, would be the best that could be available. In many instances they would be the only places where such instruction would be available.

I think offhand of the new problems of radiation exposure, wherein medical schools, rather than in schools of public health exclusively, competencies exist to provide highly specialized training in an area where specialists are scarce, where they represent an important field that must be covered in protection of public health.

Mr. ROBERTS. Would any of the people or any of the personnel that would be affected by these traineeships or grants be especially equipped for the handling of, say, a nuclear fallout problem, or a nuclear attack in case of atomic war?

Mr. JONES. Very definitely so. The people in public health activities, probably since the original legislation in 1956, have been confronted with the problem of protection from fallout hazards if they exist, certainly potential hazard, and they need to be trained to do this. The specialized training provided through this legislation makes this possible.

Mr. ROBERTS. Many of these would be sanitary engineers and people who would be in the front lines, so to speak, of protecting water supply, food supply, and other areas that would be vital to the maintenance of the civilian population?

Mr. JONES. That is quite correct, Mr. Chairman.

Mr. ROBERTS. What other schools would be eligible for the traineeships, other than the three you have mentioned?

Mr. JONES. There would be the three basic schools, of course, that have been eligible: the schools of public health, of nursing, and of engineering. The principal new group of schools would be schools of medicine.

Medical schools in recent years have developed departments of preventive medicine and community health as a basic part of the instruction of students training to be doctors for practice, but they have developed special competencies in such departments. These competencies should be made available to those who are specializing in public health beyond the basic education of physicians. It is the utilization of these competencies that would be made possible by an extension of the eligibility to include this type of educational institution.

We would also expect schools of dentistry to be included. Dental health is a public health problem which needs very special emphasis.

Schools of social work are very definitely involved, because health relates to welfare problems in a very extensive way.

Schools of pharmacy, which are involved in many of these aspects of public health, and other schools, such as osteopathy, which would be related to the health professions in a comparable manner.

Mr. ROBERTS. Is there any danger that by expanding these funds to these other fields, the three fields that have been under this program might be deprived of funds?

Mr. JONES. I think not, Mr. Chairman, especially if the recommendations for a graduated increase in appropriation authorizations were likewise made a policy of the Government.

Mr. ROBERTS. I go along with the social worker field. I see there can be a relationship, but it seems to me that this would be an awfully big sponge, if you got into supporting institutions who were turning out social workers.

Mr. JONES. It would not be related to the training of social workers per se, Mr. Chairman. It would be related only to that aspect of a training program in a school of social work that had special relevance to public health workers.

For example, public health nurses frequently are confronted with problems of how to deal with low income families who have health problems, and who do not respond to just the medical aspects of the public health program.

Therefore, if they had some specialized training in how to deal with families of this kind from the standpoint of the public health program, this would be a great boon to the quality of service rendered by the public health workers. It would be a very selective type of program in schools other than those now included.

Mr. ROBERTS. Would that be perhaps in the field of migratory workers?

Mr. JONES. It could well be. That is an excellent example, Mr. Chairman.

Mr. ROBERTS. Now what about the schools of pharmacy? How would they come into this particular picture?

Mr. JONES. The schools of pharmacy have special competence in some areas that are particularly part of public health. For example, the fields of clinical pharmacology or pharmacology of the effect of drugs on humans. The field of toxicology, which increasingly is becoming important in public health work by virtue of the extended use of chemicals in the environment which create public health hazards. We need specialized personnel that know how to deal with these problems.

For example, the Public Health Service coordinates a series of poison control centers where specialized personnel and information are available to serve as a reference point for physicians who are confronted with accidents involving poisonous substances that are accidentally ingested by children and by others. Schools of pharmacy have special competencies in the field of toxicology and pharmacology. These should be made available for highly selective training of people who would be public health workers in such fields as control of contaminants in the environment, pesticides, and the like.

Mr. PICKLE. In that connection, I wanted to ask about another school where there are possibilities of funds being made available.

In your testimony I believe on page 3, you make reference to the language that would be inserted, the new language that would be inserted, in this bill, and that is shown on the last two lines of page 2 and the first two lines of page 3, which reads, beginning with—

and to other public or nonprofit institutions providing graduate or specialized training in public health, for the purpose of strengthening or expanding graduate or specialized public health training in such institutions.

Now as I understand it, just as you have said, this would give your Department greater latitude in selecting institutions for graduate training in public health.

Now I pose this question to you. I am wondering, if this language was inserted into the law, would some of these funds which are made available be utilized for public health training in vision care? And particularly in one or more of the Institutes where courses are available for optometrists, for public health institutions? What would be your position on that?

Mr. JONES. It could well be, Mr. Pickle.

Mr. PICKLE. Do you have any personal feelings on that?

Mr. JONES. These training programs are adjudged on the basis of applications that come in. They are very carefully reviewed by the staff, and then they are referred to a National Advisory Council on Public Health Training which then looks at them from a policy standpoint as to whether or not there is a special need in the area for which the application is made. They will then judge these in relation to other applications.

But the answer is: "Yes, I would think there would be in many instances need for specialized training."

Mr. PICKLE. Thank you.

I have questions in other areas, but I will yield back to the chairman.

Mr. ROBERTS. These programs have been in effect now since 1956. But according to your statement, and other statements before the committee, we still have rather dangerous shortages in these particular fields.

Do you think that the money that is being sought with this authorization will be sufficient to meet the needs in the next 5 years?

Mr. JONES. Mr. Chairman, I do not think the amount of money being requested in this bill will meet the full need. But what the legislation, if enacted, would do, would be to support the more critical areas of need. By support of programs in institutional environments where they may be weak and need development and, thereby to encourage further development, not with Federal funds, but outside of the Federal program, through this kind of simulatory grant and support program.

We are not proposing that the Federal Government assume the whole burden by a considerable margin, but to provide the stimulation for meeting the special gaps, the special needs, and to encourage a development outside of the Federal Government in the field of public health training.

Mr. ROBERTS. The staff has just shown me the departmental letter which came up with the bill which contains, I really think, a very clear breakdown of the appropriation requirements and the expenditures.

Now you start out in 1965 with $4½ million for public health traineeships, and in 1966 it goes to $7 million; in 1967 $8 million; in 1968 to $10 million, and then it will stay at the same $10 million figure until 1969.

Then you asked on project grants for what looked like a half-million-dollar increase over the $2 million already authorized for fiscal 1965, so that if you start off with $2½ million, then you go to $4 million for fiscal 1966; $5 million for 1967; $7 million for 1968; and $9 million for 1969.

Those figures do not include, of course, the increase for administrative cost over the fiscal 1964 level of $272,000.

Now this would show, not including what is already authorized under existing law, a figure, I believe, of $19,443,000. Is that correct?

Mr. JONES. That is correct.

We have a table, Mr. Chairman, which we could submit for the record, which shows an estimate of cost that is projected, the figures that you have referred to, and also an estimate of cost for the same years, if the present level of authorization were continued, and then the difference in cost beyond what is now being spent.

(The table referred to follows:)

ESTIMATE OF COST 1965-69

[Dollars in thousands]

Item	1965	1966	1967	1968	1969	Total
Public health traineeships	$4,500	$7,000	$8,000	$10,000	$10,000	$39,500
Project grants	2,500	4,000	5,000	7,000	9,000	27,500
Administration	375	445	520	590	665	2,595
Total	7,375	11,445	13,520	17,590	19,665	69,595
Man-years of employment	36	44	51	57	64	252

ESTIMATE OF COST AT 1964 LEVEL OF OPERATION

Public health traineeships	$4,195	$4,195	$4,195	$4,195	$4,195	$20,975
Project grants	2,000	2,000	2,000	2,000	2,000	10,000
Administration	[1] 222	222	222	222	222	1,110
Total	6,417	6,417	6,417	6,417	6,417	32,085
Man-years of employment	[2] 24	24	24	24	24	120
Additional cost	$958	$5,028	$7,103	$11,173	$13,248	$37,510
Additional man-years	12	20	27	33	40	132

[1] Does not include $50,000 for 2d National Conference on Public Health Training.
[2] Does not include 4 man-years for 2d National Conference on Public Health Training.

Mr. ROBERTS. Now, do you anticipate the addition of a number of people to carry out this program? Or what would be your estimate on the number of additional Federal workers that would have to be employed?

Mr. JONES. To carry out this program, Mr. Chairman, would require, according to our estimate, an addition of 12 man-years in 1965, 20 in 1966, 27 in 1967, 33 in 1968, and 40 in 1969, a relatively small increase to manage the increase proposed.

Mr. ROBERTS. Would that be for a total of 132 additional man-years?

Mr. JONES. Man-years for the full 5-year period. Is that correct?

I might point out, Mr. Chairman, that the total cost over a 5-year period, of the proposed programs, would be $37½ million, approximately, over the current cost, and the total program would cost $69,600,000, approximately.

Mr. ROBERTS. The $69,600,000 would be a total cost?

Mr. JONES. That is correct. So we are asking for $37 million over 5 years, as opposed to what would be about $32 million if the program were continued at its current level.

Mr. PICKLE. I did not get those figures. Would you mind repeating them?

Mr. JONES. It may be easier, Mr. Pickle, if you would refer to the chart, there.

Mr. PICKLE. One is coming up now, yes.

I wanted to ask you this question, Mr. Jones, along the same lines as I did the last witness. You indicate that there are 5,000 vacancies now, in the public health field, and the lady who just testified stated that of the number of nurses which have been made available in the public health traineeship, approximately 50 percent of them had come from the regular registered nurse field.

Obviously, if half of their number came from the regular R.N. field, then it would seem that that is one reason why we have such a shortage of nurses now. Special agencies or fields are taking these nurses, or so it would seem to me.

Now, what is the salary comparison in your particular field? Let's say a person who wants to work for the HEW as a nurse—would they get more than those who would be in the regular nursing field?

Mr. JONES. It would all depend, Mr. Pickle, as to the nature of the job.

Mr. PICKLE. But would it not be a little higher wage level?

Mr. JONES. Not necessarily. Some of the specialized nurses—well, if you compare the Public Health Service hospitals, which employ nurses, with the general community hospital, the comparison would be about the same. It would be roughly the same. And this is where the bulk of the nurses are utilized.

But then this is not a public health nurse, as such. The public health nurse, who has specialized responsibilities which require specialized training beyond just the R.N., generally receive somewhat higher compensation.

I think we could give you a table, Mr. Pickle, if it would be helpful, that would provide a comparison in three types of nursing positions, the nurse diretcor, the superivising nurse, and the staff nurse, in the public health nurse field, if this would be helpful to you.

Mr. PICKLE. I would like very much to see the table.

Mr. JONES. We will give you that for the record.

(Table referred to follows:)

Median annual salaries of public health nurses in selected agencies,[1] by type of agency and position, 1957–62

Type of agency and position	1957	1958	1959	1960	1961	1962
Local official health units:						
Nurse director	$6,043	$6,600	$6,675	$6,957	$7,363	$7,560
Supervising nurse	5,241	5,348	5,506	5,680	5,933	6,233
Staff nurse	4,107	4,301	4,408	4,540	4,652	4,902
Nonofficial agencies:						
Nurse director	5,464	5,900	6,068	6,375	6,683	6,963
Supervising nurse	4,770	4,981	5,214	5,453	5,659	5,859
Staff nurse	3,650	3,881	4,042	4,202	4,316	4,442
Boards of education:[2]						
Supervising nurse	5,708	6,263	6,300	6,767	7,288	7,700
Staff nurse	4,597	4,854	5,267	5,442	(3)	6,090

[1] 791 public health nursing agencies reported in 1957, 836 in 1958, 826 in 1959, 856 in 1960, 772 in 1961, and 810 in 1962.
[2] No director classification in boards of education.
[3] Data not available.

Source: NLN yearly reviews, 1957–62.

Mr. PICKLE. I have been advised, Mr. Jones, that as soon as a nurse graduates from an accredited school, governmental agencies by and large are waiting in line to grab them up. This would be true whether

it is the Army or the Navy or the veterans hospitals, or the HEW, NASA, and so forth.

If this is true, it looks to me like the Government is actually competing against the hospital for the general supply of nurses. This is a little bit removed from the particular bill we are talking about, and yet they are so related. Do you have any feeling about that? Am I incorrect in that feeling, or assumption?

Mr. JONES. I would say that you are quite correct, Mr. Pickle. But not only are Government agencies waiting to pick them up, but usually every other operation that utilizes a nurse is waiting.

Mr. PICKLE. What kind of agencies would the "others" be?

Mr. JONES. It would be hospitals, it would be nursing homes, it would be private physicians who would want a registered nurse in their office. It would be all kinds of local agencies. The State sanitarium.

Mr. PICKLE. I understood that most, though, would go into governmental agencies.

Mr. JONES. I am told, Mr. Pickle, that about 20 percent of nurses now employed are in public agencies from all levels of government.

Mr. PICKLE. And this would be all agencies?

Mr. JONES. That is correct. And 80 percent are in other types of nursing activity.

Mr. PICKLE. Would you classify let's say the veterans hospitals as in that 80-percent category? Or in the 20 percent? In which group would you classify them?

Mr. JONES. They would be in the 20, as employees of a public agency, Mr. Pickle. Twenty percent would be all nonprofit public agencies, such as community hospitals supported with tax funds, in Veterans' Administration hospitals, Public Health Service, and the Department of Defense.

I think there is one important statistic to remember, Mr. Pickle, and that is that the actual numbers of nurses in practice have gone up through the years, but the demand has gone up faster. What our problem is as we see it from the standpoint of the responsibility of the Federal Government, which has a nationwide responsibility for protection of the public health through these various public health programs—is a responsibility to assist in the specialized training that equips the registered nurse, for example, as one category of public health worker, to do the specialized jobs for which they are needed. This is quite apart from the problem of increasing the supply of registered nurses for all purposes.

Mr. PICKLE. Only 20 percent of the nurses actually go into the public health field. I would not think that would be particularly alarming, but if it was a majority, or even 50 percent of them, I would say it would be.

Mr. JONES. Yes, sir.

Mr. PICKLE. I am glad to get your figures, because they are in contradiction with some figures I had received.

Mr. ROBERTS. Thank you, Mr. Pickle.

This may not relate particularly to this bill, but it is a question that can arise when we bring this bill or the nursing bill to the floor.

One of the Members of Congress, a very distinguished Member, who has been interested in nursing for many, many years, made a speech

the other day, and the speech was along the line that what we need is bedside nurses, and that was pretty much the theme of the speech: that with all of the legislation that will be considered in the nursing field, this is the main need.

I would challenge the statement, but I just wondered what would be your reaction to that.

Mr. JONES. I think, Mr. Chairman, the answer to that is that no one would disagree to the proposition that bedside nurses are needed. Then you must go on from there to define more clearly what is meant.

I am sure the one who made this statement was concerned that people who are sick in bed were not getting as extensively as they would like the services of a registered nurse for all their needs.

The shortage of nurses had led to efforts to utilize the talents of those nurses who are professionally trained in a more effective or efficient manner in terms of the spread of the service. The shortage of nurses who are professionally trained has led to the practical nurse program, the nurses' aids program, ward clerks in hospitals, other types of personnel whose training is not as extensive as that required for registered professional nurse, to do those services for patients that can be done by others who are not professionally trained, provided a professionally trained nurse oversees the nursing activity and is responsible for the patient.

There has been a great deal of discussion about the relative needs for collegiate schools of nursing, for hospital schools of nursing, and for associate degree programs, as you have looked into in connection with other legislation, Mr. Chairman. But it is abundantly clear that we need nurses at all levels of nursing service.

In the nursing homes, which are almost all short of nurses, if a nurse is there available to those who may be chronically ill or aged and infirm, and therefore in a nursing home, the professional nurse does give bedside care in a sense, but when there are numbers of patients there, she cannot provide every personal need for every patient.

But so long as she is there to oversee and to do as much as she personally can, she can use practical nurses and nurses' aids and attendants and orderlies to assist in some of the programs.

I do not want to extend this too long, Mr. Chairman, but one other factor is that more is being required of the nurse. There was a time when nurses, as a matter of practice, were not allowed to give hypodermics. This was always done by the physician. But it is commonplace now and is expected by a physician that a nurse do procedures of this kind after they are competently trained to do it.

The professional requirement for nursing services has gradually increased, which has tended, Mr. Pickle, to take nurses away sometimes from the type of bedside care which could be done by other people.

Mr. ROBERTS. Well, I certainly feel that you and certainly Dr. Terry and your other associate are experts in this field, which makes me a little hesitant to ask this question, but we hear a lot from time to time about the need for research in studies along the lines of better utilization, that we tend to give each patient a sort of a—well, kind of a checklist, like checking out of a plane.

He comes in, and regardless of what he is there for, for the first day or two, we give him a blood test, an X-ray, we check his pulse, we check his vision, we do just about everything to him, or at least that has been my experience. It has happened that way to me.

And I wondered, perhaps, if you have any views as to what these studies could do. Could we still do a good job for the patient and maybe do some things—are we doing some things that may not be necessary in some cases?

Mr. JONES. There is a great deal of experimentation and demonstration going on now in hospitals, particularly in this country, Mr. Chairman, designed to determine whether or not there can be a more effective utilization of the talents of nurses, and for other health professional personnel, also.

One example I will give you is the use of new techniques involving electronics in the measurement of the physiological processes of patients. This is monitoring their physiological activity through devices which are comfortably attached to the patient and fed into one single control point for maybe a whole group of patients.

You are familiar, I am sure, with the experiments with nursing units that are built in a circle, with the nursing station in the center and the patients around the periphery. Here the nurse can observe directly a number of different patients and with the utilization of electronics techniques, can keep track of the important developments affecting that patient.

Mr. ROBERTS. I remember a few years ago we got some from the members of the conference for construction of one of these facilities that it seemed like to me was being sponsored by the Mayo Clinic. Has that been built? Or do you know?

Mr. JONES. It is under construction, I am told, at the present time, and has not been completed.

Dr. TERRY. I think you are referring, Mr. Chairman, to the Methodist Hospital in Rochester, Minn., which is associated with the Mayo Clinic, and we have been very intimately involved in this.

It has received from our Hill-Burton funds both experimental construction funds as well as some routine Hill-Burton funds. It is in the process of building at the present time. They have worked with some units previously for demonstration purposes, but the more extensive unit is still under construction at this time.

Mr. ROBERTS. Dr. Terry, what is the program being sponsored in Montgomery, known as the medical type facility?

Dr. TERRY. Yes, Mr. Chairman. This is what might be referred to as an experimental hospital facility, which involves several features.

One feature is the automation associated with it, similar to what Mr. Jones has referred to—various ways of recording vital signs or other important data about patients.

Also, this particular adaptation has been made in such a way as to devise hospitals which are easily assembled and disassembled and can be moved with some eye to particularly usefulness, for instance, in the military.

So it is a study of hospital design, which involves several types of features.

Mr. ROBERTS. Of course, I am getting you off the track, now. Thank you very much.

I think this completes the list of witnesses.

I regret that it was impossible for the subcommittee to conduct hearings yesterday, particularly in view of the fact that Dr. Myron Wegman, dean of the School of Public Health, University of Michigan,

and president of the Association of Schools of Public Health, had journeyed from Ann Arbor to Washington to present the views of that association to the subcommittee. I am sure that we are all aware of the vital role of the schools of public health in training public health personnel and of the intense interest which Dr. Wegman and others associated with the schools of public health have in this legislation. I would like to include in the hearings a copy of his statement which he had prepared for this hearing.

(The statement referred to follows:)

STATEMENT OF MYRON E. WEGMAN, M.D., M.P.H., DEAN OF THE SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF MICHIGAN

I am Myron E. Wegman, dean of School of Public Health of the University of Michigan and president of the Association of Schools of Public Health. The association which I represent includes the 12 accredited schools of public health of the United States, 6 of which are in private schools: Columbia, Harvard, Johns Hopkins, Pittsburgh, Tulane, and Yale; and 6 at State institutions: California at Berkeley, California at Los Angeles, Michigan, Minnesota, North Carolina, and Puerto Rico. As president of the association and on behalf of my colleagues, I am grateful for this opportunity to indicate our wholehearted support for H.R. 10043, the Public Health Graduate Training Amendments Act of 1964, as a well-planned step toward the essential support of the balanced training program our country needs to provide adequate numbers of properly prepared public health workers.

Our schools have now had a good many years experience with Federal support for the preparation of needed health workers and it is this experience which makes us endorse wholeheartedly the proposed bill as one of the key steps. You have already had introduced before you in the evidence the report of the Second National Conference on Public Health Training, convened at the direction of the Congress. Recommendation 1 of this report called for extension and expansion of the existing programs of (*a*) traineeship support of students, section 306 of the Public Health Service Act, (*b*) project grants for selected fields of public health instruction, section 309, and (*c*) formula grants to schools of public health for the broad support of basic instruction, section 314(c)(2); characterized by the recommendation as "interrelated * * * components of a coordinated approach for the correction of * * * shortages" of "manpower for public health." The three aspects constitute a complementary package but the present bill deals with the first two for logical reasons of immediacy and timing. I shall, therefore, deal first with these two aspects of the bill.

Time and again representatives of this association have appeared before committees of the Congress to point out the urgent necessity for the public health traineeship program. Eight years of experience have now completely confirmed this need. The training for which support is sought is training at the graduate level and candidates for admission must have completed their undergraduate programs and have at least a baccalaureate degree. Many students in public health, furthermore, already have higher degrees and such candidates include doctors of medicine, dentists, and veterinarians. These people have already invested large sums of money in their education and, by and large, are simply unable to underwrite the additional high costs of graduate training in public health. Furthermore, the relative age and maturity of these students must be taken into consideration. Many have already had a period of work in a community health service before seeking graduate training and are, thus, well beyond average student age. Many are married and already have family responsibilities.

Coupled with this is the fact that the great majority of these graduates go into public service where the recompense is relatively low and there is little financial justification for the heavy investment required. Our experience over the years has been confirmed once more this year and, at this writing, 45 students already accepted at our own school as meeting academic and personal requirements have indicated to us that their personal resources will not permit them to attend the school of public health without some form of financial support.

In some graduate fields universities themselves have been able to offer student support in various ways, including part-time work and local scholarships. This has been true to only a very limited extent in schools of public health, in part because the heavy academic load the students must carry makes part-time em-

ployment quite inadvisable, and in part because the national character of each of these schools makes local scholarship money often unavailable. In the State schools, furthermore, only a minority of the students are from the State and the rest are not able to take advantage of the substantially lower in-State tuition. At the University of Michigan, for example, roughly three-quarters of our students are from out of State, far and away the highest proportion of any of the schools and colleges of the university.

These students cover a wide variety of fields, including persons training for public health administration, medical care administration, chronic diseases and aging, maternal and child health, nutrition, health education, public health dentistry, biostatistics, epidemiology, public health laboratory practice, radiological health, industrial health and other forms of environmental health, population planning, and international health. This is the program of general support for the public health workers, who are needed to form the solid base for community health services.

An indication of the kinds of health manpower needs which schools of public health and the specialized schools are being called upon to fill, with the help of these programs, may be had from a table prepared for the Second National Conference. Just to maintain in the year 1970 the level of services provided to health departments in 1962 by physicians, nurses, engineers, health educators, nutritionists, and others will require some 5,000 additional trained personnel. And this figure does not take into consideration either existing shortages or attrition through death or retirement.

I should like at this time to call the attention of the committee and the Congress to the extreme urgency in timing for this legislation. The program has become well established over the past 8 years and applications have increased as the traineeship program has become better known. This momentum will be lost if there is interruption or delay in the program. We already have in our institution alone a backlog of 85 applications for traineeships already on file more than half of whom, as noted above, have already been accepted for admission. We have had to inform all candidates, however, that no action can be taken on their traineeship applications until the Congress has acted. While in previous years there has often been delay in appropriation, we had well-founded confidence that the then existing legislative authority would be exercised. At the present time, however, authorization for traineeships expires on June 30, 1964, and there is, thus, no legislative authority for appropriation for the 1964–65 academic year. At this time, then, it is exceedingly difficult to give any encouragement to prospective students.

A corollary factor of some importance is the relation of this training program to other scholarship opportunities. By agreement among graduate schools of this country, notice of awards of fellowships do not go to applicants until April 1, at which time the schools send out notices of award or rejection. Successful students then have until April 15 to make up their minds, and enter into a firm commitment. These dates have already passed, thus making it even more difficult for the field of public health to compete for bright young minds against the many other fields where fellowships are already available.

Like certain other institutions, our own school at the University of Michigan is in a particularly difficult situation with regard to this problem of timing. In a bold move to make maximum utilization of the university's facilities, our board of regents has voted to adopt the principle of year-round operation. To put this into effect and to carry out three full semesters of teaching within a 12-month period, the board has adopted a new university calendar, with registration on the 26th of August and the 1st day of classes on the 31st of August. As I mentioned earlier, a great many of our students are mature people with established homes; they must make their plans with some anticipation. This is obviously of even greater importance with regard to physicians and dentists who may just be coming into the public health field and must make plans for disposition of a practice as well as for movement of the family. Most applicants ask for a decision 6 months before school starts, but at a very minimum they should have at least 3 months notice that all is in order. Even such a period is essentially impossible this year. If there is any serious further delay in enacting this legislation and securing the requisite appropriation, I am afraid we shall lose to public health many excellent candidates who will be forced, often against their own basic desires, to make other plans in sheer protection for their families.

Our schools are completely unanimous in pleading that action be taken quickly. We should like to recall that even with such advance planning as we can do in the hopes that the legislation will pass and an appropriation be approved, appli-

cations from the schools will have to be processed by the Public Health Service, allocations made to the schools and awards processed by the schools to the individual students—all in time for them to arrange their personal affairs and be on the campus by the last week in August.

The second portion of this bill deals with project grants to supply funds for essential faculty and equipment for a defined program. Up to now this has applied not only to schools of public health but also to schools of nursing and schools of engineering engaged in teaching public health as a specialty for their students. These project grants have served a very useful purpose in pinpointing support in areas where special emphasis needs to be given. A wide variety of subjects are covered and the Public Health Service has thus been able to exercise leadership in stimulating development of educational facilities where, in the opinion of the Service, the greatest shortages existed. The program has been exceedingly popular from its very inception, quickly exhausting available funds. Ongoing projects have been so successful and so much in need of continuation that for the last 2 or 3 years the Service has been unable to fund many worthwhile additional or new projects, despite a backlog of applications.

It thus becomes imperative that this phase of the program be expanded but it is also important, as pointed out forcefully by the Second National Conference on Public Health Training, that eligibility for participation in the project program be extended to other areas of specialized instruction in public health, notably medical schools and certain other institutions. Our association is particularly interested in this recommendation and wishes to endorse it strongly. Inclusion of medical schools as eligible for these grants will be most useful in helping meet the lack of well-trained physicians in the field of public health. We believe that an essential step to meet this shortage is improvement in the teaching of preventive medicine in medical schools, in many of which there are serious inadequacies in this subject, both in teaching faculty and equipment. The proposed bill provides for expansion of the authority under section 309 to allow project grants to be made to departments of preventive medicine for the express purpose of strengthening their teaching so that it may achieve the same status in the eyes of students as the presently more attractive clinical specialties.

The Association of Schools of Public Health believes that the opportunity to increase the quality and quantity of education in preventive medicine in medical schools will benefit public health in this country in many ways. Not only will there thus be more likelihood of better students entering public health as a career but more of the practicing physicians of the country will have acquired the knowledge to make their cooperation with community health services more effective. A reciprocal interrelation exists between medical schools and schools of public health. As the former do a better job of teaching public health, more and better medical graduates will seek admission to schools of public health. More of these people, in turn, will, when they graduate from schools of public health, be in demand as faculty members of medical schools.

Similar observations might be made for the other professions which the newly expanded authority will allow to participate in this program. Public health services to the community are most effectively supplied through a team approach. The quality of services rendered by this team is directly affected by the level of preparation of professional members of the team.

I should like to comment at this time on the third aspect of the combination recommended by the Second National Conference on Public Health Training; that is, the recommendation for increase of formula grants (sec. 314(c)(2), Hills-Rhodes grants to schools of public health). These grants were originally authorized by the Congress in recognition of the fact that schools of public health, as essentially national schools preparing personnel for all of the States and constituent units of the United States, have so small a portion of their costs met by tuition that Federal aid in meeting the deficit was essential. The Second National Conference recognized this fact and recommended strongly that the formula grants be extended and expanded. The current authorization under which they are made, however, does not expire until 1966 and it is my understanding that for this reason the Department of Health, Education, and Welfare did not suggest action on this portion of the recommendation at the present time. Nevertheless, I am assured that the Department recognizes the key nature of this type of aid to preparation of health personnel. I should make clear that the expansion in project grants does not in any sense lessen the need for the formula grants. The purposes are quite different. The project grants proposed in H.R. 10043 are designed to aid training in special areas in public health, as need is determined by the Public Health Service and its advisers.

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The formula grants, on the other hand, have as their purpose the broad underpinning of the multidisciplinary training obtainable only in schools of public health. At the proper time our association will be pleased to go into greater detail concerning the urgent and vital needs for the expansion of the formula grant program. All of the schools would wish me to emphasize their great needs for expanded formula grants.

May I close, Mr. Chairman, by referring once again to the importance of the time factor in the legislation now under consideration? Trainees who are planning to enter schools of public health this fall, and who have applied in the anticipation that the traineeship program would be continued, need assurance so that they may make their personal plans. We are today almost exactly 4 months from the date students must be on the campus at our university and certain others in the country.

The 12 schools of public health of this country have steadily and dutifully expanded their teaching facilities to meet increased demands. The legislative and appropriation process through which this bill still must pass is long. Only prompt action of the Congress can avoid the serious setback to public health in our country which would result from an unexpected sharp decrease in the number of properly prepared public health workers the country so sorely needs. On behalf of my colleagues and myself, I respectfully ask and urge that action be taken as soon as possible.

Mr. ROBERTS. In addition, I have received letters from a number of individuals and organizations also supporting the enactment of this bill. These include the American Public Health Association and a letter from Dr. Charles E. Smith who is chairman of that association's committee on professional education. These letters will, without objection, be included in the record of the hearings.

(The material referred to follows:)

THE AMERICAN PUBLIC HEALTH ASSOCIATION, INC.,
New York, N.Y., April 16, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Health and Safety Subcommittee of the House Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN ROBERTS: As chairman of the Committee on Professional Education of the American Public Health Association, I strongly endorse the enactment of H.R. 10043, Graduate Public Health Training Amendments of 1964 and respectfully request that this statement be included in the testimony of your hearings on this vital legislation. I deeply regret that I cannot be present to present it in person.

Our committee on professional education has the responsibility of accrediting the schools of public health and of establishing the educational qualifications of the various categories of professional health workers of our Nation. Thus we are keenly aware that the Federal traineeships are essential to provide educational preparation to properly qualify physicians, nurses, engineers, and the other recruits so sorely needed in the public service of public health.

We who participated in the Second National Conference on Public Health Training documented the great values of the traineeships during this past decade as provided by section 306 of the Public Health Service Act which H.R. 10043 would continue. These traineeships converted a recession in number of professionally prepared public health workers to a moderate increase. However, the expanding national population and technological advance of public health make imperative even greater numbers and greater diversity of health workers essential at Federal, State, and local levels. Thus these traineeships direly need continuation and expansion.

To complement these traineeships for the post baccalaureate professional students, project grants (sec. 309) to extend and to expand the resources of the educational institutions are essential. The expanded authorizations as provided in H.R. 10043 are realistic and indeed conservative. Only if there is Federal support to aid the universities to expand their offerings in diversity and for increased numbers can the traineeships be justified. Through tuition and endowments of the private universities, through the tuition and tax support of our State universities our professional schools already provide the essential basic support of these educational programs. The project grants are indis-

pensable for the vitally needed expansion. Our Committee on Professional Education of the American Public Health Association is in close touch with educational institutions and with the employing public agencies and underscores the vital importance of this legislation for the public health of our Nation.

With the expiration June 30 of the authorization of the traineeships (sec. 306) there is greatest urgency in enactment of H.R. 10043 and its funding. Indeed, unless this is accomplished most expeditiously, students already admitted for next fall will not be able to attend. These dropouts would result in serious damage to public health. We look to the hearings of your honorable subcommittee to assure the Nation of its continued advancement in the recruitment of and training for careers in public health.

Respectfully yours,

CHARLES E. SMITH, M.D., D.P.H.,
Chairman, Committee on Professional Education, American Public Health Association; Member, National Advisory Committee on Public Health Training; and Dean, School of Public Health, University of California, Berkeley.

ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH, INC.,
Ann Arbor, Mich., February 27, 1964.

Hon. KENNETH A. ROBERTS,
House Office Building, Washington, D.C.

DEAR CONGRESSMAN ROBERTS: I am writing on my own behalf, as well as that of the 12 member schools of our association, to express our strong endorsement of H.R. 10043, Public Health Graduate Training Amendments Act of 1964. As was stated so clearly in the final recommendations of the Second National Conference on Public Health Training, convened at the direction of the Congress, the combination of (*a*) traineeship support of students, (*b*) project grants for selected areas of public health instruction, and (*c*) formula grants to schools of public health to support basic instruction, constitute a balanced and complementary package. Our schools are vitally interested in all three parts of this package, but wish at this time to comment on the urgency that requires action on H.R. 10043 at the earliest possible moment.

In our various appearances before your committee, representatives of the Association of Schools of Public Health have emphasized again and again the vital character of traineeship support for students at schools of public health. Over the years, our students, three-quarters of whom, incidentally, come from outside Michigan, have had sharply limited personal resources. Our experience makes crystal clear that the great majority simply could not attend school in the absence of public health service traineeship support.

Not only do we endorse the priniciple of this legislation, but I should like to emphasize the urgency in timing with regard to the traineeship provisions. Our school year at Michigan will begin next academic year with registration on the 26th of August and the first day of classes on the 31st of August. Since most of our students are older, often with established families and homes, they obviously need time to arrange their affairs in order to spend an academic year at a graduate school. This is obviously of particular importance with regard to physicians and dentists who are often just coming into the public health field. Most fellowship programs notify successful applicants at least 5 months before the start of school and 3 months would seem to be an absolute minimum. All of our schools, therefore, are very much concerned that the bill not only pass, but pass quickly, so that we may notify promptly applicants whom we consider qualified for traineeships and give them sufficient assurance that they may proceed with their plans for attendance at school. If there is any significant delay in the passing of the legislation and its corollary appropriation, we run the risk of losing to public health many excellent candidates who will be forced to make other plans because of personal deadlines.

The second part of the legislation and the second part of the package of recommendations by the National Conference on Public Health Training has to do with project grants. These awards have been very useful not only to schools of public health but to other professional schools training people in specialized areas of the health sciences. Our association strongly endorses this section of the legislation; the expansion proposed is modest in relation to the needs brought out at the Second National Conference. The device of project grants is

an excellent way to stimulate instruction in areas in which the Public Health Service has concluded that there is particular deficit. Furthermore, support may be given in this way to health programs in schools not devoted primarily to public health.

The proposed legislation does not include reference to the third part of the combination recommended by the Second National Conference on Public Health Training—formula grants (Hill-Rhodes grants) to schools of public health. As you know, the Conference recommended that these grants be extended and expanded, but since the current authorization under which they are made does not expire until 1966 it is my understanding that the Department of Health, Education, and Welfare did not suggest action on the Hills-Rhodes grants at this time. I have been assured by the Department that they recognize the validity of the recommendations of the Conference regarding formula grants to schools of public health and agree that these grants constitute an indispensable part of the balanced support by the Federal Government for preparation of public health personnel. As I have indicated to you on other occasions, our schools find the Hill-Rhodes grants a crucial aspect of Federal aid.

In summary, I respectfully ask your support of House bill 10043 and express my hope that the committee will recognize not only the need for this legislation, but the fact that "time is of the essence."

Sincerely yours,

MYRON E. WEGMAN, M.D.,
President and Dean, School of Public Health, University of Michigan.

THE AMERICAN BOARD OF PREVENTIVE MEDICINE, INC.,
Baltimore, Md., April 20, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety,
Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR CONGRESSMAN ROBERTS: This letter is being sent to you to support the provisions contained in H.R. 10043, a bill to amend the Public Health Service Act to extend the authorization for assistance in the provision of graduate or specialized public health training, and for other purposes.

The American Board of Preventive Medicine is a nonprofit organization incorporated under the laws of the State of Delaware. It was created in accordance with action of the advisory board for medical specialties and is recognized and approved by the Council on Medical Education of the American Medical Association as a medical specialty board authorized to certify properly qualified specialists in preventive medicine. Specifically, it certifies individuals in the areas of public health, aviation medicine, occupational medicine, and general preventive medicine.

Its principal purposes are to encourage the study, improve the practice, elevate the standards, and advance the cause of preventive medicine. It does also grant and issue to physicians licensed by law to practice medicine, certificates of special knowledge in the various fields of preventive medicine as outlined above. Because of the purpose of the board, it has a very special interest in legislation which is designed to attract qualified people into the general area of preventive medicine and to provide educational experiences which are readily available and of high quality.

The provisions of this bill are designed to extend the authorization for traineeships for graduate or specialized training in public health for physicians and other professional health personnel. There is no question but what the availability of these traineeships has increased the number of capable young physicians entering the field of public health. This can be documented by studying the applications from physicians to schools of public health in relation to the availability of these traineeships. The board is convinced that this type of support is essential, if adequate numbers of professional health workers are to be recruited to this important field.

Section 3(a), subsection (a) of section 309 of the Public Health Service Act relating to project grants to schools for graduate public health training allows for an increase in the authorization stepwise to a maximum of $9 million for the fiscal year ending June 30, 1969. The need for such an increase has been documented by the report of the Second National Conference on Public Health Training held in August of 1963, which is I know available to the committee.

They received data supporting their recommendations from several sources, including the schools of public health, which bear out this need. In view of the excellent use to which the public health traineeships and the project grants have been put in the past, and in view of the demonstrated growing need for such support, the board hopes that the Subcommittee on Health and Safety and the House Committee on Interstate and Foreign Commerce will give a favorable report on this bill.

While provisions are not included in this bill to amend section 314(c) of the act which provides formula grants to the schools of public health, the board wishes to point out that this is an important element in the support of schools of public health, and if they are to continue to do their excellent job of providing to the Nation high-caliber professional workers in the field of public health, it is essential that all three elements of Federal support—the traineeships, the project grants, and the formula grants—be continued.

I apologize for the delay in getting this letter to you. Had there been time, I should have requested an opportunity to appear before the subcommittee on behalf of the board. This does not appear to be feasible at this time. However, I hope that this communication can be made a part of the records of the subcommittee hearings.

Respectfully yours,

JOHN C. HUME, M.D., *Secretary-Treasurer.*

UNIVERSITY OF VIRGINIA,
SCHOOL OF MEDICINE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Charlottesville, Va., April 21, 1964.

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

DEAR CONGRESSMAN HARRIS: I am writing to support H.R. 10043, a bill to extend and improve existing legislation relating to graduate and specialized training in public health.

The Second National Conference on Public Health Training, held in August 1963, stressed the effectiveness of public health traineeships as a means of increasing the number of trained professional public health personnel, and noted that project grants have been effective in improving the quality of public health training in institutions eligible to receive them. The proposed legislation would extend the authorization for public health traineeships contained in section 306 and broaden the eligibility for project grants authorized by section 309 to include other types of institutions and agencies which provide graduate and specialized public health training.

Today's changing patterns of medical care require the skills of professional personnel trained in the disciplines of preventive medicine and public health and skilled in coordination of community health services. Such personnel are now being trained in schools of public health with the assistance of project grant funds. Schools of medicine could greatly augment the output of the 12 schools of public health, but few such departments are adequately staffed and supported at present. In general, departments of preventive medicine have not been as successful in attracting financial support as have other, more "glamorous" departments in medical schools. However, as documented at a conference of teachers of preventive medicine in June 1963, more and more departments of preventive medicine are developing adequate postgraduate teaching programs and undertaking community oriented research projects. There is a great need to improve the capability of departments of preventive medicine in schools of medicine to increase and update the public health content of their instructional programs. The training of physicians in preventive medicine would be greatly strengthened and improved by placing departments of preventive medicine in medical schools in the same category as other institutions which provide specialized public health training, such as schools of public health and schools of nursing.

I urge that favorable action on H.R. 10043 be taken by the Committee on Interstate and Foreign Commerce, and ask that my letter by included in the records of the hearing on the bill.

Sincerely yours,

WILLIAM S. JORDAN, Jr., M.D.,
Professor and Chairman.

STATEMENT OF THE AMERICAN DENTAL ASSOCIATION AND THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS

Mr. Chairman and members of the committee, I am Dr. Wesley O. Young of Lexington, Ky. I am here, as a representative of the American Dental Association and the American Association of Dental Schools.

I am trained as a public health dentist and have worked on official health agencies for more than a decade. At present, I am an associate professor and chairman of the Department of Community Dentistry at the College of Dentistry of the University of Kentucky. I also am a member of the National Advisory Committee on Public Health Training, established under the provisions of the legislation setting up the public health training program.

On behalf of the American Dental Association and the American Association of Dental Schools, I am testifying in favor of important changes in the public health traineeship grant legislation. In essence, these changes involve five factors:

(1) Extending for an additional 5 years the authorization for traineeships to support students preparing for full-time careers in public health;

(2) Extending for 4 years the authorization for project grants to educational institutions providing public health training to strengthen their teaching programs;

(3) Strengthening the project grant program for public health training by authorizing grants to educational institutions not now eligible, such as schools of medicine and dentistry;

(4) Increasing the appropriation ceiling for the project grant program, and

(5) Providing for a third conference on public health training to evaluate the continued effectiveness of the entire public health training program and to report to the Congress by January 1, 1968.

The American Dental Association and the American Association of Dental Schools have long recognized the importance of public health programs. The effectiveness of these programs, however, is largely dependent upon the availability of competent, well-trained personnel and such personnel has been in short supply. For this reason, the associations support the proposed amendments to implement the expansions in the total training program recommended by the Second National Traineeship Conference.

In addition to indicating support for the basic program and the general changes that are now suggested, it seems appropriate to comment at greater length on the provision of the legislation which is of particular importance in strengthening the contribution of dentists to public health programs.

Section 309 of the Public Health Service Act now provides for project grants for the expansion and enrichment of public health curriculums in "* * * schools of public health and to those schools of nursing or engineering which provide graduate of specialized training in public health for nurses or engineers."

H.R. 10043 would amend this section to allow these project grants to be made to schools of public health and "* * * to other public or nonprofit private institutions providing graduate or specialized training in public health." This provision would, for the first time, make it possible to provide support to increase the effectiveness of public health teaching in schools of dentistry. This provision might well be one of the most important contributions the public health training program can make to the strengthening of public health programs.

Medical and dental schools are now teaching various aspects of public health and preventive medicine and dentistry. Traditionally, however, the departments responsible for the instruction have been underfinanced and understaffed. Rarely have these important subjects been accorded the time in the curriculum that would be desirable. Often departments of preventive dentistry have been curricular orphans, staffed largely by part-time teachers. Strengthening these departments would provide important benefits in two ways.

First, such support would be an important factor in recruiting personnel for careers in public health. Traditionally, specialties in dentistry have been dependent largely on strong departments in the professional school to attract students to undertake advanced preparation. Public health ordinarily has not had the advantage of being able to recruit at the primary source of students—the professional schools.

While I was in dental school, for example, I had no contact with a dentist trained in public health and received no indication that there were opportunities for a career in this field. Only after I had practiced general dentistry for 3

years did I learn about dental public health. Even then I probably would not have been willing to undergo the sacrifice of disposing of a practice and entering graduate school had I not been free of family responsibilities at the time. The lack of adequate opportunities to recruit to the field of public health during the years of preprofessional education is a serious block to increasing the supply of public health personnel.

The second benefit of strengthening the teaching of public health in schools of dentistry is even more compelling. Many public health programs are dependent upon certain specialized skills of the clinician in practice—skills that might be termed the public health aspects of clinical practice. Although the programs of public agencies play an important part in maintaining the health of the public, they must be teamed with the efforts of the dentist and physician in private practice. One of the major factors in obtaining community water fluoridation, for example, has been the ability of local dentists to interpret this procedure to their patients and to community groups. Similarly, the extent to which the benefits of topical applications of fluoride and other preventive procedures used on an individual basis will reach our population will depend on the adequacy of the training dentists receive in their use. Unfortunately, restorative and reparative procedures have traditionally overshadowed preventive dentistry in the curriculums of many dental schools.

Project grants could be used to encourage the development of departments of preventive and public health dentistry in schools of dentistry staffed with full-time specialists. They would also make it possible to experiment with new and more efficient methods of teaching the use of public health procedures in clinical practice. Developments of this nature would stimulate more dental students to prepare for careers in public health and increase the utilization of preventive and public health procedures in clinical practice. The same benefits could, of course, be anticipated from project grants made to schools of medicine.

Mr. Chairman and members of the committee, the public health training program has proved to be wise legislation. On behalf of the American Dental Association and the American Association of Dental Schools, I urge that you approve the extension and that you support the modifications recommended by the Second National Conference on Public Health Training, as contained in H.R. 10043.

STATE UNIVERSITY OF NEW YORK,
COLLEGE OF MEDICINE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Syracuse, N.Y., April 8, 1964.

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

DEAR CONGRESSMAN HARRIS: I understand that hearings are to be held soon on H.R. 10043. Since my academic responsibilities are concerned with providing for courses in preventive medicine for both medical students and graduate physicians, I am particularly interested in this pending legislation. No field of medicine offers more hope for the future health of our citizenry.

I should like to urge in the strongest possible terms that favorable action be considered on this bill and, furthermore, that this letter be included in the records of its hearing.

With kindest regards,
Sincerely,

HARRY A. FELDMAN, M.D.,
Professor and Chairman, Department of Preventive Medicine.

STATE UNIVERSITY OF NEW YORK,
COLLEGE OF MEDICINE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Syracuse, N.Y., April 8, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN ROBERTS: As one who is concerned with the education of medical students and graduate physicians in preventive medicine, I would like

to urge as strongly as possible that favorable action be considered by your committee on H.R. 10043. This bill offers marked and important advantages for improving the training and recruiting of people into this most important health field. May I, also, ask that this letter be included in the records of the hearings on H.R. 10043.

Sincerely,

HARRY A. FELDMAN, M.D.,
Professor and Chairman, Department of Preventive Medicine.

STATE UNIVERSITY OF NEW YORK,
COLLEGE OF MEDICINE,
DEPARTMENT OF ENVIRONMENTAL MEDICINE AND COMMUNITY HEALTH,
Brooklyn, N.Y., April 20, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

SIR: This is to write in support of H.R. 10043 which has been introduced to renew and to extend the U.S. Public Health Service traineeship and project grant programs.

There is a serious need for support of grant-in-aid programs that promise to strengthen the training of physicians well in preventive medicine. Several conferences were held in 1963 which explored this need and which undoubtedly formed a basis for some of the present recommendations being considered by the Congress. Just as there has been a lag in applying what we know in preventive medicine, there has long been a lag in the level of Federal support of arrangements needed to improve the staffing of medical schools and related institutions in the field of preventive medicine.

Most sincerely yours,

DUNCAN W. CLARK, M.D.,
Professor and Chairman.

THE OHIO STATE UNIVERSITY,
DEPARTMENT OF PREVENTIVE MEDICINE,
Columbus, Ohio, March 30, 1964.

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

SIR: I wish to communicate with you concerning the proposed bill S. 2530 and its counterpart H.R. 10043 dealing with a revision of sections 306 and 309 of the Public Health Service Act.

I am in full accord that Congress should authorize the public health service to continue its activities in graduate training and project research in the public health field. I feel, however, that it is necessary at this time to make certain other radical chances in the bill. These result from extensions in both interest and competence in a field which is now broader than the terminology implied in the original Public Health Service Act.

At the present time, the terminology which covers the promotion of health, prevention of illness or injury, the promotion of optimum productivity, and social adjustment is called preventive medicine. It involves all the usual vaccination, sanitary, and therapeutic measures carried out by public health services in the past, but it also involves all phases of what is now known as environmental medicine or environmental health (the control of all real and potential hazards to health and productivity, be they physical, chemical, biological, psychological, or sociological). The best graduate training and research in these areas has not been done solely or even primarily in schools of public health. Furthermore, in the period from 1930 to 1965 emphasis on both research and training in a majority of public health schools has been directed to personnel in underdeveloped countries with problems vastly different from those in the United States. Courses have been watered down to meet the language deficiencies of people who must work in relatively primitive countries. Only a little of the total public health school effort in training has been directed toward Ph. D. level or equivalent American personnel to deal with American problems of today and tomorrow.

During this period the American Board of Preventive Medicine has come into being and now recognizes four specialties as follows:

Aerospace medicine.
Occupational medicine.
Public health administration.
General preventive medicine (microbiology, epidemiology, etc.).

The development of these specialties has not been primarily in the schools of public health, but rather in departments of preventive medicine in medical schools, some of which have schools of public health and many of which do not. There are at least five departments of preventive medicine offering master level and Ph. D. level training in one or more of the areas of preventive medicine which are equal or superior to the training in the very best schools of public health. They are recognized by the American Board of Preventive Medicine and by the Council on Education and Hospitals of the AMA but not by the law. Special provisions are made for public health schools which are not shared by the departments of preventive medicine who participate in graduate research and training.

It is, therefore, recommended that the terminology of the revised Public Health Service Act be changed to include schools of public health and/or departments of preventive medicine with accredited graduate training programs in any of the specialties recognized by the American Board of Preventive Medicine or equivalent. I commend this change to your serious consideration.

Respectfully yours,

WILLIAM F. ASHE, M.D.,
Professor and Chairman.

ASSOCIATION OF TEACHERS OF PREVENTIVE MEDICINE,
April 8, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN ROBERTS: The multiplicity of health problems which face our Nation are obvious and apparent. The number of physicians trained in preventive medicine and public health is appallingly inadequate at the present time and the discrepancy will become more severe as the size of the population continues to increase. It is of vital importance that the means for the training of more physicians in preventive medicine and public health become increasingly appropriate to and adequate for the nature and magnitude of these necessary efforts.

I, threfore, desire to urge favorable action on H.R. 10043 by the Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce. This legislation is essential for the development of the professional manpower required for the indicated public health effort.

It is requested that this letter be included in the records of the projected hearings on H.R. 10043.

Sincerely yours,

HENRY J. BAKST, M.D., *President.*

THE JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA,
DEPARTMENT OF PREVENTIVE MEDICINE,
April 9, 1964.

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

DEAR SIR: I should like to call to your attention the importance for emphasizing the training of physicians in preventive medicine. The contribution of such trained personnel should contribute significantly to the general health of our Nation.

Therefore, I would like to urge that favorable action on H.R. 10043 be taken by your committee.

Cordially yours,

E. HAROLD HINMAN, M.D.

THE UNIVERSITY OF WISCONSIN,
DEPARTMENT OF PREVENTIVE MEDICINE,
Madison, Wis., April 3, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety,
Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR REPRESENTATIVE ROBERTS: This letter is to urge favorable action on the bill H.R. 10043 entitled "Graduate Public Health Training Amendments of 1964" and to request that this letter be included in the records of the hearing on that bill.

There is a shortage of physicians trained in the field of public health. For example, here in Wisconsin four of the eight district health officers of the State board of health are without physicians because of the shortage of such personnel. The shortage is a nationwide one. Two aspects of its solution are: (1) the stimulation and basic training of physicians in their medical school training; and (2) provision for postgraduate education of both a formal and short term nature. The first of these requires the development of strong departments of preventive medicine within the medical schools to attract physicians to the field of public health as a career and to provide a basic understanding for all physicians of the importance of principles of public health and preventive medicine. Additional financial assistance to such departments is an integral part of this requirement. The second area is the need to support formal training of physicians through the nine schools of public health in the United States. This, however, may not meet the requirements of postgraduate education so that other course work need be set up in departments of preventive medicine, in other health-related teaching institutions, and in official health departments. Refresher courses, seminar and workshops are needed not only for physicians in the field of public health but also for other professional help workers such as sanitarians, public health laboratory workers, etc. In my responsibility as director of a State laboratory of public health the need for intensive short-term training to improve the efficacy of laboratory procedures in both public health and private laboratories is clearly evident.

Because of these considerations I urge that your committee approve the extension and improvement of existing legislation relating to graduate and specialized training in public health.

Sincerely yours,

ALFRED S. EVANS, M.D.,
Professor and Chairman; Director, State Laboratory of Hygiene.

THE ALBANY MEDICAL COLLEGE OF UNION UNIVERSITY,
DEPARTMENT OF COMMUNITY HEALTH,
Albany, N.Y., April 3, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN: Successful efforts to solve the health problems which face our Nation in both the immediate and more extended future will require that the training of physicians in preventive medicine become increasingly appropriate to and adequate for the nature and magnitude of those efforts.

For this reason I strongly urge favorable action on H.R. 10043 by the Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce. This legislation is fundamental to the development of the professional manpower required for the indicated public health effort.

I respectfully request that this letter be included in the records of the projected hearing on H.R. 10043.

Sincerely yours,

J. GARTH JOHNSON, PH. D., M.P.H.,
Professor and Chairman, Department of Community Health.

TUFTS UNIVERSITY,
SCHOOL OF MEDICINE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Boston, Mass., April 3, 1964.

HON. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR SIR: The remarkable research efforts now being carried on in our medical institution, much of it made possible by research support from the Federal Government, are providing us with increasing knowledge concerning the nature of human health and the steps by which disease develops. Unfortunately many of these discoveries are not being rapidly implemented at the present time. There is a serious shortage of physicians trained in preventive medicine at this time and it can be safely predicted that the requirement for such physicians will sharply increase during the next decade. I am firmly convinced that support must be available not only to strengthen traditional programs in schools of public health but also in departments of preventive medicine in medical school.

Therefore I would like to urge favorable action on H.R. 10043 by your committee and that this letter be included in the records of the hearing on H.R. 10043.

Sincerely yours,

COUNT D. GIBSON, Jr., M.D., *Chairman.*

UNIVERSITY OF ILLINOIS AT THE MEDICAL CENTER,
DEPARTMENT OF PREVENTIVE MEDICINE,
Chicago, Ill., April 7, 1964.

HON. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR SIR: As one who is responsible for the training of physicians in preventive medicine and the specialized training of some of them for careers in the field of public health and prevention of disease, I am greatly in favor of H.R. 10043. During the great expansion of medical facilities, and support for various types of training, the plight of this field has become increasingly severe. Because of the limited number of graduates each year there is keen competition among all of professional areas. The relative neglect of opportunities to provide training for careers in preventive medicine within the framework of the medical school has encouraged most students in their belief that this is an unimportant field and not one for serious consideration. Coupled with this has been a failure of departments to grow proportionately to most others within the colleges since the growth of many departments have been financed by training grants, traineeships, and similar extra university support. Unless there are programs designed to reestablish a balance between preventive medicine and other programs only a worsening of the situation can be anticipated. Certainly money will not answer all of the problems but without it a beginning cannot be made. Building a staff of enthusiastic and knowledgeable teachers who can give the stimulus to attract graduate students will take time and many of them will have to be trained from the recent graduates. To do this support such as that specified in H.R. 10043 is desperately needed.

If there is any way that we could furnish more definitive information to the committee we shall be happy to do so. If not, we would appreciate this letter becoming part of the committee's record.

Sincerely yours,

MARK H. LEPPER, M.D.,
Professor of Preventive Medicine and Head of the Department.

HARVARD UNIVERSITY,
MEDICAL SCHOOL,
DEPARTMENT OF PREVENTIVE MEDICINE,
Boston, Mass., March 31, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Safety and Health, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR SIR: As professor of preventive medicine and head of the department at the Harvard Medical School, I am constantly handicapped in my efforts to interest medical students in a public health career. In contrast with the large sums available for the reserch and the treatment of important diseases, funds are not available for adequate staff and facilities for departments of preventive medicine in schools of medicine to bring to bear preventive knowledge in medical education, teaching, and research.

Many medical students from their childhood are motived in the direction of the treatment of patients and not toward the prevention of disease. It is difficult to make them aware of the increasing complexity of modern society which carries with it such serious man-made threats to human health as radiation, toxic insecticides, antibiotic resistant germs, and potent but potentially harmful new drugs. Moreover, many natural diseases such as cancer, heart disease, and arthritis are better prevented than treated. Indeed, once their damage has been done, therapy in most cases has relatively little to offer.

The bill introduced by Congressman Harris—H.R. 10043—to renew and expand the U.S. Public Health Service traineeship and project grants, if enacted, would fill this serious gap in the protection of our citizens. I therefore urge favorable action on it by your subcommittee and request that this letter be included in the records of the hearings to be conducted by your Subcommittee on Safety and Health of the House Committee on Interstate and Foreign Commerce.

Very truly yours,

DAVID D. RUTSTEIN, M.D.,
Professor of Preventive Medicine and Head of the Department.

THE UNIVERSITY OF NORTH CAROLINA,
SCHOOL OF PUBLIC HEALTH,
Chapel Hill, March 3, 1964.

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

DEAR MR. HARRIS: On behalf of this school of public health and its membership in the Association of Schools of Public Health, I bring to your attention our concerted endorsement of H.R. 10043, Public Health Graduate Training Amendment Act of 1964. We are wholeheartedly in favor of the three parts of this legislation but are particularly concerned at the moment with the urgency for action on H.R. 10043.

From the representatives of the schools of public health appearing before your committee from time to time, you are aware that the majority of the students attending public health schools today could not do so were it not for Public Health Service traineeship support. The fact that this type of student is older than the normal age for graduate students in that he may be a physician, dentist, statistician, nurse, etc., makes timing in the assignment of traineeships of utmost importance. It takes months of prior planning for such an individual to be able to return to academic training. We would like to notify successful applicants at least 5 months in advance of opening of school. The majority of these students come to us from other States. For these and many other reasons we wish to emphasize the importance of timing with regard to the traineeship provisions. We are concerned, therefore, that the bill not only pass, but pass quickly.

The second part of the legislation, having to do with project grants, likewise concerns schools of public health. It is through the device of such grants that we are able to stimulate instruction in neglected areas of health programs.

It is our understanding that formula grants (Hill-Rhodes grants), a third interest in public health legislation, are not included in the immediate proposal. Suffice it to say, however, that we consider the Hill-Rhodes grants a crucial aspect of Federal aid.

We shall appreciate anything you can do toward the immediate support of bill H.R. 10043.

Sincerely yours,

W. F. MAYES, M. D., *Dean.*

THE UNIVERSITY OF NORTH CAROLINA,
THE SCHOOL OF MEDICINE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Chapel Hill, April 1, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN ROBERTS: I am writing to urge passage of H.R. 10043 which renews and expands the U.S. Public Health Service traineeship (sec. 306) and project grants (sec. 309) programs.

My position as chairman of the Department of Preventive Medicine, University of North Carolina, may not be an unbiased but it should be an informed one. Also, in the capacity of cochairman of the national conference on research, graduate education, and postdoctoral training in departments of preventive medicine which was held in Saratoga Springs, N.Y., June 10–14, 1963, I had an opportunity to do considerable thinking about as well as hear a great deal of discussion of, points covered in this act.

This bill should strengthen departments of preventive medicine in medical schools and enable them to carry out more adequately their functions of training and indoctrinating undergraduate medical students with the preventive viewpoint; of interesting enough of such students in public health as a career; of carrying out appropriate research; of giving training in academic preventive medicine; and of participating appropriately with schools of public health and other health professional schools in training in public health.

I am sending a similar letter to the Honorable Oren Harris, chairman, Committee on Interstate and Foreign Commerce. I would appreciate it if one or both letters be appropriately included in the records of the hearing on H.R. 10043.

Sincerely yours,

WILLIAM L. FLEMING, M.D.,
Chairman, Department of Preventive Medicine.

LOUISIANA STATE UNIVERSITY,
SCHOOL OF MEDICINE,
DEPARTMENT OF PUBLIC HEALTH AND PREVENTIVE MEDICINE,
New Orleans, La., April 3, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR SIR: As professor and head of the department of preventive medicine and public health at LSU School of Medicine, I feel that it is my duty to write to you to ask your cooperation in doing anything you can to help eradicate the great need for strengthening and improving the training of physicians in preventive medicine. I believe that favorable action on H.R. 10043 by your committee would be a definite step in this direction. I hope that this letter along with the many others that you will receive supporting this measure will be included in the records of the hearing on H.R. 10043.

Sincerely,

ROBERT W. SAPPENFIELD, M.D.,
Professor and Head of the Department of Preventive Medicine and Public Health and Professor of Pediatrics.

UNIVERSITY OF PITTSBURGH,
SCHOOL OF MEDICINE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Pittsburgh, Pa., March 31, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

SIR: I am writing with respect to H.R. 10043 which, I understand, is being reviewed by your committee. A program such as proposed in this bill is badly needed. Currently, we are neither teaching the preventive aspects of medicine adequately to medical students in our country nor attracting them to seek careers in public health and preventive medicine. As you know, many of our

major health problems today could be eliminated if only we applied in preventive programs already existing knowledge in the field of medicine. The establishment of public health and preventive medicine training programs within schools of medicine will greatly influence the country's future physicians to give more emphasis to prevention in the practice of medicine.

I strongly urge the support of you and your committee for this legislation. If it is appropriate, I request that this letter be included in the records of the hearing on H.R. 10043.

Very truly yours,

KENNETH D. ROGERS, M.D.,
Professor and Chairman of the Department.

PACIFIC PALISADES, CALIF., *March 30, 1964.*

Hon. OREN HARRIS,
House of Representatives,
House Office Building,
Washington, D.C.

MY DEAR CONGRESSMAN HARRIS: I am writing for your support of Public Health Graduate Training Amendments Act of 1964 (S. 2530 and H.R. 10043). Early passage of this legislation is in the best interest of national health, welfare, and safety. Our schools of public health draw students from all States and, therefore, do not restrict enrollment to students from the respective supporting State.

The students are at the graduate level, generally older, with family responsibilities and commitments requiring early planning and, frequently, traineeship support. At the present time we have 79 applications for traineeships and anticipate over 150 total applications before our closing filing date. Unfortunately, many of these potential future health service professionals will be denied the opportunity without the support of the pending legislation.

The schools of public health cannot securely plan for staff, space, and equipment without a firm commitment to a specific number of students. The many professional and community organizations in which I actively participate are concerned with any significant delay in passage of this legislation and its corollary appropriation, together with the risk of losing excellent candidates for professional training in the health field.

I respectfully beg your support of this important legislation for early passage and its corollary appropriation.

Sincerely,

L. S. GOERKE,
Dean, School of Public Health, University of California, Los Angeles.

THE UNIVERSITY OF TENNESSEE,
DEPARTMENT OF PREVENTIVE MEDICINE,
Memphis, Tenn., March 30, 1964.

Hon. KENNETH A. ROBERTS,
Chairman, Subcommittee on Health and Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR SIR: I am writing to you on behalf of H.R. 10043, and would like to request that my letter be included in the records of the hearing on this legislation.

As a teacher of preventive medicine and public health in a medical school, I am keenly aware of the severe shortage of physicians who have had adequate training in this field. It is urgent that training programs for physicians in this area be implemented as fully as possible if the population of this country is to receive the benefits of the many new developments in this field. Favorable action on this bill by your committee will do a great deal toward meeting an important need, and your support of this measure is respectfully solicited.

Sincerely,

H. PACKER, M.D.,
Professor and Chairman.

YALE UNIVERSITY SCHOOL OF MEDICINE,
DEPARTMENT OF EPIDEMIOLOGY AND PUBLIC HEALTH,
New Haven, Conn., March 6, 1964.

Hon. OREN HARRIS,
House Office Building,
Washington, D.C.

SIR: I wish to express my strong endorsement of H.R. 10043, Public Health Graduate Training Amendments Act of 1964. As was stated so clearly in the final recommendations of the Second National Conference on Public Health Training, convened at the direction of the Congress, the combination of (*a*) traineeship support of students, (*b*) project grants for selected areas of public health instruction, and (*c*) formula grants to schools of public health to support basic instruction, constitute a balanced and complementary package. Our schools are vitally interested in all three parts of this package, but wish at this time to comment on the urgency that requires action on H.R. 10043 at the earliest possible moment.

In our various appearances before your committee, representatives of the Association of Schools of Public Health have emphasized again and again the vital character of traineeship support for students at schools of public health. Over the years, our students have had sharply limited personal resources. Our experience makes crystal clear that the great majority simply could not attend school in the absence of Public Health Service traineeship support.

Not only do we endorse the principle of this legislation, but I should like to emphasize the urgency in timing with regard to the traineeship provisions. Our school year will begin next academic year with registration on the 15th of September and the 1st day of classes on the 16th of September. Since most of our students are older, often with established families and homes, they obviously need time to arrange their affairs in order to spend an academic year at a graduate school. This is obviously of particular importance with regard to physicians and dentists who are often just coming in to the public health field. Most fellowship programs notify successful applicants at least 5 months before the start of school and 3 months would seem to be an absolute minimum. All of our schools, therefore, are very much concerned that the bill not only pass, but pass quickly, so that we may notify promptly applicants whom we consider qualified for traineeships and give them sufficient assurance that they may proceed with their plans for attendance at school. If there is any significant delay in the passing of the legislation and its corollary appropriation, we run the risk of losing to public health many excellent candidates who will be forced to make other plans because of personal deadlines.

The second part of the legislation and the second part of the package of recommendations by the National Conference on Public Health Training has to do with project grants. These awards have been very useful not only to schools of public health but to other professional schools training people in specialized areas of the health sciences. I strongly endorse this section of the legislation; the expansion proposed is modest in relation to the needs brought out at the Second National Conference. The device of project grants is an excellent way to stimulate instruction in areas in which the Public Health Service has concluded that there is particular deficit. Furthermore, support may be given in this way to health programs in schools not devoted primarily to public health.

The proposed legislation does not include reference to the third part of the combination recommended by the Second National Conference on Public Health Training—formula grants (Hill-Rhodes grants) to schools of public health. As you know, the conference recommended that these grants be extended and expanded, but since the current authorization under which they are made does not expire until 1966, it is my understanding that the Department of Health, Education, and Welfare did not suggest action on the Hill-Rhodes grants at this time. I understand that the Department recognizes the validity of the recommendations of the conference regarding formula grants to schools of public health and agree that these grants constitute an indispensable part of the balanced support by the Federal Government for preparation of public health personnel. Our school finds the Hill-Rhodes grants a crucial aspect of Federal aid.

In summary, I respectfully ask your support of the House bill 10043, and express my hope that the committee will recognize not only the need for this legislation, but the fact that "time is of the essence."

Very truly yours,

ANTHONY M. M. PAYNE, M.D., M.R.C.P., *Chairman.*

Mr. ROBERTS. I would like to ask if there are any other witnesses who had planned to appear.

Are there any witnesses who wish to file statements?

If not, this will conclude the hearings on this bill, and I want to thank all of the witnesses and their staff and those present for your kindness.

(Whereupon, at 3:50 p.m., the subcommittee was adjourned.)

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