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DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR 1974

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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

NINETY-THIRD CONGRESS

FIRST SESSION

SUBCOMMITTEE ON DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS

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PART 7

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INDIVIDUALS AND ORGANIZATIONS (Continued in Part 8)

Printed for the use of the Committee on Appropriations



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DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE APPROPRIATIONS FOR FISCAL YEAR 1974

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INDIVIDUALS AND ORGANIZATIONS

THURSDAY, MAY 10, 1973.

ALCOHOL ABUSE AND ALCOHOLISM

WITNESSES

DR. WILLIAM SIMPSON, MENNINGER FOUNDATION
MIKE GORMAN, WASHINGTON REPRESENTATIVE, NATIONAL COUNCIL ON ALCOHOLISM

Mr. FLOOD. The committee will come to order. We will begin the presentation by the public witnesses for the HEW Subcommittee. The first subject we have is "Alcohol Abuse and Alcoholism." The first witness is Dr. William Simpson, Menninger Foundation, Topeka, Kans.

Proceed.

Dr. SIMPSON. Mr. Chairman and members of the committee, as the newly elected president of the National Council on Alcoholism, it is a privilege to appear before this distinguished committee this morning to acquaint you with the facts regarding the administration's inexplicable emasculation of the national alcoholism program. Since the National Council on Alcoholism has testified before your committee in both 1971 and 1972, in the interests of time I will not repeat the shattering figures on the incidence of alcoholism in this country.

However, just a month ago, the National Commission on Marihuana and Drug Abuse, appointed by President Nixon, with the addition of two Members from the Senate and two Members from the House, issued a report covering 2 years of study and field hearings, stating flatly that "Alcohol is the most widely used and most abused drug in the United States today."

The National Commission, headed by Raymond P. Shafer, the former Republican Governor of Pennsylvania, summarized 482 pages of findings in this significant quote:

> It is estimated that over 9 million Americans are alcoholics, that over 50 percent of our crimes are alcohol related, and that over 50 percent of our highway accidents are alcohol related. And these figures don't take into consideration the other social harms that result from alcoholism, such as absenteeism from work, family arguments and disputes, and other social costs that are caused because of the misuse of alcohol.

We hear a lot today about the fact that the youth of our country are involved in the usage of marihuana and many other abusive drugs. The Shafer report took this data into consideration, but still came out with the flat statement that the most dangerous and widely used drug

among the youth of our country is alcohol. More than 25 percent of our young people are consumers of alcoholic beverages. In the 22-to-25-year age bracket, more than two-thirds of our young people are regular consumers of alcohol.

Mr. Chairman, we are not prohibitionists, nor do we want to imply that the millions of our people who use alcohol are alcoholics. However, a significant minority cannot handle this lethal drug, and they are the ones who make alcoholism our Nation's fourth largest public health problem.

A comparison of Federal moneys spent on alcoholism compared with money spent on other drugs is both revealing and discouraging. It is estimated that expenditures of various Federal agencies on drug abuse in 1972 approximated $1 billion, while only $87 million was appropriated for alcoholism.

What are the human consequences of these cutbacks? I have the documentation, and it is painful. As of March of this year, 273 local projects aggregating $40 million in approved but unfunded alcoholism programs have not been paid. Not a single project grant has been awarded since June 1972. In my own State of Kansas, where we have put a great deal of State and local money into treating the alcoholic rather than punishing him, the last six applications we have sent in to the Institute have been approved, but not one has been funded. I know from personal experience that many of these local people have spent a year and more working up a neighborhood treatment program, getting local matching moneys and going through all the bureaucratic hurdles necessary to get an application approved.

To what end? I have before me, departing from the text, a document from the NIAAA regarding grant applications for approval but unfunded as of January 29, 1973. On page 6, under facilities, there are items that you are familiar with. For example, the Kansas Association for Alcoholics, Inc., in a little town called Norton, Kans., which has within it the Valley Hope Treatment Center. This has sprung out of the grassroots of Kansas. It is located in a motel that went bankrupt and was bought up by a group of interested citizens who hired a very good director who really knows his business—Dr. William Leopold. They have had a fantastically successful rate of recovery in the treatment of alcoholics.

I know this man, Dr. Leopold, and what he is applying for, and to my mind it is a relatively small amount of money programed to develop alcoholism counselors and to train them. These are not doctors, these are not high-priced people, but people who work right one-to-one with alcoholics in trying to get them sober and keep them sober.

In my opinion as a practicing physician and psychiatrist and someone who works in this field, it is these kinds of people we need more and more. Dr. Leopold and his group are adequately trained to be able to carry on an excellent training program for these people. They are not asking for much money. These people, alcoholism counselors, trainees, if able to be trained would get jobs of consequence and would be able to get alcoholics into treatment and get them back into productive life.

Here is another one, Haskel Alumni Association in Lawrence, Kans. That prevention treatment program is one of only two junior community colleges in the country that are for Indians. This is one of them.

Alcoholism is twice as prevalent among Indians as among the general population. Here is an attempt with a small amount of money,

$82,000, to try and get some people trained to work among these Indians to get them educated about alcoholism and get them in treatment.

The University of Kansas, Kansas City, Kans., Professional Education on Alcoholic Abuse and Alcoholism, $52,000. This has to do with a residency program to train general practitioners to be able to recognize and treat and refer for rehabilitation people with alcoholism problems. They have got a good man aboard and if the money comes in he can do the job.

Here is another one. High Plains Comprehensive Mental Health Center in Hays, Kans. There you can see for 10 miles in any direction. It is a phenomena in this country that a little town sitting in the middle of the prairie has one of the best comprehensive mental health centers in this country. What are they asking for? Fifty thousand dollars for the initiation and development of an alcoholism treatment program covering about 17 or 18 counties. They want to get something going. I know the man who runs this: he came to see me and spent a day in Topeka consulting with me and various other people active in the field of alcoholism. They want to try to apply what they learned in Hays and other counties so as to be able to do something constructive and helpful for the people in the counties.

Alcoholism is just as prevalent in the western plains of Kansas as it is here in Washington, New York, and urban centers.

We are almost hysterical about drugs but forget that alcohol is the most abused drug.

Even in the National Institute of Mental Health, where the National Institute on Alcohol Abuse and Alcoholism is presently located, $243 million is spent for drugs—three times the money spent for the prevention of alcoholism.

In the research field, where we need to know so much more about the various causes of alcoholism, less than $7 million is spent on research in alcoholism, as compared to more than five times that sum for research on other drugs.

The Federal Government collects $4.5 billion in taxes on alcoholic beverages each year. It spends less than one-half of 1 percent of this tax revenue for all research, training, and service programs in the field of alcoholism.

A little over 2 years ago, we finally felt that we had made a small but significant beginning in the fight against this massive disease. On December 31, 1970, President Nixon signed into law Public Law 91–616, which authorized $300 million over a 3-year period to finance the opening round of a national effort against alcoholism. However, the administration has recommended less than one-half of this authorization since 1970, and we have suffered the consequences.

However, we thought we were still on the up-grade last year, when this committee rejected the administration recommendation of $98 million for the Alcoholism Institute and instead voted $156.5 million. The other body raised this figure to $192 million, and a compromise was reached at $172 million. However, as all of you well know, the President twice vetoed HEW bills, and we were caught in the overall picture.

For fiscal 1974, the administration recommends $86,421,000 for the Alcoholism Institute—$12 million less than it recommended just a year ago.

This is not a partisan issue. As far back as 1969, Senator Barry Goldwater told the Senate that: "Clearly the time has come for us to face this problem and mount an aggressive campaign against it." On May 25, 1972, Senator Harold Hughes introduced S. 3644, a 3-year renewal of the basic Alcoholism Act in somewhat expanded form. Commenting on the introduction of the new legislation, Senator John Tower of Texas, a cosponsor of the 1970 alcohol legislation, said this on the Senate floor: "I have been most pleased with the programs that have developed in the short span of less than 2 years. All 50 States have already developed their State alcoholism plans. Congress now needs to extend and expand the program of alcohol rehabilitation begun by the 1970 act by passing S. 3644."

Mr. Chairman, now let us get down to the nitty-gritty of the fiscal 1974 budget. The administration recommends $86,421,000—$12 million less than it recommended a year ago.

There are two major components of the Federal alcoholism effort: formula grants to the States so that they can plan and develop broad treatment facilities and, second, special project grants to individual local communities, agencies, et cetera, so that they can zero in on such special areas of concern as the public drunk, the drunken driver, the Indian alcoholic, the alcoholic in the ranks of both management and labor, and so on.

In block grants to the States, the Congress late last year—under considerable urging from the States—unanimously renewed for fiscal 1974 the $80 million authorization for these grants.

Why the emergency? Because all 50 States had completed their alcoholism plans but were unable to carry them out despite the fact that many States appropriate fairly sizable sums for State Commissions on Alcoholism. In fiscal 1973, the authorization for block grants was $80 million, but the administration sent up only $30 million. This committee in 1972 doubled the request to $60 million, but our rejoicing was short-lived because of the two HEW vetoes.

Mr. Chairman, we are realists. We know something about the problem of inflation and taxes, and we are not asking for the moon. In the area of block grants, we are requesting only $50 million—far below the authorization—although we have hard documentation that to fund existing State plans would cost four or five times this sum.

However, we want to concentrate our testimony—and this is where we take the real beating—on the special project grants which go out to the people at the grass roots. For all of these community and local programs which are designed to treat rather than punish the alcoholic, the administration recommends the ridiculous sum of $40,222,000 for fiscal 1974. I cannot describe the purpose of these special project grants better than was done in the report of the House Interstate and Foreign Commerce Committee which accompanied the original 1970 legislation:

> The legislation reported by the committee will make it possible for the Institute to make grants to public and private nonprofit agencies, organizations, and institutions and enter into contracts with public or private agencies and individuals to develop programs for the prevention and treatment of alcohol abuse

and alcoholism. It is vitally important for these programs to be community based, and to utilize public health rather than criminal or other punitive measures, in order to provide the most effective treatment possible.

The special project grants section of the Alcohol Institute is absolutely swamped with sound and scientifically approved applications which it cannot fund because of the inadequate sums recommended by the administration. Time does not permit informing this committee of the many project areas which are starving for funds, but I would like to zero in on the implementation of the Uniform Alcoholism and Intoxication Treatment Act adopted in 1971 by the National Conference of Commissioners of Uniform Laws and recommended by it for enactment in all the states.

In essence this act states as broad public policy, for the first time in the history of the Republic, that alcoholism is a disease—not a penal offense—and that its millions of victims should be treated and brought back into the mainstream of American life. The present administration was quick to endorse the principles of the act. In November 1971, then Secretary of Health, Education and Welfare Elliot Richardson wrote a letter to every State Governor, proposing immediate adoption and implementation of the Uniform Act. In that letter Secretary Richardson wrote:

> In giving my full support to this act I intend to promote its adoption by the States as well as to promote the early initiation and expansion of more effective services for alcoholic persons.

Mr. Chairman, we can write all the letters we want to, and we can recommend a model treatment act for alcoholism, identify it as a disease, but none of this is going to mean a hill of beans until we actually have local programs and facilities where these sick people can be treated.

The National Council on Alcoholism, along with the Alcohol and Drug Problems Association of North America, has devoted a great deal of its limited resources to aiding some States in the passage of the Uniform Act. Our major obstacle in many States has been the feeling that even when a State passes a law declaring alcoholism a treatable disease, it then does not have the financial wherewithall to treat the alcoholic. Right here in the District of Columbia we have had a model law since 1966 but practically no progress in treatment facilities. The alcoholic still revolves through the court and jail process and winds up at the horribly overcrowded work farm at Occoquan.

Mr. Chairman, we are deeply alarmed at the increased number of alcoholics being warehoused in the back wards of mental institutions. For years the schizophrenic patient comprised by far the largest percent of first admissions to these State institutions; over the past 5 years the alcoholic has moved far ahead of the schozophrenic and now comprises close to 35 percent of first admissions to these institutions.

I was flown in from Minnesota and there they tell me that about half of all admissions to the State hospitals in the State of Minnesota are alcoholics.

A recent survey also disclosed that mere custody of alcoholics in these institutions costs the States more than $500 million. What more

dramatic example could we have of the need for local, neighborhood treatment facilities so that these people are not consigned to a lifetime of misery at the expense of the American taxpayer? This administration says it is devoted to workfare and to the reduction of the welfare rolls; it might be surprised to know that in many counties of our country today, acoholics comprise 50 percent and more of those on the relief rolls.

How can we accomplish the goal of treating rather than jailing the alcoholic when the administration recommends only $40 million in special project grants, which compares with an authorization of $90 million? And we don't even have the $40 million for these programs. When $15 million in alcoholic programs were transferred out of OEO last year and over to the Alcoholism Institute, the Institute got the 250 projects, but it didn't get the money. It was told to finance these 250 OEO projects out of the President's 1974 recommendation.

So we don't have $40 million—we have the magnificent total of $25 million for special project grants.

One example will have to suffice. On January 11, 1971, Secretary of Health, Education, and Welfare Elliot L. Richardson and Secretary of Transportation John Volpe held a press conference here in Washington to announce a "powerful offensive" against the drunken driver who kills 30,000 people a year and seriously injures another million people. What has happened in the intervening 2 years since the press trumpets blared forth? The Department of Transportation, with large grants running in some cases to $2 million per project has set up 35 programs in various parts of the country where it is doing a commendable job detecting the drunken driver and trying to get him off the highway. But those with knowledge in the field of alcoholism know that you can fine the drunken driver, you can jail him or you can take away his license, but that doesn't deter him. He must have his drink, and he will go on doing what he is doing until someone treats his illness.

A very preliminary survey from 15 of the first 35 Department of Transportation projects turned up more than 20,000 drunken drivers who were repeated offenders and who definitely needed treatment. However, the same survey noted that only a very small percentage of these drunken drivers were receiving treatment for the very simple reason that facilities were not available in their communities.

In cooperation with the Department of Transportation, the National Institute on Alcoholism has tried to develop treatment programs coordinated with the 35 key drunken driver detection projects. In other words, when the drunken driver is picked up there is an immediate attempt to get him into a treatment program. However, because of lack of funds, the NIAAA has been able to support only 12 of these coordinated projects. Just to locate treatment facilities in the 35 sites now run by the DOT would cost an additional $8 million. In very simple terms, the Institute on Alcoholism, pennies can't match the Department of Transportation dollars.

But now even these pennies are gone. The contemplated phaseout of project grants in alcoholism by the administration will guarantee continued slaughter on our highways.

Other project grant programs could be dealt with an equal detail if there were enough time.

Alcoholism is twice as prevalent among our Indian population as among the rest of our population. Yet, because of its restricted budget, the Institute will not be able to fund 36 approved projects on Indian alcoholism costing only $5 million in the current year and in fiscal 1974.

Exciting labor-management programs are underway to detect the executive and the worker who have problems with alcoholism in an attempt to save these people and put a halt to the loss of hundreds of thousands of skilled people at both the executive and the assembly line level. The National Council on Alcoholism has made this one of its major program emphases. Our labor-management division is receiving reports from industry that approximately 70 percent of executives and workers in these programs are being treated and retained on their jobs. Just a few years ago, most of them would have been fired, their lives and those of their loved ones would have been ruined and most of them would have wound up as a taxeaters rather than taxpayers.

The Institute does not have enough money for this program now—it should have scores of trained people working with industry and labor unions in developing alcoholism rehabilitation programs. However, under the President's 1974 budget proposals, even the small amount going into this area will be wiped out.

Mr. Chairman, I have consciously devoted the major part of my testimony to the funding aspects of our alcoholism activities, because an authorization with out an adequate appropriation is meaningless.

It is really a heartbreaking experience to go down a list of several hundred alcoholism projects which have been scientifically approved at the regional and national level and have not been funded—in some cases for a year and more. In following through on a selected list of projects which interested me, I found out that in every case the local community had raised required matching money, the State legislature had voted its share of the money, but the Federal Government was still writing long-winded letters which in essence said "no Federal funds."

In very simple terms, Mr. Chairman, when the $40 million the Alcoholism Institute has been allocated by the administration to close out continuing proects is used up, there will not be one special alcoholism program with Federal funds among the entire 50 States.

Again, coming down hard on the side of realism, we recommend the minimum sum of $80,322,000 for special project grants in alcoholism in fiscal 1974. Tragically, this recommendation will not start a single new local program in alcoholism. It will merely fund the 273 scientifically approved projects which will have to be carried over from fiscal 1973.

This is not progress, gentlemen—it is mere survival.

Mr. Chairman, I append to this statement the official budget recommendations approved by the board of directors of the National Council on Alcoholism.

[The information follows:]

COMPARATIVE BUDGET FIGURES—NATIONAL INSTITUTE ON ALCOBOL ABUSE AND ALCOHOLISM

	Fiscal year 1973 President's budget	Fiscal year 1974 President's budget	NCA recommendations
Research	$8,582,000	$6,901,000	$10,901,000
Training	4,945,000	3,763,000	6,763,000
Community programs:			
Project grants	49,336,000	40,322,000	80,322,000
Grants to States	30,000,000	30,000,000	50,000,000
Management and information	5,213,000	5,435,000	6,435,000
Total budget figure	98,077,000	86,421,000	154,421,000
Total voted by House last year	156,500,000		
Total voted by Senate last year	192,000,000		
Total increase recommended by NCA over administration fiscal year 1974 request			68,000,000

Mr. FLOOD. Thank you, Doctor.

Dr. SIMPSON. Thank you, sir.

STATEMENT OF MIKE GORMAN

Mr. GORMAN. May I say we have appended to the statement by Dr. Simpson the recommendations so it will be a little easier for the committee to deal with that.

Mr. FLOOD. Proceed, Mr. Gorman.

Mr. GORMAN. Thank you, Mr. Chairman. I have been before this committee before and have had the honor and privilege for many, many years. I won't replay any broken record, since I think Dr. Simpson covered the major points. I would like to make two simple points:

1. The present administration says it will begin on July 1 to phase out all the project grants Dr. Simpson talked about. That is the end of it. No more.

As to what they will do with the formula grants to the States beyond fiscal year 1974 I don't know; fortunately the Congress renewed the formula grant last year for fiscal year 1974, not knowing what will happen this year, we decided we needed this because of the pressure of the States who said, "We have run out of the block grant money and have to have some money to get going." That is No. 1.

2. We are heartened in the second place by the fact that the Senate Subcommittee on Drug Addiction and Alcoholism reported out yesterday a 3-year renewal of the basic 1970 alcoholism bill. That bill includes the much higher figure than we are recommending here, but the essential point is they are not going along with the philosophy, if you want to use so dignified a word, of Mr. Weinberger, that we are going to cut out all special project grants and eventually overlook a problem that affects 9 million Americans. The Senate subcommittee yesterday said no, and my information said no unanimously, in bipartisan fashion, that is a problem the Congress addressed itself to before and still supports very strongly.

The OMB does not hold hearings except internal hearings and listens to computers on the side. Mr. Weinberger, whom I like and respect and so forth—and I will be very careful what I say about that—I

don't think he knows too much about the alcoholism picture across the Nation.

That is the burden of our story. We got off to a good start in 1971 and this committee did a terrific job for us last year. But according to the decision—I don't have to repeat that; you know better than I do—the impact of these vetoes, we have existed on continuing resolutions. The fact is, we were caught up in the whole ball of wax and therefore could not get the money you appropriated because of the vetoes.

So our plea, we know we have been fiscally responsible in our recommendations and they are lower than we have ever made before. We have been both pragmatic and prudent. As Dr. Simpson pointed out, you cannot brush a problem of this size and magnitude under the table and say local communities like High Plains in the middle of Kansas can finance 100 percent of the alcoholism effort.

One final thing. I want to express my deepest gratitude for your kindness in letting us arrange not only this hearing but the other hearings on the National Institutes of Health. You have as usual been kind and perspicacious.

Mr. FLOOD. Thank you very much.

THURSDAY, MAY 10, 1973.

HEART AND LUNG

WITNESSES

DR. FRANK FINNERTY, PROFESSOR OF MEDICINE, GEORGETOWN UNIVERSITY

DR. RICHARD L. NAEYE, PROFESSOR AND CHAIRMAN, DEPARTMENT OF PATHOLOGY, PENN STATE UNIVERSITY, DEPARTMENT OF MEDICINE

Mr. FLOOD. Now we have the heart and lung people.

First is Dr. Finnerty, Georgetown University, professor of medicine.

Dr. FINNERTY. I come not as a professor but more as a sort of worker in the field. Although I have something prepared, I can certainly talk off the cuff. Any questions that you have, please ask.

[The statement follows:]

Hypertension represents the major health challenge in the country today. It is the leading cause of strokes, heart failure, and kidney failure and is a major risk factor in heart attacks. Hypertension is the major cause of death in blacks. More than 23 million people in this country currently have hypertension, more than 50 percent of them do not know they have it, and less than 10 percent are under effective treatment.

What can be done in a practical way about this epidemic? The Government has already started to attack the problem. The National Heart and Lung Institute is currently sponsoring a program in 14 different communities to demonstrate that intensive therapy of all types of hypertension reduces the incidence of death, strokes, and heart attacks. Emphasis in this program is placed on reorganization of clinics, full utilization of paramedical personnel, and finding ways to motivate patients so that they will stay on medication and remain under medical care.

This program is currently funded at $6.1 million. As part of this program our group went out into the inner city several summers ago and set up shop in supermarkets. With civic association leaders directing the shoppers over to our

blood pressure tables during one weekend, we screened 500 subjects, 204 of whom were found to be hypertensive. These activities continued for several weeks until 700 hypertensive patients were found. These patients were then referred to our special high blood pressure clinic at D.C. General Hospital where the elevated blood pressure was verified. They were then randomly assigned to be followed either by us or in the general medical clinic at D.C. General.

Although those patients who were followed by us were cared for primarily by paramedical personnel, they were seen by the same nurse and paramedical person at each visit which allowed for the development of a personal relationship. Long waiting times were prevented by scheduling appointments at a particular time, for example, at 8:15 a.m. on Monday morning instead of just on Monday morning. Finally the medication was supplied by the clinic instead of sending the patient to the pharmacy where he would usually wait an average of 2 hours.

These patients have now been followed for more than a year. In the group followed by us there has only been a 7 percent dropout rate, whereas in the group followed in the general medical clinic, the dropout rate has been 78 percent. Indeed, 40 percent of the patients referred to the general medical clinic did not even show up for the first visit. More important was the observation that in 83 percent of the patients followed in our special clinic, the blood pressure was brought to normal whereas in those patients who returned to the general medical clinic, normal blood pressure was obtained in only 12 percent. Particularly significant was the observation that in 74 percent of the patients whose blood pressure was brought to normal in our clinic, antihypertensive therapy consisted of just a pill a day. These findings go a long way to emphasize that the diagnosis of hypertension is easy and painless, and that treatment is simple, frequently as simple as a pill a day. The problem is getting the asymptomatic patient to remain under treatment and continuing to take medication.

Screening the millions of undiagnosed hypertensives in other communities, particularly where the majority of patients would be under private medical care would frequently frustrate the patient, antagonize the physician, and cause chaos in already overcrowded offices. In order for community screening programs to be successful (and it is my strong belief that this method of attack is the only practical way to identify the millions of hypertensives), three changes must be made: (1) Physicians must be reeducated to consider that strokes, kidney failure, and heart failure are all preventable complications of hypertension and, therefore, that all patients with hypertension, even mild hypertension should be treated; (2) patients must be educated to seek medical care, not just when they are sick but "in order to stay well"; and (3) the basic structure of medical delivery (private practice and clinics) must be reorganized with emphasis on personalized care.

In July 1972, Secretary Richardson launched a national hypertension information program, an unprecedented cooperative effort combining all health forces for the Government (National Institutes of Health, Federal Drug Administration, Veterans' Administration, Department of Defense, Health Services and Mental Health Administration) and organized medicine (American Medical Association, American Heart Association, American College of Cardiology, industry, insurance, and pharmaceutical companies) to fight one disease. The main thrust of this program is and will be educational making every citizen aware of the frequency of hypertension, its complications, what can be done about it, how to take advantage of already existing facilities, and reeducating physicians to consider that strokes, kidney failure, and heart failure are all preventable complications of hypertension. This program is not attempting to finance health care for hypertensives but rather to provide a focal point for those organizations, be they private, voluntary, or professional. Its immediate objective is to create public awareness which later can be translated into community action programs, for example, providing expertise in initiating community control programs.

This program is currently funded at $2 million. It is my impression that increasing the funding to $10 million would go a long way toward halting this "silent killer." It must be reemphasized that this would not be a one-time thrust or a plea for new facilities, or more medical schools, or hospitals. This is an education program for the community and the physicians with a plea to utilize already existing facilities and take advantage of recent therapeutic advances.

Over and above the national education effort, we need help on three further fronts. Although effective antihypertensive therapy is available and has been

demonstrated to be lifesaving, there are curerntly exciting breakthroughs in new pharmacologic approaches to lowering blood pressure such as prostoglandins and renin and angiotension blockers. The renewed interest in hypertension has obviously encouraged the pharmaceutical industry into developing these agents. It is hoped that the Food and Drug Administration might streamline its slow and tortuous mechanisms for clearance of these new agents so that they might be clinically evaluated in man. Federal support in the amount of $2 million would seem to be merited here.

We must also not lose sight of the fact that although effective drugs for the treatment of hypertension are now available, the basic cause of hypertension has still not been clarified. Basic research on the mechanism and etiology of this disease must be encouraged and supported in an amount close to or equal to that for the hypertension information and education program, for example, $10 million.

Finally, to complete the picture, hard data must be forthcoming on the value of treating patients with mild hypertension. Such data are currently available only on patients with diastolic pressure over 105 mm. Hg.

In summary, it is my recommendation:

1. That the national hypertension information and education program should be supported in the amount of $10 million.
2. The basic research into the mechanism and etiology of hypertension should receive equal support, for this, indeed, may be a curable disease.
3. The funding of the national hypertension detection and followup program which is currently being carried out in 14 centers should be increased by $1 million.
4. The evaluation of new pharmacological approaches in all types of hypertension and clinical trials in patients with mild hypertension should be funded at $2 million and $8 million, respectively.

Dr. FINNERTY. First of all, I guess the magnitude of the problem of high blood pressure is the major cause or is the major health challenge in the country today. I am sure that you have heard lots of people saying this, but I can give you some numbers. There are 23 million in this country who have high blood pressure, and an equally shocking thing is it is the cause of stroke, heart failure, kidney failure, and it is certainly a leading cause of people who have heart attacks.

The sad part is that fully 50 percent of these 23 million people don't know that they have this disease, and equally sad is the fact that less than 8 percent are under any kind of what we would call good treatment. Eighty percent have blood pressure control. What can be done about this in a practical way?

Lots of people and the Government have started at the National Heart and Lung Institute, and have funded to the level of $6.1 million, a program that is called hypertension detection and followup. This is run in 14 centers where 14 groups of people, 14 investigators of representative groups of people—the real emphasis here is to use paramedical people—go out in the bushes and get the people and keep them under treatment.

The real problem is keeping people under treatment. As part of this, several summers ago in a pilot effort run by NHLI, we went out to D C. General and went out into the bushes, right in the heart of the inner city, and set up shops in the supermarkets with the local civic people sending the people over to our blood pressure tables.

In a single weekend, groups of medical students, citizens whom he had trained, went out and screened 500 people, or I should say we screened 500 people. And 204 or 206 of them had high blood pressure. That was a random taking of pressure. We sent the group to our special clinic at D.C. General where the blood pressure was indeed veri-

fied. Ten percent were not verified, so we let them go. We then divided the people up into two groups to show what we could really do if we tried. Not a very sophisticated basis but just in terms of plain fact. Half of the people we referred to the general medical clinic at D.C. General; the remainder of the people we kept in our special clinic.

Most of the people whom we kept were followed by paramedical people, and by that I mean we have a nurse supervised by a doctor consulting. Actually, a paramedical person runs it, and by that I mean people whom we have trained from the community who may not have had even as much as a high school education. We have taken people right out of the community, trained them ourselves, and they have taken care of the patients, with the help of the nurse and doctor supervising.

A doctor plays a little part in this. Anyway, these people were for the first time given an opportunity to identify themselves with a particular person. I won't bother you with the details, but we have followed that group of people for more than a year, for 13 or 14 months, and the results are pretty striking. First of all, only 7 percent of the people we were following of the 200 people we were following dropped out, wheras in contrast to the group that went to the general medical clinic, there were 78 percent dropped out.

As a matter of fact, 40 percent didn't even go to the general medical clinic the first time.

Second, just as important, I think, is the fact that 78 percent of the people whom we were following by paramedical people had their blood pressure down to normal, whereas only 6 percent of the control group had their blood pressure back to normal. I think a further point on that is that of the group of people whose blood pressure was brought down to normal by us, three quarters of them, 75 percent, were taking just a pill a day.

The point here, I think, is that diagnosis of blood pressure is certainly easy and painless. The treatment is frequently simple, and frequently as simple as taking a pill a day. The real problem is how do you get people, not just city hospital people, but how do you get anybody to keep coming back, keep taking pills when they feel fine?

That is truly a disease, and there is no foolishness about that. The doctor does not have the time nor does he give a damn—not to be vulgar—but he is trained to treat the sick person. Unless one motivates the patient—and the doctor can't—the patient is not going to come back as long as he feels well.

The only way we feel that the intelligent person or the well person is going to be motivated is as a result of a personal relationship. We feel whether this is private practice or clinic, this is not going to be done by the doctor but has to be done by the nurse, paramedical person, who will accept it as a challenge.

You may say what we have done may well not be applicable to some high-income area or some other area. Fine. I think that may well be so. I think there are three changes which have to be made in what is going on now. First of all, the doctors have to be reeducated that the stroke and the heart failure and the kidney failure and premature death are really preventable complications. The doctors don't know. There was a survey in Chicago and they found that 50 percent

of newly identified hypertensive patients who went to a cardiologist or internist, sophisticated kind of doctors, were not even given a second appointment.

Second, the patients, whether private or clinic, must be educated to go to the doctor or go to the clinic so that they can stay well, not just when they are sick.

Third, we think that the actual delivery of care must odviously be changed. The city hospitals treat patients like herds of cattle. Unfortunately many doctors do this and many doctors get paid for it. In July of 1972, Secretary Richardson launched a hypertension information program. The nicest part of this is that for the first time all of Government sat down at the same table, Food and Drug, HEW, HSMHA—all those people sat down and talked. They are launching an information program to zero in on one disease, a public information kind of program. This is not a program designed to treat all hypertensive patients at all. It is an education program for the doctor and for the community, not to build more schools or more buildings or anything, but a plea to utilize already existing facilities which has not been done. As an example—not to be wasting time—we did a survey at the city hospital, as it were. One of our nurses went around on the wards of surgery patients, psychiatry patients, down the line, not the medical or obstetrical service. She took blood pressure routinely on 1,000 patients and of the 1,000 patients she found 400 patients who had high blood pressure, more than 150 over 100, and only 4 of them knew about it.

This is in the hospital. The blood pressures were not even taken for sure. What this program says is that they will really have to educate the doctors and really get people to utilize already existing facilities. When you go to a psychiatrist or go to an ear, nose, and throat guy or surgeon, down the line, they don't take blood pressure routinely.

Why do you have to be a specialist to take blood pressure? It is painless. We are not saying they should treat them, but they should take that.

Enough of that. This is a program that is currently funded at $2 million. We think that if this could be beefed up to the point of $10 million we would be a long way down the road to doing one thing.

Three other points and I will stop. Although there are effective drugs in the treatment of blood pressure, there are currently on the scene in the pharmaceutical industry three or four exciting new drugs which really are, to sound nonscientific, the best things that have come down the road. These drugs need to be evaluated. How can we get these drugs past the long, tortuous pathway of Food and Drug for clearance? How could they be clinically evaluated?

The third point. Although the treatment of this disease is available, although drugs have been lifesaving, we should not make the same mistake made when insulin came out. No basic research was done on diabetes for 10 or 15 years after insulin came out. We still don't know the cause. There should still be continued basic research, we feel, in the causes of high blood pressure. And this might be a curable disease. If it is curable, it is much easier than to be taking pills.

Finally, there should be clinical trials on as to the question of, is it worthwhile to treat patients who have hypertension? VA studies

have shown beautifully, in men who have diastolic pressures above 105, there is a marked decrease in morbidity rates. There are no hard data on patients with mild hypertension. We feel there should be surely beefing up of the national hypertension information program from its current $2 million to $10 million.

There should be rebeefing up or beefing up of some basic research into this disease because there surely must be a cause. The national hypertension detection and followup program which is now going on needs a bit more support and there should be a way or a pathway and perhaps Government support for the funding or at least the acceleration of the evaluation of these new drugs and for us to get hard data on people who have mild hypertension.

Mr. FLOOD. Thank you.

STATEMENT OF DR. RICHARD NAEYE

Mr. FLOOD [continuing]. Dr. Richard Naeye, professor and chairman, Department of Pathology, Penn State University, Department of Medicine.

Dr. NAEYE. Mr. Chairman, I thank you for the opportunity to appear here.

My name is Richard Naeye, I am a physician and I direct a research program at the Hershey Medical Center, in Hershey, Pa. We are investigating the causes and prevention of black lung disease. Our program is supported by the Heart and Lung Institute and I am here to both ask for new funds for their lung program and to recommend a major reorganization of the research effort on black lung diseases.

Currently 144,000 miners and 107,000 widows are receiving Federal black lung benefits that amount to almost $50 million per month and the accumulated total to date is almost a billion Federal dollars. It appears that total current research expenditures on black lung disease amount to about $30 per miner per year. This is a small sum but additional money alone won't solve the problem of black lung disease. The current research effort to prevent and treat black lung disease is fragmented between multiple NIH institutes and the U.S. Mine Bureau. More important, scientists in one area or discipline often have little or no knowledge of what scientists in other areas or disciplines are doing on black lung. Therefore, in my opinion, we have two problems, not enough research and some of the research we do have is poorly organized and the total research effort on black lung disease is poorly coordinated.

Let me offer some specific suggestions about what kind of research is needed and how it might be organized. In the last 5 years, federally sponsored research has identified more than a dozen disease processes in the lungs of coal miners but of these dozen diseases only two are responsible for most of the miners' disability. The first is lung fibrosis and the second bronchitis and emphysema. I have a written statement that lists very specific proposals for investigating the causes, prevention and treatment of these disorders. These proposals were drawn up by a committee of experts from a variety of scientific disciplines. We drew these proposals up because we are not at all sure that current efforts to reduce dust levels in the mines are going to eliminate either the lung fibrosis or the emphysema in the next generation of coal miners. The current dust suppression measures that resulted from the

1969 law do not very much reduce the very fine dust particles in the mine atmosphere and we think these very fine particles may well be responsible for at least the bronchitis and emphysema. We also think that a large number of organic compounds and gases which are found in coal mines may be contributing to the miners' lung disease. In our view, it is imperative that research be undertaken to determine how the lung defends itself against mine dust, gases and these organic compounds. We then need to find out why these defense mechanisms in the lungs break down in some miners and not in others so that the lung disease can be prevented.

However, I would be dishonest if I told you that more money alone would bring the successful research needed to prevent and cure black lung disease. There is a critical shortage of competent researchers in black lung disease. At Hershey, for example, we would certainly expand our research on black lung disease if we could find certain highly qualified scientists who are in very short supply. Specifically, we need Federal training grants to train some of the needed scientists. Of equal importance, we need some new mechanism to coordinate the entire research program for black lung disease. In my view, it is imperative that the mineralogists and other physical scientists come into close contact with the physicians and biological scientists who are working directly on black lung disease. To do this, I recommend that a categorical program be established in the Heart and Lung Institute centered on black lung disease, very much like the program which centers on the sudden infant death syndrome in the Child Health Institute. Such a program focuses the attention of scientists from many different disciplines on the same critical health problem. In my view, such an organizational approach is the one most likely to generate new ways to prevent and cure black lung disease. I think a similar approach would also speed the prevention and cure of certain other occupational lung diseases, such as those related to asbestos and cotton dust. Currently, all sponsored research on these other diseases amounts to only about 30 cents a worker per year. In summary, I would recommend: (*a*) a new organizational approach to occupational lung diseases (*b*) additional funds to directly support new research and training grants to support the training of certain needed scientists who are in critically short supply.

I am supervising a research program on black lung disease. Our program is supported by the Heart and Lung Institute. I have only a 6-minute statement to make. I am not here just to ask for funds for black lung disease, but also recommend a rather thorough reorganization of the whole effort to investigate the disease. Money alone won't solve the problems.

Currently there are 251,000 ex-miners and widows receiving Federal black lung benefits that amount to approximately $50 million per month. The cumulative total of Federal benefits paid to date is almost $1 billion. By contrast, the total current research expenditures on black lung disease amount to only $30 per year per miner. A little over $5 million is the total current effort.

This is a small sum of money, but we feel more money alone will not accelerate answers to this preventing of the disease. The current Federal effort is fragmented between multiple NIH Institutes and the U.S. Mine Bureau. More important, I think scientists and technicians

in one discipline often have very little or no knowledge of what scientists and physicians in other disciplines are doing in terms of studying black lung disease. Therefore, I think we have two problems in black lung disease: There is not enough research. And a lot of the research that we do have, total effort, is often poorly organized and poorly coordinated in some respects.

Let me offer some specific suggestions about what kinds of researchers are needed and how they might be organized. In the last 5 years, federally sponsored research on black lung disease identified more than a dozen disease processes in the lungs of coalworkers. Of these various disease processes, we now recognize that only two are responsible for most of the disability. The first of these is the fibrosis, with which you are so familiar, in your people in your own district. In the rest of the coalfields, bronchitis and emphysema is the major most common and most often disabling feature.

I have a written statement which I will pass around, which goes into considerable detail on specific proposals for investigating the cause, prevention, and treatment of these two major components of the disability. These particular proposals were drawn up by a committee of experts from a wide variety of disciplines. We actually met and wrote these proposals because none of us is competent at all in the current efforts to reduce the dust levels which are going to have much effect on the disease process, especially the bronchitis and emphysema.

For example, the current dust suppression measures that came out of the 1969 law, do very little to reduce the very fine dust particles in the mine atmosphere.

Furthermore, we are getting a rapid increase in the numbers of new compounds and chemicals in the mine dust atmosphere because of the machinery that is used. We are especially apprehensive there will be no influence whatsoever on the bronchitis and emphysema by the current measures. We think these are the major disabling features in most coal miners.

We think it is imperative that newer research be undertaken to determine how the lung defends itself against not only the dust but all these new organic compounds and against the gases that we are finding in the underground atmosphere. However, I think I would be dishonest if I told you that more money alone would bring rapid and successful research into these problems. I don't think it will.

Additional problems are the very severe shortage of competent researchers in certain areas. At Hershey, we would definitely rapidly expand our research program if we could find certain scientists qualified in certain areas. They don't exist or are in such short supply we cannot find them.

I would say specifically, Federal training grants are needed to train some of the needed scientists.

There are other disciplines that do have enough personnel. Of equal importance, we need some new mechanism to coordinate the entire research program for black lung disease. In my view it is imperative that minerologists and engineers and other physical scientists collaborate very, very closely with physicians and biological scientists trying to work on the disease.

Frankly, lots of times the two groups have no idea what the other group is doing. This has retarded and led to misdirection of research

and effort, in my opinion. To do this, I personally would recommend a categorical program to be established at the Heart and Lung Institute centered on black lung disease. There are models in other institutes. For example, the one on sudden infant death syndrome has been successful and rapidly accelerating the understanding of the disease. This type of program focuses the attention of scientists from many different disciplines on the same health problem.

In my view, such an organizational approach is the one most likely to generate rapid advances to prevent and cure the disease. I think a similar approach would also rapidly accelerate the prevention and cure of some other major occupational lung disease. We all tend to think of the problem of asbestos and cotton dust, which are now major issues. Currently, all sponsored research on these other lung diseases amounts to only 30 cents per worker per year.

In summary, I would recommend:

1. A new organizational approach to working out the prevention and cure of black lung disease, and

2. Additional funds, not just for research, but to train certain critically short supply people whom we need to advance this research program.

Mr. Flood. Thank you very much.

[Additional information submitted for the record follows:]

Detailed Suggestions for a Comprehensive, Integrated Approach to the Cause, Prevention, and Treatment of Lung Disease in Coal Workers

These suggestions are the product of four subcommittees, gathered from many disciplines in several States at the request of Governor Shapp's office in Harrisburg. The coordinator of this planning effort is Dr. Irving Selikoff, of the Mount Sinai School of Medicine, Fifth Avenue and 100th Street, New York City. The coordinator for the subcommittee on mechanisms of black lung disease is Dr. Richard L. Naeye, Pennsylvania State University College of Medicine, Hershey, Pa. Dr. Naeye prepared the attached summary of the deliberations of the various subcommittees.

Members of the main committee and the subcommittees think that the efforts to solve the problems of black lung disease have been hampered by: (*a*) lack of funds; (*b*) multiple government and private agencies all involved with no coordination of efforts; and (*c*) lack of communication between scientists in disparate disciplines so a physician working on the action of a type of coal particle on the lung may know nothing about recent advances which mineralologists have made in determining new chemical and physical characteristics of coal dust particles. There is a strong suspicion that some work now being undertaken would advance more rapidly if it took into consideration information recently derived from other scientific disciplines while much other much needed research into the causes and treatment of black lung disease is not being undertaken at all.

The committee in question has not yet made its final recommendations about how this new effort to prevent and treat black lung disease should be coordinated by speaking for himself, Dr. Naeye recommends that the responsibility be given to the National Heart and Lung Institute. This recommendation is made on the basis that the lung program in the Institute is relatively new, has vigorous leadership, and many contacts in the scientific community with those scientists and physicians who would have to implement this new effort.

Prologue

More than a dozen disease processes are found in the lungs of coal workers. Some are unique to the coal workers and clearly related to dust exposure underground. Others are found in both coal workers and noncoal workers but have an increased frequency or severity in the coal miners. Still other disease processes have not been quantitatively compared in coal workers and noncoal workers in the same community so that their relationship to underground mining is unknown.

Almost all of the disease processes in coal workers are associated with irreversible changes in lung structure so that future research should focus on mechanisms of disease production and disease prevention. However, some features of coal workers lung disease might benefit from therapy and we will mention them.

Intensive research efforts into the character, causes, and prevention of black lung disease started only about 10 years ago in the United States. From this research it has become clear that two major disease processes are responsibile for most of the disability in black lung disease: (*a*) fibrosis whose most dramatic manifestation is so-called Progressive Massive Fibrosis (PMF); and (*b*) bronchitis and emphysema. The evidence indicates that free silica plays an important but not the only role in genesis of the fibrosis. There are two reasons to think that such fibrosis will become less common in the years to come. First, it is most severe in the anthracite mines and such mining is now on a low scale. More important, Federal law is reducing dust levels in the mines and if U.S. experience follows that in several European nations, a marked reduction in pulmonary fibrosis will follow such dust suppression. There is no assurance at all that dust suppression will reduce the most common cause of disability, bronchitis and emphysema. Future research should focus on this latter issue.

SPECIFIC RESEARCH NEEDED TO DETERMINE THE CAUSES OF PULMONARY FIBROSIS, BRONCHITIS, AND EMPHYSEMA IN COAL WORKERS

Fibrosis

1. Study the fibrinogenicity of silica and many other specific constituents of mine dust, both individually and in concert using in vitro cell culture systems. The U.S. Mine Bureau is currently making an important effort to identify the many hundreds of organic and inorganic substances in mine dust.

2. Use the various organic and inorganic substances identified in mine dust for immunologic studies (in vitro). Correlate the immunologic reactions with X-ray and functional findings in working and retired miners. There is a very real possibility that such immunologic reactions contribute to the pulmonary fibrosis in at least some coal workers.

3. If a plausible mechanism for fibrosis is demonstrated in any of the aforementioned systems, add components of cigarette smoke and bacterial products to determine if they potentiate the fibrogenic effect.

4. If a plausible agent or agents are demonstrated for the genesis of fibrosis, move to experimental animals for appropriate fibrogenic models. It would be important to determine if airway bacterial flora potentiate the fibrogenic process. Both qualitative and quantitative studies of such flora should be undertaken. Special attention should be directed to a typical and the more usual mycobacteria.

5. To further define the role of infections in the human disease, conventional animal models should be compared with germ free models.

6. Following the establishment of successful in vitro and/or in vivo models, the effect of specific mine dust components, singly and in combination, should be tested on isolated preparations of cell membranes, isolated lyosomes, and other subcellular components.

Bronchitis and emphysema

Bronchitis and emphysema are by far the most important current causes of pulmonary disability in soft coal workers and as previously mentioned there is no assurance that currently planned control measures in the mines will have any effect on these disease processes. There is the complicating factor that there are great individual differences in susceptibility to these disease processes. Research should emphasize analysis of these individual differences so that susceptible persons could be prevented from entering the underground industry and those with early disease having a high probability of advancing to disability could be diverted to less dangerous environments.

1. Both the substances and models mentioned in the previous section should be explored for their effects on:

(*a*) Cell destruction or alteration of subcellular components.

(*b*) Effects on the mucociliary escallator with special emphasis on the quantity, chemical composition, and viscoelastic properties of mucus.

(*c*) Determine what additive role bacteria and tobacco smoke have on the above.

(*d*) If destructive processes are demonstrated, determine what role enzymes like serum alpha-1, antitrpysin, and chemical mediator substances might have.

(*e*) Determine what role many of the above have on tracheobronchial epithelial regeneration.

(*f*) Determine what role many of the above have on alveolar macrophages with respect to the metabolic and protective functions of the cells, the proteolytic enzymes which they release, production and release of surfactant.

2. Attempts should be made to identify workers or potential workers who will be susceptible to bronchitis and emphysema through analysis of those who have developed the diseases as follows:

(*a*) Analyze macrophage function.

(*b*) Screen for in vitro immunologic reactions to specific mine dust components.

(*c*) Expose to predetermined dust loads and evaluate the effects of these loads on mucociliary transport.

(*d*) If an immunologic reaction is demonstrated, study the effect of the airborne antigens in question on mucociliary transport.

(*e*) If any or several of the above yield positive results, assess plasma membrane receptors for immunoproteins, phagocytic activity, ultrastructural and biochemical character of organelle development (i.e. lysosomal enzymes) and bactiocidal capacity.

3. To determine the potential reversibility of at least the bronchitis and bronchiolitis components of coal workers lung disease, determine the effects in experimental animals of restoring airway sterility and altering and viscoelastic properties of mucus on pathogenesis of the pulmonary disorders.

CLINICAL AND TREATMENT PROBLEMS

The ensuing recommendations deal with the problems of chronic respiratory disease in coal workers. Emphasis is placed on chronic respiratory disease in coal workers rather than on coal worker's pneumoconiosis because the relationship between occupation and disability is complex and difficult to relate to radiologic abnormality alone.

I. Protocol for optimal clinical management

A. The subcommittee recommends that a longitudinal, controlled study be performed in which various treatment modalities are assessed. The subcommittee is not aware of a controlled study of sufficient magnitude to provide definitive data in this area.

B. It is recommended that this proposed study be directed from a single national center.

C. It is recommended that the population to be studied and the criteria for admission to the study be well defined. It is suggested that the following criteria be utilized:

1. History of continuous employment in a coal mine for at least 15 years.

2. Objective evidence of impaired lung function—either increased airway resistance or impaired alveolar gas transfer or both.

D. It is recommended that the following treatment modalities be studied:

1. Physical therapy.

2. Bronchodilator drugs administered locally and parenterally.

(*a*) IPPB with and without aerosolized bronchodilator drugs.

(*b*) Steroids?

3. Continuous oxygen therapy.

4. Cessation of smoking.

5. Evpectorants.

E. It is recommended that separate studies be done among bituminous coal miners and anthracite coal miners.

II. Programs of medical education

A. Undergraduate medical education:

1. It is recommended that every medical school located in or near a coal mining region be required to provide a formal educational experience in the diagnosis and management of patients with occupational respiratory disease.

2. Furthermore, to achieve maximum impact it is recommended that this program be based in the department of medicine.

3. It is recommended that modest supplementary funds be made available to medical schools from Federal sources to defray the costs of the proposed educational endeavor. If funds are not available for this purpose, it is recommended that Federal legislation be enacted to provide the necessary moneys.

B. Continuing medical education:

1. It is recommended that medical schools in or near coal mining regions be charged with the responsibility of organizing the faculties to provide courses periodically to physicians who treat and evaluate coal workers under federally related programs.

2. It is recommended that attendance at these courses be made mandatory for continued participation by a physician in the treatment and evaluation of coal workers under federally related programs.

3. It is recommended that the courses include as a minimum the following topics: clinical pulmonary physiology and the interpretation of pulmonary function tests, radiology of the chest, diagnostic criteria and clinical management.

4. It is recommended that the courses be given in carefully chosen locales which will permit maximum attendance by physicians.

5. It is also recommended that Federal legislation be enacted to provide funds to defray the educational costs of these courses.

III. Objective testing for diagnosis and evaluation

Although objective tests of physiologic function are available today, none are diagnostic or highly discriminatory. Recognizing the desirability of a tissue diagnosis and the difficulty of obtaining it, the subcommittee expressed interest in a study correlating the histologic pattern of tissue obtained by open lung biopsy with physiologic studies. However, the subcommittee is well aware of the difficulties in justifying such a study and cannot at this time recommend this study. With a view to developing and validating objective tests for diagnosis and evaluation, the subcommittee recommends that research in the following areas be pursued vigorously:

A. Small airway disease and its relation to alveolar gas exchange in coal workers.

B. The relationship of abnormalities in alveolar gas exchange to exercise capacity in coal workers.

C. The relationship of changes in pulmonary hemodynamics to exercise capacity in coal workers.

D. Quantitative studies of airway clearance in coal workers.

BIOLOGICALLY IMPORTANT PARTICLES IN MINE DUST

In the past decade a new generation of instruments and techniques have been developed which would permit particle characterization in aerosols and human tissues with a previously unparalleled depth of sophistication. It is now possible to acquire some physical and chemical data that would have been impossible only 3 years ago. Therefore, some areas of particle research which have been critical in terms of biological importance, but beyond the state of the instrument art several years ago, may now be studied.

An example of this technological advance may be illustrated by the following. The development of high resolution scanning electron microscopy has increased "seeing" of particles down to the tens-of-angstroms size range. At the same time, beam currents have been increased by several orders of magnitude (field emission gun assemblies) permitting X-ray photon excitation in particles only several hundred angstroms in size. The increased electron flux permits peak definition, in extremely short periods of time, from the background. In addition, the development of high-resolution, lithium-drifted, silicon energy detectors has expanded the ability of these instruments to chemically characterize small particles, even in the light element range (down to Z=11, Na). The above system now permits routine analysis of particles which are beyond the capabilities of such instruments as the electron microprobe analyzer. To add to this powerful tool, the system may be automated to scan and analyze a large number of particles in a remarkably short time period.

The following areas, concerning particles, are recommended for research support:

1. *Disease Occurrence and the Characteristics of Coal Deposits:*

There have been few studies in the United States which have attempted to correlate the chemical and physical characteristics of coal deposits in a specific area with the incidence/severity of coal miners' pneumoconiosis among the men who worked the area. A survey is recommended which shall gather the following data:

1.A.—An area (single or multiple eastern States) should be chosen from which good epidemiological/clinical human data exists concerning the incidence and severity of coal workers' pneumoconiosis among the mining population.

1.B.—The area should be geologically surveyed for it's coal characteristics, both rank and grade, on a field and seam basis. Hard coal (anthracite) through soft coal (bituminous) areas should be selected, in a single region if possible.

1.C.—Nature of the structure, host rock, deposit, mining design, recovery methods and all general information regarding coal mining operations should be noted. This information should be evaluated in terms of how each factor contributed to the relative "dustiness" of the mining.

1.D.—All data concerning any form of dust measurement should be collected, noted and evaluated in terms of the above variables.

1.E.—The coals in the area should be chemically and physically characterized, in a bulk and on a particle basis. The analysis should not only try to establish rank and grade of coal, but should add significantly to the available data. Proximate analyses should be routine with selected ultimate analyses made on a few representative samples.

1.F.—Analyses for chemical composition of coal should include "volatiles", fixed carbon, and ash, by weight percent; in areas of suspected elevated increase in lung cancer, ultimate chemical analyses of the coals should be made. Trace metal content of the coal should be done routinely, on bulk samples and on separated phases.

1.G.—The entire coal deposit must be defined in terms of sedimentary petrology and mineralogy. The coal petrography should be worked out on representative samples; the weight percents of the following minerals determined: quartz, feldspars, clays, micas, sulphides and oxide minerals. Individuals within each mineral group should be identified and characterized. For example, the clay minerals should be individually identified as kaolinite, illite, montmorillonite, etc.

1.H.—The size-distribution of the mineral components should be measured.

The above data should be (must be) stored in a computer in a retrievable form. These factors are to be cross compared with all biological and epidemiological data available and significant factors may be determined by multifactorial analysis.

Much of the above information concerning the physical and chemical characteristics of coal deposits may already be available. Cooperation with the following organizations should be solicited: U.S. Bureau of Mines; U.S. Geological Survey; the various State geological surveys involved; large interested companies, such as United States Steel Corp.

The thrust of this piece of research is an effort to find out as much as possible about the materials to which workmen have been exposed and developed disease.

2. *Coal Dust Aerosols; Their Nature and Properties:*

Once coal is mined, it is important to determine the properties of the dusts that are made airborne; it is important to determine how these properties change with time and hoy the conditions of the mine effect changes in the aerosol. It is now possible, with new instrumentation, to obtain these data, and to measure the following parameters:

2.A.—The aerodynamic diameters of coal dust components and their effective settling velocities.

2.B.—With a battery of side-by-side instruments measuring different physical characteristics, it is possible to simultaneously monitor and analyze a polyphase-polymodal aerosol and obtain the size distribution of each of the phases present. The size distribution may range from the angstrom to the micron sizes.

2.C.—By means of laser fluctuation spectroscopy it is possible to measure changes in an aerosol's characteristics on an almost instantaneous basis. It may be of extreme importance to determine how the characteristics of the aerosol, especially aerodynamic diameters, change with time and mine conditions.

2.D.—With available instrumentation, each of the above phases may be separated so that chemical and physical characterization of different sized particles may be obtained. This aspect of aerosol characterization may have profound importance in terms of pathogen identification.

2.E.—Instrumentation is now available to determine, on representative mineral or coal fractions, particle charge and magnitude. This property has profound effects on the aerosol, as demonstrated, but may also have biological consequences.

Aerosols from coal mines may not directly reflect the mineralogy of the deposit. Local mine conditions may be such as to change aerosols from identical deposits so that are markedly different. This aspect of pneumoconiosis should be investigated.

3. *The Nature of Particles in Human Tissues:*

The physical-chemical nature of coal dust and coal dust aerosols are important to the understanding of pneumoconiosis. The pathogenic agent or agents may be identified and characterized by processes of elimination and shrewd guess. Now it is possible to identify and characterize particles present in the tissues of workmen at the time of their death. These data may be even more significant in defining the pathogenic agents involved in disease.

3.A.—It is now possible to study the nature and distribution of particles in the tissues of individuals exposed to mineral dusts. In place of bulk extraction techniques for the removal of particles from the tissues (which tend to create size and chemical artifacts) normal histologic slices may be prepared from any kind of tissue and used for electron beam instrument examination. The technique has been referred to as "carbon extraction," and has come to be used routinely in two pneumoconiosis laboratories with great success. The technique allows the examination of particles which lie in their original anatomical site since death of the individual. No physical or chemical artifacts are produced with this technique.

3. B.—Tissues should be selected from a group of workmen with a range of exposures (duration of time and intensity of dust) who have a similar range of disease stigma. Emphasis should be placed on scarring. The organs to be examined may be confined to the lungs but may also include some extra-pulmonary organs as well, for example, spleen, liver, and so forth. The analysis of several areas of single organs is essential to arrive at some feel for particle distribution. This is especially true for the lungs where the particles tend to be largest around the main bronchioles and smallest out toward the pleural surface.

3. C.—Tissues so selected should be prepared for examination by the carbon extraction technique. Instrumentation for particle analysis should include transmission electron microscopy, selected area electron diffraction, electron microprobe analysis, and scanning electron microscopy with equipment for microchemical analysis (nondispersive X-ray analyzer).

3. D.—Particles examined in this manner can be sized, chemically characterized, structurally characterized, identified and enumerated. Differences between minerals of the same type may be observed; in the same portion of tissue, or in different anatomical sites. Differences between normal and abnormal tissue particle burdens may be easily determined. An evaluation of the particle lung burden may be made, in the extrapulmonary organs as well as the lung.

The observations made concerning the particles in tissues may be compared with the data collected concerning the geology of the deposits and the nature of the generated coal aerosols. For the first time it would be possible to trace the fate of specific, implicated, mineral pathogens from the source to the biological host. Although there is much data for a substance such as quartz, the committee is aware that there may even be some surprises here too. The analysis of tissues is of critical importance in the definition of the agents involved in pneumoconiosis, and as a measure of the amount of dust required to produce disease.

4. *Experimental work involving particles:* The identity, chemical and physical characteristics of some of the biologically active particles in coal dusts are known to some degree. It is possible to design in vivo and in vitro test systems to further understand the nature of their interaction mechanisms. Also, and perhaps more important, recent work has demonstrated that it may be possible to inactivate some of these particles and decrease significantly their biological potency. This committee would recommend research be concentrated in the following areas:

4.A: In vivo test systems should be designed around use of laboratory animals of many species, including higher order primates. Animals should be exposed to aerosols of bulk dusts from coal mines, and from fractionated dusts of different composition and size range. Dose levels should be varied as well as time of exposure. Radioactive materials should be used as traced materials to study such features as removal mechanisms and mineral solubility.

4.B: Animals should be exposed to other substances in addition to coal dusts and their components. Multiple factor etiology for the origin of coal workers' pneumoconiosis should be examined. The importance of such substances as cigarette smoke should be studied as well as the mineral dusts.

4.C: After selected time periods, the animals should be sacrificed and examined for evidence of disease. The body tissues should be examined for their

mineral content. The nature of the particles should be studied and compared with the characteristics of the test aerosol. The techniques for study are those outlined in section 3.

4.D: In vitro test systems should include work testing the inactivation of mineral surfaces with such polymers as PVP–N–O. Membrane systems should be used but expansion to other models should include macrophage and lymphocyte cultures. When polymers of interest are screened in this manner, their effects should be tested in animal systems. Experiments 4A–4C should be conducted with polymer materials and identical tissue evaluations made.

EPIDEMIOLOGY AND SMALL AIRWAY DISEASE IN COAL WORKERS

The group attempted to survey the available literature and drew heavily upon their intimate personal knowledge and experience in studies of coal workers or in the general areas of the application of epidemiological and physiological studies to the study of respiratory diseases. Out of this background arose a general consensus that the following points need most urgent attention either because of lack of available knowledge or lack of precise definition of the question being studied, or the validity of the methodology employed was questioned.

1. In far too many of the studies reported in the literature there appears to be an obvious lack of a clearly defined hypothesis.

2. Some considerable confusion seems to have arisen with regard to a precise definition of coal workers' pneumoconiosis.

3. Too many studies appear to have been undertaken with the aim in mind of showing correlation between certain observable events; that is, chest X-ray changes or symptoms or functional changes but without adequate attention to sound epidemiological principles in population selection.

Accordingly, the working group feels that the most urgent areas of needed research in coal workers' pneumoconiosis which should receive highest priority are the following:

1. Determination of what factors are responsible for, or are associated with, the phenomenon of changing from category 2 or 3 simple pneumoconiosis to complicated or massive fibrosis, despite removal from further dust exposure, and at an almost fixed, predictable rate per annum.

2. More precise information regarding mortality among coal miners. There are some hints of geographical variations in mortality not only for all causes but for specific causes as well. The reasons for these variations (if they are shown to exist) must be sought. Are they related to type of coal being mined or to differences in cultural background?

3. More precise information is needed regarding the prevalence and incidence of respiratory cancer, chronic bronchitis, and emphysema in the coal mining population as well as epidemiologically demonstrated geographical variations in this incidence.

4. There is an urgent need to develop some "index" that incorporates the dust-dose relationship which can be used as an independent variable against which to compare prevalence and incidence data regarding X-ray findings, respiratory symptom complexes, pulmonary function indices, and mortality.

5. There is an urgent need to validate all of the tests for "early detecting" of disease within the small airways. This must be accomplished in prospective, longitudinal studies of well-defined cohorts in order to assess their true role in detecting "disease" in its presymptomatic state.

6. Rather than beginning new investigations with the aim of determining which of a variety of "new" physiological tests will best correlate with another rseponse to dust exposure such as the X-ray or respiratory symptoms, attempts should be made to follow up on cohorts that have been identified in the past in a retrospective-prospective design, and the responses should be related to the dust-dose index.

7. Assuming that not all of the interindividual differences in response to dust exposure will be accounted for by variations in dust-dose (as outlined in No. 4 above), the application of case-control studies, either prospective or retrospective, attempting to study men at similar risk, may prove helpful in identifying individuals who may be unusually susceptible to the effects of coal mine dust.

THURSDAY, MAY 10, 1973.

CANCER BUDGET

WITNESSES

DR. H. MARVIN POLLARD, DIRECTOR AT LARGE, MEMBER OF EXECUTIVE COMMITTEE, AMERICAN CANCER SOCIETY, AND PROFESSOR OF INTERNAL MEDICINE, UNIVERSITY OF MICHIGAN SCHOOL OF MEDICINE

DR. ARTHUR G. JAMES, PRESIDENT, AMERICAN CANCER SOCIETY

Dr. POLLARD. Mr. Chairman, Dr. James is the current president of the American Cancer Society and will present our testimony.

Dr. JAMES. Mr. Chairman, we appreciate the opportunity to meet with you and your committee.

Mr. Chairman and members of the committee, I am Dr. Arthur G. James, president of the American Cancer Society. I am professor of surgery at the Ohio State University in Columbus, and medical director of the Columbus Cancer Clinic. I have submitted a formal statement presenting the position of the American Cancer Society regarding the fiscal year 1974 budget of the National Cancer Institute, which includes a citizens budget expressing what the American Cancer Society believes is the 1974 funding level necessary to enable the NCI to meet the expectations of the Congress, the President, and the public in fiscal 1974. Mr. Chairman, I respectfully request that the more formal statement I am presenting be included in the record of these hearings.

Mr. FLOOD. Without any objection, that will be done.

[The statement follows:]

Mr. Chairman and members of the committee. I am Arthur G. James, M.D. I am president of the American Cancer Society. It is an honor and a pleasure for me to come before you today to present the position of the American Cancer Society regarding the 1974 fiscal year budget of the National Cancer Institute.

I am from Columbus, Ohio, where I serve as professor of surgery at the Ohio State University School of Medicine, and medical director of the Columbus Cancer Clinic. I am an Ohio native, and received my undergraduate and medical education at Ohio State University. My professional life has been devoted to cancer and its treatment, starting out after medical school as a fellow of the National Cancer Institute, doing postgraduate work in oncology—the science of treating cancer—at the Memorial Hospital for Cancer and Allied Diseases in New York City. Noting that I had an NCI fellowship—one of the earliest, awarded shortly after NCI was established—you can be sure that I will have something to say about the need for continuing the NCI research and clinical training programs later in my presentation.

On completion of my fellowship I became affiliated with the Columbus Cancer Clinic. I am a past president of the James Ewing Society, and am presently serving as the first president of the American Federation of Oncologic Societies. These are organizations of physicians whose time is devoted to the treatment, prevention, and diagnosis of cancer.

I believe in the volunteer effort, and have worked as an American Cancer Society volunteer most of my medical career. I served as president of the Society's

Ohio division in 1959–69, and have served as a member of the national board of directors since 1963.

My experience as an enemy of cancer is long. It has been frustrating, but it has been rewarding, too. I remember well in 1935 when, as medical students, we talked about one cancer patient in five being cured. Now we are talking about curing one in three, and the general feeling is that it could be one in two if we could get all developing cancers early enough. I believe this. I am convinced that if people would do for themselves what we know would in many cases prevent cancer, or detect it early enough to get a complete cure, we could achieve that one in two cure rate, almost without new research advances.

I believe this is extremely important in view of the fact that there will be 650,000 new cancer cases in the United States this year, and nearly 350,000 people will die of cancer during the same period. This means that according to our best statistical projections, one in four Americans living today—nearly 55,000,000 people—will get cancer sometime during their lives, and one in six—approximately 38,000,000—will succumb to this dread disease. The cancer problem is immediate. It is a great social, economic, and personal problem.

Mr. Chairman, I am here today to urge this committee, on behalf of the 2½ million volunteers of the American Cancer Society, to support a National Cancer Institute appropriation for fiscal year 1974 of $600 million, plus $40 million for cancer control programs. We urge this—not because we favor "full funding," for the sake of full funding, but because we are convinced that the amount of $640 million is fully justified if we are are to achieve the results the public now expects in solving the cancer problem.

I would like to briefly review with you the American Cancer Society's testimony before this committee 1 year ago. Last year, in a departure from previous policy, we did not offer a citizens budget because we felt that the authorization of $530 million set in the legislation was realistic, necessary, and represented a level of program development and expected achievement that could be effectively carried out by the NCI. We were gratified when, although the full $530 million was not appropriated, both House and Senate accepted the recommendation of this committee and appropriated $492 million, in light of other national requirements. However, this year we will offer a citizens budget because we do not agree that the proposed budget of $500 million is adequate to meet the opportunities, the urgent needs to make substantial progress toward solving the problem, or the expectations of the public.

The national cancer program was moving according to expectations until its fiscal year 1973 budget became an unintended casualty of the Presidential vetoes of the HEW appropriations. The result was that the program, which both the executive and legislative branches of Government had given such strong support to in the first 6 months of 1972 through the $40 million supplemental appropriation, and the increased appropriation for fiscal year 1973 to $492 million, suddenly found itself marking time. It then had to operate for nearly 9 months on its previous year's budget level. One year ago we testified that the President's proposed fiscal year 1973 NCI budget of $430 million was inadequate. It woud have been realistic in the time and circumstances under which it was prepared, before the National Cancer Act was passed, but it did not reflect the new mandate implicit in the National Cancer Act. We stated that the act provided for a dynamic new national cancer program with the introduction of new initiatives not previously spelled out which required new and additional funding. It changed the NCI from an orientation of research only, to one that added a new dimension of reaching out to the cancer patient, and the potential cancer patient, particularly through its new cancer control program mandate. The act called for an active new international data bank; broad manpower training programs to "provide an expanded and continuing manpower base from which to select investigators, physicians and allied health professions . . ."; support of cancer research in other countries; direct involvement of industry in cancer research; and a cancer control program.

Under Dr. Rauscher's leadership the cancer program has moved decisively and effectively considering the funding limitations under which he has had to operate.

Mr. Chairman, the American Cancer Society fully recognizes and appreciates the fact that the NCI has enjoyed a great increase of funds—$319 million increase in 4 years—whie other NIH institutes have not fared as well. We enthusiastically salute, and have high praise for both the President and the Congress

for making the battle against cancer a national goal, and for giving it the high priority it enjoys. This action and the attitude it manifests has done more than anything could to focus interest and action on the problem. We are particularly grateful to this committee and its leadership in recommending funding levels that truly reflect an understanding of the problem, the opportunity, and the requirement.

However, the American Cancer Society is a categorical organization. Our focus is limited to the cancer problem. Although the increase in NCI support over the past 4 years is great compared to others, we cannot rest on that point if we are to maintain the high priority that has been given to achieving the control of cancer.

Because the NCI has been required to operate under the continuing resolution, at the $378 million funding level of fiscal year 1972 for the first three-quarters of fiscal year 1973, many of the new initiatives I mentioned above have not been implemented, and will not be until the necessary funding is provided.

In light of the mandates in the act, and the commitments made when the act was passed and signed, it is somewhat ironic that only recently was the NCI given authority to operate the national cancer program at a level of $432 million—only $2 million more than the amount we testified would be inadequate, 1 year ago.

At the beginning of the new program, the NCI was instructed to develop programs at a budget level of $640 million for fiscal year 1974. This was done. The Institute is capable of carrying out a productive program at that level in fiscal year 1974. It represents what can and really needs to be done. In fact, the President, and members of Congress stated expressly many times their commitment to the new national cancer program, and their determination to provide whatever funding was necessary to make this program work, and be successful.

Mr. Chairman, we believe the program will be successful, but we wonder whether the new cancer program will be allowed to be as dynamic as everyone seemed determined to make it, 1 year ago. We believe that the only way to guarantee this is for the Congress to take the initiative and vote to appropriate the authorized, program-justified amount of $640 million for fiscal year 1974. We have talked with Dr. Rauscher; with Mr. Benno Schmidt who is Chairman of the President's Cancer Panel; with Dr. R. Lee Clark, of the Cancer Panel; Dr. Jonathan Rhoads, Chairman of the National Advisory Cancer Board; and members of the Board. They all agree that an appropriation of $640 million is realistic, and needed to get the job done.

I would like to comment on several elements of the program which the American Cancer Society believes are especially important, and which would be brought to their expected level of achievement under a $640 million budget.

SUPPORT OF CINICAL AND RESEARCH TRAINING

The American Cancer Society is well aware of the various positions that have been taken regarding Federal support of clinical and research training. It is indeed unfortunate that in the field of cancer, as well as other areas, this has become a matter of disagreement, with the result that new funding has been stopped, and on-going training support programs are being phased out.

Mr. Chairman, I can only speak for the cancer problem, but regardless of the mechanism of funding, to make it possible and attractive for bright young people to go into cancer research, or one of the several highly specialized areas of clinical cancer, some form of Federal financial support is essential.

I comment on this with very special, personal concern because I know that if a clinical cancer training grant had not been available to me when I started my professional career I probably would not have gone into cancer. As a result, I have devoted my life to fighting cancer. I have served professionally, and as a volunteer for 35 years. I teach, and I have trained many clinicians who have chosen to work in cancer. I must add that compared to some medical specialty areas, cancer, or oncology, has not been the most attractive. It requires dedication and commitment as well as an intense desire to help people with very real disease problems.

We come before you with evidence of a critical need in cancer training, both clinical and research, that requires continued, full Federal support, at least until the rather alarming deficiencies are corrected.

You will recall that about 18 months ago, some 250 of the nation's leaders in cancer research, education, and patient care were brought together at several meetings to contribute to a review of cancer needs, that might serve as the basis for development of a national plan for the conquest of cancer.

One area they reviewed very critically was that of manpower needs in clinical cancer, and cancer research. The following information comes from the source document for the national cancer plan that was developed by the 250 cancer leaders. In clinical cancer:

ONCOLOGISTS

Oncology is a relatively new field of specialization, now recognized as a subspecialty of internal medicine and surgery. As cancer is actually a group of diseases, affecting different types of cells in different organs and body systems, it requires attention and action by all types of medical generalists and specialists. Oncology is the science of treating cancer, be it medically, surgically, by pediatricians, obstetricians and gynecologists, whoever. It is treated by chemotherapy, surgery, radiotherapy, depending on the patient, the nature and extent of the disease, and other factors. An oncologist is trained to know what kind of treatment is best at what point in the course of the disease. Today there are approximately 800 oncologists in the United States. According to those who advised the Government on cancer manpower needs, there is an immediate need of 4,000 to 5,000 oncologists to provide cancer victims with the kind of care that is possible, but sparsely available.

RADIOTHERAPISTS

One of the most effective forms of cancer treatment is radiation therapy. This capability became practical in the late 1950's and early 1960's when new modalities, including high voltage radiation therapy, became available; nuclear energy was harnessed for therapy in radioactive cobalt, etc. A survey indicated that in 1960 there were only 25 qualified, trained radiotherapists in the United States. Recognizing the crucial requirement for more; for the need to stimulate interest and make it possible for radiologists to train as radiotherapists, the NCI established a special radiotherapy training support program in 1960. In 1970 there were 200 trained radiotherapists. Today there are 550, but because of rapid advances in new forms of radiation therapy such as neutron, and Pi Meson therapy, as well as the need to make radiation therapy available to more people, we need 2,000, now. The only reason we have 550 now is because of the NCI training program.

MEDICAL PHYSICS SPECIALISTS

In addition to being one of the most effective, and most actively progressing forms of cancer treatment, radiation therapy is one of the most complex, and if not properly managed, can be one of the most dangerous. For this reason, radiation therapy requires a highly skilled team of technicians, and in particular, medical physics specialists. The National Cancer Planning group estimates there are 550 medical physics specialists in service today, but that 1,500 are urgently needed.

REHABILITATION SPECIALISTS

As the cancer cure rate rises, more and more people are surviving this disease for longer periods of time. However, sometimes the survival is very difficult for the individual. Cancer treatment can be quite radical, including colostomies, other forms of ostomy; removal of larynx; a breast, amputations, etc. The cancer survivor often requires special forms of rehabilitation capabilities to be available to him. The planning group states that there is a severe gap between the number of cancer rehabilitation specialists now available, and needed; although they were not able to accurately estimate these needs, the consensus was that it is in the thousands.

Cancer research manpower needs as estimated by the 250 cancer experts are as follows:

CARCINOGENESIS RESEARCH

Knowing the various causes of cancer will, in many cases, make it possible to control those forms of the disease through controlling exposure to those

causes. The planners estimate that we have 1,700 research specialists in carcinogenesis, but we need 2,500 more.

IMMUNOLOGICAL RESEARCH

Efforts to understand the role of the body's own defense mechanisms against foreign invaders are proceeding feverishly in many laboratories around the country, because many scientists believe that such understanding may lead to a very effective means of combating and controlling cancer. It is a new area, and some careful attempts are being made to apply early new knowledge directly to some patients, and with some success. However, so far it is a crude effort, at best. The needs at this time, as determined by the cancer planners, is for 1,500 more immunological researchers.

RESEARCH IN CANCER BIOLOGY

The cancer problem will never really be solved unless we understand just what cancer is, how it comes about, and why. More progress has been made in the past 30 years in understanding mankind's most complex biological enemy than in all of previously recorded history, but we are yet only scratching the surface. The cancer biologists, working in basic and fundamental biological systems are moving slowly, but inexorably toward greater understanding. The cancer planners estimate that there are 1,850 cancer biologists at work today; that we need 3,350.

EPIDEMOLOGY

The cancer epidemiologist is a rare breed. The cancer planners estimate there are only 80 in the country. They see an immediate need for 220. The epidemiologist studies how cancer behaves in the human situation; in the community; how it manifests itself; what various dietary, environmental, geographic, other factors affect the incidence and occurrence of various types of cancer. Understanding these factors makes it possible to try to control the causative, epidemiological factors.

Mr. Chairman, the mandate for manpower training is in section 407(b)(7) of the National Cancer Act, as part of the whole thrust against this disease. But even if this were not an official part of the act, across the board cutbacks of training funds seriously threaten the success of the national cancer program. It is certainly not the time to stop the support of training in the areas of deficiency listed above.

CANCER CENTERS

The American Cancer Society is anxious that the NCI's comprehensive cancer centers program develop in a manner that will assure success. Although we believe it is safe to say that we will have the seven comprehensive cancer centers identified, and under way by the end of this fiscal year—and eight more by June 30, 1974—unless Congress and the President provide the funding necessary, the "comprehensiveness" of these centers will have to be scaled down to a level where they may be comprehensive in name only.

It has been predicted that with adequate funding, by the end of June 1973, 75 million Americans will live within 100 miles of a major cancer center. This is about one-third of our population. We are anxious that this prediction come true.

The comprehensive center should provide not only the best diagnosis, treatment, and education, but should also exercise a strong influence on the community, on community hospitals, and medical and paramedical practitioners. It should radiate the kind of capability it develops, out to the fringes of its medical marketing area. Its ability to do this depends on the level of funding given to the NCI, aand the NCI priority for it.

As you know, the American Cancer Society is an organization of volunteers, including 50,000 practicing physicians. Many of of these men and women are those closest to the cancer problem—the family physician. We believe that the comprehensive centers have an obligation to reach out to these practitioners who are on the firing line, so to speak, to provide them with opportunities for updating themselves to what is developing in cancer diagnosis, prevention, and treatment. Unless funding is adequate, this element will suffer along with other comprehensive center elements.

CANCER CONTROL

Cancer control is certainly a highlight of progress thus far in the national cancer program. The cancer control element is that one which brings the national program to life, and makes the program truly a national one, not just a Government program. The American Cancer Society is pleased by developments. Communication and cooperative effort by the society and the NCI is excellent. Our liaison is intense, consultation is ongoing and frequent. If it were to receive the $40 million authorized for 1974 in the National Cancer Act, many more things could be done, and the national program would reach a momentum in which the entire program would be visible and serving the American people in a way that would generate enthusiastic, active support. However, whatever the funding level for cancer control, the American Cancer Society will not stint in its commitment to work cooperatively and jointly with the NCI in areas where our mutual effort will assure progress.

CITIZENS BUDGET

Mr. Chairman, you have been presented with a budget that meets a Federal projection of $500 million for the National Cancer Institute for fiscal year 1974. The American Cancer Society respectfully offers a citizens budget which totals $640 million, which is the amount authorized in the National Cancer Act of 1971, for fiscal year 1974. We believe that the citizens budget represents a realistic, practical, and productive program for the NCI in the coming year. Also, we believe that application of the proposed level of funding would serve in the long run to reduce, overall, the total amount of Federal funding that is going to be ultimately necessary to bring us to the capability of controlling cancer, relegating it to the position of many other diseases mankind has been able to control, such as polio, small pox, diphtheria, and others.

CITIZENS BUDGET FOR THE NATIONAL CANCER INSTITUTE, FISCAL YEAR 1974

Research grants	$120, 000, 000
Cancer centers	100, 000, 000
Task forces (grants)	15, 000, 000
Fellowships	7, 000, 000
Training grants	25, 000, 000
Direct operations (including reesarch contracts, 199,239,000)	272, 400, 000
Construction	60, 600, 000
Cancer control	40, 000, 000
Total	640, 000, 000

Dr. JAMES. I am pleased to have with me today Dr. H. Marvin Pollard, professor of internal medicine at the University of Michigan Medical School, who is chairman of the Legislative Committee of the American Cancer Society Board of Directors, and is a past president of the society. Dr. Pollard has appeared before you in recent years representing the American Cancer Society position on the NCI budgets. Dr. Pollard will be pleased to join me in answering questions from members of the committee, or in discussion. It may seem a bit unusual to have representatives from Michigan and Ohio State appearing together cooperatively, but our good natured athletic rivalries only serve to emphasize our close working relationship in a matter as serious as cancer.

Mr. Chairman, we are here to urge this committee, on behalf of the 2½ million volunteers, including 50,000 physicians, of the American Cancer Society, to support a National Cancer Institute appropriation for fiscal year 1974 of $600 million, plus $40 million for cancer control programs. We urge this, not because we favor so-called full funding, but because we are convinced that $640 million is fully justified if we are to achieve the results the public now expects in solving the cancer problem.

The NCI has plans prepared to implement a dynamic program, which would effectively expend $640 million. The national cancer plan leadership including Dr. Rauscher, Mr. Benno Schmidt, Dr. R. Lee Clark, Dr. Jonathan Rhoads have told us a number of times that the program needs that level of spending to meet the expectations of it, and to meet its real potential.

Both the Congress and the President have stated repeatedly during the past year that they will provide the program with whatever funds are justified to meet its goals and objectives. We urge this committee to once again assert its leadership in determining the necessary funding level for the NCI to accomplish its mission.

In my verbal presentation I would like to touch on several highlights we believe to be especially important in your consideration of the NCI fiscal 1974 budget.

The first is the crisis in Federal support for cancer clinical and research training. The NCI training program was one of its first programs, initiated when the institute was established in 1937. I was one of the first to benefit from this program. On leaving medical school in 1937, I was awarded an NCI fellowship to train in clinical cancer in the Memorial Hospital in New York City. If I had not had that opportunity, I doubt very much if I would have gone into cancer medicine. I have been in it now for 35 years, I have lived it both professionally and personally, as a volunteer of the American Cancer Society.

The important thing, Mr. Chairman, is that the National Cancer Act mandates, in section 407 (b) (7), that the national cancer program "* * * provide an expanded and continuing manpower base from which to select investigators, physicians, and allied health professional personnel * * * including where appropriate, the use of training stipends, fellowships, and career awards."

But even if this were not mandated, whatever the support mechanism be, the crisis in cancer manpower demands that there be some mechanism Federal support for both clinical and research training, and that rather than eliminate Federal support, it be reinstated and expanded now. The fields of cancer treatment, such as oncology, radiotherapy, and rehabilitation, as well as the research fields of carcinogenisis, cancer biology, immunology, and epidemiology are grossly undermanned, according to the 250 cancer experts who did the research and evaluation which went into development of the national cancer plan.

The American Cancer Society strongly supports the cancer control and comprehensive cancer centers elements of the National Cancer Act and program. We are working very closely, very productively, with the NCI in cancer control. This is the program most closely identified with the public. If the national program is going to meet its objectives, and if the public is going to develop an association with it, cancer control efforts must be dynamic, varied, and given the funding needed to make this possible.

The centers program is the other element of the national cancer effort that directly affects the public. However, although we may have the 15 centers promised by the end of fiscal 1974, if the funding is not adequate, the American Cancer Society is concerned that the comprehensive cancer centers will be "comprehensive" in name only.

Last, Mr. Chairman, I respectfully offer the American Cancer Society's citizens' budget for the National Cancer Institute for fiscal 1974.

Mr. Chairman, it is interesting to note that under the proposed $500 million budget for NCI for 1974, only 23 percent of new research grant applications could be funded.

Research grants	$120,000,000
Cancer centers	100,000,000
Task forces	15,000,000
Fellowships	7,000,000
Training grants	25,000,000
Direct operations of the NCI (this includes $199,239,000 for research contracts)	272,400,000
Construction	60,600,000
Cancer control	40,000,000
Total	640,000,000

Thank you Mr. Chairman.

Mr. FLOOD. Thank you, Doctor.

THURSDAY, MAY 10, 1973.

COMPREHENSIVE CANCER CENTERS CANCER CONTROL PROGRAM

WITNESS

DR. GERALD P. MURPHY, INSTITUTE DIRECTOR, ROSWELL PARK MEMORIAL INSTITUTE

Mr. FLOOD. Next we have Dr. Gerald P. Murphy. Dr. Murphy is the institute director of Roswell Park Memorial Institute, Buffalo, N.Y., also speaking on cancer.

Dr. MURPHY. Good morning, gentlemen.

Mr. Chairman and esteemed members of the committee, I am Dr. Gerald P. Murphy, institute director of Roswell Park Memorial Institute. Roswell Park Memorial Institute is one of the oldest and one of the largest comprehensive cancer centers in the world, and since its inception, a vital part of the New York State Department of Health. The institute, May 2 of this year, celebrated its 75th anniversary as a cancer center. The center is located in Buffalo, N.Y. As a member of the National Cancer Advisory Board, I have been familiar with several aspects of the national cancer program. Prior to my appointment to the Board, the staff of Roswell Park Memorial Institute and myself testified in hearings held by Congressman Rogers and his committee at Roswell Park Memorial Institute, October 11, 1970, in support of legislation that eventually resulted in the National Cancer Act of 1971.

As for my own background, I have been an active physician and scientist. I have been associated with Johns Hopkins University School of Medicine and Walter Reed Medical Center, and since 1967 I have been affiliated with Roswell Park Memorial Institute. My primary medical and research interests have been in urological cancer.

Currently, I head the NCI, national prostatic cancer project funded for 1973 to the level of $750,000, and I am chairman of the National Cancer Institute Advisory Committee associated with the cancer control program.

I am here this morning with two major objectives: One, to give you a broad overview, as I see it, of where centers, particularly comprehensive cancer's stand such as Roswell Park Memorial Institute in relation to the National Cancer Act; and to voice my support of an expanded cancer control program. Both of these obectives assume the persistence in some form of associated and specific cancer training programs.

Today, existing comprehensive cancer centers, without more extensive surveys or studies, are prepared immediately to engage in technology transfer, in getting essential cancer research and treatment messages to practicing physicians, nurses, medical technicians, and other supporting medical personnel.

For example, at Roswell Park Memorial Institute we established 3 years ago a wide area telephone service (WATS) line so that physicians and others directly treating cancer patients can telephone directly to our center in Buffalo from any place in New York State and get immediate, personalized, patient-oriented answers to cancer treatment questions. The physician can receive updated assistance over the telephone. He can be led directly to the most helpful current research reports. He can make repeated calls as the patient's condition changes. It is a private consultation. It costs him nothing. If he has knowledge gaps, they are not unfairly displayed to his patient or to his colleagues, and this private consultation maintains important private physician-patient relationships.

From 1970, we have accepted over 15,000 calls since establishing the WATS line for health care professionals in New York State. This is a good system and can be effectively used and should be fiscally supported at newly comprehensive cancer centers throughout the country.

The M.D. Anderson Hospital and Tumor Institute in Houston, Tex., has done a similar job with a multistate approach keyed to programed professional education tapes supported to date by the regional medical program. To those of us in the comprehensive centers, working directly with patients, we believe cancer control spending could well be used to assist patients immediately. There is no need for untimely delays with complex, overlycentralized planning.

The American Cancer Society in which I serve at the State and national level, estimates today that about 33 percent of today's cancer patients survive long enough to be considered cured or under control, but that providing optimum treatment for more patients could raise that percentage to 50 percent. Thus, about 111,000 more cancer deaths might be spared this year if optimum treatment methods were more effectively and immediately disseminated to all of those who treat cancer patients.

At Roswell Park Memorial Institute we are prepared to further develop and rapidly implement different types of demonstration teams that would provide physicians in the outlying communities the latest methods of cancer therapy, for example, in Hodgkins disease and several other solid tumors. We are prepared to further demonstrate newly available screening techniques to determine whether cancer

is present and, if so, how extensive it is; we are also prepared to demonstrate the newly developed rehabilitation techniques and prostheses for a patient ready to resume a workaday existence but in need of cosmetic or functional counseling. Such demonstration teams are currently located at such centers as Roswell Park Memorial Institute, Sloan-Kettering Memorial Center, and M. D. Anderson Hospital and Tumor Institute. These demonstration teams can further accomplish two things:

(1) Conduct regional workshops or seminars, with the aid of the American Cancer Society and State health officials, that would inform practicing physicians about the latest instruments and methods. This would immediately, through this type of orientation, provide better knowledge to the physician on how to treat cancer patients more effectively in their own community.

(2) This type of orientation could rapidly update the physician and demonstrate current limitations, if any, of their available community cancer hospital equipment and resources. They would be better informed when a patient could be sent to a larger, more specialized comprehensive cancer center. Patients could stay close to home and family with confidence, knowing that their physician is aware of the best time for the patient to go to a center for special diagnosis or treatment. These same techniques, in my opinion, can be effectively employed at newly designed comprehensive cancer centers. The public at large must also be similarly educated.

France, with only a fraction of comparable resources, has for some time used such demonstration teams for cancer control and has found this an effective approach in transferring current technology on cancer therapy to the practicing physician.

What I have described is directed toward the individual patient, the health care professional as well as the public at large. There is not one target. Center demonstration teams and traveling demonstration teams could also address their work beyond the individual to all aspects of the health care team.

Today, technology is such that a cancer patient is best treated by a coordinated group of individuals. You are all familiar with the new importance of nurses and others who monitor television screens and other devices in intensive care units for heart disease. Often the support personnel are the troops on the firing line while the physician is the officer, the necessarily remote leader with multiple responsibilities, possibly with patients at several different locations.

Close monitoring of body functions, body fluids, chemical balance, metabolism, and other body indices is just as necessary on an hour-by-hour basis for some of the cancer patients as it is for the heart patient.

Cancer centers use the team approach routinely. Our cancer control outreach work would be directed to spreading the team idea to the community hospital. Traveling demonstration teams would go beyond transfer of technology to practicing physicians. They would also promote the establishment in community hospitals of coordinating methods, of teamwork, of varying the assignments of various key personnel to fit the team idea.

Under our present medical care system, the achievement of teamwork can come only by persuasion, by demonstration of superior results, and cannot be dictated or effected by publication of "guidelines."

Lest you gain the wrong impression and feel those of us in cancer centers think we know how to do everything in cancer, I want to say that cancer centers are not immediately prepared to carry out all phases of urgently needed mass screening procedures.

For that reason, research and development is needed for screening techniques at cancer centers and other institutions. These centers should receive support in order to explore ways to screen the patient and the public at large that will (a) attract a maximum of participants, (b) identify the largest possible proportion of those people with the disease, while (c) producing the fewest mistakes—or "false positives," and (d) do it at a cost for orginal equipment and staff that will enable public health services to program the work. We realize we cannot provide adequate screening studies that are complex or expensive; that is, we also realize that the best screening imaginable would be a waste of money without staff and systems to fill the all-important gap between the identification of the person who has cancer without knowing it and the placement of that person under the care of a physician. Followup evaluation of the regional impact of a center's work is also vital. Evaluation is a crucial area which also needs research and development support. Such a program also requires input and coordination from the American Cancer Society and individual State health departments.

Comprehensive cancer centers should have active cancer control programs and can be in an excellent position to bring a newly identified patient together with the right physician or right community hospital program.

Other important partners in this vital area are, as mentioned, the American Cancer Society, State health departments and school systems who can and are doing things to increase the general public's willingness to get cancer check-ups. We know more work needs to be done.

To the credit of Dr. Rauscher, an official cancer centers program booklet of the National Cancer Institute, approved by the National Advisory Board, requires that an institution or program designated as a "cancer center" must "maintain a statistical base for evaluation of the results of its program activities," and this base is supposed to rest on standardized "disease classification to enable exchange of information between institutions."

Further, there is the requirement that centers "provide leadership in developing community programs involving active participation by members of the medical profession practicing within the area served by the centers."

Both of these requirements strengthen the center directors' hands in planning cancer control work in their areas.

The same booklet provides that "costs necessary to develop community services, such as programs of early diagnosis; demonstration of new or improved treatment methods; data collection and analysis; and the provision of unique or highly specialized regional resources may be funded by a cancer center support grant," another provision that strengthens a center's outreach program.

As you know, Mr. Chairman, comprehensive cancer centers are supposed to conduct long-term programs in pure biomedical research,

clinical services and research, training, perform studies in epidemiology, and in prevention.

This means centers are looking forward to obtaining core grants to provide support for central services and program development. They need construction grants. They need program grants and contracts. In addition, many of the staff of these centers will obtain individual research grants, but these are not tallied by the budgeters as "center" grants.

At present, apart from the National Cancer Institute, there are only three existing institutions in the country that meet NCI's definition of comprehensive cancer centers: Roswell Park Memorial Institute, the oldest cancer center in the world; Sloan-Kettering Memorial Center and M. D. Anderson Hospital and Tumor Institute.

The provisions of section 408 of the national cancer law of 1971 provide that 15 new centers be created for clinical research, training, and demonstration of advanced diagnostic and treatment methods. Dr. Rauscher has announced that eight centers have been selected and await board approval in 1973. This must be promptly implemented and fiscally supported.

Truly, the scientific and clinical communities are eager to proceed with the conquest of cancer. I hope that this committee in its considered judgment will specifically appropriate more center grant funds.

My contacts with cancer groups around the country leads me to believe that $100 million for direct center support could be economically and productively spent in fiscal 1974.

Mr. Chairman, with your permission, I would like to add an appendix to my testimony which reviews the past 17 years of federally supported cancer training programs.

Thank you, Mr. Chairman and members of your committee for giving me the opportunity to present some of my views on implementation of the national cancer program.

[The appendix follows:]

INTRODUCTION TO APPENDICES—EXHIBIT A–E

The impact of this possible cutback will be catastrophic to our trainee programs at Roswell Park Memorial Institute, one of the major comprehensive cancer centers in the United States. Roswell Park Memorial Institute has been a reliable source for oncologists in this country, not only in the basic, but also in the clinical areas of oncology. We have steadily trained senior personnel for the cancer field, particularly since 1954 (exhibit A). From 1955, funds for support for these training programs have come principally from two NIH trainee grants (exhibit B). In both of these grants, we have met the objectives of what they were intended to do. Currently, the training program in cancer research (CA–05016) supports 136 of our predoctoral students and two post-doctoral (exhibit C), and the clinical cancer training grant (CA-08139) supports seven in medicine, general surgery pediatrics, and radiotherapy. To meet the need to provide more personnel in the cancer field for implementing the national cancer program, we requested more funds from NIH to increase our existing clinical trainee programs in cancer by asking Dr. Holyoke to submit a surgical oncology training program. Dr. Holyoke was site visited and later notified that his surgical oncology research traineeship project was approved but not funded despite a high priority (exhibit D). Moreover, we submitted training grants in the area of molecular biology of diseases, radiotherapy and epidemiology. Two of the three project grants have recently been project-site visited (exhibit E).

Should the current policy in cutting back on NIH training program grants be enforced, you can see that Roswell Park Memorial Institute, like other cancer centers, will have to phase out immediately their present training programs in

the basic and clinical areas of oncology (exhibit C), and the likelihood of other training grants being supported is out (exhibit E).

EXHIBIT A

Number of graduates from Roswell Park Graduate School or physicians trained in clinical departments at Roswell Park Memorial Institute receiving support from NIH training grant funds

	Number of predoctoral students trained in oncology from 1955–72
I. Basic science area:	
A. Fields of specialization in oncology:	
Biochemistry	15
Biology (molecular)	11
Biophysics	5
Biostatistics	5
Chemistry	4
Experiment pathology	1
Microbiology (viral oncology)	11
Natural sciences (oncology)	54
Pharmacology	6
Physiology	5
Total	117

B. Number of Roswell Park Memorial Institute graduates working in the cancer field in the United States of America:

Ninety-eight out of 117 of our graduates are directly working in the field of cancer. This is 85 percent of those trained. Many have been placed at the major cancer centers—NCI, Memorial, RPMI, et cetera.

	Number of physicians trained in oncology from 1968–72
II. Clinical cancer area:	
A. Fields of specialization in clinical cancer:	
Oncological medicine	9
Dermatology	1
Oncological surgery	5
Tumor pathology	3
Radiotherapy	2
Total	20

B. Number of Roswell Park Memorial Institute clinical trainees working in the field of clinical cancer:

Thirteen out of the 20 are in the field of oncological medicine at cancer centers: 1 is serving military obligation in USPH Service and plans to return to cancer; 4 have gone into general surgical practice; 1 is a general pathologist at a VA hospital; and 1 other is in general internal medicine practice with an emphasis in oncology.

EXHIBIT B

CURRENT NIH TRAINING GRANTS APPROVED AND FUNDED

Title of project	Principal investigator	1973	1974	1975	1976
1. Training program in cancer research (CA-05016-16).	Edwin A. Mirand	$199,533	$200,307	$201,122	
2. Clinical cancer training grant (CA-08139)	Lucius Sinks	105,592	163,793	164,756	$165,767

EXHIBIT C

CURRENT NUMBER OF BASIC SCIENCE AND CLINICAL TRAINEES SUPPORTED FROM NIH FUNDS[1] AT ROSWELL PARK MEMORIAL INSTITUTE

	Number
Academic departments in RPMI graduate school:	
A. Number of trainees in training program, Cancer Research Grant (CA-05016), until June 30, 1973:	
1. Predoctoral:	
Biochemistry	6
Biology	13
Biophysics	18
Biostatistics	3
Chemistry	8
Exp. Pathology	12
Microbiology (Viral Oncology)	7
Natural Sciences (Oncology)	45
Pharmacology	13
Physiology	11
2. Postdoctoral: Biological Resources (Viral Leukemia)	2
Total	138
Clinical departments:	
B. Number of trainees in Clinical Cancer Training Grant (CA-08139) until June 30, 1973:	
1. Postdoctoral:	
Medicine	3
General surgery	2
Pediatrics	1
Radiotherapy	1
Total	7

[1] Stipends, tuition and/or fees or supplies.

EXHIBIT D

NIH GRANTS APPROVED BUT NOT FUNDED OR DISAPPROVED

Title of project	Principal investigator	Total direct costs (year)					
		1972	1973	1974	1975	1976	1977
Surgical oncology research traineeship (CA-05270-01H1)	Douglas E. Holyoke	$34,800	$34,100	$34,100	$34,100	$34,100	[1] $34,100
Radiotherapy technician training program	John H. Webster	$31,109	$33,664	$35,271		[2]	

[1] Approved but not funded.
[2] Disapproved because Roswell Park Memorial Institute lacks undergraduate college affiliation.

EXHIBIT E

NIH TRAINING GRANTS SUBMITTED (ACTION PENDING)

Title of project	Principal investigator	Total direct cost (yer)				
		1973	1974	1975	1976	1977
1. Training program in molecular biology of disease.	Kenneth Paigen	$75,632	$145,375	$166,005	$166,443	$170,165
2. Training in clinical and research radiotherapy.	John H. Webster	55,895	111,339	171,015	241,876	280,880
3. Training program in medical sociology, soical epidemiology, and control of cancer.	Saxon Graham and Edwin A. Mirand.	138,197	137,047	141,617	146,715	151,753

Mr. FLOOD. Thank you very much, Doctor.
We will recess until 2 o'clock.

THURSDAY, MAY 10, 1973.

HEART AND LUNG

WITNESS

DR. ISADORE ROSENFELD, ASSOCIATE PROFESSOR OF MEDICINE, CORNELL UNIVERSITY

Mr. PATTEN. The committee will come to order.

Proceed, Doctor.

Dr. ROSENFELD. Thank you very much.

Mr. Chairman, I appreciate your coming here; without you there would be no hearings.

I have a prepared statement for the record and in the interests of time I thought I would make a few supplemental comments to emphasize the points that are in the statement.

[The statement follows:]

Mr. Chairman, I am Dr. Isadore Rosenfeld, associate clinical professor of medicine, Cornell University Medical College, a past member of a recent national heart and lung institute task force on arteriosclerosis and I am engaged in the private practice of cardiology in the city of New York. I wish to thank you and the members of your committee for the privilege of appearing before you this year, as I have the preceding 2 years. Your continued understanding of the fight against heart disease and your past support for the programs of the National Heart and Lung Institute have been a source of great comfort to the academic community as well as to practicing physicians everywhere.

I appear before you here today in order to present my viewpoint concerning the budgetary needs which must be filled if the intent of the National Heart, Blood Vessel, Lung and Blood Act of 1972 (Public Law 92-423), enacted in September 1972) is to be consummated. You will recall that it was the purpose of this act "to enlarge the authority of the NHLI in order to advance the national attack upon heart, blood vessel, lung and blood diseases." Under this act, the Director of the NHLI is charged with carrying out a program designed to help the scientific community understand the basic nature of this great killer among us. The Director is also to establish programs for detecting the earliest manifestations of heart disease and arteriosclerosis, and to establish centers for research and for demonstration of treatment to bring to the American people the fruits of what knowledge we already have and to train enough personnel in order to reduce the impact of this disease in America.

Without belaboring the magnitude of the problem of arteriosclerosis, suffice it to say that it remains the No. 1 killer, causing more deaths in this country than all other causes combined, including cancer, all other diseases and accidents. In terms of impairment of human activity and, therefore, in terms of economic cost to the Nation, this disease also ranks No. 1. Not only does it terminate life prematurely, but it causes more human beings to have serious limitations of their abilities and it costs us more time, in terms of hospital days, than any other illness. Aside from the personal tragedies which cannot be expressed in numbers, heart disease costs America some $8 billion in direct costs each year. So when we ask for an increased budget of some $134 million of additional expenditure for fiscal 1974, we are offering to each other the greatest economic bargain imaginable.

In my discussion today, I would like to emphasize research areas in which, I believe greater effort now will bring the greatest results.

ARTERIOSCLEROSIS

Despite all our research efforts and millions of hours of scientific manpower and dedication, we do not have the understanding as to the basic cause or causes of arteriosclerosis. But we have made many important observations which may enable us to control the ravages of this disease. These observations center around the phenomenon of "risk factors." The practicing physician who deals with in-

dividuals and the epidemiologist who deals with populations know that, in this country, certain individuals seem coronary prone. These are people whose blood fats are deranged, abnormal, or elevated. They also have in common the cigarette habit. They are likely to have hypertension, that is high blood pressure. They are probably overweight, often have a disorder of sugar metabolism and are apt to lead sedentary lives. Not everyone who sustains a heart attack or stroke prematurely has these characteristics but, statistically, they do. Our vulnerability, then, may relate to our sex, our race, the food we eat, and even, as some studies indicate, to the presence or absence of traces of certain minerals in the water supply where we live. We have, in general, the highest heart disease rates in the world in this great country of ours. Only Finland has higher rates, The reason for this is not clear. Sweden, which is in the same part of the world as Finland, has substantially lower rates than both Finland and the United States. In another part of the world, as I mentioned to you in my presentation in 1971, the highly industrialized Japanese have a very low rate. If the rates are so different in different areas, there have to be different causes and, if we understood these causes, we might be able to change them. These puzzling differentials compel us to ask what Americans and Finns are doing that's wrong or what people in Sweden and Japan and Crete and other low-rate areas are doing right. The point is that our high death rate need not be inevitable. Coming back to the risk factors which I mentioned earlier, our most fruitful direction of research, at this time, would seem to be whether the modification of the risk factors I have enumerated can modify the incidence of the disease here in America. While our basic researchers must continue their studies into the pathology, the genetics and the biochemistry of this disorder, we cannot sit by and await their results. We must intervene where we can now to reduce the pain, suffering, and premature death occasioned by arteriosclerosis. Most present research does center upon these risk factors, thanks to past support of the people of the United States to the NHLI. Many laboratories, public and private, are engaged in studies on various aspects of these identified risk factors and other factors which are suspect enough to be worth more thorough investigation.

The NHLI has underway three major clinical trials aimed at reducing death and disability through learning more about the following three major risk factors: First, elevated or abnormal blood lipids; second, high blood pressure, which afflicts 1 in 10 of all Americans and 1 in 3 among black persons; third, cigarette smoking—a habit which is still on the increase among young persons.

In my statement last year, I reminded you that 6 lipid clinics had already been established with a capability of studying 300 patients each, per year, permitting the study of only 1,800 patients. I indicated that if we were to answer the critical question concerning cholesterol and heart attacks, we needed twice the number, that is 3,600 patients studied for 5 years. Twelve lipid research clinics have now been set up to conduct a primary prevention trial of this lipid hypothesis. Clinical protocol has been developed and all of the laboratory procedures have been standardized so that patient recruitment can begin about July 1, 1973. Current funding for the trial is about $8 million in 1973. As the trial becomes fully operative in 1974, an additional $3 million will be required as a full complement of patients is recruited. By 1978, provided we are able to continue this trial, we should have the answer as to whether or not modifying what we eat and lowering our cholesterol level by medication will, in fact, reduce heart attacks in people with certain types of lipid disorders. Any compromise on the scale of this study will result in inconclusive data with respect to this critical question. It may very well be that we will determine that, by simply altering the national eating habits, we can make a significant impact on this major cause of death in this country. On the other hand, it is conceivable that the entire cholesterol story will turn out to be a red herring and we can all go on merrily eating our dairy products with abandon. In any event, it is a critical issue to be decided and I urge this committee to appropriate these funds for the necessary continuation of these beautifully designed studies.

A second aspect of the risk factor control program undertaken by the NHLI is the hypertension clinical trial to which my colleague, Dr. Frank Finnerty, will no doubt address himself. Suffice it to say that all 14 clinics required for the trial are now operative and the screening of an estimated 150,000 subjects, in various parts of the United States, necessary to obtain the required 11,000 to 12,000 study patients, is underway. Funding for this study in 1973 is approximately $6 million. Again, additional funding in 1974 of approximately $2 million will be required for full operation.

Finally, the NHLI is about to launch a multirisk-factor trial. This trial, you will recall, was recommended by the NHLI task force on arteriosclerosis, of which I was a member, and has been in an active planning phase for the past year. The trial is designed to test whether individuals, at particularly high risk because of combinations of risk factors, that is abnormal or elevated blood lipid, high blood prssure, and smoking, will experience a reduction in events if treatment is directed simultaneously toward the control of all these risk factors. This trial, which is to run concurrently with the lipid hypothesis testing clinics and the blood pressure control clinics, has the merit of demonstrating whether or not intervention, across the board of risk factors, can prevent the complications of human arteriosclerosis. It is important that this multirisk-factor trial be pursued, for it may very well be that control of only one of the major risk factors may not be statistically significant. The study designed for this multirisk-factor trial requires that approximately 12,000 subjects be studied for a period of 6 years. This will necessitate the Institute establishing approximately 20 study clinics and assume that each clinic will be able to follow about 600 patients. Thus far, eight such clinics have already been established. I understand that additional proposals are being processed, such that the additional clinics can be established during the next few months. Funding for this trial during 1973 will cost approximately $7 million. However, as the additional clinics are established and a full complement of patients recruited, an additional $4 million will be required during 1974.

I said at the outset of my remarks that a twin attack on atherosclerosis must be launched. We must apply the fruits of whatever knowledge and observations we have already made while, on the other hand, basic research into the underlying mechanisms of the disease must proceed if we are to solve the riddle of its causation. The trials which I have just described are to test hypotheses that have been developed as a result of research carried on during the past 10–15 years. With respect to the needs of fundamental research on the underlying problems of arteriosclerosis, there is need for a greater effort in developing animal models of the disease which can then be available for careful study under controlled conditions. In this way, we can assess new medications and other methods which cannot be tried in human beings which may slow down the development of the disease process. I urge this committee to provide an additional appropriation of approximately $10 million for our attempt to understand the fundamental pathology or pathogenetic progression of this disease.

THROMBOSIS

Thrombosis, that is, the phenomenon of blood clotting within a blood vessel, is directly related to atherosclerosis and is responsible for many of the clinical complications related to the thickening deposits lining the blood vessel walls. In lay terms, a blood clot is formed because of some interaction between the blood and the deposits of atherosclerotic plaque along the lining of the blood vessel. This blood clot, or thrombus, then impedes the flow of blood to the heart or to the brain or to the kidneys or to any other vulnerable organ and causes a heart attack or stroke by virtue of severe or total occlusion of the blood vessel. Basic research has contributed much in this area in recent years but the reason for the sudden, localized clotting of blood is not understood. Many approaches are being made to learn how the process of thrombois begins, either in normal blood vessels or in those thickened and streaked with atherosclerotic plaque. The wall of the blood vessel and the dynamic properties of flowing blood are being studied with new instrumentation which gives us finer data than ever before. In this area, some of the findings will also help us in the basic problem of producing manmade materials which will be compatible with blood and which must be available for the fabrication of artificial vessel to replace those that are diseased. For treatment and prevention, there are drugs which are known to interfere with, or to slow down, platelet aggregation. It may surprise you to hear that simple aspirin, the tablets you take, is one of these drugs which may be of help in preventing thrombosis formation. It is crucial to press forward with trials of drugs in the prevention and treatment of these life-threatening clots within our arteries. I recommend additional appropriations of $4.5 million for these purposes.

MYOCARDIAL INFARCTION

Research carried on during the past decade has resulted in improved care of the patient with myocardial infarction. Only 10 or 12 years ago, one expected

to have a mortality of some 30 percent among acute heart attack patients once they reached the hospital. Today, as a result of newer methods of coronary care, monitoring, electrical apparatus to convert abnormal life-threatening heart rhythms to normal, and a few drugs, our best medical centers are reporting rates as low as 6 to 15 percent for in-hospital mortality. This represents an enormous achievement. However, half of the patients with acute heart attacks die before they ever reach a hospital. Therefore, research is critically needed to identify those at increased risk of sudden cardiac death. If we remember that in 1970, some 675,000 Americans died of heart attacks, then we are talking about identifying more than 300,000 who die before they can be treated on the scene or taken to a hospital. The cause of many of these instantaneous deaths is a lethal disturbance in cardiac rhythm which need only persist for 3 or 4 minutes before death occurs. We must develop means of identifying those individuals who are prone to such sudden catastrophes and, at the same time, we must develop and test new drugs for the treatment and/or prevention of the arrhythmias.

We must also devise improved techniques for lessening the damage to the heart once a heart attack has occurred and better methods for assessing the magnitude of the damage within the heart muscle itself once the attack has run its course. I estimate that an additional $6 million could profitably be appropriated for these purposes.

CORONARY ARTERY BYPASS SURGERY

During very recent years, a surgical procedure has been developed for bypassing diseased segments of coronary arteries which supply blood to the heart muscle itself.

The popularity of this procedure is enormous. My first patient to undergo this operation in its infancy was the son of a distinguished Member of the U.S. Senate. He is alive and well, thanks, I believe, to this procedure. This operation which, as I said, was relatively new 3 years ago, is currently being performed at the rate of 20,000 operations per year in this country alone and it is estimated that the number may increase to perhaps 40,000 in the immediate future. Admittedly, this represents a late treatment of arteriosclerosis but it may, nevertheless, be life saving to hundreds of thousands of Americans. Unfortunately, results of this procedure have not been uniformly good. For some reason, certain individuals do not seem to benefit, nor is it clear how or why complications such as closure of the graft occur in some individuals and not in others. A long term evaluation of the results of this procedure is most urgently needed. This evaluation is estimated to cost an additional $4.5 million and should be undertaken immediately.

ARTIFICIAL HEART

In my statement last year, I indicated the status of engineering and biological studies in the development of a completely implanted heart pump system in animals. I indicated then that, while our basic commitment was to prevention and treatment of arteriosclerosis, we, nevertheless, had in this country some 28 million persons in 1970 who already had cardiovascular disease. For many of these, it is too late to prevent the disease. In many forms of arteriosclerotic cardiovascular pathology, no operation is feasible, yet countless numbers of these Americans have sick hearts in bodies that are too young to die and, for them, the development of an artificial heart may mean years of additional useful life. The scientific results of this program continue to be encouraging although there are many technical problems yet to be overcome. These problems include defining the chronic effects of the heat system and blood pump on the human circulation. Extended engineering, bench testing, and implantation in animals must continue to be done. I estimate $10 million could be profitably expended toward the development of these goals.

RESEARCH AND DEMONSTRATION CENTERS

The act of 1972 which expanded the authority of the NHLI directed the Institute to prepare a national plan for diseases of the heart, blood vessels, lung, and blood. One of the specific new authorizations in the act provides for the establishment of 30 new research and demonstration centers for these diseases. The act also provides authorization for the centers to be concerned with any combination of the three diseases. In my testimony last year, I urged support of

similar centers based on the original recommendations of the NHLI task force on arteriosclerosis of 1971. Other public witnesses have also testified in support of comprehensive centers over a period of several years. However, as yet we still do not have even one comprehensive research and demonstration center in any of these diseases in the entire United States. Mr. Chairman, now that there is formal authorization for such centers in this new heart, blood vessel, lung, and blood act, I urge that funds be appropriated so that, at least, a few of them can be established during 1974. Approximately 10 such centers should be established now at a cost of approximately $40 million. Additional funds of $50 million for construction should be made available for this purpose as well.

The additional appropriations that I have recommended on behalf of the NHLI are based on the 1973 budget of $255 million. For an additional $134 million, Mr. Chairman, we can continue on our way along the road to eliminating this terrible disease which is the cause of so much premature death and suffering. I hope that, in your wisdom, you will see fit to recommend the allocation of this budget and, in closing, I would remind you, sir, that we are told that $400 million was the price of one round trip to the Moon, that is after billions had been spent in the basic space technology. If the Moon trip bought priceless knowledge for mankind, it was not too large a bill to pay. Neither is what I am asking for the conquest of our greatest killer. Thank you.

Additional funds requested	(*Millions*)
Arteriosclerosis—risk factor trials	$9.0
Lipid research clinics	3.0
Hypertension detection and followup	2.0
Multiple risk factor intervention trial	4.0
Thrombosis	4.5
Atherosclerosis—fundamental research	10.0
Myocardial infarction and sudden death	6.0
Coronary artery bypass surgery	4.5
Artificial heart—medical devices	10.0
Research and demonstration centers	40.0
Construction	50.0
Total	134.0

Dr. ROSENFELD. First of all I would like to convey the greetings and regrets of Dr. DeBakey, who was hoping to be here, but because of a prior commitment to do some open heart surgery in Budapest couldn't make it.

Mr. PATTEN. He said he is Lebanese, not Hungarian.

Dr. ROSENFELD. He is, but he said that he loves goulash.

This is my third appearance before this committee and every year I reiterate the magnitude of the problem of arteriosclerosis and I beseech the members of the committee to vote favorably on the appropriations requested. I thought that this year I would take another tack because it must be awfully depressing for you people to sit here and hear about how many people are dying, and it may appear to you at times that you are pouring money into a bottomless pit with respect to arteriosclerosis, any progress that is being made toward its conquest. I think that one can analyze the state of the art into three categories:

What has been accomplished in the fight against arteriosclerosis? What are the gray areas? Where have we made literally no progress?

Some of the statisticians at the National Heart and Lung Institute, in an attempt to give impact to the 25th anniversary of the American Heart Association and the founding of the National Heart Institute,

came up with some figures which would indicate on the basis of available data 3 million lives have been saved by virtue of research and technological advances in arteriosclerosis in the last 20, 25 years.

More recently, great progress has been made as a result of appropriations by Congress. For example, as recently as 6 or 7 years ago if a man had a heart attack and was admitted to an average hospital, his chances of coming out alive were 70 percent. He had a 30-percent chance of dying. That is only as recently as 6 or 7 years ago. Today, because of the research developments, coronary units, electronic devices, that figure has been reduced from a mortality of 30 percent to somewhere between 6 and 15 percent. That is a real progress that can be measured in human lives. Fifteen years ago people with heart block were untreatable for any length of time and died. Today there are about 75,000 people in this country who have pacemakers, who would ordinarily be dead except for that technique. More recently there has been developed a surgical procedure called "bypass operation," where blocked arteries within the heart, that lead to heart attack, are detoured by various grafts.

In my opinion, many lives are being prolonged and the quality of life is being improved by this operation.

It may interest you to know, Mr. Chairman, the very first patient of mine who had this open-heart procedure for coronary heart disease was the son of a Member of the U.S. Senate. That was 3 years ago. He is still alive after having been resuscitated twice. Those are the areas of progress that we have made.

We have made meaningful progress in terms of prolonging life and reducing morbidity and mortality. Where we are in the gray area, the gray area relates to risk factors pertinent to heart disease. There has been a lot of talk, especially in this committee, every year about the implications of high cholesterol, high blood pressure, and cigarette smoking and what these things do to us as a nation. Why do 700,000 people die every year of heart attacks?

Mr. PATTEN. Overweight?

Dr. ROSENFELD. Yes.

As a matter of fact, overweight happens to be—I am saying this with some trepidation before Dr. Cahill—this happens to be one of the minor risk factors. In any event, we have got to know the answer, whether modifying what we eat and correcting the so-called abnormalities in our blood fats is going to make a difference to this country in terms of the death rate. The literature has been full of small studies, a few hundred people followed for various short periods of time, that are really at this point inconclusive.

You will remember in the record it will indicate last year I stressed the importance of support for the program testing lipid synthesis theory of the National Heart and Lung Institute. We determined that in order once and for all to establish the answer to this question, whether or not cholesterol and fats have any real meaning in the development of heart disease, one has to study some 3,600 people for 5 years. Nineteen hundred have already been in the process of being studied. We need another 6 clinics to study the other 1,800. Hope-

fully in 1978, if the Heart Institute gets the extra money and the amounts are tabulated at the end of my prepared statement, the answer will be here.

I think this is the most important thing we can do. I do want to briefly allude to two or three other areas, which are more fully described in my statement regarding the request of the Heart Institute for continued and additional support in 1974.

One is a multirisk factor trial. It may be that if we control only cholesterol or only cigarette smoking or hypertension, the impact is very fairly small. If we control all across the board we may make an impressive reduction in our morbidity and mortality from heart disease. To this end, the National Heart and Lung Institute wishes to establish 20 centers across the country, in which in each center 600 people would be followed over a period of 6 years in order to see whether controlling these risk factors will reduce the death rate.

The Heart Act of 1972 authorized the establishment of some 30 research and demonstration centers. To this date not a single one has been built. These are centers designed to train people, to further our basic research, to run tests on promising drugs, and other technological advances. It has been estimated that $40 million would be needed for the coming year and $50 million for construction to start 10 of the 30 that have been authorized in the Heart Act of 1972.

My statement makes reference to the artificial heart program which, if we are going to pursue it in a meaningful way, will require an extra $10 million. We talk in terms of prevention, but there are 28 million people with established heart disease in this country and for whom prevention is too late. I think that you and I are candidates for this group. An artificial heart can conceivably add useful years to many of those afflicted.

I have referred to other problems in my statement, and in concluding I would like to make one important point. I talked about clinical development and research trials. I think it would be unfair for me to leave you with the impression that we have the answers and merely have to enforce them. I think that the bulk of the research, bulk of the money should continue to go to basic research to elucidate the causes of this disease. We are skirting the peripheral issues with our artificial heart and pacemakers and our lipid control. We have got to support the scientific community to understand the basic nature of the disease. Unless there are any questions, that concludes my statement. Thank you.

Mr. PATTEN. It is a pleasure to have you, and I know that your remarks will have a tremendous impact on our deliberations. There is no doubt of the interest of all of the Members of Congress in this subject.

Thank you very much.

Dr. ROSENFELD. Thank you.

THURSDAY, MAY 10, 1973.

ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES

WITNESSES

DR. GEORGE F. CAHILL, JR., DIRECTOR, JOSLIN RESEARCH LABORATORIES
DR. GEORGE E. SCHREINER, PROFESSOR OF MEDICINE AND CHIEF, NEPHROLOGY DIVISION, GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE
DR. FRED KERN, JR., PROFESSOR OF MEDICINE AND CHIEF, GASTROENTEROLOGY DIVISION, UNIVERSITY OF COLORADO SCHOOL OF MEDICINE
DR. IVAN F. DUFF, PROFESSOR OF INTERNAL MEDICINE, UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

MR. PATTEN. Dr. Cahill.

Doctor, it is a pleasure to have you with us. Do you care to read your statement?

Dr. CAHILL. The statement is a lot longer than what I wish to say. With your permission, I would like to give you an off-the-cuff statement.

Mr. PATTEN. We will put the formal statement in the record.

[The statement follows:]

PREPARED STATEMENT ON BEHALF OF THE ACTIVITIES OF THE NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES BY DR. GEORGE F. CAHILL, JR., PROFESSOR OF MEDICINE AT HARVARD UNIVERSITY MEDICAL SCHOOL, BOSTON, MASS.; PHYSICIAN, PETER BENT BRIGHAM HOSPITAL, HARVARD UNIVERSITY MEDICAL SCHOOL; AND DIRECTOR, JOSLIN RESEARCH LABORATORY, BOSTON; FORMER INVESTIGATOR, HOWARD HUGHES MEDICAL INSTITUTE; FORMER DIRECTOR, AMERICAN DIABETES ASSOCIATION; FORMER PHARMACIST'S MATE 2/C, U.S. NAVY; MEMBER, EDITORIAL BOARD, JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, JOURNAL OF LIPID RESEARCH; AND MEMBER, AMERICAN DIABETES ASSOCIATION, AMERICAN PHYSIOLOGICAL SOCIETY, AMERICAN FEDERATION FOR CLINICAL RESEARCH, AND ASSOCIATION OF AMERICAN PHYSICIANS; FORMER MEMBER, METABOLISM STUDY SECTION, AND CHAIRMAN, METABOLISM STUDY SECTION; FORMER CONSULTANT TO NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AND FOOD AND DRUG ADMINISTRATION

Mr. Chairman and members of the committee, I appear before you today to speak on behalf of the research and training activities of the National Institute of Arthritis, Metabolism, and Digestive Diseases, and particularly its diabetes program. My name is George F. Cahill, Jr., and I am a doctor of medicine, having obtained by degree from the Columbia University College of Physicians and Sur-

geons. I am professor of medicine at Harvard University Medical School, Boston, Mass.; and director of the Joslin Research Laboratory, Boston. I am a wniner of the Oppenheimer Award of the Endocrine Society the Lilly Award from the American Diabetes Association, and the Banting Medal, also from the American Diabetes Association. I am on the editorial boards of the Journal of Clinical Endorcrinology and Metabolism, the Journal of Lipid Research, and the Diabetes Journal. I am thoroughly familiar with the activities of the National Institute of Arthritis, Metabolism, and Digestive Diseases, having served on the NIH metabolism study section and as chairman of the metabolism study section from 1969–70. I am a member of the American Physiological Society, the American Diabetes Association, American Federation for Clinical Research, Clinical and Climatological Association, Society for Clinical Investigation, Association of American Physicians, and the Endocrine Society.

Mr. Chairman and members of the committee, I consider it a privilege to testify before you today on behalf of the National Institute of Arthritis, Metabolism, and Digestive Diseases. Because of your past interest and concern, the battle being waged by our Federal Government against disease and disability has been so productive. I commend you specifically for the continuous support you have given to the vital programs of the National Institutes of Health (NIH). This world-renowned biomedical research agency has become the veritable symbol of our country's efforts to achieve better health for everyone. Through its support of biomedical research, research training, and construction of research facilities, as well as through its own intramural laboratory and clinical research, the NIH has made—and will continue to make—valuable contributions toward man's conquest of disease.

My specific intent today is to discuss the progress being made by one of the NIH components, the National Institute of Arthritis, Metabolism, and Digestive Diseases, or the NIAMDD. This Institute is performing admirably its task of obtaining new biomedical scientific knowledge needed to control the many and diverse diseases within its province of responsibility, the first of which are the arthritic disorders, which are probably responsible for more crippling and discomfort than any of the other ills of man. In addition to research on arthritis and diseases of metabolism such as diabetes, disorders for which the Institute was originally established, it has continued to expand its activities in other major research areas. These now include he digestive diseases such as peptic ulcer; many hereditary metabolic disorders such as cystic fibrosis, endocrine gland diseases, disorders of the blood, liver, and bone, urology and diseases of the kidney, orthopedics, dermatology, nutrition and many others. It is self-evident that this is an extremely broad area of responsibility. I am sure that in the future the Institute will continue to approach its many research problems with confidence that it can aid materially in solving some of the major physical ills of mankind.

The solution of these ills will be no small task, as the complexities of biomedical research are exceeded only by the complexities of the human body itself. Productive laboratory experiments and clinical trials require time, labor, patience, diligence, persistence, and the drive to go on despite frustrations and seeming dead ends. These laborious and meticulous processes, however, provide the foundation on which progress in medicine is built. And this life-preserving progress will continue to occur as long as research institutions such as the National Institute of Arthritis, Metabolism, and Digestive Diseases are enabled to carry on their work.

In discussing the specific accomplishments of this Institute during the past year and the directions of future research, I will devote my time largely to diabetes research because this is my own special field of interest. For the past 20 years and more, my research efforts have focused primarily on diabetes and related problems. I consider this to be one of the more fascinating and challenging fields of medicine today. Because of the hereditary aspects of diabetes and the fact that it involves many of the body's organ systems, the study of this disorder encompasses the fields of biochemistry and metabolism, genetics, neurology, opthalmology, dermatology, hematology, and others. Although the research of recent years has yielded important information about the disease process and valuable new methods of treatment, basically, diabetes still remains an enigma.

The disorder results from a built-in error in the body's metabolism. Individuals affected by this serious disease are predisposed to it by their hereditary background. The most obvious chemical defect in diabetes is the body's inability to

metabolize carbohydrates normally. As a result, the diabetic is unable to utilize efficiently the carbohydrates he consumes; that is, turn them into heat or energy needed for normal body functioning, or store them in the form of glycogen. Instead, the carbohydrates, converted into glucose, accumulate in blood and tissues and spill over into the urine. Primarily, this occurs because of a diminished activity or availability of insulin, a hormone produced by the pancreas, although many other factors are now known to be involved. Not only may there be an eventual decreased production of insulin, but there may also be initial periods of overproduction of insulin, stimulated by a basic impairment in the normal activity of this hormone. Disturbances in the metabolism of fats and proteins accompany the defect in carbohydrate utilization. Side by side with these basic metabolic disturbances are the many well-known, serious clinical symptoms and pathologic manifestations in the body of the diabetic patient, which involve the large and small blood vessels of the body and underly the many serious complications of diabetes from premature coronary heart disease, through blindness.

Authorities now estimate that there are approximately 4½ million diabetics in the United States alone. Another 5 million in our country are potential diabetics, persons who, because of an inherited proclivity, may develop the disease sometime during their lives. Of the total world population, 30 million are suffering from diabetes, and more than one-quarter of the earth's population carries the gene for it.

These staggering figures serve to add dimension to even the smallest relevant research findings. The past year has been a highly productive one in diabetes research, and this Institute has played a vital role in this progress. Studies conducted in Bethesda, or supported by the Institute and carried out at other biomedical research centers, have continued to increase in a very meaningful and useful way the body of knowledge concerning this complicated disease.

Although modern diabetes research is focused upon finding the basic cause of the disease, there are a number of ongoing investigations of new approaches with a therapeutic potential. For example, a normally functioning pancreas transplanted into patients with severe diabetes has been found to produce sufficient insulin to control the blood sugar levels of the recipient. Unfortunately, this effect is not long lasting since to date, transplanted pancreati have soon succumbed to the well-known defensive rejection reaction of the host and, ultimately, have ceased to function.

More recently, grantee-scientists have investigated the transplantation of insulin-producing pancreatic cells from normal to diabetic rats. Such therapy resulted in significant reductions in sugar levels in the blood and urine, of excessive urination, and restoration of weight gain. This line of research ultimately may prove superior to transplantation of the entire pancreas, which is more apt to be rejected by the recipient's body.

Various other studies are designed better to understand, and perhaps to forestall, development of the long-term complications of diabetes. One of the most severe of these complications is diabetic retinopathy, or progressive damage to the retina of the eye. A number of recent studies have suggested a relationship between secretion of human growth hormone and development of this severe eye disorder. A NIAMDD-supported investigator now has demonstrated that diabetic patients with retinopathy have markedly higher blood levels of this hormone than do diabetic subjects without retinopathy. Although he does not suggest that these elevated blood hormone levels may be the cause of the diabetic retinopathy, he does theorize that this visual abnormality develops in a setting which includes increased blood levels of human growth hormone.

In addition to diabetes, there are a great many other so-called metabolic diseases, although diabetes and cystic fibrosis are perhaps the best known ones. I would like to mention briefly a recent "breakthrough" in one metabolic disease that is not so well known—Fabry's disease. In this particular disorder, because of an enzyme deficiency, an insoluble chemical substance accumulates in different tissues and organs. This accumulation results in progressive, multiple disabilities and leads to an early death.

A NIAMDD grantee-scientist has shown during the past year that transplantation of a kidney from a healthy donor can provide sufficient enzyme activity to correct the metabolic defects in Fabry's disease. Based on this experience, the kidney might be a convenient organ for future trials of "enzyme transplantation" in a variety of metabolic diseases in which diminished activity or the complete absence of one specific enzyme is the basis for the disorder. The Institute

plans to pursue this line of investigation which may lead to a therapeutically applicable principle at least in certain of these matabolic diseases.

One of the most basic and valuable activities of NIH and NIAMDD, next to their direct research studies and broad support of extramural research, has been the effective training program which has continually brought promising young scientists into the forefront of research and academic teaching of medicine. Many of the advances in our knowledge of diabetes and many of the top teachers and practitioners in this field are the direct or indirect product of the diabetes training program of NIAMDD. Paradoxically, at a time when we need to push ahead to capitalize on the gains that we have made in the understanding of diabetes, our most fundamental research resources are being demolished. At a time when we should translate our new understanding into more effective patterns of practice at all levels of medical care, funds for training are scheduled to be phased out.

Intelligent planning for the education and training of manpower for future research in diabetes and the future care of diabetic patients is obviously desirable and, in fact, essential, but it will be impossible now because of all the uncertainties of future funding of the training of the next generation of researchers and teachers in the area of diabetes. What is required now is provision for a continuing supply of highly motivated individuals for teaching and research so that supply of highly motivated individuals for teaching and research so that our understanding of diabetes continues to grow and our new insights are disseminated in usable, stimulating forms to undergraduates, residents, and all practicing physicians dealing with this complex metabolic disorder.

In lamenting the demise of the training grants program in a recent edition of the Washington Evening Star and Daily News, Judith Randal presented some thought-provoking ideas. She pointed out that, at first glance, the number of people involved—about 11,000 young men and women a year—might seem small, and the amount of taxpayer savings next year alone—$153 million—might seem rather large. But as an investment in the future, the awards represent the kind of opportunity the Nation can ill afford to ignore.

It is from the ranks of these young people that future medical school faculties for early physician education are drawn. With Americans clamoring for more doctors, says Miss Randall, how is the demand to be met if the pipeline that supplies qualified instructors is allowed to run dry?

I was also particularly intrigued by the same writer's statement that it is a rare scientist who makes a fundamentally important discovery after age 30 or 35, and that most of those who go down in history achieve this fame for the work they do within 2 or 3 years of earning their Ph. D. degrees, or, in the case of M.D.'s, within a few years after they initiated their own research efforts. It is to these young scientists that my generation of physicians must look to insure that the billions we have already invested in campaigns against disease are not wasted. If the training grants program is allowed to go down the proverbial drain, I fear for the health standards of the next generation.

I am sure that it is obvious from what I have said so far that I support fully the programs of the National Institute of Arthritis, Metabolism, and Digestive Diseases and the vital role they play in the advancement of American medicine. Unfortunately, the administration budget for fiscal year 1974 for this Institute is smaller than the current budget of the Institute which, in turn, is still smaller than the fiscal year 1972 budget. Thus, we witness an ill-advised and ill-conceived attempt at economy in an area where our Nation cannot afford to economize—its health. The proposed budget is woefully inadequate; it does not even permit the Institute to continue what it has started in vital biomedical research. Unlike many another enterprise, biomedical research cannot be turned on and turned off at will like the manufacture of widgets or an advertising campaign. The leadtime to obtain meaningful advances in biomedical research is exceedingly long; if it is interrupted arbitrarily through fiscal restrictions or the shifting of biomedical research money from one field to another such as the most-favored field of cancer, then precious years of preparation are lost, momentum is lost, and if this is combined with phasing out of research training programs—which I mentioned before—promising future research workers are lost.

Mr. Chairman and members of the committee, I urge you most earnestly to reverse this fiscal policy before irreparable damage is done. I am submitting to you herewith a citizen's budget which, although realistically on the lean side, would still permit the Institute to maintain its current research momentum.

My colleagues and I urge you to study it seriously when you formulate your own recommendations for the fiscal year 1974 budget for this Institute. If you, like we do, believe in the need for a better future with regard to health—if not for us then for our children—I am sure you will do all in your power to support the continued productive activities of this Institute with an adequate and realistic budget along the lines proposed in the citizen's budget.

Again, Mr. Chairman and members of the committee, I would like to express my appreciation for your continued interest and support and for the privilege of testifying here today.

FISCAL YEAR 1974 BUDGET PROPOSED BY CITIZENS FOR THE NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES

[In thousands of dollars]

	1974 President's budget	1974 citizen's proposal
Extramural grants:		
Research grants	88,763	110,000
Fellowships	3,851	7,750
Training	9,551	19,000
Total extramural	102,165	136,750
Direct operations:		
Laboratory and clinical research	20,039	20,500
Research and development contracts [1]	4,299	11,500
Collaborative research and support	1,237	1,450
Epidemiology, biometry, and field studies	1,198	1,500
Research management and program services	4,670	5,000
Total direct operations	31,443	39,950
Total	133,608	176,700

[1] To outside institutions.

Dr. CAHILL. It is a great privilege to appear before you. As you know, my name is George Cahill, Jr., a distant relative to your Governor. I don't know whether I should mention that or not.

I am here to speak on behalf of the Institute of Arthritis, Metabolism, and Digestive Diseases. I have with me three medical associates, Dr. Schreiner, who will address himself to kidney disease; Dr. Duff—Dr. Engleman could not come—Dr. Duff, spaeking on the subject of arthritis; and Dr. Kern, who will represent digestive diseases. I am going to speak on the metabolic side of things.

My primary interest is in diabetes, which I will mention in a moment. I would like to point out first that the Institute is very broad in its coverage. In fact, it has been spoken of as the "Institute of Lots of Things," or of "Everything Else." This way it has been given a problem in maintaining visibility. The kidney disease problems, skin problems, bone and joint problems, to name a few, are covered by this Institute.

I will let my colleagues speak to the other specific areas. I would like to emphasize one or two areas of research in which my main interest lies.

There are probably 5 million known diabetics in the United States, of which possibly 400,000 or 500,000 are of the "juvenile" type who have to take insulin every day to stay alive. This is obviously a major problem.

As the previous speaker said, people with diabetes have a greatly accelerated rate of heart attacks. The second leading cause of blindness

in the United States is diabetes. It is a disease that touches on many different areas of medicine and has a tremendous morbidity. In the past 5 or 10 years tremendous strides have been made. For example, again supported primarily the NIAMDD, we have been able to grow certain insulin-producing tissues in tissue culture. That was unthought of more than a decade ago. I brought a picture with me of something that would be of interest to you. This is an electron microscopic picture of a single cell; this is the nucleus of the cell. These tiny little cannon balls are the stored packets of insulin inside the cell. When you and I eat, these cells release the insulin into the blood so that we can properly put what we eat, sugars, fats, and so forth, where they belong, not in the blood vessels where we don't want them to be.

This is the normal human cell, but the important thing about this picture is that this so-called "beta cell" has been grown in a tissue culture for 3 or 4 weeks. This advance is 2 months old and is now feasible for us to take these special insulin-producing cells and put them back into man. In other words, not just to alleviate the problems of diabetes by giving insulin but perhaps to cure the disease in toto by being able to implant into humans the tissue which is deficient, these beta cells.

I would like to emphasize, growing these cells, learning how insulin works, learning what it does, all of the ancillary processes, metabolism of diabetes—these have all been studied or the studies financed by the NIAMDD Institute—the National Institute of Arthritis, Metabolism, and Digestive Diseases.

We are most excited but just on the threshold of some major breakthroughs on other diseases, which are mentioned in the statement I have submitted. One of two diseases probably will be cured in toto in the next few years. It is tragic that in this exciting moment, where we have gained so much progress, we are now being limited by the budget cutbacks, which I am not going to go into. We are financially so out of phase that the major advances we made are being jeopardized. These are literally held up by lack of funds and that is because the NIAMDD Institute is one of the two or three institutes which had the major cutbacks. We are in deep trouble for that reason.

I am here to emphasize to you the impact of this because underlying the basic studies which have been supported by the Institute are the major advances in really all of the diseases which we are talking about. I don't want to belittle the other institutes at NIH except to point out that most of the advances achieved in the various examples given in testimony are studies supported by the NIAMDD Institute because it is more involved in basic research. I am really saying in summary, and I will stop here, that the situation in biomedical research is grave with the cutbacks in research funding, and the disappearance of the training grants—because half of the research, literally half of the medical research supported not only by this Institute but all other institutes—has been done by these young imaginative hungry fellows who decided not to go out and make a bundle in Middletown, U.S.A., by practicing medicine. They want to hang around at $12,000, $14,000, $15,000 a year because they are interested in our health, interested in the long-term health of the country, and we are losing these people without which there will be no research as we lost the training grants.

I am speaking for the Institute in several terms, the research impact particularly now. I am also speaking to the real hope that the training grants can somehow be brought back on the scene. This is essential to continue the input of bright, young people into medical research.

I might stop there. In the back of my written statement there is a prepared budget we would like to submit to you—the so-called citizens budget, which represents the level of funding that can carry forth the momentum of the past decade, and that will enable us to achieve our goal. I will stop here. If it is agreeable to you, I will answer your questions before you go on to Drs. Schreiner, Kern, and Duff.

Mr. PATTEN. Thank you, Doctor. It will be a pleasure to fortify your statement by a personal observation. I have one. I know a young engineer, 35, making $25,000 a year, who just went blind.

Dr. CAHILL. Juvenile diabetic.

Mr. PATTEN. My father had a separation of the retina for 30 years before he died. Apart from this personal interest, I don't have to tell you that we do not have to be around town long before we can document what you are saying.

Dr. CAHILL. I failed to mention one other point. We are now working on an artificial pancreas which is comprised of a part that tests blood sugar and a part that injects insulin. It is our hope that either that or the transplantation of beta cells—a horserace, whichever gets there first—will succeed, but we have both sides covered. I can say 3 years ago I wouldn't have dared to say it, but I think we will have diabetes in the palm of our hands in the next 3 or 4 years.

Mr. PATTEN. Wasn't there a rejection?

Dr. CAHILL. The fascinating thing, Mr. Patten, is that it is a recent discovery, not even in my written testimony, just made public a week ago. If one keeps a tissue going in tissue culture for a period of 3 to 4 weeks, it looses its capacity to be rejected when transplanted even into another species. It is remarkable. Dr. Schreiner, Dr. Kern, and I were talking about it earlier today. We saw pictures of a mouse with rat skin put on it a year before with no need to poison the system, to suppress the rejection system, which you usually have to do when you put one tissue into one species from another species.

We even saw a rabbit with chicken skin, which is really far apart phylogenetically. It is a whole, brandnew ballgame, and this is an incidental observation made by a couple of dermatologists at Stanford. Again, dermatology research is supported by the NIAMDD that we are here to testify for. This is a typical example of supporting good basic investigation. Those data can be extrapolated and applied to all kinds of health problems.

Mr. PATTEN. Thank you very much.

Dr. CAHILL. Thank you.

Mr. PATTEN. It will be a pleasure to get the views of your colleagues on the record.

STATEMENT OF DR. GEORGE E. SCHREINER

Dr. SCHREINER. Thank you, sir. It is a pleasure to be with you. I have a prepared statement which I would like to submit for the record and not read it.

[The statement follows:]

PREPARED STATEMENT ON BEHALF OF THE ACTIVITIES OF THE NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES BY DR. GEORGE E. SCHREINER, PROFESSOR OF MEDICINE, GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE AND DIRECTOR, RENAL AND ELECTROLYTE DIVISION, GEORGETOWN UNIVERSITY HOSPITAL WASHINGTON, D.C.; FORMERLY ASSOCIATE PROFESSOR OF MEDICINE, GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE; PRESENTLY DIRECTOR, CLINICAL STUDY UNIT, GEORGETOWN UNIVERSITY HOSPITAL; PRESENTLY CONSULTANT TO: WALTER REED ARMY MEDICAL CENTER, WASHINGTON, D.C. AND VETERANS ADMINISTRATION HOSPITAL, WASHINGTON, D.C., AND NATIONAL INSTITUTES OF HEALTH, BETHESDA, MARYLAND AND NATIONAL NAVAL MEDICAL CENTER, BETHESDA, MARYLAND AND ANDREWS AIR FORCE BASE, WASHINGTON, D.C.; SPECIAL ADVISER, NATIONAL ZOOLOGICAL PARK, SMITHSONIAN INSTITUTE. MEMBER ASSOCIATION OF AMERICAN PHYSICIANS; FORMERLY PRESIDENT, AMERICAN FEDERATION FOR CLINICAL RESEARCH; MEMBER AMERICAN SOCIETY FOR CLINICAL INVESTIGATION: FELLOW, AMERICAN COLLEGE OF PHYSICIANS, MEMBER, COMMITTEE ON INTERNATIONAL EDUCATION; SECRETARY-GENERAL, III INTERNATIONAL CONGRESS OF NEPHROLOGY: EDITOR-IN-CHIEF, NEPHRON: EDITOR-IN-CHIEF, TRANSACTIONS, AMERICAN SOCIETY FOR ARTIFICIAL INTERNAL ORGANS (ASAIO); MEMBER, EDITORIAL BOARD, ANNALS OF INTERNAL MEDICINE; PAST PRESIDENT, NATIONAL KIDNEY FOUNDATION; CONSULTING EDITOR, BIOMEDICAL MEASUREMENTS AND MODERN MEDICINE; MEMBER AMERICAN COLLEGE OF PHYSICIANS (FELLOW); MEMBER, NATIONAL RESEARCH COUNCIL; FORMERLY CHAIRMAN, NEPHROLOGY PANEL, AMERICAN MEDICAL ASSOCIATION; MEMBER, NATIONAL DRUG RESEARCH BOARD; MEMBER, SOCIETY FOR EXPERIMENTAL BIOLOGY: FORMER PRESIDENT, AMERICAN SOCIETY FOR ARTIFICIAL INTERNAL ORGANS: PRESIDENT-ELECT, AMERICAN SOCIETY OF NEPHROLOGY, VICE PRESIDENT, INTERNATIONAL SOCIETY OF NEPHROLOGY

Mr. Chairman and members of the committee: I appear before you today as a citizen witness with a deep concern for and interest in the programs of the National Institute of Arthritis, Metabolism, and Digestive Diseases. My name is Dr. George E. Schreiner, I am professor of medicine at Georgetown University School of Medicine here in Washington and director of the nephrology division. I am a consultant to the Walter Reed Army Medical Center, the Veterans' Administration Hospital, the National Institutes of Health and the National Naval Medical Center, all in this area. I am a past president of the American Federation for Clinical Research, the largest organization for clinical research in the United States with more than 6,000 members and I am also past president of the American Society for Artificial Internal Organs and of the American Society of Nephrology and vice president of the International Society of Nephrology.

I have also served as president of the National Kidney Foundation, an organization with 40 affiliates widely distributed throughout the United States. I am also editor of the Transactions of the American Society for Artificial Internal Organs, a member of the editorial board of the *Annals of Internal Medicine* and consulting editor of *Kidney International* and *Bio-Medical Measurements* and the *Medical Annals of the District of Columbia*. I am active in a number of scientific and medical societies including the Medical Society of the District of Columbia, the Society for Experimental Biology, the American Society for Clinical Investigation, the Association of American Physicians, the American College of Physicians, and the Clinical and Climatologic Association.

I am quite familiar with the activities of the National Institute of Arthritis, Metabolism, and Digestive Diseases, having served on a study section for its extramural grant program and having participated in many of its seminars.

As many of you may know, the Institute is giving special emphasis to research in my own area of specialization, kidney diseases, including research and development of improved artificial kidney treatment, and with this committee's permission, I would like to confine my remarks to aspects of kidney disease.

Kidney disease and related urologic disorders constitute a public health problem of considerable magnitude. End-stage kidney disease is responsible for the deaths each year of about 60,000 individuals and diseases of the kidney and urinary tract are the leading cause of absenteeism of women from the work force. Kidney disease is the fourth largest cause of death after heart disease, cancer and stroke, a point which was recognized by the Congress when they included kidney disease along with heart, cancer and stroke in the title of the regional medical programs. As you know, kidney disease was the first catastrophic illness to be included in the disability medicare provisions passed in H.R. 1 in

October 1972. Only through research can the clues be developed to mitigate some of the common kidney diseases before they reach the end-stage or terminal renal failure. Such end-stage renal failure is usually not reached until the function of both kidneys has declined more than 90 to 95 percent. Research in this interval between the onset of the kidney disease and the time when 90 percent of kidney function is lost is when we have the greatest opportunity to learn how these diseases can be controlled and prevented. If we do not do so, kidney disease will continue to present an emergency situation. Special diets are useful for a short time but ultimately transplantation of a kidney or dialysis on the artificial kidney will be necessary.

In the past year scientists have made a number of significant advances in difficult research areas. For example, one investigator has demonstrated that the adverse consequences of immunosuppressive drug therapy to prevent the rejection reaction in kidney graft recipients can be minimized by administering these potent drugs on alternate day schedules. This produces no increase in the incidence of graft rejection. This experience may be useful in treating other disorders which require long term drug therapy.

It has also been determined that diabetic patients are often excluded from artificial kidney programs because of the impact of the treatment on the disease, increasing the difficulties in the management of the diabetes. Diabetes can with improved knowledge be successfully treated in between one-half and two-thirds of the patients who are put on dialysis. A similar record has been obtained at the University of Minnesota by an Institute-supported scientist who has successfully transplanted kidneys into patients with diabetes of 20 years or more duration. Moreover, when patients with diabetes and kidney disease have progressively failing vision which will inevitably lead to blindness, the operation of a successful kidney transplant can halt the deterioration in eyesight and in some instances may even produce an improvement.

A permanently indwelling catheter has been developed which makes possible the performance of peritoneal dialysis in the home. This is a relatively safe and potentially inexpensive form of dialysis or blood cleansing. A permanently placed abdominal catheter eliminates the necessity for puncturing the abdominal wall each time that dialysis is required, and the procedure appears to be a suitable alternative to regular hemodialysis in specific categories of patients.

Still another problem associated with long term dialysis has been bone demineralization which weakens the skeleton and makes it prone to fractures. Also, this entity can cause deposits of calcium in the soft tissues of the body particularly in the membrane around the teeth, and around joints. Intensive research has revealed that restriction of dietary phosphate absorption with the aid of phosphate binding preparations and proper setting of the dialysis bath calcium concentration can eliminate this complication. A more active form of vitamin D has been found to play an important role in the bone metabolism of kidney disease. This conversion in the digestive tract is impaired in uremia. This chemical is in turn altered in the kidney to the most active derivative of vitamin D.

These striking advances, Mr. Chairman, are destined to be slowed down or stopped in light of proposed funding cutbacks. I am well aware of the economics of inflation and of the necessity to hold down Federal spending. This is the negative side of the coin. Reducing the Federal expenditure to zero would not increase the productivity of the work force. If one group of diseases is the leading cause of absenteeism and loss of productivity in the newest and most rapidly growing segment of the work force, namely, women, can we really afford not to do research in that group of diseases? Can we afford to accept the present losses of productivity?

Unlike the majority of chonic diseases, kidney diseases are particularly likely to cause death to patients in their middle, productive years. The social and economic impact of kidney diseases, therefore, is out of proportion to that which one could expect from simple analysis of the bare statistics, though some of the statistics are frightening enough.

Because kidney disease is very common in the years between 30 and 50, the most productive time of life for most people, it is an economic as well as a health problem. The effects of renal disorders cost the economy approximately $1.5 billion annually due to 770,000 workdays lost and the 1.8 million days of bed disability and costs of treatment. In terms of indirect costs of mortality, that is, lost future incomes, kidney disease costs the country many more billions annually. Additionally, more than $1 billion is spent each year for hospital and

nursing home care, professional services and drugs. With the present state of technology, hospital dialysis costs each patient from $29,000 to $35,000 per year, or $4,500 to $7,500 for home treatment.

Progress in transplantation has surpassed our desires of a decade ago. We are close to a worldwide accomplishment of almost 10,000 such operations. There are still problems in typing, organ perfusion, transportation, immuno-suppression and aftercare. However, because a shortage of available organs is already curtailing the tempo of renal transplantation in the United States, it is expected that the majority of new end-stage kidney disease patients would have to be taken care of with chronic dialysis until advances in organ preservation, transplantation methodology, and in a sophisticated organization to improve the supply of organs, catches up with the demand. It is estimated that within a few years approximately 40,000 patients will be kept alive with maintenance dialysis.

At the same time, the quality of life on dialysis is still far from ideal. The treatment itself is too lengthy and puts a burden for potential rehabilitation of patients. Thus, any improvement in current dialysis therapy which can be developed by the Institute's artificial kidney—chronic uremia research and development program would enhance the medical rehabilitation of the patients and would make the currently lengthy treatment briefer and more effective and more economical. Such improvements will bring about significant human benefits in terms of well-being and ability to work full time, and will result in tremendous savings of Federal funds.

Mr. Chairman and members of the committee, it was your urgings in 1965 and your earmarking of the first $2 million for this undertaking, that established the special artificial kidney—chronic uremia program at this Institute in 1965 for the "development of a better artificial kidney than the machines which now exist." The goals of the program are to provide scientific data and technology leading to improved patient care and lower maintenance costs for patients with irreversible chronic kidney failure. During the last few years, the program has been extremely successful in bringing about or stimulating important improvements in artificial kidney apparatus and methodology, in increasing their effectiveness and decreasing their initial and operational cost, and in improved rehabilitation of chronic dialysis patients.

Much to the dismay of those knowledgeable in the field of dialysis, the fiscal year 1974 budget for this Institute shows a one-third cut in the allocation of funds for the artificial kidney—chronic uremia program rather than an appropriate and timely increase. I therefore strongly urge that the sum of $4½ million of new and additional funds be specifically earmarked by this committee in addition to the funds presently allocated to the Institute's artificial kidney—chronic uremia program. This, Mr. Chairman and members of the committee, would be the single most promising step for a major reduction in the near future of the Government's cost of dialysis treatments under social security and for the improvement of the quality of life of an estimated 40,000 future dialysis patients—a tremendous plus in terms of human values on which one cannot place a dollar pricetag.

Mr. Chairman, I am familiar with the proposed administration budget for fiscal year 1974 for this Institute. This budget represents the second significant decrease since fiscal year 1972 and to me symbolizes the future stagnation of American medical research and American standards of medicine, if we do not reverse this trend. The citizen's budget introduced by Dr. Cahill seeks to meet the needs of this Institute and our national biomedical research effort. It is a relatively lean proposal and I seriously commend it for your consideration when you formulate the budget for this Institute.

I wish to thank you, Mr. Chairman and members of the committee, for the opportunity and privilege of appearing before you today.

Dr. SCHREINER. We are primarily interested in the kidney activities of the Institute but subscribe to the citizens budget that Dr. Cahill presented. In fact, I was kind of chuckling as he was talking about the race between mechanical pancreas and the pancreatic transplants. We have just been through a decade of this, where the artificial kidney was racing with kidney transplants, and unlike other races they both won. We are finding that there are certain areas that are particularly

suitable to one form of treatment and other types of patients that are particularly suitable to the other. It really does not hurt to have two runners in the race if you have two prizes at the end and they can both win.

We are very interested in diabetes. One of the achievements of the Institute was to grant support to scientists, who showed that diabetics could be transplanted under certain controlled conditions. We are now carrying over 30 diabetic patients on artificial kidneys here in Washington. It is possible to make these treatments available to the diabetic, but it is not easy. There are some tricks involved that require further investigation or research. This sort of applied research was a direct outcome of Institute support. All of us who have done any research recognize that, as Dr. Cahill pointed out, if you learn something about how to keep skin in a tissue culture and render it transplantable, that information is almost immediately applicable to a gland, and perhaps with improved technology, could be applicable to the preservation of kidney transplants as well.

As you know, we are now coming up on 10,000 kidney transplants done around the world. This is a substantial therapeutic maneuver at the present time. We are still faced with the rejection problem. If it is solved for the beta cell, skin and culture, we would hope ultimately that that solution will spill over to what has become a very important therapeutic modality, namely kidney transplantation.

The other point I would like to make about the administration budget is that there is a sharp decrease in the training and fellowship categories. This is the biggest tragedy of all. For example, I happen to be the director of one of the oldest training grants in the field of kidney disease in the United States, and yet we have been told not only are we going to be cut off but we cannot apply for an extension because of cessation of funds. It means we are going to have to go out of business in terms of continued research in this area.

I think this is a tragedy when in our field, diseases of the kidney and the urinary tract, we are dealing with the leading cause of absenteeism among women in the work force.

The question is not whether we can afford some money for research but can we afford not to study the loss of productivity of the newest and largest segment of our work force coming up, which is the gradual, as you know, increase in women as a proportion of the work force. Here is the No. 1 reason for absenteeism, and we are told we should cut research in this area by 50 to 60 percent in terms of actual productive research. It does not make any kind of economic sense and it does not make any kind of scientific sense for the arguments that Dr. Cahill, who preceded me, made. We know what your committee is up against in terms of the overall problem of inflation. I think somebody has to face basic economics, and that is: If you reduce the Government expenditures to zero, you wouldn't have improved productivity of the work force by one iota, whereas if you do something to meet the disease that causes the loss in productivity, then you improve productivity and you get a basic economic answer to inflation.

Cutting the Government expenditures is not the answer to productivity of the work force when sickness is one of the reasons for loss in productivity. Somebody has not learned the basic lesson in economics.

We can only hope that you would exercise your persuasive personality to get in there and fight as we know that you will.

Mr. PATTEN. Aren't you getting support from social security?

Dr. SCHREINER. That is for dialysis and transplant treatment only, not for research to prevent these diseases in the first place.

The actuarial figures from Social Security Insurance Department for this year, the program begins July 1, are $55 million. For the next complete year it will be $105 million. It will gradually grow, but this is to replace the current high cost of dying in uremia, which is considerable. The average person going into a hospital dying of uremia has 3 or 4 terminal hospitalizations. We feel that if you have a treatment that can bring people back to meaningful life and rehabilitation and job restoration, you have to take your mind off the absolute number of dollars spent because these people are not being maintained in a nonproductive capacity, but the rehabilitation rate over the country is about 75 to 80 percent, people actually going back to jobs.

We have patients on dialysis who are now engaged in the international monetary talks for the World Bank. We have them riding horses. We have them working—and one in Congress several years ago.

Mr. PATTEN. We thank you for your efforts. We have been through all this during this past year. Thank you, Doctor.

STATEMENT OF DR. FRED KERN, JR.

Dr. Kern from Colorado.

Dr. KERN. I would also like to submit my written testimony for the record and to emphasize a few points orally.

[The statement follows:]

PREPARED STATEMENT ON BEHALF OF THE ACTIVITIES OF THE NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES BY DR. FRED KERN, JR., PROFESSOR OF MEDICINE, AND HEAD, DIVISION OF GASTROENTEROLOGY, UNIVERSITY OF COLORADO SCHOOL OF MEDICINE, DENVER, COLO. PRESENTLY CONSULTING PHYSICIAN, FITZSIMMONS GENERAL HOSPITAL, DENVER; PRESENTLY CONSULTING PHYSICIAN, VETERANS' ADMINISTRATION HOSPITAL, DENVER; PRESENTLY ATTENDING PHYSICIAN, COLORADO GENERAL HOSPITAL, DENVER; FORMERLY VISITING PHYSICIAN, BELLEVUE HOSPITAL, NEW YORK; FORMERLY PHYSICIAN TO OUTPATIENTS, NEW YORK HOSPITAL, NEW YORK; FORMERLY INSTRUCTOR IN MEDICINE, CORNELL UNIVERSITY MEDICAL COLLEGE, ITHACA, N.Y.; FORMERLY IN THE MEDICAL CORPS, U.S. ARMY, WORLD WAR II. CERTIFIED BY AMERICAN MEDICAL BOARDS IN INTERNAL MEDICINE AND IN GASTROENTEROLOGY. FORMER CHAIRMAN, SUBSPECIALTY BOARD ON GASTROENTEROLOGY, AMERICAN BOARD OF INTERNAL MEDICINE; FORMER MEMBER, AMERICAN BOARD OF INTERNAL MEDICINE; MEMBER, SCIENTIFIC ADVISORY BOARD, NATIONAL FOUNDATION FOR ILEITIS AND COLITIS; MEMBER, ADVISORY BOARD, DIGESTIVE DISEASE FOUNDATION; FORMER MEMBER, EDITORIAL BOARD, GASTROENTEROLOGY; MEMBER OF THE AMERICAN FEDERATION FOR CLINICAL RESEARCH; AMERICAN COLLEGE OF PHYSICIANS (FELLOW); AMERICAN GASTROENTEROLOGY ASSOCIATION, AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASE; AMERICAN INSTITUTE OF NUTRITION; AMERICAN SOCIETY FOR CLINICAL NUTRITION; SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE; AND THE AMERICAN CLINICAL AND CLIMATOLOGICAL SOCIETY

Mr. Chairman and members of the committee, it is a privilege to appear before you this year to speak on behalf of the research program of the National Institute of Arthritis, Metabolism, and Digestive Diseases. My name is Fred Kern, Jr. and I am a graduate of the Columbia University College of Physicians and Surgeons and the University of Alabama School of Medicine, and I am board certified in both internal medicine and in gastroenterology. I am professor of medicine and head, division of gastroenterology, at the University of Colorado

School of Medicine, Denver. I am consulting physician at the Fitzsimmons General Hospital and the Veterans' Administration, Denver, and attending physician at the Colorado General Hospital, Denver. I was chairman of the subspecialty board of gastroenterology, American Board of Internal Medicine, and was a member of the American Board of Internal Medicine, as well as a member of the editorial board of gastroenterology. I also am a member of the Scientific Advisory Board of the National Foundation for Ileitis and Colitis and a member of the advisory board of the Digestive Disease Foundation.

I appreciate the opportunity to appear before you today to speak on behalf of the activities of the National Institute of Arthritis, Metabolism, and Digestive Diseases (NIAMDD), and for the numerous scientists and research institutions across the country working with research grant support from this Institute. I am familiar with the work of this Institute, especially in the area of digestive diseases, my own field of research.

The diversity and magnitude of digestive diseases, including peptic ulcer, ulcerative colitis, and disorders of the liver, gallbladder, and pancreas, place them among man's most frequent chronic and disabling afflictions. Each year Americans spend nearly 300 million man-days away from work—and 116 million man-days in bed—because of acute and chronic digestive disease.

The economic and social cost of digestive disease is significant. The loss due to disbility, and the income loss due to premature death, is calculated at $8.1 billion annually. Of all disease categories, digestive disease ranks third in causing economic loss, exceeded only by cardiovascular disease and accidents. The economic loss to the United States due to peptic ulcer alone is calculated at just under $1 billion a year.

Half the population of the United States has digestive complaints and 21 million Americans suffer from specific chronic digestive diseases, which represent the largest cause of hospitalization in this country; 7.7 percent of deaths in the United States are due to digestive diseases.

Today, before I cite briefly some specific advances made by or supported by the National Institute of Arthritis, Metabolism, and Digestive Diseases, I would like to remind you that the Institute's name was changed this past year to reflect more adequately Congress increasing interest and emphasis on digestive diseases.

Digestive disorders are as complex from the biomedical reasearch investigator's point of view as they are from that of the practicing physician. For example, until recently, little is known about how gallstones are formed, but they afflict many millions of Americans. Surgery is the standard treatment for gallstones, but a less drastic way of controlling the condition has long been sought. About 2 years ago grant-supported investigators reported that long-term oral administration of natural bile acid, chenodeoxycholic acid, can result in dissolution of longstanding cholesterol gallstones. In the United States, cholesterol gallstones account for about 90 percent of all gallstones.

The same investigators now report that continued chenodeoxycholic acid therapy, for 12 to 24 months, has resulted in total dissolution of stones, in additional patients, and reduction in stone size in the others. Thus, it would appear that prolonged administration of this bile acid, provided it is proven free of undesirable side effects, may offer an alternative to surgery for many cholesterol gallstone patients.

Another important development evolved from the Institute's Phoenix clinical research section where an investigator devised a physiological method of measuring the lipid composition of human bile. The new procedure should prove useful in determining the effects of various diets, drugs, and diseases on the metabolism of biliary lipids, and appears to be particularly applicable to the study of cholesterol gallstone formation.

Another research highlight from this past year involved an NIAMDD intramural investigator in Bethesda who showed that ingestion of gluten by patients with celiac disease, who cannot tolerate this cereal protein, results in increased intestinal synthesis of certain antibodies, a large portion of which are directed against gluten. This finding is viewed as additional evidence of an immunologic basic for celiac disease.

In another study, Institute scientists and contract-supported associates are using experience gathered from epidemics of Asiatic cholera to study the effects, treatment, and prevention of acute diarrhea among American Indian infants. A team of researchers has established a clinical study unit on the Apache Indian

reservation about 150 miles northeast of Phoenix at the Indian Health Service's White River Hospital, to study Apache Indian babies who suffer severe annual epidemics of diarrhea. The reseachers have now demonstrated the usefulness of oral glucose and electrolyte solutions in treating the symptoms of acute infectious diarrhea in Apache children.

Conventional therapy of children with diarrhea has emphasized withholding or reducing food to avoid exacerbating the disorder, while replacing fluid losses by intravenous feeding. Early feeding, with minimum reliance on intravenous replacement of fluids, however, is especially desirable in areas where diarrhea is constantly present, where undernutrition is common, and where physicians who can place and maintain intravenous needles are scarce.

If the initial experiences of the scientists are borne out in subsequent clinical trials, semiskilled personnel and family members could be trained to treat a large proportion of children with diarrhea in similar adverse settings. Needless to say, acute diarrhea in infants and children is a major worldwide health problem.

I am familiar with the digestive disease-related activities of the Institute and I know that it is now engaged in support of an indepth study of Crohn's disease, an inflammatory condition of the small intestine which causes severe pain, fever, and weight loss, with prolonged periods of hospitalization, and frequently leads to abdominal operations involving removal of portions of the intestine. In about half the cases, the disease begins between the ages of 20 and 30.

Nine large research centers across the country are now evaluating the therapeutic and prophylactic value of different drug treatments. The Institute's National Cooperative Crohn's Disease study is a controlled, randomized clinical evaluation of three drugs, prednisone, asulfidine, and azathioprine, to determine their efficacy. The study will examine each drug's effectiveness in preventing intensification of the disease and will determine the effects of each in preventing recurrence of the disease. Prompt and effective treatment of this debilitating disease could transfer an incapacitated, helpless, and dependent person into a productive, self-supporting member of the community.

Earlier, I had mentioned the experimental use of chenodeoxycholic acid in the dissolution of cholesterol gallstones. Based on the encouraging results of this research, plans are now being formulated by the Institute for initiating cooperative clinical trials. A preliminary protocol calls for a double-blind clinical trial to evaluate the safety and efficacy of chenodeoxycholic acid in dissolving gallstones. From 8 to 14 clinical centers will test 700 to 1,000 patients over a 4-year period. Trials of this magnitude are essential to obtain statistically reliable and meaningful information. Such large scale clinical studies, expensive as they may be, are needed not only to establish the efficacy of a new treatment approach, but also to rule out the ever-existing possibility of undesirable side effects. The potential benefits are worth it, however, since the 400,000 surgical operations to remove gallbladders which we see in this country annually, cost close to $1 billion as well as 6,000 to 9,000 lives, and a total of 15 million people in our country are estimated to have gallstones.

Mr. Chairman, a few weeks ago several colleagues and I visited Members of the Congress to discuss the important role of digestive diseases in the national health picture. At the time, to illustrate some of the most important concrete steps which we felt are much needed, we mentioned the need for adequate funding of about $2 million for a well controlled study of the medical treatment of gallstones and the need for $1 million for development of improved endoscopic devices for visual examination of the gastrointestinal tract. I would like to take this opportunity to reiterate the importance of these proposed items.

These research advances and activities merely touch upon the long list of serious chronic digestive diseases which cause a vast amount of illness among Americans. Too little is known about these disorders, and current methods of therapy are in most instances simply palliative. The situation will remain the same until we know more about the most fundamental aspects of biologic phenomena as they are related to gastroenterology and more about the role played by diverse physiologic, metabolic and genetic defects, reactions to life stress, alcoholism, infections and cancer.

A broad, intensified research program is needed to produce additional concrete and critical advances in the state of knowledge in digestive diseases. Although the existing biomedical research has produced satisfying dividends, the NIAMDD, in view of its broad responsibility for multiple disease areas, simply does not have enough money to mount an attack on digestive disease on the scale

required to match the challenge of the national digestive disease problem. A fresh effort to solve the problems posed by liver disorders or peptic ulcer will require a major thrust in research and training that can only be effected by increasing appropriations for the purpose.

Mr. Chairman, the great French philosopher, Andre Gide, once opened a lecture with these words: "All this has been said before—but, since nobody listened, it must be said again." Needless to say, I am not referring to this committee. I have a somewhat eerie feeling that I am standing in Gide's shoes. This is distressing since the lesson which apparently must be retaught is so crucial to all of us—certainly to our well being.

I must express my deep concern over the present decision to phase out the NIH research training programs. The elimination of all research training grants will detrimentally affect the progress of biomedical research and the quality and quantity of scientists in the future.

The programs of training grants and followships which were maintained by NIAMDD, were designed to help alleviate the serious shortage of scientific manpower for biomedical research and for teachers in the Nation's medical schools, and to uphold the high standards of excellence and productivity now characteristic of those engaged in modern day biomedical research. This shortage is felt particularly in the field of digestive diseases and is reflected in the fact that while digestive diseases rank second only to disorders of the heart and blood vessels in number of physician office visits or house calls, there are little more than 2,000 physicians in this country specializing in this field.

I would like to state emphatically that more money for training is needed rather than the present phaseout of these funds, in order to assure an adequate corps of well trained scientific manpower.

Does this kind of thing make sense or does it conjure up Poor Richard's proverb with reference to being "penny wise and pound foolish"? We must know more—much more than we now do—in order to cope with the vast multiplicity of medical problems on any kind of a basis that is other than makeshift and temporary, if we wish to deal effectively with the national health problems such as digestive diseases.

It is hardly reasonable to expect that Federal support for research and development could continue indefinitely to accelerate as it did in the 15 years from 1950 to 1965. These were indeed golden years for science and technology. Not only did Federal support increase from a few hundred million dollars a year to over a billion—but private industry, the foundations, and universities, and other nonprofit organizations made similar efforts. The results were more than rewarding and profitable. They were exciting; they lifted the spirit; they opened visitas for the future that no one had imagined.

I understand, however, along with my colleagues, the necessity for economy in times such as these—the dangers of inflation—and the fact that it is impossible to economize without drawing agonized protests from those who find their funds reduced or cut off. Sometimes that cannot be avoided.

What I deplore is the irrational and occasional emotional budgetary attack upon certain endeavors of the Government simply because they are not aimed at producing a specified, tangible product. It is clear that scientific research and research training has been placed in that category. Such thinking, it seems to me, in not even Neanderthal; it is pure Piltdown.

Meanwhile, I am convinced that our tendency in times of economic stress to jump on research as the vulnerable part of the Federal budget results mainly from thoughtlessness—not from any real antipathy or disenchantment with basic science itself. While this is an important point, it does not mitigate the damage we are doing to ourselves by slashing research funds.

This brings me to what I think is the crux of our modern dilemma—the ability to select rational priorities.

In this day of instant and almost universal communications, of unequaled crowding, of enormous economic pressures, of minimal requirements for physical labor and hence maximum free time, or unbridled materialism and of constant, organized "protesting"—whether right or wrong—it is easy to become stampeded and to attempt to cure the symptoms before the cause is understood.

In many ways, it seems to me, this is happening or is about to happen. I could cite endless examples of practical values that have come to us from our past burst of scientific effort—in terms of dollars, consumer goods, jobs, education, and most important, in terms of improved health. They are truly enormous. But

I think perhaps one of the greatest unsung benefits has been the intangible one of our image in the eyes of the rest of the world. To the doubters who have not spent time abroad, I would say: go and listen; for you cannot detect the admiration, the envy, and the emulation from here.

No one denies that the United States' world image is tarnished in spots. But the overall reflection is a bright one, and much of the luster has come from our scientific endeavors, our academic strength, and the resulting attainments in our standard of living and in our quality of life and highly improved standards of health.

Nonetheless, we have long known that we could not keep the rate of increase of our support for biomedical science at the level of the late fifties and sixties—even without the costs of a war added to the national budget.

The danger now is not only that the Institute's budget has significantly dropped but that the present economy psychosis with which many of us seem afflicted has reduced the support for biomedical and scientific research way below the normal cost-of-living increases necessary merely to keep research standards at their current level. If this is permitted, we will be in serious trouble—internally and relatively to the rest of the world. Believe me, Western Europe, Russia, Japan, and China are not standing still. When the chips are down, American scientists are not going to be able to pull any applied rabbits from the scientific hat without knowing the basic tricks.

Mr. Chairman and members of the committee, I have carefully studied the proposed administration budget which, I am sorry to say, is considerably smaller than previous years. This Institute has received drastic and disastrous cutbacks in funds over the last several years, and the proposed administration budget does nothing to mend the damage. Moreover, because of the well known annual escalation in cost of doing biomedical research, which in our experience is considerably greater than the 6 percent annual inflationary erosion of the value of the dollar, the proposed administration budget will buy much less in terms of health research than the drastically cutback fiscal year 1973 budget. The proposed citizen's budget introduced by Dr. Cahill, to which I subscribe wholeheartedly, includes additional funds for digestive diseases. In the name of 21 million digestive disease patients all over the country, I urge that you increase the administration budget for fiscal year 1974 along the lines we have recommended so that we can soon bring about improved methods of prevention, diagnosis, and treatment to all who need them.

Mr. Chairman and members of the committee, again I thank you for your continued interest and support, and for the privilege of testifying here today.

Dr. KERN. As you know, I am here representing the National Institute of Arthritis, Metabolism and Digestive Diseases, especially in the field of digestive disease, which is my own research interest. I am very grateful to have the opportunity to speak with you today to emphasize the points that have been made by my colleagues, Drs. Cahill and Schreiner.

I have really three points to make.

Mr. PATTEN. You know my friend Dr. Nelson at Fitzsimmons Hospital in Denver?

Dr. KERN. Yes, sir.

I would like to say a little bit about the digestive disease health problem. I notice the cardiologist witness who preceded us didn't feel it necessary to tell you about the magnitude of heart disease, and I share that belief. Everybody knows about heart disease, but I didn't think everybody does know about digestive disease.

For reasons that are a little bit obscure, digestive diseases don't get a lot of publicity. They are extremely important diseases. I perhaps should mention some of these diseases, identify them.

Mr. PATTEN. That is because we are used to something the next morning.

Dr. KERN. That is where most of us get our information, from television advertising in our field. The diseases that we are concerned about are the acute and chronic diseases of the digestive system. The chronic diseases or chief chronic diseases are peptic ulcer—ulcer of the stomach and duodenum—cirrhosis of the liver, and hepatitis, pancreatitis, a disease known as chronic inflammatory disease of the bowel, which includes regional enteritis, colitis, and, of course, cancer of all these organs.

It has been estimated that about half of the population of the United States in any 1 year has acute digestive complaints. Eleven percent of the population or 21 million to 22 million people have specific chronic digestive disorder. When these figures are broken down by age it is significant. In younger people, less than 45, the incidence is only 5 percent, but it goes up with age. Between 45 and 60 it is up to 20 percent. Over 45, 35 percent of the population has these chronic illnesses. One-quarter to one-third of all major surgery done in this country is done for digestive disorders. There are 300 million man-days lost from work each year. That is 13 percent of all absenteeism. One hundred and sixteen million man-days in bed, and the economic cost is estimated at around $8 billion.

I would like to go on to tell you about some of the really exciting developments in research in a couple of areas. I would emphasize again that the research on which these advances are based has been supported by the Institute and most of the time the really important discoveries come out of basic research. I would like to tell you a little bit about gallstones. I see that you know about some of our progress in this field.

Mr. PATTEN. I am not worried any more. My gall bladder is out.

Dr. KERN. You represent a very large segment of society, since about 15 million people have gallstones, and more than half of those are operated on. As a result of basic research supported by the Institute, some very, varied important information has been learned about the physical chemistry of bile, which is a secretion of the liver. What we have learned is what is wrong with bile and what allows cholesterol to precipitate out of solution and to form stones in the gallbladder. As an outgrowth of that information, some investigators at the Mayo Clinic have come up with a medical treatment for gallstones. While this has been tried thus far on a relatively small number of patients, it appears that in 50 or 60 percent of the people stones are dissolved by medical therapy without the need for surgery. If this is proved to be true in a large percentage, in a large study population, this has enormous medical and economic consequences. As I indicated, about 400,000 operations a year for this disorder, about 7,000 or 8,000 deaths, most of which are associated with the surgery. If those people respond to medical treatment and do not need surgery, the benefits are obvious.

The Institute hopes to undertake a large-scale controlled clinical trial throughout the country to determine what groups of patients should be treated, what the toxicity is, and so on. This is very costly in terms of $2 or $3 million a year, but is obviously a tiny drop compared to the yearly cost of the disease to the country.

One other illness I would like to mention in passing, again as an example of the benefit to basic research, is the recent discovery in the treatment of acute diarrheas. Here again I am sure that you know acute diarrhea is extraordinarily common throughout the world; it is probably the most common acute illness in the entire world. As a result of basis research using frogskin and toad bladders and animal intestinal tracts, investigators learned about the control of the transport of the sugar and water from inside of the gut into the body and vice versa. In the past, the usual conventional therapy for diarrhea was to take people off food and replace water, minerals, and sugar by vein.

As result of these basic studies, it was learned that the ingestion by mouth of a simple sugar and salt solution would cause water to go back into the body from the gut and thereby diminish and counteract the bad effects of diarrhea. This has been used in an Institute-supported Study among Apache Indians, with dramatic results and successes. It has saved—supposedly has saved thousands of lives of cholera victims. I would like—

Mr. PATTEN. I just came from a trip to the Ivory Coast and half of our group were afraid to leave the room. It was the same way in Korea. "Don't eat the vegetables." "Don't drink the milk." "Don't eat the meat unless it is well cooked." I saw it firsthand. Members of our party were very sick.

Dr. KERN. The military is very much aware of this since there were more troops hospitalized in Southeast Asia for acute diarrhea than for battle injuries.

I would like to say that these are just two examples. There are other promising areas and there are huge complex areas that have not really been touched on in a substantial manner and requires a great deal more research.

I would like to add my endorsement of the other witnesses in stating that the present administration budget for the Institute is simply inadequate. As a result of holding the budget down in the past 5 years, the amount of funds that the Institute could put into research in our field for 5 years has remained constant without any increase, and this budget will result in a decrease. In general, as a result of inflation, the number of grants that could be funded has gone down by 25 percent.

Mr. PATTEN. You didn't have that little story about the diarrhea in your article.

Dr. KERN. I think it is in there very briefly.

Mr. PATTEN. Thank you very much, Doctor.

I don't want to make predictions but I think we will make you feel your visit was worthwhile.

Dr. KERN. Thank you very much.

Mr. PATTEN. What has Dr. Duff to add?

Proceed, Doctor.

STATEMENT OF DR. IVAN F. DUFF

Dr. DUFF. Mr. Chairman, I will try to be informal and brief and hand you a copy of the prepared statement.

[The statement follows:]

PREPARED STATEMENT ON BEHALF OF THE ACTIVITIES OF THE NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES BY DR. IVAN F. DUFF, PROFESSOR OF INTERNAL MEDICINE, UNIVERSITY OF MICHIGAN MEDICAL SCHOOL; PHYSICIAN IN CHARGE OF ARTHRITIS DIVISION, UNIVERSITY HOSPITAL AT ANN ARBOR; FORMER DIRECTOR, REGIONAL ARTHRITIS CONTROL PROGRAM, MICHIGAN; FORMER MEMBER, GENERAL MEDICINE STUDY SECTION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, AND NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES TRAINING COMMITTEE; FORMER NIAMDD TRAINEE AT KAROLINSKA HOSPITAL, STOCKHOLM; DIPLOMAT OF THE AMERICAN BOARD OF INTERNAL MEDICINE; FORMER FELLOW COMMONWEALTH FUND; MEMBER, AMERICAN COLLEGE OF PHYSICIANS (FELLOW), AMERICAN FEDERATION OF CLINICAL RESEARCH, AMERICAN RHEUMATISM ASSOCIATION (FORMER EXECUTIVE COMMITTEE MEMBER AND PRESIDENT), NATIONAL SOCIETY OF RHEUMATOLOGISTS

Mr. Chairman and members of the committee: By way of introduction, I am Ivan F. Duff, professor of internal medicine at the University of Michigan Medical School.

From 1948 through 1969 I was physician in charge of the Rachman Arthritis Research Unit at the University of Michigan. I am also a former director of the Nation's pilot regional arthritis program. As a part trainee of the National Institute of Arthritis, Metabolism, and Digestive Diseases, I spent a year of research and study at the Karolinska Hospital in Stockholm, Sweden. I later served as a member of the NIAMDD arthritis training committee and the general medicine study section of the Department of Health, Education, and Welfare.

I hold membership in a number of professional medical associations including the National Society of Rheumatologists and the American Federation of Clinical Research. I am also a diplomat of the American Board of Internal Medicine, a Fellow of the American College of Physicians, and past second vice president of the American Rheumatism Association. I am also president-elect of the Michigan chapter of the Arthritis Foundation.

I am pleased to appear before you today to speak on the question of fiscal year 1974 budget for the National Institute of Arthritis, Metabolism, and Digestive Diseases (NIAMDD), one of 10 research components of the National Institutes of Health, and, more specifically to present to you the views of the American Rheumatism Association on this subject.

I speak for the association, which represents over 2,200 physicians and surgeons with primary research, teaching and clinical responsibilities in the rheumatic diseases, to bring to your attention some of the current problems arising out of the administration's decision to reduce the research and training budget of NIAMDD by over $14 million from the fiscal year 1972 level for fiscal year 1973, and to propose a further reduction of the Institute's budget in fiscal year 1974 to where there would be $20 million less than the fiscal year 1972 budget provided, or $133 million for fiscal year 1974, as contrasted to $153.3 million for fiscal year 1972.

These reductions in program support are more than merely decreases, Mr. Chairman, for, as you know, in the case of the research training grants and fellowship programs, they represent the beginning of the end of those programs, a phasing out which would be completed, if the administration is allowed to implement this unilateral course of action, within the next 3 years.

The American Rheumatism Association has protested these actions, as has the national voluntary health agency of which the association is one of two professional medical sections, the Arthritis Foundation, but to no avail. We now petition this committee, Mr. Chairman, to redress this grievance, for you in your wisdom have seen fit in the past to provide funds for these programs, and we trust that you are as indignant as we are that these actions have been taken without any consultations with those bodies of Congress which legislate the laws for appropriations and which spend considerable time seeking what they believe to be justifiable levels of support.

Although few Americans would deny that medical research is a prerequisite for the Nation's well being, or that the support of this research should continue to be shaped by the public and private sectors, private philanthropy cannot be expected to constantly pick up previously federally funded programs because of a growing and alarming lack of social commitment by this administration. Secretary Weinberger himself has said in a March 1 statement made before the House Subcom-

mittee on Public Health and Environment "there is a valid Federal interest in supporting health and medical research," yet because of a decision to create two special research areas in NIH, namely in cancer and heart disease, the other disease-related research areas must apparently suffer. We fail to see the logic in this, Mr. Chairman, and we protest this unevenhanded treatment of the research community. This lack of continuity in Federal funding of important medical research areas such as the rheumatic diseases which affect over 20 million people is severely damaging to the long term needs of research which are (1) to bring together a skilled team of researchers to work on various facets of a clearly defined problem and (2) to maintain this team and, if need be, to enlarge upon the nucleus in order to attain the research goal as soon as possible. Every break in continuity of research funding breaks up teams which may have functioned together for 15 or more years. This loss apparently goes completely unrecognized by this administration. Although the concept of serendipity in research is thoroughly accepted, we would hope that the funding of research may be left less to chance and more to necessity.

In your due consideration of this year's request for funding of medical research, Mr. Chairman, the American Rheumatism Association hopes that you will take proper note of the constantly increasing economic costs to the Nation of chronic diseases such as arthritis which come under the aegis of the National Institute of Arthritis, Metabolism, and Digestive Diseases. Seven years ago, in 1966, when the cost of arthritis to the Nation was first calculated by the Public Health Service, it was found to be approximately $3.6 billion per year. This was based upon an arthritis population of slightly less than 13 million as reported in the 1963 health interview survey. Within the past few weeks, The Arthritis Foundation recalculated the economic costs of arthritis based upon new prevalency figures for this most common of all chronic diseases which indicated in 1969, again as the result of a health interview survey, that 20.3 million Americans are afflicted with the Nation's No. 1 crippling disease, arthritis. The latest economic costs of arthritis show that Social Security Disability Insurance paid to arthritis victims now totals $316.3 million a year as compared to $85 million in 1964, or an increase of over 370 percent in 8 years; that $132 million is now paid to arthritis victims under aid to the permanently and totally disabled as compared to $47 million in 1964, an increase of over 280 percent in 8 years; that workloss due to disability has risen from $2.3 billion per year to $4.5 billion; and that the total economic cost of arthritis is approaching $9 billion per year as contrasted to $3.6 billion in 1966.

NEW DIRECTIONS IN ARTHRITIS RESEARCH

In order to define those areas in arthritis research which would benefit most from special emphasis, The Arthritis Foundation recently named a National Advisory Committee on the future of arthritis research. Dr. Lewis Thomas, dean of Yale University's Medical School, and president-elect of Sloan-Kettering Cancer Institute, chaired the committee which included 10 rheumatologists selected for their outstanding contributions to specific research fields, and an orthopedic surgeon with primary research responsibilities.

I would like to briefly describe the five areas of research which the committee has recommended for increased emphasis and funding. A more complete version of the report is available for the record.

First, the identification of a possible viral agent as the cause of arthritis. Although rheumatoid arthritis had long been regarded as an infectious disease, the inability of researchers in the 1920's and 1930's to isolate bacteria as a causative factor in arthritis and the failure of antibiotic therapy to ameliorate the disease caused interest in the microbiological hypothesis to wane. However, recent findings relating chronic infections to rheumatoid factor, a blood substance believed to be specifically associated with rheumatoid arthritis, and a better understanding of the so-called "slow" viruses that appear to "hide" inside cells before emerging to create havoc, plus the discovery of animal diseases that resemble rheumatic diseases in humans and that are known to be associated with infectious agents, have once again created widespread interest in the investigation of infection as a major factor in arthritis.

If an infectious agent could be identified as the cause, or even a contributing cause of rheumatoid arthritis, it could result in one of the biggest payoffs in arthritis research, since it would hold out the possibility of a vaccine being developed to treat or ward off rheumatoid arthritis much like penicillin is now

used to treat the streptococcal infection that was discovered to result in rheumatic fever, a disease which until this infectious process was identified used to maim and kill thousands of young children every year.

Second, the discovery of the exact nature of the involvement of the body's immune system in rheumatoid arthritis. We are now fairly certain that a malfunction of the immune system is an important factor in the debilitating process in affected rheumatic joints. It is further believed that we are now within only a few years of clarifying this very important mechanism. Once we are able to do this, we can then interdict the systemic process and prevent further disability. Of course to do this, we would first need to have the patient's condition accurately diagnosed. This leads to another problem with which I will try to deal later, namely the inadequacy of trained personnel to properly diagnose arthritis conditions.

Third, inflammation. We are on the verge here of some very exciting discoveries. Very briefly they concern those areas of human functioning associated with inflammation, normally the first manifestation of an arthritic condition. The first area is the relationship between prostaglandius and cyclic AMP, a new "family of hormones" which appear to mediate tissue injury as well as to play an important role in inflammation itself. More knowledge about these hormones could lead to new improved forms of therapy for arthritis as an interim measure until we are able to fully understand the causative factors.

The second area of inflammation now being brought into close examination is the role of the corrosive enzymes responsible for destruction of joint cartilage.

The third area is an expanded investigation of inflammation in animal models and tissue culture systems in order to develop new modes of drug therapy.

At this point I would like to diverge for a moment, Mr. Chairman, to explore with you the world of drug therapy in arthritis. If I may, I will quote from the Thomas committee report as an introduction to my remarks.

"Today's therapy for the rheumatic diseases is significantly more powerful and in some respects more effective than that of a decade ago, but it continues to be only partially satisfactory."

And, if I may add, Mr. Chairman, one only has to look at the growing numbers of Americans crossing over the border to Mexico to avail themselves of quick "cures" for arthritis as one demonstration of our limited ability in drug therapy which often drives patients over the brink of frustration to despair and makes them eminently susceptible to the trading on the sufferings of humankind practiced by those who value people's lives less than the dollars they make from them. Arthritis quackery, which is now conservatively estimated to be a half-billion-dollar-a-year business, will continue to grow, Mr. Chairman, until this Nation decides to place adequate funds at the disposal of the researchers who are dedicated to end quackery by finding more effective forms of drug therapy.

How do we go about this very important aspect of arthritis research? One of the primary methodologies we employ is the cooperating clinics program of the Arthritis Foundation which involves 16 university-affiliated hospitals in various series of standardized clinical trials of promising new drugs. This program, now in the middle of its second decade, is in danger of being starved to death by an inadequate diet of funds brought about by the administration's refusal to recognize the efficacy of this committee's deliberations on NIH appropriations. We implore you, Mr. Chairman, to add sufficient new funds to the arthritis research activities of the Institute to make possible the expenditure of $500,000 for the cooperating clinics in fiscal year 1974. This would enable the clinic's program to begin an evaluation of new nonsteroidal anti-inflammatory compounds which could well produce a drug with similar or better effects as indomethacin but with greatly reduced toxicity, a major problem with most anti-inflammatory agents. The clinical testing of these compounds is extremely difficult because of the high degree of variability of rheumatoid arthritis and because of the sophistication required in statistical design and measurement of disease activity in order to determine the efficacy of these drugs. This means that 200 to 300 small drug trials will be needed over the next few years for initial screening of new drugs.

The cooperating clinics are capable of undertaking this enormous task. The question is, Mr. Chairman, Can we obtain the necessary commitment from Congress to do this work? Twenty million Americans are waiting for the answer.

Now, to return to the fourth and fifth research recommendations of the Thomas committee.

Fourth, in recognition of the important and laudable strides being made by our orthopedic colleagues in corrective surgery for disabled and deformed arthritics, the committee sugests broadening of joint replacement techniques to the point where the provision of new knees, shoulders, and elbows may be as normal and successful a procedure as total hip replacement is at present.

Fifth, and last, the committee urged that greater attention be given to epidemiologic studies of arthritis in order to try to obtain answers to such questions as: What characteristics distinguish rheumatoid arthritis patients from persons without arthritis? What is the reason for the remarkable female to male ratio of 5 to 1 in systemic lupus erythematosus and why are black women three times more susceptible to this disease than nonblacks? Why do two of every five Americans over 65 have moderate to severe osteoarthritis? And, conversely, why do three of every five persons over 65 escape this degenerative joint disease? These are only a few of the questions which we believe could and should be answered with greater funding of the epidemiology of arthritis.

These areas of research emphasis will only be translated into research activity when and if adequate funds are available to mount a significantly expanded research effort in arthritis, and such an effort can only be sustained, we believe, through general support of arthritis clinical research centers and laboratories currently engaged in biomedical research of which there are approximately 50 in existence at present.

It is estimated that minimal support of these centers would require a budget three to four times the present amount allocated to arthritis research by NIAMDD. We therefore intend to seek special legislation for this purpose rather than attempt to place such a request before this committee. The importance of the center concept in arthritis lies not merely in the facilitation of research, but as an integrated team facility for training and treatment as well.

These regional arthritis centers will provide two essential ingredients to arthritis control: (1) a thorough and expert diagnostic investigation, thereby facilitating early and accurate diagnosis, both of which are imperative if crippling is to be avoided or minimized; and (2) prompt application of proper therapy, regularly assessed and modulated to the individual needs of the patient who himself becomes a member of the interdisciplinary team, since his understanding of his disease and his willingness to scrupulously observe a rigidly controlled therapeutic regimen are necessary to obtain a successful course of treatment. These centers will only be able to function if a constant supply of quality teachers and researchers are available.

Manpower is certainly the scarcest and surely the most vital of the components presently needed. The availability of trained investigators, sophisticated in the fundamentals of biomedical sciences, is an essential catalyst for high quality medical care.

In past years, the role of the Arthritis Institute has been unique in the training of medical school teachers since it is responsible for more clinical specialties than any other Institute at NIH. More clinical specialty training is thus supported in the various departments of medicine in medical schools throughout the Nation. Teachers, of course, are a prerequisite to the production of physicians; and better qualified teachers, as produced by this program, are a prerequisite to the production of better qualified physicians.

These training programs are, indeed, vital to the force, movement and quality of American medical practice. It is a question, if you will, of critical mass. The research training programs assure, primarily, that we will have a sufficient number of independent researchers and teachers with the degree of experience, scientific sophistication, and competence that it necessary for the conduct of productive biomedical research and for the research training of others. However, although Institute training programs have been eminently successful in increasing the actual number of trained investigators in the various disciplines, this added manpower is fully absorbed as it is created and in reality, is inadequate to meet the current expanding requirements. In other words, we look to this Committee not only to reinstitute the training grants and fellowship programs at NIH, but to restore them to their 1969 level, which would require approximately a 35 percent increase over the 1972 level of funding.

As to the administration's proposed budget for the NIAMDD as well as with the needs of its programs, my colleagues and I feel that it not only fails to provide sufficient funds to insure adequate progress in the ongoing health research effort of this Institute, but that it is insufficient to maintain its present momentum

and level of research. I commend to your serious consideration the "Citizen's Budget," which my colleague, Dr. Cahill, has introduced with his testimony. It represents a reasonable picture of the needs of this Institute and of the disease areas which it serves.

In conclusion I wish to thank you, Mr. Chairman and members of the committee, for permitting me to present these facts about the programs of the Institute which have a direct bearing on the successful execution of its mission.

Dr. DUFF. I am from Michigan and I have been involved in taking care of people with arthritis since 1948, since which time I have been a physician in charge of arthritis research and training in clinical investigation in the university.

Mr. PATTEN. Do you know Dr. Gray of New Jersey?

Dr. DUFF. No, sir.

Mr. PATTEN. Proceed.

Dr. DUFF. Yes, sir.

Today as spokesman for the American Rheumatism Association, I am speaking for about 2,200 physicians and surgeons with interests like mine, to express honest concern at the alarming reduction of NIAMDD research and training budget which in fiscal year 1973 was cue $14 million and the projected cut for fiscal year 1974 is $20 million less than the total available in 1972.

These reductions in program support, to us, Mr. Chairman, are more than mere decreases, where, as you know, I am sure, in the research and fellowship programs they represent the beginning of the end of phaseout of those programs within the next 3 years. In my own subspecialty we have conducted a survey that would indicate to us as a result of these actions, by 1976 we will lose support of 145 of the total of 201 very bright, carefully selected young men and women who are fellows in our specialties. That is 72 percent of our total.

That is accompanied by about a 54-percent decrease in research effort in this area, and 3 out of our 27 invaluable training and research units in rheumatology will be closed. In past years the role of NIAMDD has been unique in training medical school teachers, because that Institute is responsible for more clinical specialties than any of the other Institutes. More clinical specialty training has thus been supported there. Across the Nation teachers are prerequisite to the production of physicians and better qualified teachers as produced by these programs are essential to the force, to the movement, and to the quality of American medical practice. It is an astounding statistic, but in the last 10 years 80 percent of the professors of internal medicine in this country are the product of these training programs in the Institutes. Although the Institute programs have been eminently successful in increasing the number of trained investigators and teachers, they have not been able to keep up with the demands, and we are falling behind.

Now these programs are to be extinguished. We feel we must petition this committee to review the situation. In the past you have seen fit to provide funds for these programs. We have to look to you to reinstitute the training grants and fellowship programs at NIH, but also to restore them to their 1969 levels. That will require approximately a 35-percent increase over the 1972 level of funding.

Not long ago Secretary Weinberger indicated that the Federal Government did have an interest in supporting health and medical

research. Yet, because of the decision to strongly support two special research areas in NIH, namely, cancer and heart disease, other disease-oriented research areas, all of which are represented today by my colleagues, must apparently suffer.

Mr. Chairman, we fail to see the logic in this. This lack of continuity in Federal funding of important medical research areas such as rheumatic disease is sufficiently damaging. The long term needs of research are, one, to bring together a skilled team of investigators to work on a set of clearly defined problems; and two, maintain that team. If necessary, to enlarge upon the nucleus in order to achieve their goals as soon as possible. Every break in continuity of research funding fractures teams which have been functioning productively. This loss is appalling to us.

In your conideration of this year's request for funding of medical research, Mr. Chairman, we would like to specifically call your attention to the increasing economic costs to the Nation of disease of the joints and related structures. Seven years ago, based on an arthritis population of 13 million, the cost was estimated at $3.6 billion per year, but now, based on an estimated arthritis population of over 20 million Americans, the total economic cost is approaching $9 billion per year.

Social security disability payments alone to arthritis now total $316 million a year. That is an increase of 370 percent in 8 years.

I would like to briefly mention some directions of research. A prestigious committee recently was drawn up by a professional society chaired by Dr. Thomas, who is president elect of the Sloan Kettering Cancer Institute of New York City. It reviewed the areas in our field where research was especially indicated. They came up with recommendations for five areas that should have increased emphasis and funding. There is not time to go into this in its entirety but I do have a copy of what I think is an important research support and I would like to mention a few areas.

First of all, there is a good lead to infections as being a cause of arthritis. If we could define an infectious agent as a cause of rheumatoid arthritis and then go on to develop an effective antibiotic, this would be one of the biggest payoffs of all in arthritis research.

Secondly, there is evidence that the immune system in the body in arthritics is malfunctioning. We are certain within a few years of clarifying this important mechanism if we could modify this by some agent. Hopefully we could inhibit the progression of the disease and halt the disability.

No. 3 concerns the cause and the nature of inflammation, which is the hallmark of joint disease. Prostaglandins, a new family of hormones, have been found, among other things, to facilitate tissue injury, and they play a role in it; if it could be modified by a drug, perhaps this would represent an important new advance in management of inflammation and tissue injury. You know very well that although our treatment today for patients with arthritis is powerful, and cortisone is the prototype in the past, we are only partially successful in taking care of arthritics. As you also know, related to this is the fact that quackery in arthritis is now a half-billion-dollar business a year. This will continue to be so lucrative until this Nation decides——

Mr. PATTEN. I saw an ad that said for 50 cents you can buy something to cure cancer and arthritis.

Dr. DUFF. One of the appalling and shameful and alarming things is happening on the border in Arizona. The exodus of people across the border to get so-called cures in Mexico. Until this Nation decides to adequately fund researchers who are dedicated to finding more effective means of drug therapy, this situation will continue. This leads me to speak to you of another aspect of arthritis research. A primary methodology developed by our professional organization in cooperation with this Institute, we refer to it as the Cooperating Clinics Group, this consists of highly experienced persons in 16 affiliated hospital medical schools across the country who participate in highly effective standardized clinical trials of promising new drugs. This mechanism is now standing in great jeopardy. It is in danger of being starved to death because of inadequate diet of funds brought about by failure to accept the wisdom of this committee's deliberations on NIH appropriations in the past.

We implore you to add sufficient new funds to the arthritis research activities of the Institute that would make possible the expenditure of half a million dollars for the cooperating clinics in fiscal year 1974. This would enable them to begin evaluation of new nonsteroid anti-inflammatory compounds which could well include a drug with a similar or better effect than cortisone or other things which you have heard about, but with greatly reduced toxicity. That is the major problem with most of the agents available to us today. The clinical testing of these compounds is very difficult because there is a high degree of variability in the way in which arthritis presents itself and because of the level of sophistication that is required. This Cooperating Clinics Group is capable of undertaking what is really an enormous task. The question is, if we can obtain the necessary commitments from Congress to continue to do this work and literally millions of Americans are waiting for the answer.

A fourth recommendation of the Thomas report concerns the exciting, most laudable strides that have been made by our orthopedic surgeons in corrective surgery. It has now truly resulted in a golden era for the disabled and deformed arthritics. They express that there should be a broadening of the development and the evaluation of what is spoken of as joint replacement techniques, to the point where one day there could be provision of new knees, new elbows, new shoulders. This would be as successful and important a procedure as is total hip replacement right now.

Finally, they recommended there should be more attention paid to population surveys and epidemiological evaluations of arthritis to try and answer some very important questions. What is it that distinguishes a patient who has rheumatoid arthritis against one who does not? What is the reason for the very remarkable female-to-male ratio of five to one in one of our deadly arthritis diseases, systemic lupus dermatosis? Why do black women have three times more of this disease than nonblacks?

Why do every five Americans at my age and over have moderate atheroarthritis, and conversely, why do three of every five people escape without these systems?

These areas of recent emphasis, Mr. Chairman, will only be translated into research action when and if adequate funds are available to meet a significantly expanded research effort in arthritis, and such an effort can only be sustained, we believe, through general support of clinical research centers and laboratories that are now engaged in biomedical research, and there are about 50 of those in existence at this time.

We estimate that minimal support of these centers would require a budget three to four times the present amount allocated to research at NIAMDD.

Rather than attempt to place such a request before you now, we intend in the future to suggest special legislation for the development of regional arthritis demonstration and research centers.

I should like, as my colleagues have before me, Mr. Chairman, to conclude in this manner: The administration-proposed budget for NIAMDD fails to provide sufficient funds to insure adequate progress in the ongoing health research efforts of the Institute. It is insufficient to even maintain its present momentum and level of research. I commend to your serious consideration the budget which Dr. Cahill, who preceded me, has presented to you. It represents a reasonable picture of the needs of the Institute and the disease area it serves.

I want to thank you for permitting us to come today. I will be pleased to elaborate or answer questions.

Mr. PATTEN. I just wish every Member of Congress had heard your voice. I hope they will get the time to read your statement as well as the other statements.

Thank you very much.

FRIDAY, MAY 11, 1973.

CHILD HEALTH AND HUMAN DEVELOPMENT

WITNESSES

DR. HARRY H. GORDON, RESEARCH PROFESSOR OF OBSTETRICS ALBERT EINSTEIN COLLEGE OF MEDICINE, YESHIVA UNIVERSITY

DR. KENNETH RYAN, PROFESSOR AND CHAIRMAN, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, HARVARD MEDICAL SCHOOL

Mr. SMITH. The hearing will come to order.

Our first witness this morning will be Dr. Harry H. Gordon.

Dr. Gordon, you have a statement to present?

Dr. GORDON. I do, Mr. Chairman.

Mr. SMITH. Please proceed.

Dr. GORDON. Mr. Chairman, members of the committee: My name is Dr. Harry H. Gordon. I am National Association for Retarded Children—professor of pediatrics and director emeritus of the Rose F. Kennedy Center for Research in Mental Retardation and Human Development of the Albert Einstein College of Medicine. I appear today to support research and research training which will help children who suffer from developmental disabilities—mental retardation, cerebral palsy, severe personality disorders, learning dis-

ability, malformations of the brain, heart, spine, arms, legs, kidneys—on behalf of them and their families, on behalf of those already born and those as yet unborn.

I have had almost 43 years experience as an institutional practitioner and teacher of pediatrics with longer stints of service at Yale, Cornell, University of Colorado, Johns Hopkins, Einstein, Walter Reed and Fitzsimmons Army Hospitals, and shorter stints as a visiting teacher in many other States including those represented in Congress by all the members of this subcommittee. Developmental handicaps (and they are the same, no matter in which of the 50 States one lives) prevent these children from becoming independent citizens who can live with dignity and not as burdens on their families and communities.

Pediatricians do what they can to help individual patients and their parents. The opportunities to help have improved dramatically during my professional lifetime; these great improvements have come as a result of clinical and laboratory research. As Members of Congress, you too have participated in these advances in health science and service by your support of the authorizations and appropriations for research and research training. It is you who established the National Institute of Child Health and Human Development, mandated to address itself to research in the problems of human development, be they those of a pregnant woman carrying an as yet unborn fetus, an infant born after only 6½ rather than 9 months in the uterus, a child who because he can't learn, fails in school and becomes the butt of his colleagues, an aging adult. In the same bill, passed in 1962, you recognized the importance of basic laboratory research to clinical research which would benefit the health of the citizenry by creating the National Institute of General Medical Sciences, dedicated also to a noncategorical approach to laboratory science and a broad-based training of medical scientists.

It has been my good fortune to taste firsthand the fruits of the wisdom of your support, while you have to be satisfied with "statistical compassion," an indirect satisfaction because you don't see the handicapped children whom you have helped and whom your constituents have to rear.

This help has come from clinical and laboratory research. Let me list some of the benefits of research that I have myself seen since I entered pediatrics in 1930. A vaccine against whooping cough has wholly prevented a disease which used to kill or main infants and children leaving some of them permanently brain damaged by encephalitis-inflammation of the brain—or cerebral hemorrhage, a condition you ordinarily associate with high blood pressure, arteriosclerosis and old age. Vaccines have wiped out or are wiping out tetanus, diphtheria, smallpox, poliomyelitis, measles and German measles, all diseases which can permanently cripple children. I have seen many children damaged in the uterus by the virus of German measles and left with mental retardation, cataracts, deafness and congenital heart disease, all as a result of the epidemic in 1964–65. That epidemic yielded 20,000 brain damaged, physically handicapped newborn infants, the cost of whose continuing care is estimated at $1 billion, a cost which takes no account of the suffering of babies and

their parents. The German measles vaccine, produced in the laboratory and tested by clinical research supported by congressional appropriations has guaranteed that this affliction need not occur again.

The discovery of new antibiotics in the laboratory and their trial by critical clinicians trained in scientific methodology with the support of Congress has permitted us to cure infections of premature infants which used to be complicated by meningitis and permanent brain damage. One of our current scourges is the bacterium known as H. Influenzae. It doesn't cause influenza but in young infants it does cause draining ears, obstruction of blood vessels inside the skull, and meningitis; the latter two are associated with permanent brain damage and mental retardation. Research supported by the National Institute of Child Health and Human Development both intra and extramurally will give us a vaccine to prevent this. As a practicing doctor, I won't have to walk away from infected infants and their parents able to help only marginally, the situation I used to meet not so long ago, when faced with infantile paralysis and measles encephalitis and the severe muscle spasms of tetanus, and phenylketonuria.

We have made great technologic advances in the care of prematurely born infants. We are saving two-pound babies because recent research has given us a greatly improved technology. We are able to feed infants of even a pound and a half through a plastic tube placed in a blood vessel in the navel; their total fluid requirements; that is, about 1 ounce—six teaspoons per pound for the whole of 24 hours. We have learned from research what this amount should be; and we're beginning to study the possibilities of giving protein as well as sugar solutions. We have an automatic pump which can deliver these miniscule amounts over the 24-hour period without clots in the system. To some we give bicarbonate of soda into the veins or artery of the navel to correct the acidosis they develop because of immature liver and kidney function. We have learned through research how to assist their breathing and how to monitor the amount of oxygen in their blood so that we don't blind them as we did 20 years ago when we knew we had to give oxygen to keep them alive but didn't know how much was safe. We didn't have monitoring competence using micromethods that we now have. All these improvements have come from laboratory research and clinical trial.

We are grateful for all that has been done but there are numerous unsolved problems. Some premature babies who survive are normal, others have minimal, moderate or even severe brain damage. Long-term research is required to measure this in relation to the nutrition of the mother, to modern nursery practices, to the level of jaundice, low blood sugar, acidosis.

We save their lives for better or worse; systems of bioethics do not give us much choice. But I wish research in reproductive physiology would tell us how to prevent prematurity. There is an increased incidence of prematurity in association with poverty and the prospects of developmental attrition are greater amongst premature infants born to lower then higher economic classes. But we don't know specifically to what in poverty we should address ourselves. There is considerable laboratory evidence in animals that maternal malnutrition affects the brain. There is epidemiologic evidence in humans that

malnutrition may be a critically harmful factor in poverty. Is it general malnutrition, or is there a specific deficiency like that of a vitamin or trace mineral? Is the deficiency important not only during the pregnancy but also dating back to childhood of the mother or the mother's mother? What is there in child rearing practices among the poor that causes developmental attrition with its resultant ultimate problem of poor progress in school, delinquent behavior, drug addiction and other forms of social maladaptation? Are familial infections with unknown viruses behind familial intellectual defects? Are there familial allergic factors that make the brains of some infants subject to damage, just as it turned out that what was known as icterus gravis with kernicterus—severe jaundice of the newborn with permanent brain damage, in everyday language—was an immune system disease—a disease of sensitization to inherited Rh antigen on the red blood cells of the baby. And what can we do to screen infants early for deficits in their perceptions and association of what they see with what they hear, deficits which will ultimately develop into learning difficulty, intellectual deficit, and behavior problems.

There is much, much, much to do and it is discouraging to find an administration climate which is inimical to health science and training. Research and training are the tooling up phase of the health industry. They improve the quality of what is to be purveyed and the quality of the purveyors. They are what is called R. & D. in industry. Of the total health expenditures of over $75 billion for fiscal 1970, barely $2 billion or 2.7 percent was expended for research. The percentage for research in child health is thought to be less than 1 percent of the cost of child health services. This percentage falls far below the 8 to 16 percent found in most forward looking industries or the 5 to 10 percent in the Department of Defense.

It is discouraging to find that the President's 1974 budget in the field of child health research is only $51 million. This is a decrease of $4.5 million or approximately 9 percent from the actual expenditures in fiscal 1972. It amounts to a decrease of almost 20 percent if we make a modest estimate of 5 percent annual inflation in salaries of personnel, costs of equipment, consumable supplies, animals, et cetera. It is a blindness to the real needs of our citizens.

Of equally great concern is the phasing out of the research training programs. Testifying in December 1969 and June 1970 before Senator Magnuson's committee I made the point that NICHD training programs and fellowships permitted us to attract to the field of mental retardation, reproductive physiology, perinatal biology, child health research bright young people who were willing to be trained for research and academic careers instead of more lucrative careers in medical practice or industry. I reiterate to you that bright young people are our seed corn; they are the ones in whose minds may lie the great clues for advances in current and future generations on behalf of current and future generations.

I am dismayed to read as an official statement "The continuation of a special program of Federal funding to train researchers in the biomedical sciences cannot be justified." This is ridiculous, I have read the Brookings Institute report by Schultze and his coworkers on setting national priorities in the Federal budget. I appreciate the

limitations within which you must labor. To sacrifice the future productivity of bright young minds in areas of national scourges that affect millions of citizens is false economy. It implies a type of cost benefit analysis within the national budget that is blind to the benefits for our citizens of improved health as compared with the benefits of more highways or bombing practice over Cambodia. It is completely blind to the loss that takes place when we tell a promising young medical or science student to go into private medical practice or industrial research.

Three of our twelve mental retardation research centers have recently suffered serious losses through the premature deaths of productive, inspiring scientists—a pediatrician-geneticist at UCLA from a brain tumor, a pediatrician-biochemist at the University of Wisconsin from a postoperative complication, a psychologist—epidemiologist at Albert Einstein from a massive coronary thrombosis. All three were brilliant and dedicated to helping mentally retarded children and their families through research. Hope for their replacement lies with finding bright young men or women attracted to the field through training and fellowship opportunities and prospects of research support. The suggestion that we train them as part of our research grants means reversion to a system in which promising young people were hired as extra pairs of hands in a research project without regard to the training demanded by modern scientific advances, training that would permit them to stand on our shoulders and bring their own imaginative approaches to the huge problems that confront us.

Many important young members of our faculties, have been the recipients of the benefits of the fellowship and training programs. Instead of departing for full-time private medical practice, true, socially useful, lucrative careers, they have remained in the medical schools and universities as less financially rewarded members of faculties. They teach our new doctors to be critical clinicians, able to distinguish what is good from what is new, what is a drug of proven value and what a drug of only advertised value, trained not to delude the parents of retarded children with false claims about hormonal or megavitamin treatment. At the Rose F. Kennedy Center, one of the 12 centers for research in mental retardation created by Public Law 88–164, which you passed in 1963, 27 of 29 principal investigators, 93 percent, were given their opportunities to enter research careers through your fellowship support. We would have no vibrant productive center publishing 200 scientific papers last year without the past congressional support of the fellowship and training programs. I'm sure similar data could be gathered from the 11 other centers, and from medical schools throughout the country.

I urge you, therefore, within the national budget and the statutory ceiling on expenditures to give very high priority to health science research on behalf of children, and within the NICHD budget to restore funds for fellowships and research training.

There is an old saying about children, "Consider them not as your children, but as your builders." Our children are one of the greatest natural resources, some say the greatest natural resource determining the future of our great country. I thank you for permitting me as a

citizen to participate on their behalf in the deliberations of your committee.

Mr. SMITH. Do you feel encouraged in your ability to make further progress in this preventive work?

Dr. GORDON. Yes. We have a long way to go but we are making progress. I have been in the business for 43 years. There are certain conditions we don't see any more from which I started to walk away frustrated in the early years. I started to practice before they had antibiotics.

I go to a premature nursery now and we save 2½- and 2-pound babies who used to die or be otherwise severely damaged. I don't mean we cannot improve our treatment, but we are doing big things now. There are big things still to do, particularly in helping with the learning and early diagnosis, and to help with prevention of these diseases.

Mr. SMITH. Taking into consideration the broader view of the balance of nature, is the percentage of these kinds of babies who are saved and who are able to be productive and healthy substantial?

Dr. GORDON. We are getting an increased productivity out of training programs for retarded young adults.

Mr. SMITH. Talking about those whom you save at 2½ pounds?

Dr. GORDON. Yes. We think that more of them will be productive. Before, some would die and some would be severely damaged. We are saving some. Those we are saving will be left damaged.

Mr. SMITH. What I refer to is this: There are those who say we are tinkering too much with the balance of nature when we try to save those who ordinarily would not have been saved. My question is this: After we save them, do they become productive?

Dr. GORDON. Some do and some don't. It is an ethical problem you raise.

Mr. SMITH. That is right, it is.

Dr. GORDON. I think from the standpoint of all of us——

Mr. SMITH. Everybody naturally wants to save every life possible. However, we have those who say you tinker too much.

Dr. GORDON. I would like to have them come to the nursery with me and pick who they won't save. But they won't do it.

Mr. SMITH. That is not the question. That is difficult for everybody. The question is this—Having saved those children, do a large percentage become productive and normal citizens?

Dr. GORDON. Yes. The figure on the small babies, those under 2 pounds, the figure used to be a bad one. It was that some 15 percent would come out with average intelligence. There are figures now which say 50 percent. The 50-percent figures have to be established. They are not yet proven because these methods we are talking about have come about within the last few years. The time to judge them is not what they show at 1 or 2 years but how they behave after 6 years, after they go to school. I have to tell you we have a 50-percent figure now, but it is a soft figure.

Mr. SMITH. Thank you, Doctor.

STATEMENT OF DR. KENNETH RYAN

Mr. SMITH. We next have Dr. Kenneth Ryan.

Dr. Ryan, I see you have a statement.

Dr. RYAN. Yes, I do. I am speaking as a private citizen but I have identified myself on the statement.

Mr. SMITH. Proceed.

Dr. RYAN. The discipline of obstetrics and gynecology shares a common concern with the National Institute of Child Health and Human Development in the levels and character of research and training which bear directly upon the quantity and quality of human life. At a time when we're concerned with possible gasoline rationing and the deterioration of our rural environment and urban centers, it shouldn't be necessary to reinvoke the Malthusian prophecy to goad us into an awarness for the need to be concerned about population growth. As if this isn't enough, the individual family that has an unwanted pregnancy creates in a microcosm a population problem for the mother and prospective child that the Federal population research programs were supposedly addressed to. Tied inextricably to this is the implied assurance that maternal and child health can be safeguarded and that optional human development can be achieved. All these are concerns of the National Institute of Child Health and Human Development programs.

In the report by the Secretary of Health, Education, and Welfare of a 5-year plan for population research programs submitted in October 1971 to a Senate special subcommittee on human resources, it was projected that in fiscal year 1974 population research budgets should total $130–$190 million of which a major portion could only be provided via the National Institutes of Health programs. Part of this is funded by State and local money. The projected 1974 budget of $39 million is approximately half of that estimate. The 1973 budget was 25 percent below projected needs of that report and only one of every three approved research grants could be funded the past year. In 1974 only one of every five approved research grants will be funded with the money allotted and inflation will decrease the effectiveness of each research dollar.

If anything, the need for additional research in population problems is heightened with each new disclosure of the inadequacy of present methods such as the risk of stroke from the pill.

An area of contraceptive technology which is evolving at a very slow pace is that concerned with the male where the dissociation of endocrine well-being from procreative ability (spermatogenesis) should be possible.

The actual reduction in population research budget from 1973 to 1974 and the hidden losses imposed by inflation seem strange indeed in view of the oft-stated commitment of the President to provide safe, effective family planning services to all of our citizens. I would urge you to consider whether the projected budget is indeed adequate in this area. I suggest it is not.

Approximately 10 percent of our population is over 65 and it is expected that the number will double to 40 million in the next 50 years. It is inconceivable that with all the concern about the safety and efficacy of estrogen therapy to postmenopausal women to pre-

vent heart disease and osteoporosis that there exists no prospective study of aging in women. Approximately 25 percent of women over 60 have spinal compression fractures and the risk of hip fracture is 20 percent by age 90. One sixth of all hip fractures die within 3 months of the injury (Heaney). In spite of this we don't have enough information to predict whether use of hormones in postmenopausal women can prevent this.

The value of estrogen in prevention of coronary artery disease in women or men is still the subject of controversy, and in one study (Coronary Drug Project, Journal of American Medical Association 214:1303, 1970) a high dose of estrogen resulted in an excessive incidence of myocardial infraction rather than protection.

I urge you to consider whether the amounts allocated in the projected budgets for aging research are adequate.

Support for training research scientists is being phased out in current projections. The statement has been made that there is no shortage of skilled scientists and research personnel and also that there is no justification for providing training subsidies for students in only one broad field of study. On the other hand, national interest has always dictated such subsidies in the areas of greatest need such as in agriculture with farm subsidies and in the energy field with oil depletion allowances. I would submit that a human resource is equally if not more important, especially in the health field.

The students who pursue courses of study in the health sciences have to spend long years in preparation and do not command the potential for large salaries often cited.

It would be a grave error to allow our substantial scientific manpower pool to dwindle—a manpower group that has brought enormous credit to this country and a Nobel laureate practically every year. I urge you to consider whether the present course of phasing out training programs should continue.

As the entire health care field becomes a larger and larger portion of our gross national product, one should seriously consider allocating an appropriate percentage of Federal expenditures in this area—an expenditure which must also include the effects of inflation. There is a rising expectation that technology in the health sciences and health care will improve and that it will be available to all. This can be achieved only by a realistic commitment to health research and training. Two areas of health services that affect every citizen include family planning methods and the warding off of the degenerative processes associated with aging. The administration of agents such as contraceptive pills for family planning and hormones for aging to a wide segment of our otherwise normal and healthy population imposes a responsibility not only on the medical profession but on society as a whole to support the research and training necessary to insure the safeguarding of the public welfare.

I see no hope for that safeguarding except through action of Congress. It will require a lot of resolve on the part of Congress to get the appropriate remedies.

Mr. SMITH. You spoke of hormones and the various risks involved. You also spoke of the pill and its risks. That brings to my mind this question: Is there sufficient information for the users of these various products concerning the side effects and possible risks?

Dr. RYAN. I am sure you are aware of the Nelson committee hearings highlighting that and the strong action of the FDA to get suitable package inserts for this. It is an obligation of physicians to inform their patients of the risks.

Mr. SMITH. We have outlawed DES. I am not saying we should not have, but it was brought out in the hearings in another committee that the residue of DES in 75,000 pounds of liver is the same as it is in one pill. You have different standards for FDA than for Agriculture.

Dr. RYAN. I understand.

Mr. SMITH. One or the other must be wrong. I don't know which one.

Dr. RYAN. You cannot get the answers from that without a tremendous amount of work. That is a very good example that it is a danger of cancer in young women whose mothers received this medication. This is a good example of 20 years involved from the time they started using these drugs until harm was shown. We are subjecting citizens of this country to the use of these agents with insufficient information which should be obtained by further research. We have to weigh benefits against risks in all of these. We would like to reduce the risk.

Mr. SMITH. Should the use of the product be delayed until the research has been completed?

Dr. RYAN. You know what happened after the Nelson hearing in terms of people who went off the pill and then faced with——

Mr. SMITH. I am not sure.

Dr. RYAN. Every time this is brought up in the newspapers you frighten the public, confuse people who are not sufficiently informed. They then withdraw. You have unwanted pregnancies and the risk of the unwanted pregnancy which is far greater than the risk of the agent they were scared away from in the first place. It is that kind of vicious cycle we are involved in in trying to inform people and not frighten them and yet protect them. It is not a simple matter.

Mr. SMITH. Thank you, Dr. Ryan.

FRIDAY, MAY 11, 1973.

NEI RESEARCH AND TRAINING

WITNESSES

DR. DAVID SHOCH, CHAIRMAN, DEPARTMENT OF OPHTHALMOLOGY, NORTHWESTERN UNIVERSITY MEDICAL SCHOOL
DR. JAY M. ENOCH, DEPARTMENT OF OPHTHALMOLOGY, WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

Mr. SMITH. We have next Dr. David Shoch.

I see you have a statement, Dr. Shoch.

Dr. SHOCH. The statement has been submitted and I would like to read excerpts and some of the highlights.

Mr. SMITH. Please proceed.

Dr. SHOCH. Mr. Chairman and gentlemen: I am Dr. David Shoch, professor and chairman of the department of opthalmology at Northwestern University in Chicago, Ill. I am also president of the Association of University Professors of Ophthalmology, an organization of department chiefs of ophthalmology of all the medical schools in the United States. The members of this organization are largely responsible for the teaching of ophthalmology to medical students, the training of residents in ophthalmology, and the supervision of research and the training of research workers in this field. I am also the secretary for instruction of the American Academy of Ophthalmology and Otolaryngology, an organization of some 5,000 ophthalmologists, and as such am responsible for the organization of about 200 continuing education courses for the practicing ophthalmologist. I mention this to indicate that my interests are not only academic but that I am also concerned with the upgrading of the clinical activities of practitioners so that our citizens may receive the best possible eye care, for this after all is the overriding concern of that portion of the Government concerned with health care.

The very high level of eye care in this country attests to the wisdom of the programs that have been supported by the Federal Government in recent years and most particularly the establishment of the National Eye Institute. To use my own university as an example, in 1966 I was appointed as the first full-time salaried chief of ophthalmology in the history of the school. The funds to support me came from a Federal Government grant and with further support I have been able to double the number of our resident trainees from 6 to 12. Similar experience in other universities has accounted for the marked increase in the number of research and practicing ophthalmologists in this country, an end plainly advantageous to our citizens.

Further, we have been able to add full-time staff in special fields such as neuro-ophthalmology, ocular pathology, and pediatric ophthalmology and all of these young men received their specialized training under special NIH fellowships. This, in turn, has resulted in a vast increase in our research output. For example, again on a special grant from NIH, one of these young men is about to publish the first atlas of neuro-ophthalmic pathology which will be of great value to students in this field.

To turn to other areas of research, we are now vitally interested in the blindness that results from longstanding diabetes, called diabetic retinopathy. This has now become the No. 1 blinding disease in the United States. Preliminary research activities at our institution indicate that an unusual clotting of an element in the blood called platelets may be responsible for the retinal blood vessel disease in these patients. This terrible human and economic crippling disease is being investigated along other lines at many other institutions and it is clear to those of us in the field that the support of research activities in this area will shortly result in a major breakthrough. The major portion of these programs is supported by NEI grants and a cutback in funds will unquestionably delay the much desired resolution of this problem.

This example is duplicated in every other area of blinding diseases. Almost entirely through NEI support, new techniques and procedures have been developed that make the treatment of a second widespread,

blinding disease, cataracts, almost always successful. With new materials and freezing and aspiration techniques, the disability following cataract surgery has been reduced to days rather than weeks, an economic saving of great magnitude, to say nothing of the relief of a distressing period of convalescence to the patient. Similarly in the area of retinal diseases, new surgical techniques, again developed under the auspices of NEI, have permitted the repair of badly torn retinas that were until recently considered unrepairable. In the same vein it has been shown that patients with retinal destruction due to sickle-cell anemia may be helped by the use of lasers, again a development that has been financed largely through NEI grants. Finally, I would like to mention the other great eye crippler, glaucoma, in most cases an insidious disease without any overt symptoms, that causes a painless gradual loss of vision. The development of new diagnostic techniques and more importantly the development of new drugs have allowed us to find and control this disease in many patients. Just in the last year there have been reports of NEI supported research that indicates that some of the damage to the optic nerve may even be reversible with the use of an old drug called phenylhydantoin.

To this point I have illustrated the progress that has been made in the diagnosis and treatment of a variety of blinding diseases, but I must emphasize that we still know very little about the fundamental causes of these diseases on which true progress depends. For example, why indeed do people develop cataracts, why do some retinas tear, what is the relationship of the blood supply of the optic nerve to the increase in intraocular pressure that characterizes glaucoma and finally what is the biochemical defect in diabetes that predisposes retinal blood vessels above all others to death and destruction. The answers to these questions and dozens of others can only come through the support of fundamental, basic research in ophthalmology. This must go hand-in-hand with clinical research if we are to make any progress in our unending fight against blindness. To continue this research effort the ophthalmologic community and the country need competent research workers and support of research activities.

To elaborate this point, it is an unfortunate fact that 8 out of every 10 cases of blindness are the result of diseases whose causes are still unknown to science. Early detection, diagnosis and treatment can save the sight of many people, but ultimate answers can be found only through scientific research, and it is a further fact that no substantial reduction in incidence can be anticipated in the absence of an adequately financed research program to find and eliminate the causes of diseases which now account for 80 percent of all loss of vision.

Obviously economy in governmental expenditures is a desirable end but it seems to me that economy in the area of research and training in the blinding diseases is, to use an ophthalmologic term, short-sighted. Federal curtailment of funds for the support of eye research and training must be measured against the tremendous cost of blindness to this country. It is conservatively estimated that the expense of providing services to America's blind, coupled with the loss of personal income and Federal tax revenue, costs the Nation more than $2 billion a year. It is significant to note that more than 400,000 cataract operations are performed in this country every year at a cost in excess of $200,000,000, much of which is paid by medicare.

When testifying before this committee in 1965 regarding an exhaustive survey of ophthalmology sponsored by Research to Prevent Blindness, Inc., Dr. Thomas Duane advised that an annual Federal investment of $37.6 million was needed to get eye research and training on the move in this country. Eight years later, we have still not yet reached that level of support. Last year, Congress appropriated $43.2 million for the National Eye Institute, only to have the administration reduce the amount released to $33.7 million. Now, the President has requested even less than that. We are moving backward from what was needed as far back as 1965. The President's request is for $32.1 million, whereas the proposed citizens' budget, appended to my testimony, supports a need for $50.1 million for eye research and training in fiscal year 1974. Compare this relatively small figure to the cost of caring for the blind or, for that matter, to the expenditures for cataract surgery performed in this country each year. The potential economic impact of preventing blindness through medical research is apparent.

This brings me to the point of my appearance here today. The great progress in the detection and care of blinding diseases, which I have pointed out above, has largely been made possible by the funding of special fellowships and of intra-mural and extra-mural research programs financed by the National Eye Institute. It should be evident to all of us that increased funding is needed to train and support the people who will do the necessary basic and clinical research. If we fail to recognize this need now, we will find ourselves 5 or 10 years hence without the academicians to staff our medical schools.

Rather than increased funding we find that support for the training of opthalmic research scientists in the President's budget for fiscal year 1974 is now being reduced by 37.6 percent from what the President himself requested last year. We recommend that the National Eye Institute appropriations be increased to the level of $824,000 for training and $934,000 for special research fellowships to bring the total amount appropriated for these vital activities to $4,674,000. It is my recommendation that an absolute minimum of $35,953,000 be appropriated to finance research in the Nation's medical schools and other scientific institutions. This sum includes a $15 million increase over the amount requested by the President for fiscal year 1974 and an appropriation of $12.6 million for grants that have been already approved by peer review committees but to date remain unfunded. It also includes an additional $2.4 million to finance new promising research projects.

In view of the numerous opportunities for clinical application of visual research findings, I strongly recommend that the amount appropriated for research and development contracts be increased from $2,122,000 to $3,122,000. The additional $1 million should be appropriated for targeted research in the areas of retinal diseases, which a recent professional medical survey indicated to be the opthalmological affliction most difficult to treat and the disease entity most in need of research.

At the same time, it is essential that the undermanned staff of the National Eye Institute be expanded, and that the orderly growth and development of the Institute's intra-mural research program and epidemiological studies be assured. The minimum amounts necessary

to finance these vital programs are included in the financial table to which I have previously referred.

To accomplish the needs desired by all Americans, that being the elimination of preventable blindness in this country, I respectfully urge that the budget of the National Eye Institute should not be reduced as recommended by the President, but that it should be increased to $50.1 million. In conclusion, may I express my gratitude to you, Mr. Chairman, and to the members of the committee for allowing me to appear today.

[Attachment follows:]

NATIONAL EYE INSTITUTE PROGRAM AND FINANCING

Program by activities	Fiscal year 1973 congressional appropriation	Fiscal year 1973 amount released by administration	Fiscal year 1974 President's budget request	Fiscal year 1974 citizens' proposal
1. Grants:				
(a) Research	$26,099,000	$22,433,000	$20,953,000	$35,953,000
(b) Fellowships	1,812,000	1,177,000	742,000	1,676,000
(c) Training	5,209,000	2,444,000	2,174,000	2,938,000
Total grants	33,150,000	26,054,000	23,869,000	40,627,000
2. Direct operations:				
(a) Laboratory and clinical research	3,797,000	3,547,000	3,874,000	3,874,000
(b) Research and development contracts	4,059,000	2,122,000	2,122,000	3,122,000
(c) Biometry, epidemiology, and field studies	467,000	467,000	485,000	485,000
(d) Research management and program services	1,774,000	1,607,000	1,742,000	1,992,000
Total direct operations	10,097,000	7,743,000	8,223,000	9,473,000
Total obligation	43,247,000	33,797,000	32,092,000	50,100,000

Mr. SMITH. You say blindness can be a result of diabetes?

Dr. SHOCH. Yes, and it has become the No. 1 blinding disease in the country today. Patient survival in the fight against diabetes does not protect from blindness. We control the chemical diabetes and other ravages of vascular disease, but we are not able to control the blood vessel disease of the eye which progresses relentlessly. This becomes a most serious problem.

There are some dozen programs supported by NEI funds to try to get some approach as to why this happens. We have made some preliminary strides in this and one of the factors that clots blood seems to have an increased clotability in diabetics. We think that is the approach. This work has been done with NEI support.

Mr. SMITH. I notice you are proposing the same figure as the next witness. Did you collaborate all the way from Chicago to St. Louis?

Dr. SHOCH. We go to a lot of meetings together. We represent various organizations. As a matter of fact, we did not prepare these. These were prepared for us by agencies interested in blindness prevention research. I wish I can say I sat down and did this but I didn't.

Mr. SMITH. Thank you, Doctor.

Mr. OBEY. Did I understand you to say that the blood vessel diseases of the eye in diabetics are progressive?

Dr. SHOCH. Yes.

Mr. OBEY. Do they inevitably deteriorate?

Dr. SHOCH. Not in every diabetic obviously. Generally, to give you an example, the Metropolitan Life Insurance Co. gave gold medals to

diabetics who went 25 years without eye disease. In all their history they gave out six or seven medals before they abandoned the program. Most people who are diabetic if they live long enough will develop some obstruction of the retinal blood vessel. They may not go on to blindness but they develop serious interferences with their ability to function normally.

Mr. SMITH. Thank you, Doctor.

STATEMENT OF DR. JAY M. ENOCH

Mr. SMITH. Next we have Dr. Jay M. Enoch.

Proceed, Doctor.

Dr. ENOCH. My name is Jay M. Enoch, Ph. D., and I am research professor of ophthalmology and psychology at Washington University School of Medicine in St. Louis. Today I speak as president of the Association for Research in Vision and Ophthalmology. This is an organization of about 1,700 laboratory and clinical scientists concerned with research on all aspects of vision and visual disability and blindness resulting from eye diseases. Many of our members derive support for their research from the National Institutes of Health, with a substantial portion of the funding coming from the National Eye Institute. We are, therefore, deeply concerned with trends indicated in the proposed 1974 budget relating to research grant, training grant, and postdoctoral award programs. We are troubled about the long-term effects of the planned cutbacks on our efforts to prevent blinding diseases and visual disabilities.

So concerned are we, that we appear for the first time before Congress to urge a careful review of the proposed allocations. The trustees of the Association for Research in Vision and Ophthalmology unanimously support this testimony.

As scientists, we are faced with a vast array of blinding and visually disabling diseases which are not yet understood. We have only a limited number of investigators working upon these many challenges. Our research funds have always been limited. Congress—and especially this committee—in recent years has recognized the inequity between the mammoth problems which we face in eye research and the limited funds applied to their solution. However, with these limited funds, visual scientists have sought to establish a potential for the prevention of blindness never before available to mankind. In fact this modest investment already has resulted in substantial human and monetary savings for our Nation.

Late in 1965, I was asked to set aside temporarily my research work in order to serve as executive secretary to a special task force, which was established by the then National Advisory Neurological Diseases and Blindness Council. This group, called the Subcommittee on Vision and Its Disorders, was charged to review the state of eye research and to recommend to the National Institute of Neurological Diseases and Blindness how to best develop the Institute's program in the field. It was my task to gather the critical information and to coordinate the efforts of this very talented and remarkable working group of concerned professionals. Our findings were disturbing. Briefly, we found:

1. There was no single individual in the administrative structure of

the National Institutes of Health trained in, or uniquely concerned with, eye problems.

2. There was really no planning mechanism for eye and vision research. The research program had marked gaps and imbalances.

3. The program in ocular epidemiology and biometrics was grossly undermanned.

4. Large gaps existed in the vision research training programs and hence in our research effort. There was no orderly scheme for meeting special eye training needs.

5. Research supportive functions, such as special library and translation services, the development of animal models (and breeding facilities for them), and establishment of standards were fragmentary at best.

6. Federal obligations for eye research did not reflect health needs; support was in fact slipping: eye research accounted for about one fifty-ninth of total federally supported medical research in fiscal year 1963; one sixty-second of all such research in fiscal year 1965. At the same time, 10 percent of hospital admissions were for eye problems, and the prevalence of eye diseases and blindness was increasing far faster than the population.

7. With the increasing prevalence of eye disease and blindness, costs to the Nation in terms of special care, treatment, training, support and welfare, disability allowances, tax remissions, earning loss, and rehabilitation programs were rising sharply. Yet, the investment in research was very small indeed compared to these enormous outlays.

It was obvious that something had to be done to organize, direct, and channel vision and eye research efforts. Similarly, it was clear that a national program was needed in order to attack the visual problems of our society. The subcommittee's detailed analyses and recommendations were submitted to the National Advisory Neurological Diseases and Blindness Council in 1967. As the result of these findings and other important efforts, Congress passed legislation creating the National Eye Institute in 1968.

It is now only a little more than 3 years since the National Eye Institute became an independent and functioning unit. These have been 3 critical years, for each year there has been a struggle to obtain a suitable budget. Has the Institute really been given an adequate opportunity to address the profound problems which led to the creation of this important administrative entity, to train the scientists, and to attack visual problems in some orderly manner? The answer to this question must be no. Dr. Kupfer and his able colleagues have tried to do this and are trying still. We, the vision research community, are trying to help them. Does the 1974 budget offer any prospect for improvement? Are the portents for 1975 any better? Again, the answer must be no. The proposed 1974 budget indicates cutbacks in support for National Eye Institute research grants of such magnitude that only 35 percent of peer review committee approved grants will be funded. This is devastating both in terms of short- and long-term effects on our attack on visual disorders. The work of unknown but competent young investigators has virtually no chance for support. The funding of many valuable long-range projects is being discontinued or severely curtailed. Does this resolve the pressing problems of

the growing numbers of the visually handicapped and the costs of their maintenance? Obviously, no. We are heading toward a health crisis that will be irreversible 5 or 10 years from now. We will be asking then why no one acted to avoid it in 1973.

The training of a single investigator represents a substantial investment in time, effort, and money. For a researcher to be really effective in the visual research field, he or she needs in-depth training in three areas: A basic area (for example, phyics, physiology, medicine, et cetera); in the eye/visual system and/or clinical eye care; and finally in his research area or technique(s) (for example, electrophysiology, electron microscopy, immunochemistry, psychophysics, genetics, et cetera). This means that the individual requires an orderly undergraduate, graduate and post-doctoral training program spanning a decade or more of collegiate studies. In the past 3 years, we have had scant opportunity to close our scientific gaps and to establish programs directly aimed at resolving eye research needs. The phasing out of training grants and postdoctoral fellowship programs will virtually eliminate any real chance to redress the deficiencies of the past or to build for the future.

There is an interdependence between training and research programs. When training programs are cut, research programs are also cut. A large percentage of the research in many university laboratories is conducted by graduate students and postdoctoral fellows. The teacher and student share and cooperate on problems. This is really the primary manner in which research skills are taught. The student learns techniques under guidance, while at the same time our knowledge is advanced through the results of such research. Student loans alone are not an adequate mechanism for supporting trainees; rather an overall balanced training program is indicated.

Visual disorders and blindness are increasing at a rate considerably faster than our population. Ironically, the cause is found in the success of medical science in sustaining life. At a recent seminar in ophthalmology conducted by Research to Prevent Blindness, Inc., one eminent participant called attention to the tragic gap that has arisen between the human life span and the human sight span. "The useful, vital days of man have been extended," he said. "Only the eyes have failed."

For example, diabetics once had a relatively short life expectancy; today, their life span has been greatly increased. Unfortunately, among persons with diabetes for 10 years, potentially blinding diabetic retinopathy is present in 50 percent of cases. Among those with diabetes for 15 years the figure rises to 75 percent, while for those having this disease for 25 years diabetic retinopathy is present in 95 percent of cases. Prevalence of diabetic blindness has risen at least fourfold in the last three decades.

As for cataracts, 60 percent of all people of age 60 have some cataractous changes, and virtually the entire population has some cataractous formation by the age of 80. At the same time, glaucoma is present in 2 percent of the population at age 40, and 10 percent of the population have this potentially blinding disease at the age of 65.

Similarly, we are facing increasing prevalence of congenital eye disorders of childhood because of the success of medical science in reducing infant mortality. Here there is the added dimension of a

lifelong commitment for special training, care, support, et cetera. Costs over a lifetime amount to more than $100,000 per visually disabled child. That figure does not take into consideration loss of potential income, taxes and the like. Nor does it consider the social and personal costs to the individual and society.

Is it any wonder that a Gallup Survey has shown that the people of this Nation fear blindness more than any other physical affliction with the single exception of cancer? It is of special interest to note that the same survey indicated that twice as many Americans fear blindness more than they fear heart disease.

It is only through a balanced program of basic and clinical science that we can attack the many visual problems falling within our ever-widening areas of concern. New targeted treatments and diagnostic techniques can be most effectively defined if there is an understanding of the structure, chemistry and unique response characteristics of the individual cells, tissues, and systems comprising the eye and visual pathways. Often animal models are used in an effort to facilitate understanding of human vision.

When one reviews recent NEI and NIH appropriations for research, and current trends one finds the following:

	NEI	NIH	
Fiscal year 1972	$37,132,000	$1,467,010,000	Appropriation.
Fiscal year 1973	33,797,000	1,483,311,000	Estimate, January 1973.
Fiscal year 1974	32,092,000	1,531,776,000	The President's budget.

This represents a clear downgrading of eye and vision research among the Nation's research priorities. This is clearly opposite to the intent of this committee in its backing of the Nation's eye research effort. Congress has legislated the establishment of a National Eye Institute, and you have legislated increases in the funding of the Institute until, in fiscal year 1973, the level of your authorization was $43.2 million. Yet, we find that almost $10 million of that amount was not forthcoming as a result of administration action. Now, we are further threatened by the still greater reductions incorporated in the administration's proposed National Eye Institute budget for fiscal year 1974. This will have a disastrous effect upon all that the Congress may have hoped for in the progress of eye research when it created the National Eye Institute.

Has the trend toward increasing prevalence of visual disorders been reversed? Have we had an opportunity to resolve the deficiencies in the eye research programs of the past? Have the real and intangible costs of blindness and visual disabilities somehow been dramatically reduced? Has public concern for blindness dissipated? The answer to each of these questions must be a resounding no! The real impact of the cutbacks in support are considerably greater than indicated by dollar comparisons because of erosion of the value of the dollar and inflationary pressures.

Which of our programs must we severely restrict or eliminate if the President's budget is adopted and the trend continues? Shall we reduce our efforts to solve the visual problems of the diabetic, or the patient with corneal dystrophy, or the glaucoma sufferer, or the person

being blinded by retinitis pigmentosa? Shall we overlook the child with a blinding disease? The combined effect of research grant support reduction and effective dismemberment of training programs is a devastating blow to the future of eye and vision care in this Nation. If we who conduct vision research were to sit by quietly in the face of this, we would not be meeting our ethical responsibilities as scientists and clinicians or our moral responsibilities as concerned citizens.

We feel that eye and vision research have special problems and require a concentrated effort and priority on the part of the public, Congress and the scientific community. Creation of an administrative National Eye Institute has not been sufficient to resolve the problems leading to its formation. We support the efforts of Dr. Kupfer and his staff. We feel the Institute needs financial help in order to correct the inequities of the past and to effectively attack the pressing problems of today generated by the increasing prevalence of visual disabilities. We of the visual research community stand ready to help the Institute carry out its mission by providing a balanced basic and clinical science attack on the problems giving rise to visual disability and blindness. We urge support of all grants approved by the study sections dealing with visual science. We strongly support both the extramural and the intramural research programs of the NEI. Both serve as vital national resources. We encourage the maintenance of present and the creation of new training grant and post-doctoral fellowship programs needed to sustain visual research and to close long standing gaps in our scientific programs. We encourage orderly planning for future visual health needs. In so stating, we feel that we reflect the very real concern of the public for visual disorders.

We support the Citizen's budget for the National Eye Institute which recommends a $50,100,000 budget for the National Eye Institute for the fiscal year 1974.

Thank you.

Mr. SMITH. Questions, gentlemen?

Mr. OBEY. You say you support the Citizens' Budget for the National Eye Institute. What do you mean by the Citizens' Budget?

Dr. ENOCH. This was contained in Dr. Shoch's formal testimony and it was prepared by Research to Prevent Blindness, Inc.

Mr. OBEY. On page 5 you state that "among persons with diabetes for 10 years, potentially diabetic retinopathy is present in 50 percent of the cases. What percentage would actually become blind? Do you know?

Dr. ENOCH. To the best of my knowledge at this time it would be somewhere between 6 and 7 percent of diabetics who would be blind.

Mr. OBEY. I am trying to understand the significance of these figures. You say it is present in 50 percent of the cases if they have diabetes for 10 years, 75 percent if they have had it for 15 years, and 95 percent if they have had it for 25 years. What I am trying to get at is, what would those corresponding figures be in terms of the numbers in each category who actually would become blind.

Dr. ENOCH. I honestly do not know that number. I can get that information if you wish.

Mr. OBEY. I would like it.

[The information requested follows:]

JUNE 7, 1973.

Hon. DANIEL J. FLOOD,
Chairman, House Labor/HEW Appropriations Subcommittee, Capitol Building, Washington, D.C.

DEAR MR. CHAIRMAN: During my testimony before your Labor/HEW Appropriations Subcommittee on May 11, 1973, I was asked to submit for the record data on the amount of present and prospective blindness from diabetic retinopathy.

The best data indicate that, in 1970, there were some 144,000 persons in the United States who had lost vision from diabetic retinopathy to the extent that they were economically impaired. That means they literally could not do the work they had been doing, or that a company health exam, or rule, or statute, prevented them from doing their work.

The data (an analysis by Paula Kanarek, M.S., "Diabetic Retinopathy and Blindness," Harvard School of Public Health, September 1971, later updated, based on "Diabetes Source Book," USPHS Publication No. 1168 and USPHS Bulletin, series B No. 21, series 10 No. 40 and No. 46) just cited can be projected to the year 2000 A.D. Calculated only on the basis of the increase in population expected by the year 2000, the number of persons economically impaired by diabetic retinopathy will be 207,000.

But the disease is increasing much faster than population is increasing. The accompanying May 8, 1973, letter from Arnall Patz, M.D., to Senator Richard S. Schweiker expresses what a practicing opthalmologist experiences these days with regard to this disease. Diabetic retinopathy patients, Dr. Patz says, are showing up with "alarming frequency." Dr. Patz is holder of a lifetime career investigator Seeing Eye award, is on the Johns Hopkins Medical School faculty as well as being a practicing physician, so is both highly esteemed and totally unbiased with regard to the flow of Federal research funds.

If the rate of increase of incidence of the disease experienced in recent years is projected to the year 2000, the number of persons economically impaired will be 533,400.

Since blindness is not a reportable disease entity under the laws of most jurisdictions in the United States, it is difficult to produce an unquestionable figure on the number of persons who are blinded as a result of diabetic retinopathy.

For instance, only 16 States are included in the registries of blind persons that the National Eye Institute has regularly tabulated in an effort to assay the incidence and prevalence of eye diseases. Surveys indicate that State registries pick up one-fourth to one-half of the actual number of blind. Projections from this data base indicate there are (1969–70) an estimated 14,000 cases of blindness from diabetic retinopathy. This particular projection, however, is based on conservative assumptions: (1) The registered blind are the base, and (2) no diabetic retinopathy contributing factors are tallied, only the cases where diabetic retinopathy appears without other causes of blindness, (3) "Blindness" means anyone with a field of vision that covers less than 20° (of the potential horizon) or anyone whose vision is worse than 20/200 with glasses; that is, anyone whose vision is so bad with glasses that he cannot see at 20 feet what persons with normal vision can see at 200 feet. Such people literally cannot see across the street, excepting blurs, lights, and shadows.

The National Eye Institute was created partly in response to vision researchers' realization that statistics on blindness were very deficient, as I indicated in my prepared testimony on the need for biometrics and epidemiology funding.

Since its founding in 1968, the National Eye Institute has established liaison with Government health statistics groups in an effort to see what could be done to get better data. The improved data are now beginning to flow but much more work needs to be done so that eye research can be rationally planned and money spent where needed the most.

At the present moment, I can say with complete confidence that every eye doctor in the country is totally aware of the anguishing increase in diabetic retinopathy. Part of the tragedy is that, through years of neglect, neither the Government nor anyone else has solid mathematical evidence embracing the

Nation's eye disease victims that tells us exactly where we stand. Dr. Patz's accompanying letter spells out what reasonable men think this ignorance is costing us.

Respectfully yours,

JAY M. ENOCH, Ph. D.

DIABETIC RETINOPATHY CENTER,
WILMER OPHTHALMOLOGICAL INSTITUTE,
THE JOHNS HOPKINS HOSPITAL,
Baltimore, Md., May 8, 1973.

Hon. RICHARD S. SCHWEIKER,
U.S. Senate Office Building,
Washington, D.C.

Re Appropriations for Diabetes Research.

DEAR SENATOR SCHWEIKER: The American public has been lulled into a sense of false security with the assumption that insulin, which, indeed, does control the abnormal sugar metabolism, has eliminated the serious aspects of diabetes. Nothing could be further from the true state of the medical facts today. Insulin has simply permitted these patients to live long enough to develop vascular complications of diabetes in the major organs throughout the body. These changes occur in the kidneys, the heart, brain, and in the eye. Taking the eye, for example, diabetic retinopathy, the blood vessel complication in the eye, has become the largest cause of new blindness in patients between the ages of 20 and 60. This represents the gainful occupational period with its socio-economic hardships combined with the emotional burden for the patient and his family.

In the Diabetic Retinopathy Center at The Johns Hopkins Hospital we are receiving new patients with diabetic retinopathy at an alarming increase in frequency. In questioning a series of new patients on a random basis, I was impressed with the significant number who have serious visual impairment, but who have in no way reported their visual handicap to either Internal Revenue for tax benefits or other agencies. I mention this finding because I am convinced that the present figure of approximately 60,000 citizens in the United States who are legally blind from diabetes is probably underestimated. With the annual cost of approximately $5,000 per year to maintain each diabetic blind individual, and assuming the rock bottom number of 60,000 legally blind from diabetes, we are faced with the staggering yearly cost of $300 million to support these citizens. The National Eye Institute of NIH is to be commended for its judicious use of the approximately $2 million available to it for research on diabetic retinopathy. But the 150 to 1 ratio of patient costs to amount spent on diabetic eye research by NIH is a sad commentary on the state of Federal support for a condition that has become the largest cause of new adult blindness in this country.

As a member of a 16-hospital National Cooperative Study on the problem of diabetic retinopathy, I can assure you that my experience at the Johns Hopkins Hospital is shared by the investigators at each of these institutions. Furthermore, I am aware that in many centers that are not participating in the study, the same situation exists. I recognize that other major diseases, such as heart disease, cancer, and sickle cell anemia, have been given special priority in recent appropriations. I fully agree that these important diseases should receive proper funding for medical research. Yet, when one looks closely at the causes of death from patients listed with heart disease or kidney disease as a primary cause, we see in a very significant number that diabetes was, indeed, the basic cause of their demise.

I urge your support of legislation for increased appropriations to support basic diabetic research, training of personnel, and improvement of facilities for patient care. I make this request as a physician responsible for the care of patients now afflicted with diabetic retinopathy, and on behalf of the 5 million known diabetics in the United States who are potential candidates for this serious complication of their disease.

Respectfully yours,

ARNALL PATZ, M.D., *Professor of Ophthalmology.*

Dr. ENOCH. At this time, simply stated, we know somewhere between 6 or 7 percent of diabetics are blind.

Mr. SMITH. Thank you, Doctor.

FRIDAY, MAY 11, 1973.

GENERAL MEDICAL SCIENCES

WITNESS

DR. G. THOMAS SHIRES, HEAD, SURGERY DEPARTMENT, UNIVERSITY OF TEXAS, SOUTHWESTERN MEDICAL SCHOOL AT DALLAS

Dr. SHIRES. Mr. Chairman, I would like to insert this formal statement into the record, with your permission. Rather than read the lengthy document, I will just confine myself to some brief comments about the general funding level.

Mr. SMITH. That would be fine. We will insert it in lieu of the remarks you will make.

[The statement follows:]

Mr. Chairman and members of the committee, I am George Thomas Shires, professor and chairman of the department of surgery at the University of Texas Southwestern Medical School at Dallas. I would like to thank you and the committee for the opportunity to appear before you and express my concern and feelings with respect to the current request for appropriations by the National Institute of General Medical Sciences of the National Institutes of Health.

I am especially familiar with the National Institute of General Medical Sciences. In this regard I have served as a consultant to the Surgeon General by serving on the Training Grants Committee of the National Institute of General Medical Sciences, as well as on its Program Projects Committee. I am currently serving on the Surgery Study Section of the National Institutes of Health and am consultant to the Surgeon General of the Army on trauma, and am a member of the National Research Council's Committee on Trauma. Further evidence of interest in the care of patients, particularly the injured patient, is evidenced by many scientific papers, dealing with trauma, at all levels, in my bibliography of over 99 publications in scientific journals and in two published books. In addition, I serve on the editorial board of four journals, including the Journal of Trauma and am currently one of the directors of the American Board of Surgery.

As the director of a department of surgery, in one of the large medical schools in the country and as chairman of the surgical services at Parkland Hospital in Dallas, one of the largest municipal hospitals in the Nation, I am intimately concerned with the daily care of a large number of patients. In addition, my responsibilities involve, in large part, the training and teaching of physicians to deliver health service. In order to make this a vibrant meaningful experience and to add to knowledge in delivery of health care, the department also is engaged extensively in research. This is particularly in research related to bodily injury in all aspects, including initial care, resuscitation, surgical correction of defects created by injury, and in addition, fundamental research including cellular biology to unravel the effects caused by bodily injury.

I should like to confine my remarks primarily to the important role of the National Institute of General Medical Sciences of the National Institutes of Health. It should be pointed out that this is one major component of the continuing national effort for the improvement of medical care. It should be reemphasized time and again that the Government of the United States, in establishing the National Institutes of Health, has created the greatest single agency for the advancement of scientific knowledge and improvement of medical care that the world has ever known. This agency that has worked so well in the advancement of the care of patients has been little publicized as such. The tremendous current interest in the better health care for the American people is nevertheless no small part a reflection of the interest in health which has been generated by the remarkable advances which have been made as a result of this superb implement for advancement of care. Indeed, most knowledgable physicians would readily agree that this important agency is a fundamental source for accomplishing improvement of health care in this nation. This has been equally apparent when visiting other nations of the world. The National Institutes of Health are the focal point of the world for scientific and health care innovations.

Before commenting on specific budgetary requests, I would like to review briefly the role of the National Institute of General Medical Sciences with some of its advances and interrelationships, and then comment specifically on two areas of major effort with which I have the greatest familiarity. With the support of Congress and with lifelong dedication by men such as Dr. James A. Shannon, former Director of the National Institutes of Health, and Dr. DeWitt Stetten, Jr., Director of the National Institute of General Medical Sciences, the National Institute of General Medical Sciences had developed as a noncategorical institute and rather a mission-oriented institute. This is unique amongst the institutes of the National Institutes of Health. This institute has had a dual role in supporting the most fundamental research in areas involving cellular structure and function, genetics, pharmacology and biomedical engineering. In a parallel fashion it has uniquely maintained an extraordinary balance by funding and supporting new advances in medical science and by transposition of advances into practical aspects of patient care. This has been done through its programs in anesthesiology, radiology, surgery, and automated clinical laboratories. Some brief examples of the application of basic and applied research supported by this institute might be cited. One, a result of support of scientists at the Oak Ridge National Laboratory, has been forthcoming during the past year. This is a chemical version of the fast chemical analyzer known as Gemsaec (named for General Medical Sciences in Atomic Energy Commission, italicizing the first letter in each of these six words). This chemical analyzer performs up to 600 tests an hour and not only does it perform more rapidly, but is more accurate, economical, and reliable than present manual methods. This remarkable microanalytical system uses data which are recorded photographically for storage and are so arranged that a computer makes instantaneous calculations of the data within minutes, providing the physician a print out of all valid laboratory information which will assist him in making a diagnosis and selecting therapy.

One other exciting development has been produced by Dr. Donald Glazer at the University of California in Berkeley in collaboration with San Francisco General Hospital. Dr. Glazer, a Nobel Prize winner 1960, is a physicist who has moved into the health related sciences. His current project has produced equipment in computer logic aimed at the rapid identification of microbial colonies cultured from bacteria obtained from patients. This research effort demonstrates the interrelations in microbiology, pathology, physics, and biomedical engineering, which exemplifies the program of support for basic medical sciences carried to full application in the patient care area.

In its parallel role of supporting clinically oriented studies several vital areas of new knowledge have emerged. In the area of pharmacology, studies have shown that a vitally important aspect of drug treatment is the great variability in the responses of identical doses of the same drug. Also influencing the ability of a drug to do its job is the involvment of interrelated cellular transport mechanisms. One good example of this has been the recent studies demonstrating the action of drugs used extensively in the treatment of high blood pressure in this country, can be completely blocked by certain other drugs which previously had thought to be depressant drugs. This apparently occurs because the identical cellular transport mechanisms are needed for both drugs in the transport system simply overloaded by any one of this group of drugs. Other examples might be recited including anesthesia and radiology. The relatively minimal support, less than $1,000,000 per year, has aided in the attraction and training skilled anesthesiologists with studies on the actions of anesthetic agents. This has rapidly led to improved care of patients. Similar accomplishments are being made in the field of diagnostic radiology, with particular interest on newer uses of radioactive isotopes, ultrasound in medical diagnosis, and development of new equipment in computer methods relative to X-ray diagnosis. Support for studies and care of the injured will be discussed below.

It is obvious that the interrelationship of these programs within the Institute are critical, rapid and lead to immediate advance in care of patients. The developments which have been seen in pharmacology and in radiology have immediate and practical applications to the care of patients in anesthesiology and surgery. Advances in biomedical engineering are already being used in areas such as the automated clinical laboratories as well as in the monitoring of the critically ill patient or the severely injured patient.

I would now like to discuss one of two areas about which I believe the greatest concern should be expressed. The first of these concerns the critical role of the training grants of the National Institutes of Health. With the recent increase

of interest, on the part of the public, in improvement of delivery of health care, it is incongruous that the decision has been made to eliminate training grants from the National Institutes of Health. In order to increase and improve the delivery of health care, there is little question that the additional training of personnel to deliver such health care is mandatory. In this regard, much pressure is being created to increase the output of graduates by medical schools of the United States. In order to do this, there must, of course, be an increase in the faculty and teaching capabilities of the medical school functions of the universities in the nation. In order to attract and train highly qualified teachers to increase the output of well trained and well qualified physicians, there must be an increase in the available resources of the academic communities. The primary resource of the academic communities, apart from the initial operating funds funded through the universities, is through the National Institutes of Health. In fact, more than 90 percent of the external funds reaching medical school facilities comes from the National Institutes of Health.

The enlargement of distinguished faculty of schools of medicine, in order to provide the additional training of physicians which is so necessary, is very dependent upon the continued support and increased support from the National Institutes of Health. If this Nation is really to increase the output of well trained and highly qualified physicians the faculties of medicine of the universities must continue to increase. The attraction of a physician to academic medicine is a multifaceted issue. The faculty member in the clinical disciplines who train physicians for delivery of care have basically three major interests which attract them to become teachers: (1) patient care (2) teaching (3) research to advance the ability to teach, and therefore, to improve the quality of care. The National Institute of General Medical Sciences, through its support of training programs, has been responsible recently for a new, enlarged, and highly qualified stream of graduate physicians entering careers in the health field, to become academic teachers. Without this support, the training of teachers would suffer seriously. It naturally follows that with a reduction in teachers will come a reduction in quality and availability of training for physicians in all disciplines. At the present time throughout this Nation there are vacancies in important faculty positions in nearly every medical school, proving that there already is a deficiency in available teachers to train physicians who will improve the number and quality of suppliers who are delivering health care. With the extensive proposed programs for expansion and enlargement of medical school productivity it would seem imperative that support in training programs and fellowships which produce the academic teachers and investigators of the future be continued. This support is, in fact, the very heart of the education program which ultimately produces the increased number, better distribution, and highest quality of physicians.

It is truly remarkable that in the training programs of the National Institute of General Medical Sciences, in 1967, 1968 and 1969, 98 percent of the trainees have entered responsible health career positions. They are faculty members in medical schools, dental schools and other professional health schools and are in community health programs of all types. A 98-percent success rate is truly a remarkable record and speaks well for the ability to select trainees to enter training programs who will, in fact, become the teachers, researchers and health care instructors of the future.

Lastly, I would like to remark on support in an area which has not only been an area of my primary interest but which I believe has been the most neglected in the development of medical research and delivery of health care; that is, the care of the injured patient. I am sure that the committee is aware that the current estimates in the United States alone include 10 million people who are annually disabled by trauma, with 500,000 sustaining some permanent disability, in addition to 100,000 deaths per year. Trauma has now become the Nation's fourth leading cause of death and in addition, claims more young lives than other leading causes of death, since it is the primary killer in the 1-to-35-years age group. A joint National Research Council—National Institute of Health report has called traumatic injury "a neglected epidemic of modern society and the Nation's most important environmental health problem". This is probably best recognized when one realizes that accident patients take up 22 million hospital hospital bed days a year, more than are needed to care for the delivery of all the babies in a given year; more than are needed by all the heart patients annually in the United States; and four times more than are needed by all cancer patients treated annually in the United States. Even during war time, casualties are much higher from accidents than from battle deaths. In World War

II, for example, U.S. battle deaths were 292,000. Accidental civilian deaths during the same period in the United States alone were 450,000.

The National Institute of General Medical Sciences is the only institute to have started a program in the support of research and care of the traumatized patient. At the present time there are many research projects and 11 trauma centers which have been established at a cost of less than $5 million per year. While these programs are virtually in their infancy, they are, in my view, showing clear cut evidence of success and warrant a justifiable expansion of the program. These are currently seven highly specialized trauma research units. Each of these units is unique and different in its approach to problems of the injured patient and the critically ill patient. Each center is devoted to delivery of the highest level of care to these patients at the same time that advancement of knowledge is being obtained by studies on such patients. This is also unique in that this is basic and applied research which is performed and result made available to help not only with the acquisition of new knowledge, but for the specific benefit of the delivery of care to the patient being studied.

Several approaches and several types of projects are underway in each of the seven units. In the unit at Columbia University Medical School in New York City, a multifaceted approach to the change in utilization of body stores of foodstuffs, carbohydrates, proteins and fat, is being investigated. It is already quite apparent that the utilization of body stores of energy is quite different in the injured patient, than it is, for example, in the patient who uses up body stores of fuel from starvation. This unit has already developed detailed techniques for the intensive care and better means of delivering nutrition to the injured patient, thereby hastening and improving the chances for his recovery. Another of the units in Philadelphia, is studying the problems of delivery of oxygen to tissues in the patient who has had multiple injuries and who may have infection or multiple blood transfusions. It is apparent that an enzyme in red blood cells is necessary in order for the blood to give up the oxygen which it obtains in the lungs. It appears that with injury, particularly with infection, that the production of this enzyme is deficient. Ways are now being developed to increase the supply of such a chemical. The unit in Albany, N.Y., has an extensive program investigating the bioengineering approach to careful monitoring in measurement of change in the patients who have sustained injury. Several of these techniques have already been developed to the point that they are being used in other units. Another of the units, in Baltimore, is carefully studying changes in the blood clotting mechanism which occurs in response to injury and to the necessary transfusions of whole blood. The trauma unit at Cincinnati General Hospital has already made substantial advances in the control of infection in the severly injured patient. A new agent, representing a change in the form of a bacteria, has been identified as responsible for deaths in patients who have sustained clotting abnormalities following injury or infection.

In our own unit, 10 specific projects are being pursued, some of which have already led to better therapy of the injured patient. One of these projects involves the direct measurement inside a single cell of changes in fluid and other body components, in response to shock and injury. These detailed techniques were developed by the unit and can be used to benefit the patient upon whom measurements are made. This allows the quantitation of replacement of vital fluids and foodstuffs so necessary for recovery in the injured patient. Another study has begun to elucidate the nature of bleeding from the stomach in the "stress ulcer" which so often causes the death of the patient who is otherwise recovering from his serious injuries. Another study has demonstrated the value of protecting the kidney during operations for critical injuries by cooling the kidney locally at the time of the operative procedure. This has virtually eliminated death from kidney failure, which so frequently occurred during the convalescence from otherwise treatable injuries. Other projects have helped greatly in the daily care of treatment of burn victims in elucidating at least four different effects of burn injury, which are now amenable to therapy.

In the field of trauma care and trauma research, we have already seen practical accomplishments from a modest investment into better research and delivery of health care in a specific illness which is a national environmental health problem. Since total support for the seven centers is in the range of two and one-half million dollars, this important and exciting new work warrants continued and expanded support. Furthermore, these centers have demonstrated quite clearly the immediate applicability and practical uses of basic developments in bioengineering, pharmacology, anesthesiology and as well in cellular structure and function. Some of these units, such as the one in Dallas, has

basic scientists actively working with the research projects in the unit. These include full-time biochemists and mathematicians.

In conclusion, then, I would like to offer a proposed citizens budget which I believe reflects the necessary support for the effort of the National Institutes of General Medical Sciences. You will notice that the President's budget for fiscal year 1974 recommends an alarming and potentially disastrous reduction in the budget of the National Institutes of General Medical Sciences. In previous years the National Institutes of General Medical Sciences had reached a level of $175,960,000 proposed by the President in 1973. The actual budget in fiscal year 1972 was $173,338,000. The current President's budget for fiscal year 1974 recommends a totally unjustifiable reduction to $138,573,000.

This huge reduction is not even accurately reflected in the total National Institutes of Health budget. The reason that it is not is that so much money has been transferred for the study of cancer and heart disease that much of the reduction in the Institutes of General Medical Sciences is a redistribution within the National Institutes of Health, as recommended by the President. It is difficult to understand in view of the data presented above how so much money can be transferred to study diseases which afflict only the aged, while depleting the study of diseases that afflict all age groups, with the majority being in the productive years of life.

I would, therefore, urge this committee to reorder the priorities and level of support for the National Institutes of General Medical Sciences.

NATIONAL INSTITUTES OF HEALTH CITIZENS' BUDGET FOR FISCAL YEAR 1974—NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

	Fisca' year 1973	1974 President's budget	1974 recommended
Research grants	[1] $81,512,000	[1] $72,729,000	$93,882,000
Pharmacology-toxicology research centers	5,593,000	4,781,000	5,600,000
Anesthesiology and diagnostic radiology centers	2,126,000	1,757,000	2,200,000
Genetic research centers	3,000,000	5,009,000	7,260,000
Trauma centers			2,000,000
Biomedical engineering centers			1,000,000
Subtotal, research grants	95,231,000	84,279,000	113,829,000
Fellowships	12,509,000	10,970,000	18,660,000
Training	33,000,000	31,903,000	52,946,000
Direct operations	10,847,000	11,421,000	13,000,000
Total	151,587,000	138,573,000	198,435,000

[1] Includes scientific evaluation.

CURRICULUM VITAE—GEORGE THOMAS SHIRES, M.D.

Born November 22, 1925, Waco, Tex.

Education: University of Texas, Austin, Tex., 1944; University of Texas Southwestern Medical School at Dallas—Dallas, Tex., M.D., 1948; internship—Massachusetts Memorial Hospital, Boston, Mass., 1948–49; assistant surgical resident, Parkland Memorial Hospital, Dallas, Tex., 1950–52; surgical resident, Parkland Memorial Hospital, Dallas, Tex., 1952–53.

Board certification: American Board of Surgery, 1956.

Academic positions: Life Insurance Medical Research Fellowship, the University of Texas Southwestern Medical School at Dallas, 1946–47; clinical instructor of surgery, the University of Texas Southwestern Medical School at Dallas, 1955–57; assistant professor of surgery, the University of Texas Southwestern Medical School at Dallas, 1957–60; associate professor of surgery and acting chairman of the department, the University of Texas Southwestern Medical School at Dallas, 1960–61; professor of surgery and chairman of the department, the University of Texas Southwestern Medical School at Dallas, 1961—present.

Hospital appointments: Parkland Memorial Hospital—surgeon-in-chief, surgical services; St. Paul Hospital—consultant surgeon; Methodist Hospital—consultant staff (surgery); Baylor University Medical Center—consultant (surgery); Children's Medical Center—consultant staff (surgery); Dallas Veterans'

Administration Hospital—senior consultant in surgery; Gaston Episcopal Hospital—consultant (staff surgery); Presbyterian Hospital of Dallas—medical staff; Tarrant County Hospital District—teaching consulting medical staff with privileges in surgery.

Other appointments: American Board of Surgery, 1968–74; chairman, American Board of Surgery, September 1, 1972–74; chairman, examination committee, 1971–72; member, examination committee, 1968–71; chairman, nominating committee for officers, 1971–72; member, liaison committee for the basic surgical examination, 1971–72; member, task force on continuing surgical assessment, 1972–74. American Board of Medical Specialties, representative of the American Board of Surgery, 1971–77; consultant to the surgeon general, National Institute of General Medical Sciences; consultant to the Surgeon General of the Army; member, Committee on Metabolism and Trauma; National Academy of Sciences, National Research Council; member, Committee on Trauma, 1964–71; Veterans' Administration; member, Research Program Evaluation Committee, reviewer of clinical investigation applications, VA career development program, 1972-present. National Institutes of Health: member, general medical research program—project committee; member, surgery A study section, July 1, 1970–June 30, 1974. Member, editorial board, the American Journal of Surgery; consultant, editorial board, the Journal of Trauma; consultant, Texas medicine; member, editorial board, Year Book Medical Publishers; member, editorial board, annals of surgery, 1972—present.

Professional societies and associations: Dallas County Medical Society; Dallas Heart Association; Dallas Society of General Surgeons, president-elect, February 1972–74; Dallas Southern Clinical Society: member, Council for Continuation of Medical Studies, 1964–69, 1971—present; vice chairman, Council for Continuation of Medical Studies, 1969–70; member, program committee, 1961–70; member, scientific exhibits, 1967–70; member, nominating committee, 1965–66; member, membership committee, 1960–61; member, Lanters and Screens Committee, 1959–60; Texas Medical Association; member, Committee on Medical Careers; Texas Surgical Society.

The American Association for the Surgery of Trauma; member, advisory membership committee 1964; American College of Surgeons: presented scudder oration at the 1972 clinical Congress; member, board of regents, 1971–74; member, Organization Liaison Committee, 1971–72; member, Communications Liaison Committee, 1971–72; member, Committee on Surgical Education in Medical School, 1967–70; member, Committee on Trauma, 1967–70, 1970–73; member, Subcommittee on Education, 1968—present; member, Committee for the Forum on Fundamental Surgical Problems, 1968–73; member, Pre- and Post-operative Care Committee, 1968—present; American Medical Association; American Surgical Association; Secretary, 1969—present; member, program committee, 1967–70; member, education committee, 1966–69; ex-officio member, executive committee, SOSSUS, 1971—present; member, Subcommittee on Research, 1971—present.

Digestive Disease Foundation, founder and member; Halsted Society; International Society for Burn Injuries; International Surgical Society; Pan-American Medical Association, Inc.; member, Council on Surgery, 1971—present; Pan-Pacific Surgical Association; Society of Clinical Surgery; the Society for Surgery of the Alimentary Tract, Inc.; Society of Surgical Chairmen: president, 1972–74; president-elect, 1970–72; secretary, 1968–70; member, Committee on Emergency Services, 1971—present; representatives to Council of Academic Societies, 1972—present; Society of University Surgeons: chairman, publications committee, 1969–71; member, publications committee, 1965–68; member, executive council, 1969–71; Southern Surgical Association; the Surgical Biology Club; Secretary, 1968–70; Western Surgical Association; Allen O. Whipple Surgical Society.

Personal: Married to Robbie Jo Martin, 1948: Children: Donna Jacquelyn, born 1950; George Thomas, Jr., born 1953; and Joe Allen, born 1955. Member, Wilshire Baptist Church, Dallas, Tex.

Fraternities: Alpha Omega Alpha; Alpha Pi Alpha; and Phi Beta Pi.

Military service: U.S. Navy, LT(jg) MC USNR, research investigator, Naval Medical Research Institute, Bethesda, Maryland, 1949–50; Associate Surgeon, LT. MC USNR, U.S. Naval Hospital Ship Haven, 1953–55.

Mr. SMITH. Dr. Shires, thank you very much for the submission.

FRIDAY, MAY 11, 1973.

RESEARCH GRANTS AND CENTERS

WITNESS

DR. LLOYD H. SMITH, JR., DEPARTMENT OF MEDICINE, SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA

Mr. SMITH. Dr. Lloyd Smith.

Dr. Smith, do you have a statement?

Dr. SMITH. Yes, Mr. Chairman. I would like to submit it for the record. It contains as an appendage my curriculum vitae and a suggested citizen's budget.

Mr. SMITH. We will insert this in the record at this point.

[The statement follows:]

I am Dr. Lloyd H. Smith, Jr., chairman of the department of medicine at the University of California, San Francisco. As a physician I have a continuing responsibility for the care of the sick in our teaching hospital. As a medical investigator I have been concerned with the study of patients with genetic, metabolic, and renal diseases over the past 25 years. It has also been my privilege to participate in many discussions concerning our national commitment to biomedical research—as a former president of the Western Society for Clinical Research and of the American Society for Clinical Investigation and more recently as a member of the President's Science Advisory Committee. I am speaking today, however, as a private individual, albeit one greatly distressed about the recent erosion in our commitment to the conquest of disease. That erosion is clearly evident in the budget of the National Institute of General Medical Sciences under discussion today. It is both a privilege and a responsibility, Mr. Chairman, to be allowed to recommend certain changes in that budget for the consideration of this subcommittee.

Although appearing here for the first time as a witness, I am well aware of the accumulated experience and sophistication in biomedical affairs of those Members of Congress who are represented on this subcommittee. As a background for my remarks I have also read the testimony of previous witnesses from the past several years, who have described in great detail the function of this Institute and its impact on medical research and therefore ultimately on health care. I would therefore like to confine my remarks to four specific areas: the regular research grant program; the training of young biomedical scientists; the special program to establish pharmacology-toxicology centers, and the special program for genetic research centers.

THE NIGMS RESEARCH GRANT PROGRAM

The greatest health care problem in the United States does not lie in the distribution of physicians and available medical technology or even in the astronomical cost of health care, grave as these problems are. It lies in the continued existence of major diseases about which we can do little. For many of our major diseases we can give only minimal comfort or minor alleviation of suffering, but we cannot prevent the disease, cure it, or even materially alter its progress. Our health care system is often unfair and unresponsive, particularly to the needs of those who need it most. Modification of our health care system is a top national priority, agreed to by most of the major segments of our society. But even if a perfect distribution system were now universally available, rheumatoid arthritis would continue to cripple, cancer and coronary heart disease prematurely to kill, schizophrenia to render insane, and drug addiction to destroy. The product itself, medical science and technology, is inadequate even if its distribution system were perfect. It would be shortsighted and foolish indeed to mortgage our future chances to conquer major diseases on the fallacy that such work is competitive with our immediate problems in health care.

Scientific research offers the only rational approach to finding answers to the diseases which cripple or kill us. Biomedical research is therefore a form of national defense. Granted that death is part of the biological cycle and some would consider that life itself is a fatal disease. Death from carcinoma of the breast

at age 35 or from myocardial infarction at age 45 need not be calmly accepted as being in the natural order of things. None of the major diseases which affect us are beyond the grasp of scientific elucidation and therefore of rational mechanisms of control.

Such a statement might have been considered irresponsible and visionary two decades ago. It would now be accepted by the majority of the biomedical research community. The last two decades have witnessed a remarkable growth in scientific biology and in its application to medicine. Why did this occur? It is always difficult to account with accuracy for intellectual trends, but certain factors can be identified. First of all, wartime success in the harnessing of science to meet certain national goals by Federal funding and management led to a willingness to pursue this model during times of peace. The successes in the development of nuclear devices were only the most spectacular of these approaches. There were also many advances in the separation and characterization of proteins, in the pharmacology of malaria control, in the study of the pathophysiology of shock and its treatment, and in the development and application of penicillin. Our Government, as had many others, long assumed a responsibility for public health in the aggregate, sometimes crudely characterized as "Sewers and Statistics." The realization slowly developed that the Government might also have a stake in the private health of the individual and, therefore, in the conquest of the diseases which threaten him.

Second, the scientific and technical achievements of this period allowed for a rapid expansion of productivity. This includes such things as the availability of isotopes, protein separation methods, chromatographic separation procedures, electron microscopy, to name just a few. And finally, the conscious policy was developed to invest not only in science, but in scientists. It has been said that the best definition of science is that it is what scientists do. A variety of mechanisms were developed, such as the training grants, fellowships, research career development awards, and established investigatorships. The purpose of these programs, as described in the 1937 amendment to the Public Health Service Act, was "to produce the assistance of the most brilliant and promising research fellows from the United States and abroad," in the conquest of disease.

As a result of this consistent policy of national investment in biomedical science and in scientists a magnificent instrument has been developed. Biology is clearly the most exciting science of the second half of the 20th century, the position held by physics in the first half of this century.

Basic science merges in an intellectual continuum with clinical research in our medical schools and institutes in a relationship which has been fruitful for both science and medicine. Peer judgment insures that quality is the basis of scientific support. We are the beneficiaries of an exciting period of unprecedented growth and diversification in academic medicine in the United States. The models which have been developed here for the interaction of biomedical science, clinical research, and health care have been internationally acclaimed and emulated. The scientific success of this largely undirected development can be measured by any criterion which one cares to apply, from the Nobel Prize selections to a recitation of specific major advances in biochemistry, ultrastructure, molecular biology, immunology, pharmacology, and the applications which flow from these and other sciences. In a sense it is "the best of times" in medical science.

A superb instrument for biomedical research has been slowly developed in partnership by the Federal Government, the universities, the institutes, and the teaching hospitals. That instrument, I would submit, is now in danger of being dismantled. This may not be done purposefully or out of lack of regard for past successes. The destruction of the instrument is occurring, however, because, to speak bluntly, those now in charge of the budgetary process do not understand how science works. Nowhere is this more evident than in the budgetary decisions for the National Institute of General Medical Science for the fiscal year 1974.

In past testimony before this subcommittee other witnesses have described in some detail the special function of the NIGMS as the intellectual center of the National Institutes of Health and its programs in biological sciences as being pertinent to all fields of medical research. It is this breadth of applicability which insures its importance. Unfortunately, it is also the source of its vulnerability since the Institute does not carry with it a categorical description of specific disease systems with which the public singly or collectively identifies through personal experience. Molecular biology does not carry with it the "fear factor" as does heart disease and cancer. It requires some sophistication to associate biophysics and biochemistry as intrinsically relevant to human health and disease. We look in vain for evidence of such sophistication in this budget.

In my opinion the single most important program of the NIH lies in the support of investigator initiated research. There is a place for coordination in science. I personally believe in disciplinary and disease-oriented institutes and research units. There are, furthermore, phases in development and in the application of new techniques or pharmaceutical agents which require national evaluation. A sense of urgency in finding immediate answers can be of great importance at certain stages in scientific advance. But this should not replace unfettered research and the investment in the individual scientist. Few, if any, of our major advances in biomedical science or in medicine itself have been centrally programed. I can thnk of none. In my opinion, the record of the last 20 years clearly shows that the best investment in value returned to the public comes from support of the work of the individual scientist chosen on considerations of merit alone.

The return of basic research has been documented many times before with examples from various branches of biology. I would like to add only one additional example at this time. Eight years ago Dr. B. S. Blumberg and his associates were studying genetic differences in betalipoproteins—fat carrying proteins—in human serum. By the immunological techniques being used they discovered a new substance or antigen in the serum of an Australian Aborigine. Such an observation, made almost incidentally, might seem the epitome of irrelevance. This Australian antigen, as it was called, has proved, however, to be the long sought virus which is one of the causes of hepatitis—an important cause of disability and death in this country and throughout the world. Its identification has increased our accuracy in diagnosis. The virus is often transmitted by blood transfusion. The virus can now be identified in blood samples, by techniques available at all blood banks, with prevention or at least sharp reduction in this important complication of blood transfusions. More important, the discovery of this new particle, occurring almost by chance during fundamental research, allows for a rational approach toward the development of a vaccine. It seems unlikely that a centrally directed program to discover the virus of hepatitis would have focused on the immunology of lipoproteins in differential population groups.

Basic biological research—our best investment for the future of medical research, the way in which scientific capital is accumulated for the future—is central to the role of the NIGMS. Yet it is precisely in this category that the President's budget for fiscal 1974 is so disappointing. In fiscal year 1972, $28,314,000 was invested in competing investigator-initiated grants by the NIGMS. The suggested budget before you for fiscal year 1974 calls for an expenditure of $5,118,000—a reduction of 80 percent in this vital category.

In my opinion this budgetary item should be increased to $30 million. This would restore a level of effort comparable to fiscal year 1972 in constant dollars. It would allow the funding of the high-priority projects approved but unfunded in fiscal year 1973 and a reasonable level of support for similar peer reviewed projects in fiscal year 1974. We must have more "Australian-antigen equivalents" if we are to advance in the control of major diseases.

TRAINING FOR RESEARCH IN THE BIOMEDICAL SCIENCES

Excellence in research does not automatically follow the flow of funds into a field. It requires the recruitment and training of that relatively small number of individuals capable of scientific creativity. In the past, support of training for research in the biomedical sciences has been accepted as a parallel commitment to investment in research itself, based on the premise that only in this manner would an ample number of the best qualified young scientists be attracted into these fields. This premise has now been challenged by the administration and, in fact, has been acted upon in a clear-cut change in policy. Support of training for research is now being phased out and the budget before you represents only the first step in its calculated irradication.

In my opinion, this is a serious error, representing the denial of a formula which has brought us to the current stage of success in medical research. There are a number of points which may be made in defense of a continuing program in support of training rather than relying solely on historical precedence.

The Federal Government has accepted a responsibiilty for the support of biomedical science and technology as vital for medical progress through the conquest of disease. The revolution in modern biology and medical science in our time has resulted largely from this consistent national policy. An ample supply of biomedical scientists is required for the continued success of these programs. As the main purchaser of biomedical research (almost two-thirds is supported by the

Federal Government) the Government must be concerned with the number and quality of biomedical scientists. At the present time, the support of training for research by the Federal Government is the dominant force in the supply of biomedical scientists. In those disciplines most closely applicable to medicine the majority of scientists now receive some or all of their training under Federal auspices. The same holds true for postdoctoral training of physicians who wish to pursue a career in medical investigation and teaching. The announcement that these programs will be terminated by the administration has already had serious disruptive influences in our national training programs.

2. There is little evidence of excess supply over demand in most of the biomedical sciences at the present time. Recent studies have documented that in all of these disciplines the rate of appropriate employment continues to be very high. In fact, a number of openings exist on medical school faculties in all disciplines and in selected areas there are definitely shortages of highly qualified basic scientists and physician-scientists. It is true that there are differing patterns of supply and demand in the various subspecialties of science and medicine and therefore that there should be corresponding priorities establishing relative need. It is difficult to extrapolate future needs accurately over the spans of time which are realistic in relation to the prolonged periods of training which are required. This period of training to the stage of independent scientific creativity may be approximately 7 years for the Ph. D. and 8 or 9 years for the physician after the attainment of an undergraduate degree. Because of this, changes in our educational program now may have full impact only several years further along.

3. Despite the difficulty in defending specific numbers there are many indications for an increasing demand for biomedical scientists and physician-scientists over the next decade. We have witnessed a remarkable expansion of medical and health science education which will continue to accelerate with the opening of new medical schools and training programs for other health professionals. These programs will require more manpower in order to mount effective educational programs. Major new programs have been instituted in biomedical research, most prominently that for the conquest of cancer and that directed toward cardiovascular diseases. Other programs are concerned with drug abuse, human genetics, clinical pharmacology, health care delivery, the biology of aging, and sickle cell disease. All of these programs will call for trained manpower not only in the specific disciplines represented by these targeted projects, but in the supportive areas of the basic sciences. It is also evident that biomedical scientists will be increasingly employed in new areas of concren such as population control, the adverse effects of chemicals and drugs, the biological consequences of environmental pollution, and nutrition. In my opinion, a categorical decision to eliminate support of training for research in the biomedical sciences would seem at cross-purposes at this time to these other explicit components of Federal policy: the expansion of health professional education, building a national health strategy which includes equal access to health care for all citizens, the conquest of major diseases which cripple or kill large numbers of the American people, and the harnessing of scientific discoveries in meeting domestic programs and in improving the quality of life.

4. Scientific progress is the product of the creativity and resourcefulness of individual scientists who differ widely in their endowment with these qualities. One cannot, therefore, consider scientific manpower solely in units of how many individuals are available and employed. Rather we should ask how many highly creative scientists are needed to conduct the Nation's programs in biomedical research and how they may be best identified and trained. The abilities of a scientist cannot always be accurately predicted at the onset of training. Even the best training program will produce a mixture of scientists from those who are outstanding to those who are marginal in research potential. We need to train a surplus of scientists to allow for competitive choice of the best to conduct the Nation's research efforts. The investment in the training of a scientist is relatively small in comparison with the public's investment in his subsequent research career.

5. Over the past two decades, the NIH has developed some very effective and flexible instruments in the support of training. Of these, perhaps the most effective is the research training grant, a form of support which is now specifically being phased out. This type of grant allows for the selection and stability of support for those departments most competent to carry out scientific training as judged by competitive and national review. The grant minimizes financial disincentives to training on the part of the young scientist so that merit remains the sole consideration in selection. The grant is under national control so that

adjustments can be made in the numbers of trainees and in the fields of interest being supported in keeping with long-term projections of supply and demand. Federally supported fellowships, which are paid directly to the recipient, have many of the same advantages although they do not strengthen the department through supporting the training environment and also they do not furnish the process of continual national review of departmental training functions. At the present time, in the current system which is now coming to a conclusion, we have had a mixture of these two modalities of support. This has allowed a greater flexibility than would occur through exclusive reliance on either method.

In summary, the remarkable development of the scientific basis of health care in the United States has occurred under a Federal policy of coordinated investment in research and in training for research. These training programs have contributed to the size, quality, and diversity of the American medical schools. They represent a selective investment in the careers of our most talented young scientists during their formative years. The best of these are then chosen in national competition through the research grant mechanism to continue our research program in biology and medicine.

As noted, we are witnessing the results of a policy decision to discontinue the support of training. This is occurring in all of the institutes and is specifically reflected in the President's budget for fiscal year 1974. In my opinion, discontinuation of support of training is shortsighted and represents a false economy. The administration's budget calls for $31,903,000 for training grants in fiscal year 1974. This represents a decline of 25 percent of the money appropriated for training grants in fiscal year 1972. In my opinion, a figure of approximately $50 million would be a more appropriate level. This would allow for a continuation of approximately the same level of activity as in fiscal year 1972. Similarly, the President's budget for fiscal year 1974 reduces the support of fellowships by approximately one-third over that pertaining 2 years ago. In my opinion, this item of $10,970,000 should be increased to approximately $19 million to restore this important mechanism of support.

PHARMACOLOGY-TOXICOLOGY CENTERS

My comments about the importance of centers for the study of pharmacology and toxicology will be brief ones. In addition to the large number of natural products in our environment, we increasingly come into contact with many new chemical substances both purposefully and inadvertently. Many of these new agents represent the products of our drug manufacturers introduced for the prevention or treatment of disease. In the United States alone this is an enterprise of approximately $7 billion per year. Hundreds of new therapeutic agents have made their appearance both for the benefit and hazard of those who receive them. In addition, we encounter many other chemical agents in our daily lives. For example, there are more than 60,000 registered pesticide formulations, widespread use of food additives, an increasing number of household products and industrial chemicals such as plastics, soaps, solvents, and synthetic fibers, and many other products supplied by the ingenuity of chemists. It is alarming how little is known about the toxicology of these substances. It has been estimated that as many as 5 to 10 percent of acute hospital admissions in the United States may relate to adverse drug reactions. Estimates of the incidence of adverse response to drugs prescribed by physicians range from 18 to 30 percent. Patients, not infrequently, receive as many as 10 drugs during the course of a hospitalization for complex illnesses. In each case a judgment must be made as to the balance of risk versus benefit. Some of the adverse reactions to drugs can be anticipated as an accentuation of their therapeutic effect. Others cannot be predicted with current information. For example, drugs may interact within the patient to exacerbate or to reduce their effectiveness. Sensitivity to chemical agents may vary markedly based on the genetic legacy of the patient, an increasingly important branch of genetics termed pharmacogentics. Sensitivity to adverse reactions may be enhanced during pregnancy, renal disease, or liver disease. Adverse effects may be delayed in their appearance such as the recent demonstration of the occurrence of a particular form of cancer of the vagina in young women whose mothers had taken diethylstilbestrol (DES) during pregnancy. DES is a synthetic estrogen which has been in wide use for many years. Drugs may cause birth defects, as in the thalidomide tragedy 10 years ago.

Our ability to develop methods to study the action, metabolism, excretion, and toxicology of drugs has lagged far behind the introduction of new therapeutic agents. This area of clinical pharmacology is now attracting, for the first time, the attention of physicians and basic scientists alike. We have an excellent example of such a program at the University of California, San Francisco, carried out jointly between the schools of medicine and pharmacy. This is a combined program in the training of pharmacists, pharmacologists, and physicians in the recognition and prevention of adverse drug reactions. In addition, a broad gaged experimental program has been mounted to study drug metabolism and toxicology. It has exerted a secondary and salutory effect on the treatment of patients in this medical community by improving the scientific basis of therapeutic practices.

In my opinion, this type of program needs to be expanded more broadly. Although therapeutic agents are developed and evaluated in all of the Institutes of the NIH, it is within the National Institute of General Medical Sciences that the specific responsibility for clinical pharmacology and toxicology remains. The President's budget for fiscal year 1974 represents a net reduction in the special program to establish such national centers. In my opinion, this budgetary item of $4,784,000 should be increased to approximately $6,500,000 to allow for the expansion of these important programs.

GENETIC RESEARCH CENTERS

It will not be necessary to comment extensively about the Genetic Research Centers of the NIGMS. I believe that the recent human genetics program has been of particular interest to this subcommittee. In the hearings of the past 2 years you have been presented with eloquent testimony concerning the importance of genetic diseases by three of our outstanding investigators in human genetics, Doctors Seegmiller, Shaw, and Steinberg.

The interest which has been directed toward genetic diseases is appropriate and can be attributed to a number of things. First, the basic science of biochemical genetics has made remarkable advances in clarifying the mechanisms of the transmission and expression of genetic information within the cell. The medical investigator has an unparalleled opportunity to apply this new science to the understanding of disease. On occasion this may allow a remarkable precision in the diagnosis or definition of a disease, for example the insertion of a single amino acid at the wrong spot in a protein may mean the difference between health and illness, as in sickle cell disease. Although none of the genetic diseases can now be cured, many can be effectively controlled once the site of the biochemical derangement is established. Finally, as man learns to control his environment the maintenance of health or the occurrence of disease is increasingly the function of his genetic endowment. This may be expressed as a specific inherited disease transmitted according to Mendeliam laws, and hundreds of such diseases have now been described. This may also be expressed more indirectly as a genetic susceptibility to certain diseases.

More than 15 million people in the United States today have hereditary diseases. Such diseases account for approximately 25 percent of the occupancy of hospital beds. We need mention only such a common disease as diabetes mellitus, which affects 3 percent of our population and which is the most frequent cause of blindness in the United States, to illustrate the importance of this disease category. There is now firm evidence that schizophrenia, which occurs in 1 to 2 percent of the population and is the most frequent cause of insanity, has at least a strong genetic component in its cause. This grants us hope that some specific metabolic defect in brain chemistry may be found as the explanation for this disease, or possibly group of diseases, which is such an important source of disability.

The genetic research centers which have already been established are directly concerned with the application of advances in molecular biology to the diagnosis and treatment of human diseases. One of the important research and clinical seervice functions is that of aminocentesis in which cells from the fetus are studied for prenatal diagnosis of serious inherited diseases. This allows for elective abortion if the disease is serious enough to warrant this intervention and the parents elect not to bring such a handicapped child into the world. In addition to diagnosis and treatment these centers offer genetic counseling for families in which genetic diseases have been demonstrated.

The President's budget for fiscal year 1974 calls for the investment of $5,009,000 in genetic research centers. Although this does represcent an advance of approximately $2 million over the budget for fiscal year 1973, it is inadequate to fund the current centers at an appropriate rate and to allow for the establishment of three or four additional centers. These centers have already been approved, but do not now have means of support. I would estimate the need for fiscal year 1974 as being approximately $7 million, or $2 million above the amount listed in the President's budget.

SUMMARY

I have summarized my suggestions for changes in the budget for the National Institute of General Medical Sciences for fiscal year 1974 on the attached budget sheet. Suggestions have been made only in the four categories discussed briefly above: research grants, support of training for biomedical research (fellowships and training grants), pharmacology-toxicology research centers, and genetic research centers. There may be compelling reasons for other changes in the budget, but these represent categories in which I have no specific competency.

In this summary I would like to return briefly to an earlier theme. This Nation has developed a magnificent resarch enterprise in the biological sciences and in their application to the health problems of the American people. This is the only rational way to find answers to the diseases which destroy our lives and which cost this Nation well in excess of $100 billion annually in direct and indirect expenses. The subcommittee should realize, Mr. Chairman, that although our testimony today is directed specifically to certain budgetary items, much more is at stake. In the opinion of the majority of the biomedical community what is at stake is not less than the integrity and function of our national system for research in the biomedcal sciences. This is a rather dramatic statement and you gentlemen are not strangers to the hyperbole of special pleading and cassandra prophecies. This statement can be dismissed on the grounds that our ox has been gored and that we are therefore responding with reflex lamentations. It is true that the biological scientists and physician-scientists who appear here are directly and personally impacted by Federal policy in biomedical research and so are the institutions in which they work. It is our contention that the welfare of the American people is similarly impacted. These programs are not designed to provide employment for scientists but to attain specific national goals in the conquest of disease.

In my opinion, and I believe that this opinion is widely held, in the scientific community there are two recent trends in Federal biomedical science policy which, if they prevail, will seriously impair our future ability to advance in medical science. Both of these trends are documented in the budget before you, as we have discussed. They are:

1. The downgrading of the individual research grant as a support mechanism. There has been a simultaneous shift toward categorical centers and centrally directed contracts. In my opinion this is a serious error. It demonstrates a lack of appreciation of how science works. It blandly disregards the record of the past in which the greatest scientific return has been from individual investigator initiated research.

2. The decision to eliminate support of training for research. Once again this is a sharp departure from the successful formula of the past 25 years in which there has been a parallel investment in training and in research support. Most of the scientific community believes that this decision will greatly reduce the recruitment of outstanding young people into these programs of national concern. This will have grave implications for the future of biomedical science in the next two decades.

We look to those in Congress who have maintained an interest in biomedical affairs to help us retain those current NIH programs which have been tested and proved over the past 20 years as productive of scientific advances. In our national research effort the product is knowledge and the process is scholarship. The NIH is in effect a large and distinguished postgraduate university with a local and a dispersed national faculty. Scholarship cannot be centrally programed and planned like a regulatory agency or a manufacturing process. We hope that you share our pride in the achievements of American science and medicine and will help to insure that this progress will continue.

Thank you for the privilege of appearing as a citizens' witness at these hearings.

LLOYD H. SMITH, Jr., M.D.

NATIONAL INSTITUTES OF HEALTH CITIZENS' BUDGET FOR FISCAL YEAR 1974 (LLOYD H. SMITH, JR.)—NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

	Fiscal year 1973	1974 President's budget	1974 recommended
Research grants	[1] $84,512,000	[1] $72,729,000	$96,000,000
Pharmacology-toxicology research centers	5,593,000	4,784,000	6,500,000
Anesthesiology and diagnostic radiology centers	2,126,000	1,757,000	
Genetic research centers	3,000,000	5,009,000	7,000,000
Trauma centers			
Biomedical engineering centers			
Subtotal, research grants	95,231,000	84,279,000	
Fellowships	12,509,000	10,970,000	19,000,000
Training	33,000,000	31,903,000	50,000,000
Direct operations	10,847,000	11,421,000	
Total	151,587,000	138,573,000	

[1] Includes scientific evaluation.

STATEMENT FOR THE NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES, NATIONAL INSTITUTES OF HEALTH, BY LLOYD H. SMITH, JR., M.D.

CURRICULUM VITAE, LLOYD H. SMITH, JR., M.D.

Date of birth: March 27, 1924, Easley, S.C.

Education: Undergraduate—Washington and Lee University, 1944 (B.A., summa cum laude). Medical school—Harvard Medical School, 1948 (M.D., magna cum laude). Graduate—Washington and Lee University, 1969 (D.Sc., honorary).

Military service: U.S. Army Medical Corp., 1950–52.

Internship: Massachusetts General Hospital, 1948–49 (medicine).

Residencies: Massachusetts General Hospital, 1949–50 (medicine); Presbyterian Hospital, New York, 1955–56, (medicine); Massachusetts General Hospital, 1956–57 (chief resident: medicine).

Certification: American Board of Internal Medicine (1958).

Societies: 1. American Federation for Clinical Research. 2. American Society for Clinical Investigation (Emeritus). 3. Western Association of Physicians. 4. Association of Professors of Medicine. 5. Western Society for Clinical Research. 6. American Society of Biological Chemists. 7. Association of American Physicians. 8. California Academy of Medicine. 9. American Board of Internal Medicine. 10. Pan American Medical Association, Inc. (honorary diplomate member). 11. Research Societies Council. 12. Royal Society of Medicine (affiliate). 13. American College of Physicians (fellow). 14. California Society of Internal Medicine (honorary). 15. American Society of Internal Medicine. 16. Alpha Omega Alpha. 17. Member advisory panel to the section on internal medicine, California Medical Association. 18. American Academy of Arts and Sciences. 19. San Francisco Medical.

Honors and awards: 1. Phi Beta Kappa (Washington and Lee University). 2. Boylston Medical Society (Harvard Medical School). 3. American Society for Clinical Investigation (president), 1969–70. 4. Western Society for Clinical Research, president), 1969–70. 5. Association of American Physicians (recorder), 1966–71. 6. Western Association of Physicians (president-elect). 7. California Academy of Medicine (vice-president).

Committees, editorial boards, and so forth: 1. Member of editorial board, the Journal of Clinical Investigation (1966–70). 2. Member of editorial board, the American Journal of Medicine. 3. Associate editor, California Medicine (1968–). 4. Counselor of the American Society for Clinical Investigation. 5. Chairman, Board of Scientific Counselors of the National Heart Institute (1967–69). 6. Counselor of the Western Association of Physicians (1966–71). 7. Executive Committee, California Academy of Medicine (1968–). 8. Member, President's Scientific Advisory Committee (1970–). 9. Director, Royal Society of Medicine Foundation, Inc. (1971–). 10. Counselor, Association of American Physicians (1971–763. 11. Member, International Board of Editors of section 6 (internal medicine) Excerpta Medica.

Address: Department of Medicine, University of California San Francisco Medical Center, San Francisco, Calif.
Married: six children; home address: 309 Evergreen Drive, Kentfield, Calif.
Clinical interest: Internal medicine, gout, kidney stones, inherited diseases.
Research interests: Metabolic and genetic diseases.
Previous faculty positions: Instructor in medicine, Harvard Medical School, 1957–58. Associate in medicine, Harvard Medical School, 1958–60. Assistant physician, Massachusetts General Hospital, 1958–62. Assistant professor of medicine, Harvard Medical School, 1960–64. Visiting investigator, Department of Biochemistry, Oxford University, Oxford, England, 1963–64.
Current academic title: Professor of medicine and chairman, Department of Medicine, University of California San Francisco Medical Center, San Francisco, Calif. Licensure: California G–10553.
Publications: 77.

Mr. SMITH. Thank you, Doctor. Your statement is very impressive. You have made a very articulate spokesman for your point of view.

In view of your experiences mentioned in your statement, are you saying that if we were to formulate some kind of a spinoff of the Einstein theory of relativity, we would say that whenever we make an adjustment to the body with drugs there is some other adjustment that takes place too? Is that correct in layman terms?

Dr. SMITH. Every action has an opposite reaction.

Mr. SMITH. Are we doing enough to try to identify the other reactions?

Dr. SMITH. There is a whole branch of science now relating specifically to the use of drugs or agents you are referring to, external methods of treatment or intervention in human disease. Yes; there is a whole branch of science that is a traditional one. It has received extra impetus with the advances in modern biology, molecular biology, biochemistry, and ultrastructure. But there is a traditional branch of pharmacology trying to study the interaction of the action of the agent and hospital and also trying to arrive at some predicted value of how to develop drugs. If you understand how they act, then perhaps you can alter the molecule to get a specific effect while simultaneously reducing any side effects.

This has been done very brilliantly in the penicillin field, where many modifications of the parent molecule have been made to achieve specific effects of how the penicillin molecule works on the synthesis of the cell wall of the bacteria.

Mr. SMITH. Are we doing enough in this area?

Dr. SMITH. I don't think we are. I think that is an area in which we need to do more. Of course, the pharmaceutical industry is involved in it, but they have their own line of approach. They have to pursue their profit motive. I think it's up to the universities.

Mr. SMITH. Almost all of their research is on how to market the product, isn't it?

Dr. SMITH. There is a lot of that. They must answer to their stockholders. I believe the stockholders here are the American public.

Mr. SMITH. That is right.

Dr. SMITH. I think we need to do more to understand these agents.

Mr. SMITH. Are there any questions, gentlemen?

Mr. OBEY. I think you said that approximately 10 percent of admissions to hospitals are as a result of adverse reactions to drugs?

Dr. SMITH. I stated that 5 percent to 10 percent is an estimate. There was a study, which I was specifically referring to, at Johns Hopkins around 6 or 8 years ago in which the figure was around 10 percent of all patients coming in at least who had an adverse drug reaction as at least one component of their illness.

Mr. OBEY. How much of that would you say was due to inadequate scientific knowledge as opposed to irrational prescribing habits of physicians?

Dr. SMITH. I couldn't break that down. It's a very good question. I couldn't give you a breakdown at the present time of which of the two it would be.

Mr. OBEY. Can you make a guess?

Dr. SMITH. I would honestly think that perhaps three-quarters of it was due to injudicious use of the agent by the physician. We have the other problem of continuing education of the physician.

Mr. OBEY. That is what I am getting at. If the figure is that high, then don't you have another problem you have to attack, one different from that associated with basic funding through NIH?

Dr. SMITH. We do. We have another problem, that of continuing education, both education and continuing education of the physician. That is a problem which the States have to attack and the medical schools have to attack. We do this through a variety of techniques—through postgraduate courses, through articles, reviews, closed circuit television setup, through adverse drug centers where we accumulate this information and give it back to the physician. As a matter of fact, these centers in pharmacology and toxicology engage in just that kind of educational process, as well as research.

In fact, our own center engaged in such a course about 3 or 4 weeks ago, where physicians were drawn in from California to talk about the more rational use of drugs. Part of it is the application of what is known in the practice of medicine.

Mr. OBEY. Do you think, for instance, that we have done nearly enough in providing the individual prescribing physicians materials with which, in their own office, they can determine what, if any, side effects might occur under certain conditions?

Dr. SMITH. No. I think this is a continuing problem. The difficulty is that the physician in his office who is generally very busy is bombarded by an overwhelming array of written publications. Some of these he subscribes to. Much of it is sent to him gratis and without his request by the pharmaceutical concerns who would like to influence his decision in a way which would be financially beneficial to their company.

Mr. OBEY. It has been my observation that the very industry that ought to, from the public-benefit standpoint, support the dissemination of the unbiased information, is the very industry which in many cases opposes the dissemination of that kind of information.

Dr. SMITH. I am not sure whether opposition is the right term, but certainly lack of any enthusiasm for rectifying the situation. It's probably subliminal in passive opposition rather than public opposition.

Mr. SMITH. Thank you very much, Dr. Smith.

Dr. SMITH. Thank you, sir.

FRIDAY, MAY 11, 1973.

GENERAL MEDICAL SCIENCES

WITNESS

PROF. HENRY LARDY, INSTITUTE FOR ENZYME RESEARCH, UNIVERSITY OF WISCONSIN

Mr. SMITH. Would you like to present your statement?

Mr. LARDY. Yes. I would like to describe some firsthand results of basic research and what they mean.

[Biographical sketch follows:]

HENRY A. LARDY

Date of birth: August 19, 1917; Roslyn, S. Dak.
College training:
B.S., South Dakota State University, 1939; major in chemistry.
M.S., University of Wisconsin, 1941.
Ph. D., University of Wisconsin, 1943; major, biochemistry.
National Research Council Fellow in Chemistry, Banting Institute, University of Toronto, 1944–45.
Assistant professor, associate professor, and professor of biochemistry, University of Wisconsin, August 1945 to present.
Chairman, section II, Institute for Enzyme Research, University of Wisconsin, 1950 to present.
Member:
American Chemical Society (chairman, biological division, 1958).
American Society of Biological Chemists (president, 1964).
National Academy of Sciences.
American Academy of Arts and Sciences.
Harvey Society.
Biochemical Society (Great Britain).
American Diabetes Association.
The Society for the Study of Reproduction.
Honors received:
Paul-Lewis Laboratories Award in enzyme chemistry, American Chemical Society, 1949.
Carl Neuberg Award, American Society of European Chemists, 1956.
Stieglitz lecturer, University of Chicago, 1959.
Reilly lecturer, University of Notre Dame, 1965.
Vilas research professor of biological sciences, 1966.
Scientific advisory councils:
American Vitamin Association.
Life Insurance Medical Research Fund.
National Science Foundation Panel on Molecular Biology.
Oregon Regional Primate Laboratory.
National Heart Institute of the National Institutes of Health.
The American Cancer Society.
Other positions held in scientific societies:
Member of the council of the American Society of Biological Chemists, 1957–60.
Member, publications committee, American Society of Biological Chemists, 1971–75.
Member of the executive committee, Biological Division of the American Chemical Society, 3-year term (about 1954).
Vice-chairman, Biochemical Division, American Chemical Society, 1957.
Editorial boards:
Archives of Biochemistry and Biophysics, 1957–60.
Journal of Biological Chemistry, 1958–64.
Biochemical preparations, 1952– .
Methods of Biochemical Analysis, 1954– .
Biochemistry, 1962–73.
FEBS Letters, 1970– .

Dr. LARDY. Congressman Flood and members of the Committee on Appropriations:

The opportunity to present my views on biomedical research, and particularly on the Institute of General Medical Sciences, is deeply appreciated. I represent only myself, but I believe a vast majority of biochemists and other medical scientists in the United States hold convictions similar to those I wish to express. I believe the biomedical community could effectively use, and the Nation could greatly benefit from, a greater expenditure for research than has been proposed by the President's budget for fiscal 1974.

I have been engaged in biomedical research since 1939, and during the past 25 years an appreciable part of the work in our department has been supported by the National Institutes of Health. Our department has never been supported by the Institute of General Medical Sciences; I chose to speak on behalf of that Institute because it is more committed to the support of basic biomedical research than are any of the other branches of NIH.

There are two main approaches by which scientists attempt to solve important problems. One is by the direct onslaught, using available techniques to probe a problem in the hope that a solution can be found. A second method is to obtain basic information about phenomena related to the problem, in which case the solution to the problem usually becomes obvious when a sufficient number of facts and concepts have been established. The first method is certainly the method of choice when the nature of the problem is well defined. The second method is the only practical approach when the problem is not defined and when there is no idea as to where the solution will be found.

The importance of basic research in solving complicated problems pertaining to human health and welfare is accepted by everyone. If you will permit me, I would like to describe three examples from the microcosm of our own laboratory.

For more than 10 years we have been studying the mechanism by which human beings and animals make blood sugar from proteins. Brain, nerve, and blood cells are dependent on normal concentrations of blood sugar, and we must make this compound whenever we haven't consumed sugar or starch for several hours—for example, overnight and even between meals. A completely new metabolic pathway for this process has been established, and the importance of certain specific enzymes in the process was made apparent when the pathway became known. In addition, the processes controlling the activity of these specific enzymes were elucidated, and from this basic information it seemed that we might be able to make some practical contributions to problems involving blood sugar maintenance in human subjects. Young infants, particularly those born prematurely, frequently have great difficulty in maintaining blood sugar, and may even go into convulsions and coma for lack of this nutrient. We have therefore undertaken an investigation of the role of specific sugar-synthesizing enzymes in certain diseases that may be associated with low blood sugar. The first I wish to describe is Leigh's encephalomyelopathy, a genetic disease, the cause of which has been a source of controversy in the medical literature.

In collaboration with physicians and pathologists at the Milwaukee Children's Hospital, we obtained a liver biopsy sample from a child

that was suspected of having Leigh's encephalomyelopathy. Previously seven children in this family had died of malformations, and other symptoms, including apathy, inactivity, and muscle spasticity. A year earlier, this child's sister had died, and pathological and microscopic examination had confirmed a classic case of Leigh's encephalomyelopathy. At 4 months of age the child in question was flaccid, had never raised its head or turned over in bed, was without facial expression, and contained almost no musculature. Dutch workers had reported that this disease might be related to defective gluconeogenesis; that is, blood sugar formation. We established that this child's liver biopsy sample was completely devoid of the enzyme pyruvate carboxylase, the function of which is to synthesize 4-carbon organic acids from pyruvic acid and carbon dioxide. The 4-carbon dicarboxylic acid that is made by this enzyme is used for the synthesis of nucleic acid constituents of the amino acids in proteins, and of blood sugar. We therefore suggested to the physicians that the child be fed a gram of glutamine every 3 hours between meals in order to maintain a supply of 4-carbon acids. Glutamine was chosen because it readily penetrates the blood brain barrier and would nourish the brain, and its 5-carbon structure is readily converted to the essential 4-carbon acid. Within 10 days the child showed such remarkable improvement that she was returned to her family. She is now 2 years old and appears to be a normally developing youngster. This therapy is simple and should be tried in other areas of the United States where Leigh's encephalomyelopathy is much more common than it is in Wisconsin.

The second example I wish to cite relates to sudden infant death syndrome, which in the United States is the major killer of babies between 1 week and 1 year of age, and is second only to accidents as a cause of death among all children from birth to 15 years of age. This disease is especially traumatic to parents because there is always a suspicion that some harm may have been done to the child; husbands suspect wives, wives suspect husbands, and police suspect both. Last year the importance of this disease was brought to the attention of the public when Senator Mondale held hearings here in Washington, and the testimony was widely publicized in newspapers. In reading about this disease, we noticed that the victims almost invariably were found dead in their cribs in the morning rather than after a daytime nap. It appeared possible that low blood sugar could be involved, and we therefore attempted to obtain livers from babies who had died of sudden infant death syndrome. To date we have obtained three such livers. In each case there is a defect in the enzyme phosphoenolpyruvate carboxykinase. This enzyme is, again, the one that is essential for the synthesis of blood sugar, and would be especially important in infants when they begin sleeping through the night without nocturnal feedings. We have now arranged with the coroner's office in Cleveland, Ohio, to obtain additional samples of liver tissue from victims of sudden infant death syndrome to determine whether these preliminary findings are universally true. We suspect that the sudden infant death syndrome is a genetic disease in which an abnormal enzyme is synthesized and it fails to respond to the normal control mechanisms that turn on sugar formation when the body needs blood sugar.

A third possible application of our basic findings is of importance in anesthesia. For many years it has been known that a certain small

percentage of the population is fatally susceptible to the anesthetic halothane. Body temperature rises rapidly to 110° F or higher, and the patient succumbs. Investigators in the Department of Anesthesiology at the University of Wisconsin were studying an animal model of this fatal disease in swine when a group of young biochemists in our department discovered a heat-generating enzyme system in the sugar metabolism of the bumblebee. The bee cannot fly in cold weather unless he first warms up his flight muscles, and our young men discovered how the bee does this. The moment this discovery was made, our biochemists collaborated with the anesthesiologists, and it was found that halothane triggers the same heat-generating system in the susceptible pigs that the bumblebee uses to warm up in cold weather. We presume that humans who die of malignant hyperpyrexia use the same heat-generating process, and current work at Wisconsin is aimed at finding a way to control this heat production in susceptible animals and man.

It seems quite likely to us that if we had been assigned the task 10 years ago of finding the cause of sudden infant death syndrome, or of malignant hyperpyrexia, or a cure for Leigh's encephalomyelopathy, we would, like many physicians in other parts of the world, have studied these diseases in vain. We were able to make a contribution because we did a basic investigation of an important biological function; namely, the formation of blood sugar. Once the basic information in this area was established, it was relatively easy to apply it to important medical problems.

Support for the Institute of General Medical Sciences is a way of supporting basic work that may lead to more effective prevention and treatment of all kinds of disease. There are currently many brilliant young assistant professors in medical schools and in various university biological science departments who have no outside support for research. They are conducting limited investigations with small annual support from their schools, but they are unable to launch the comprehensive programs of which they are intellectually capable. The President's budget for fiscal 1974 proposes $13.5 million less than was available in 1973 for research grants from the Institute of General Medical Sciences. To provide a basic support for the well-trained men who are now in university and hospital laboratories, this Institute should have $30 million more for research. The President's budget also proposes a cut of several million for training and fellowship programs, and a phaseout of all support in this category. This will directly cut the Nation's research productivity not only in fiscal 1974 but in the future as well.

Currently, many medical schools are expanding their classes to meet the demand for more practicing physicians. These schools will need more highly trained scientists to teach the additional students. Postdoctoral training in a research specialty is one of the best ways to make a young doctor a knowledgeable, critical teacher. We should therefore be expanding the postdoctoral training opportunities at least to the level of 1972. To do that for both predoctoral and postdoctoral training and fellowship programs, and to compensate for inflation, would require $28 million above the President's request in those categories.

I think it is appropriate to leave the contracts category approximately as it is in the proposed budget but to include sufficient increases to compensate for inflation.

I strongly urge the committee to recommend funding of the research and training categories of the National Institute for General Medical Sciences at approximately $58 million above the President's budget for fiscal year 1974.

Mr. SMITH. Are there any questions, gentlemen?

Mr. ROBINSON. Just an observation, Doctor. It's interesting to note the colloquy that took place between our chairman, Mr. Flood, and the one witness that we had from one of the Institutes—frankly, I don't recall which one it was—regarding sudden infant death syndrome, which is something he is personally very interested in and always inquires into. That witness did not develop the point that you make at all. As a matter of fact, when we were asking about causes and possible preventive measures, this process that you describe and the matter of the blood sugar factor was not even mentioned. I find that a little unusual. I think that communication should be better than that, frankly.

Mr. LARDY. This is the first public presentation of this information. We have not published our data, mainly because we have only three cases.

Mr. ROBINSON. Is there any particular reason why you mentioned the coroner's office in Cleveland? Is this because of the cooperative arrangement you set up there?

Mr. LARDY. There are at least 100 deaths a year in Cleveland from sudden infant death syndrome. We have not been able to get more samples in the Milwaukee-Madison area. We went to Cleveland because we knew of work being done there. Just this week we had shipped a large number of containers of frozen samples back to us. We hope we will get some additional samples.

Mr. ROBINSON. One of the problems this committee has is reflected in a situation that I see in my own home community, and one which I would like your comment on. I come from a community that only has a population of about 25,000. We have a 450-bed hospital and we have over a hundred doctors on staff, in Winchester, Va., all of whom are well qualified, which is a highly unusual situation in this country, of course.

Mr. LARDY. It certainly is.

Mr. ROBINSON. These men are all doing very well, financially. The committee is perfectly willing to finance training grants as long as these people are going into the research area and stay there. But our intention is not being met if they are going to take these training grants and then go out and immediately begin to earn $40,000 or $50,000 a year, which is what most of these doctors at home are doing. We think that the training grant money should go to those who are going to stay in basic research.

Mr. LARDY. I agree with that fully. I think that is where it is going. A physician who is going to go into general practice and who has income as his major goal can't afford to take a fellowship and specialize somewhere. He has to get out and hang that shingle up.

I think some of them here this morning brought up the fact that 98 percent of the people who participate in training programs wind up in

teaching institutions. They may be physicians. They may be practicing medicine in the medical school, but they are teaching medical students and are not out on their own in private practice.

Mr. ROBINSON. I believe there is a 3-year indenture if you take certain research grants.

Mr. LARDY. Yes. Another factor involved is that many of these people are not physicians at all but are Ph. D.'s, biophysicists, and so forth. We know you have medical bioengineers as a new field where a great deal of pioneering work is being done. They may be pharmacologists. I think you will find, by and large, the people who are training under these programs are going into academic institutions.

Mr. ROBINSON. These are the facts of the matter that the general public does not recognize and the reason that the pressures on the budget occur.

Mr. LARDY. We appreciate that.

Another avenue, for utilization of manpower in this area, is industry. I have two graduate students a year, on the average, getting their Ph. D. degrees, and about four postdoctoral fellows who leave our laboratory. In the last 25 years we sent only two Ph. D.'s to industry out of that total group.

Mr. OBEY. I want to congratulate you, Dr. Lardy, on a fine statement. I hope you will extend my wishes to your wife as well.

Mr. LARDY. Thank you.

FRIDAY, MAY 11, 1973.

CANCER TRAINING

WITNESSES

DR. HAROLD B. HALEY, ASSOCIATE DEAN OF THE UNIVERSITY OF VIRGINIA MEDICAL SCHOOL AND PRESIDENT OF THE AMERICAN ASSOCIATION FOR CANCER EDUCATION

DR. ROBERT FINCH, CHAIRMAN, COORDINATOR OF CANCER EDUCATION IN DENTAL SCHOOLS, UNIVERSITY OF LOUISVILLE COLLEGE OF DENTISTRY

Mr. SMITH. Dr. Haley?

Dr. HALEY. Good morning, sir.

The American Association for Cancer Education wishes to thank you for the opportunity of making this presentation. I am Dr. Harold Haley, University of Virginia School of Medicine associate dean in Roanoke, Va. With me is Dr. Robert Finch of the University of Louisville College of Dentistry, who is chairman of the Coordinators of Cancer Education in Dental Schools. The American Association for Cancer Education is a voluntary organization with approximately 360 members, all of whom carry responsibilities for organization and operation of teaching programs concerning cancer in medical, dental, and osteopathic schools and in major teaching hospitals. I am leaving you copies of our most recent annual meeting program which describes specifically the types of activities performed by this organization.

We wish to present three positions to you.

1. Teaching about cancer to physicians and dentists presents special problems that need specific approaches.

2. Cancer education for many different groups of students and physicians in training in many different settings requires a broad program that allows for application to specific situations.

3. We are presenting concepts and needs. Implementation of these requires development of detailed programs. We would be happy to offer our suggestions.

I will briefly discuss each of these three positions.

1. SPECIAL ASPECTS OF CANCER TEACHING

Under the lead of the Congress and the President, the Nation is making a major commitment toward increasing our knowledge about cancer and our ability to give better care to patients with cancer. Translation of research and developmental findings to patient care requires specific teaching of students and physicians. Transfer of information from research to application doesn't just happen. Someone has to do it in a planned way. Several obstructions are present in the transmission of cancer information and teaching of cancer skills. In our culture, cancer is a dread disease. This is felt by the public, by patients, and by physicians. We find that many doctors and departments in medical schools prefer not to give any more attention to cancer than is absolutely necessary. Some teaching programs have only minimal cancer emphasis. We have found that, in every teaching center, it is necessary to have identified cancer presence—individuals with a specific commitment toward teaching about cancer. Such individuals are usually specialists who care for particular kinds of cancer patients. This leads to the second problem.

Cancer is a disease of many organs of the body, of many types and of varying degrees of seriousness. Patient care requires individualized approach of many different medical skills. The surgeon, the cancer chemotherapist, the radiation therapist, the various subspecialists, have specific roles to play. The majority of patients with serious cancer will require care by more than one physician. The patient's physician has to have an understanding of the entire disease and the varied ways of approaching it. Teaching in medical schools by department is fragmented. This fits well with many other aspects of medical learning, but it fragments the learning about cancer which crosses all clinical disciplines. In many of our medical, dental, and osteopathic schools, most of the preclinical teaching is now organized on an organ system basis rather than on specific disciplines such as chemistry, physiology, and so forth. This also requires someone to coordinate the cancer teaching. A presence, one or more individuals, is needed in each institution to be sure that cancer teaching has its appropriate role as a unified concept rather than a small fragment from separated teaching areas. A study by Dr. Susan Mellette of the Medical College of Virginia and Dr. V. K. Vaitevicius from Wayne State University of 350 interns has shown that, when they were medical students, basic science teaching in cancer in the first 2 years of medical school was given by pathologists, pharmacologists, medical clinicians, and surgical clinicians. Seventy-eight percent of these interns, when they were students in their last 2 years of medical school, had some of their teaching from multidisciplinary tumor boards. These tumor boards include cancer specialists from many different fields and

all of their viewpoints are applied to that individual patient with the group recommending a treatment program.

Another change in overall medical education in the United States is the individualization of student experience by increasing time available for electives to approximately 1 year. Electives are developed by faculty in terms of their interests. The study being referred to indicated that 91 percent of the medical students had had access to cancer-related electives and 42 percent of them had chosen such electives. Having such electives available usually means that individuals with specific commitments to cancer education have organized the electives for these students and made them attractive learning opportunities.

The American Association for Cancer Education is now in its seventh year. It is the successor organization for what was known as the Cancer Coordinators, who met as a group for about 19 years. For this period of time, there have been Federal grants available to the medical schools. For the last 7 years, these have been competitive. The medical, dental, and osteopathic schools have submitted proposals which were analyzed by peer committees and site visits were made to inspect the actual programs. Currently, 104 such programs are financed. The majority of the funds in these programs have gone toward faculty salaries. If some type of clinical education funds are not continued, we can expect that, at a time when the national effort in cancer research and patient care is increasing, the amount of time spent teaching this in medical schools will decrease. With the heavy pressure on the financial resources of the health professional schools, loss of the faculty funds from these grants is important and will hurt cancer teaching.

2. THE NEED FOR CANCER EDUCATION EXTENDS OVER A WIDE GROUP OF INDIVIDUALS AND SITUATIONS

The 104 programs mentioned include 67 medical schools, 4 osteopathic schools, 25 dental schools, 3 hospitals, and 6 specialized cancer institutes. As previously stated, the largest amount of money has gone to pay faculty salaries. Significant funds have gone for fellowships and traineeships to provide individuals with highly specialized skills to give better care to cancer patients. Other expenditures have gone for students to have shorter experiences on a full-time basis in cancer. Some of this is to give them broader experience so that they can give better care to all patients. For other students, it has given them a first taste of possible career specialization in care of cancer patients. Other expenditures have been used in developing better approaches to teaching. I have with me a paperbound textbook on cancer which was developed under the training grant in one institution, the University of Rochester School of Medicine and Dentistry. The American Association for Cancer Education has made critiques of this text in each edition. The American Cancer Society distributes this textbook to medical students through the cancer coordinator in each medical school. We have also developed programed texts that apply to specific areas of cancer. Various other teaching devices have been developed that could be discussed with you in more detail.

Under the "conquest of cancer program," comprehensive cancer centers and demonstration cancer centers are being developed. These are most important in bringing the highest level of care to the cancer patient and provide models for other centers. Such centers must have education as part of their program. In terms of the 104 institutions in which there are now formal cancer training programs, only a small number of these will have these cancer centers as currently proposed. The majority of medical and dental students will not have contact with the cancer centers. We strongly emphasize that all students and all physicians and dentists in training must have concentrated teaching in cancer, whether there be a center present or not. Where there is not a center, there is particular need for a clinical education program and people to be identified with and have responsibility for such programs.

For the breadth of programs described, i.e., students in the three types of schools, physicians in internships and residencies, traineeships, fellows and those in education programs and centers, the American Association for Cancer Education has an important role. The American Association for Cancer Education is a unique group. Each of us is a specialist in some field of cancer care. All fields are represented. This unique organization exists only to improve teaching about cancer. To my knowledge, there are no other organizations comparable to it. Other categorical diseases such as heart, kidney, mental health, etc., do not have large organizations with the single purpose of improving the quality of teaching. This organization partially reflects the dedication to education of doctors who care for patients with cancer; it also reflects their recognition that cancer teaching requires shared multidisciplinary work; and is a direct result of the Clinical Cancer Training Grants.

3. METHODS OF ORGANIZING, DEVELOPING AND FINANCING CLINIC CANCER EDUCATION PROGRAMS

In this presentation; we have outlined the need for specifically identified structured and financed cancer education programs. The legal and fiscal organization of such programs is another issue. At the present time, we are not taking firm positions on specific proposals such as Mr. Rogers bill on traineeships, continuation of the present clinical cancer training programs or new programs which might be proposed by the National Cancer Institute, members of this committee, or other Members of Congress. We are not wedded to any particular form of financing. Education programs, training grants, contracts, programs through cancer centers, etc., all can accomplish the missions outlined. If the American Association for Cancer Education can contribute to development of specific legislation, we would be happy to do so.

I would like to close reiterating our three positions.

Clinical cancer education is an area of special problems and requires specific solutions. All medical and dental and osteopathic students should have concentrated teaching in this area. There should also be specialized education programs for fellows and trainees. With these concepts, we would like to contribute to the development of specific methods of meeting these needs if this would be of help to the Congress.

Thank you for the opportunity to make this presentation.

[Additional information follows:]

the american association for cancer education

sixth annual meeting

september 21–23
1972

the university of rochester
school of medicine and dentistry
rochester, new york

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AMERICAN ASSOCIATION FOR CANCER EDUCATION

SIXTH ANNUAL MEETING

September 21–23, 1972

PROGRAM

THURSDAY, September 21, 1972

6:00 - 8:00 p.m.	Meeting of the Executive Board - Towne House Motor Inn
8:00 p.m.	Meeting for new members - Heritage Room, Towne House
8:00 - 10:30 p.m.	Registration/Information Desk open - Towne House
8:30 - 10:30 p.m.	Reception - Towne Room, Towne House

FRIDAY, September 22, 1972

8:15 - 9:00 a.m.	Shuttle van service available - Towne House to Medical Center
8:30 a.m.	Registration/Information Desk opens - Education Wing, Medical Center, Room 1-7507

SCIENTIFIC PROGRAM, EDUCATION WING, MEDICAL CENTER, Room 1–7619

9:00 a.m. Welcome: *J. Lowell Orbison, M.D.*
Dean School of Medicine and Dentistry
University of Rochester

9:15 a.m. Panel Discussion: "Pre-clinical Cancer Education"

Robert A. Cooper, Jr., M.D.
(Moderator)
Professor of Pathology
University of Rochester School of Medicine

Anand P. Chaudhry, M.S., Ph.D.
Buffalo, New York

Thomas Ervin, B.S.
Rochester, New York

Jack T. Evjy, M.D.
Boston, Massachusetts

Russell Hilf, Ph.D.
Rochester, New York

Erich Hirschberg, Ph.D.
Newark, New Jersey

10:45 a.m. Coffee Service

11:00 a.m. Address: "The National Cancer Plan"
William W. Shingleton, M.D.
Professor of Surgery
Duke University School of Medicine

12:00 noon Luncheon - Helen Wood Hall

1:15 p.m. Workshops: "Application of Television to Cancer Education"
Coordinators: *W. Bradford Patterson, M.D.*, Chief of Surgical Oncology and *Robert H. Geertsma, Ph.D.*, Professor and Chairman, Division of Medical Education and Communication, University of Rochester

2:45p.m. Refreshments

3:30 p.m. Invited Papers:
"Medical Oncology, the New Subspecialty"

B.J. Kennedy, M.D.
Professor of Medicine
University of Minnesota Medical School

"Radiation Oncology, an Emerging Subspecialty"

Henry M. Keys, M.D., Chief Resident in Radiotherapy and

Philip Rubin, M.D., Chief of Radiotherapy, University of Rochester

4:15 - 5:15 p.m. Submitted Papers: "New Concepts in Cancer Education"

DENTAL STUDENT RESPONSE TO INDEPENDENT SELF-PACED CANCER LEARNING
J.L. Westbrook, B.S., Philadelphia, Pa. and
Peter A. Pullon, D.D.S., St. Louis, Mo.

CANCER ATTITUDE CHANGE IN MEDICAL STUDENTS
Harold B. Haley, M.D., Roanoke, Va.

TECHNIQUES FOR THE ANALYSIS OF CLINICAL PROBLEM SOLVING SKILLS IN CANCER EDUCATION
Barbara J. Andrew, Ph.D., Philadelphia, Pa.

A MODULAR ONCOLOGY CURRICULUM
Albert E. Munson, Ph.D. and *Paul J. Munson, Ed.D.*, Richmond, Va.

THE ORGANIZATION AND FUNCTION OF A CANCER EDUCATION PROGRAM IN A UNIVERSITY AFFILIATED COMMUNITY HOSPITAL
John M. Bennett, M. D., Edwin D. Savlov, M.D., and *Benjamin Sischy, M.D.*, Rochester, N.Y.

5:15 - 5:45 p.m. Shuttle van service - Medical Center to Towne House

6:15 p.m. Bus service - Towne House to Faculty Club, River Campus

6:30 p.m. Reception - Faculty Club

7:30 p.m. Banquet - Faculty Club

8:45 p.m. SAMUEL HARVEY LECTURE:
"Cancer Training - 1984"
Kenneth B. Olson, M.D.
Professor of Medicine
Division of Oncology
The Albany Medical College of Union University

10:00 p.m. Bus service - Faculty Club to Towne House

SATURDAY, September 23, 1972

8:00 - 8:45 a.m.	Shuttle van service - Towne House to Medical Center
8:45 a.m.	Business Meeting - Education Wing, Medical Center, Room I-7619
10:30 a.m.	Coffee service
10:45 a.m.	Presentations: "Present Role of the Regional Medical Program in Cancer Education" *Margaret H. Sloan, M.D.* "The Clinical Cancer Training Programs" *Margaret H. Edwards, M.D.* "American Cancer Society Programs" *G. Congdon Wood, M.D.*
12:30 - 1:00 p.m.	Shuttle van service - Medical Center to Towne House
1:15 p.m.	Bus service - Towne House to Rochester airport

Mr. SMITH. Your approach to this is very interesting. In all my years in Congress, I have heard all these reasons—the causes and effects of Federal appropriations. They usually are going to take a few Federal dollars and are going to end up with some super number of professors, and so forth, in some area where they are needed.

I haven't really heard it explained as you did, that just the presence of a small amount of money causes within the department and within the school this attention to the problem. That seems to me a more logical and more practical possibility than this idea that you are going to turn out enough professors or doctors to solve the problem with a small amount of Federal money.

Mr. ROBINSON. I would like to welcome Dr. Haley here as a representative of the University of Virginia, which is in the district which I have the pleasure of representing. I congratulate him on his very articulate statement.

Doctor, I wonder if what you have to say constitutes a criticism of the National Cancer Institute specifically, because you don't even mention it in your statement.

The budget, as you know, carries $500 million as a recommendation at least for the National Cancer Institute. This is not exactly a small amount of money even in this committee where we deal in the billions quite frequently.

Dr. HALEY. I feel like Dr. Enoch earlier this morning, who made the comment this the first time his organization has ever acted in a political way.

There are things not said in my statement because I feel I am in a strange country. You, in my operating room, are in a strange country. I am now in yours being dissected. I don't know what is appropriate. I know our relationships with the National Cancer Institute, of course, the people that we would deal with and work with are as dedicated and concerned as we are.

For example, Margaret Edwards has been for maybe 6 years the National Cancer Institute administrator of the cancer training grants. She is a member of our organization and she comes down to the council meetings. We have an annual meeting, usually in January, of the executive council. We have about 25 people with the committee chairman. We try to keep it small. Margaret comes at her own expense. No Federal funds pay for her to come down here. She believes in it and comes. Bill Ross has recently become the administrator of this program within the last 2 or 3 months, but Bill has been a member of our organization for quite a while. John Bailar, who is an associate director for cancer control programs, has also been a member of our organization before he became a member of the National Cancer Institute.

We think we have strong support from the Cancer Institute. Here is where prudence comes in. There are a lot of things that I have thoughts in my mind about that I don't know whether it's prudent to say. Everybody knows the institutes don't have anything to say about their budgets today. They get told downtown. This cut from $7.8 million to $5 million is a downtown cut, not a National Cancer Institute cut.

Mr. ROBINSON. The National Cancer Institute is not being cut. This is thce point I am making.

Dr. HALEY. But what funds are released for what purpose inside are being controlled outside them. At least in informal conversations with us, we have strong support, but it's tied into this trainee problem. We are a little program. It's easy to wipe out little ones. This is probably the first time anybody from our organization has testified before a Congressional Committee. I can't complain.

Put it this way, when I went to see Dr. Bailar last fall I said "if we took Nos. 1, 5, 6, and 7 of your seven objectives for the conquest of cancer program, those which have specific education aspects, we should have a role in them." He said, "Why don't you think there is a role in numbers two and three also?" I thing the cancer people are conscious of this. We try to give them support. They give us support. I can't criticize the experience I have had with them. I think they have had limitations put on them from outside that they have no control over.

Mr. ROBINSON. I would like to state that I disagree with you, because the Cancer Institute has been consistently funded at a higher and higher level, as this committee knows and which this committee has approved. I believe this problem is not a problem downtown. We fuss with OMB all the time about this table. But I don't believe your problem lies downtown, as you say, which is OMB as we refer to it. I think your problem is an internal one with the National Cancer Institute or within NIH since NIH functions in an overall way over the National Cancer Institute.

Dr. HALEY. I don't think it's in the Institute. I really don't. In the relationships I have had for years with these people, the integrity that they give me, the impression they have, I don't think they are saying one thing to me or to us as a group and as individuals and then doing something else somewhere else.

Mr. ROBINSON. Having some considerable connection with other aspects of the school of medicine at the university, this is the first reflection that I have heard along this line with regard to the relationship between NIH and the university. That is the reason I made these comments, because I think we can get to the bottom of it.

Dr. HALEY. One of the things is we are small. It's not the big glob. We are at a pretty much personal relationship, at least I have never felt otherwise in the 10 years or so I have been involved with this.

Mr. SMITH. Is this correct? To try to summarize, if I can interpolate here, what you are saying is, in general, if somebody makes a general conclusion that training grants ought to be phased out, then the general rule becomes a rule. And that applies to every single place even where there should be a few exceptions. Is that what you are trying to say?

Dr. HALEY. This is something I have talked to Bob about and I have talked to the other officers over the phone. We had meeting of some of our officers about 6 weeks ago that led to my approach to Mr. Butler, who is a Congressman from my area, et cetera.

I am caught in the situation do I want to make a presentation to you that is supporting Paul Rogers' bill on trainees and, if that gets vetoed and the Congress does not overcome the veto, then we are wiped out because that bill is wiped out. Or do I want to stay away from that and say we have a better chance of coming in through the cancer program, and not part of the trainees.

The latter is the route I have taken. I have tried to disassociate myself from something I think is going to be vetoed because of administration policy. I am a stranger in a strange land and may have made some judgment errors on how to approach this. I don't think so. But I try to read the best way in. We are interested in trainees. Lee Clark, one of the advisors on the cancer program, is for people who have their Ph. D.'s and not in specialty program training. I am not opposing Lee Clark. But we are looking at another viewpoint that nobody else is talking about. I don't know the mechanics of how to put this through.

Sitting here for the last hour and a half we realized we better come up and say some dollars we think are important. I did have the figures, which I got from the National Cancer Institute, as to what the fiscal year budgets for 1972, 1973, and 1974 were. We are not representing anybody but ourselves, and we don't know enough about the best way to do it. We think we ought to be able to continue working at teaching the students. The route and the method is something for an expert.

Mr. SMITH. Dr. Haley, are you saying it's true or not true? Even if it were true that training grants should be phased out as a general matter, are you saying that there are particular little areas that the general rule should not apply to?

Dr. HALEY. Yes.

Mr. SMITH. And your conclusion is your situation is one of them?

Dr. HALEY. That is the function of definition. There is another aspect to it, whether you call these clinical cancer training grants, which they might have been in the past, or clinical cancer education, which is the term NCI is thinking about using for fiscal year 1975, again relating as to whether or not you are educating a man who already has a professional degree with the worry in the cancer area, you are dealing with a clinician. Do you give a training grant to a man who has already had three or four years after medical school another couple of years to get him to go into cancer chemotherapy, to guide him into that field of private practice when he goes out in it? That is one viewpoint. I support it.

But it is a separate issue from the teaching of the undergraduate student. We do both, but I think our interest and our effort is sort of an 80 to 20 percent thing. I don't want to lose the 80 percent effort with the undergraduate from overemphasizing the 20 percent effort on the post-graduate.

Mr. SMITH. Thank you very much, Doctor.

Dr. HALEY. We certainly thank you.

MONDAY, MAY 14, 1973

IMPACT AID

WITNESSES

HON. LAWRENCE J. HOGAN, REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND
DR. CARL HASSEL, SUPERINTENDENT OF PUBLIC SCHOOLS, PRINCE GEORGES COUNTY, MD.
DR. GEORGE McKENNEY, SUPERVISOR OF FEDERAL-STATE LEGISLATIVE PROGRAMS

Mr. SMITH. The first witness this afternoon will be Honorable Lawrence J. Hogan of Maryland.

Mr. HOGAN. Mr. Chairman, I appreciate the opportunity to introduce Dr. Carl Hassel, the superintendent of the Prince Georges County Schools, and Dr. George McKenney, who is the supervisor of Federal-State assistance programs.

We are here today, Mr. Chairman, to plead our case on the matter of impact aid, with which I know you are intimately familiar.

Our school system is very much affected by the current controversy surrounding the changes in impact aid. We are fifth in the Nation in receipt of impact aid and No. 1 recipient in Maryland. The Prince Georges County school system is very much dependent upon this money and, as I pointed out on the Floor last week when we amended the Second Supplemental Appropriations bill, we ought not only to consider the categories of the parents of students who live on military reservations or off those reservations but we should consider, also, the impact that the growth of the Federal Government in general has had on school districts such as ours. Because of the tremendous expansion in all of the Federal agencies in the Metropolitan Washington area the school systems have had to embark on massive school construction programs in order to cope with the increased population.

I would submit that this is an additional factor which should be weighed in deliberations relating to impact aid.

I will not go into any more detail with regard to the argument. I brought a brief statement which I would request be made part of the record.

Mr. SMITH. We will make it part of the record.

[Mr. Hogan's statement follows:]

It is a pleasure to again appear before your committee on behalf of the Nation's 10th largest school system, Prince Georges County. I bring with me Dr. Carl Hassel, the superintendent.

Our Prince Georges County school system was the recipient of the greatest amount of impact aid in Maryland in 1972. We rank fifth in the country in impact aid receipts, exceeded by such school systems as those serving Hawaii and Alaska. We are here today because the end result of the legislation we are considering, including the release of funds by the executive branch, has grave consequences on the operations of this very large school system.

Let me commend the chairman for his efficient handling of the subject of appropriations for education at a very difficult time. The President in his budget has proposed education revenue sharing. While I have an open mind on education revenue sharing, I am realistic enough to know that our legislative process takes time. It would be tragic if our good educational programs were to suffer because of flaws or inefficiencies in the legislative process.

The Congress has the power under the Constitution to both legislate and appropriate. The decision as to whether currently existing educational programs are to continue, be modified, or be discontinued is ours alone to make. In my opinion, the executive branch has done an unfortunate thing in casting its proposed fiscal year 1974 budget in a format not yet sanctioned by statute. Ending educational programs by failing to fund them, as the administration proposes, would at this time be an abdication of congressional obligations.

I am grateful for your attention to Dr. Hassel.

Mr. HOGAN. At this point I rest our case with Dr. Hassel and Dr. McKenney.

Mr. SMITH. All right.

Proceed, Dr. Hassel.

STATEMENT OF DR. CARL HASSEL

Dr. HASSEL. Very well, Mr. Chairman.

My name is Carl Hassel. I am superintendent of schools in Prince Georges County, Md.

Prince Georges County is located adjacent to Washington, D.C., and is home for more than 750,000 people. Twenty years ago our school enrollment was 35,000. We have grown to one of the largest school systems in the Nation with over 160,000 pupils being educated in our 240 public schools. In order to implement a quality educational program, the school system has over 16,000 employees making it a vital element in providing employment to residents.

To support this educational system our projected 1974 school budget exceeds $175 million. The principal source of our revenue is the property tax and the personal income tax paid by our residents. The current property tax rate is the highest in the metropolitan Washington, D.C., area and one of the highest in the country. A significant factor contributing to the tax rate is the high amount of federally owned acreage which, of course, is not eligible for tax purposes.

Mr. Chairman, I am here today to request that this subcommittee support the extension of all existing categorical programs which face elimination in the administration's proposed fiscal 1974 education budget. Specifically I refer to the Elementary and Secondary Education Act, the National Defense Education Act and Impact Aid.

In the Prince Georges County public schools, title I of ESEA has provided for the delivery of educational and welfare services to over 32,000 disadvantaged students since 1966. Funding of title I has been generously supported by Congress and has made available approximately $1 million each year in Prince Georges County. Title I has provided an extention of services and resources to children that would not have been fiscally possible at the local level.

The ESEA title II program has provided school library resources, both printed and nonprinted, on an equitable basis for the use of children and teachers in all of our schools since 1965. This particular act has given new dimension to the educational program. It has provided a broad range of resources that would not have been possible without the funds provided at the Federal level. Critical needs were identified and given highest priority over the years. Substantial materials were made available for providing enrichment and giving a new sophistication to programs in early childhood education, career education, and environmental education.

The introduction and implementation of the ESEA title II program were based on the concern that significant numbers of elementary and secondary schools in the Nation were without adequate school libraries. Tremendous strides have been made in establishing new libraries in schools that previously had none. Updating and improvement in existing library programs were likewise greatly enhanced. There is now a need to continue the gains for students and teachers that were made over the years of the title II program.

Many other Federal projects were coordinated with title II to provide a wide selection of resource materials so that they achieve their goals and objectives more efficiently and effectively through school library centers. It should be realized that participation in the benefits of title II programs were open to both students and teachers in all public and nonpublic schools. The statistics and the observable benefits under title II are endless. One needs only visit any school system across the Nation and see the impact that this program has had on the learning environment within our educational system.

The great value of title III of the Elementary and Secondary Education Act has been the diversification of approaches to the most serious problems in a large and complex school system such as Prince Georges County.

Title III has, over the years, provided us the opportunity to intensify the study of the dropout problem, develop more sophisticated programs for handicapped children, and take the resources of the educational enterprise deeper into the total community. Title III, more than any other legislative authority, produced change in the basic educational program in Prince Georges County.

Title V of ESEA was established to strengthen State Departments of Education. The results in Maryland show substantially more leadership is provided by the Maryland State Department of Education in developing and implementing innovative programs at the local level. Smaller school districts in Maryland rely heavily on these services as their limited local resources cannot permit the employment of specialists of the nature now financed at the State level by title V.

The basic rationale for Public Law 874 is to provide financial assistance to school districts whose available local and State revenues are adversely affected by the added obligation of providing public education to the children of parents who live or work on Federal property. Since the costs of education are largely met by the imposition of taxes on business and residential properties, school districts in which federal installations have been constructed are deprived of a source of revenue but not relieved of the obligation of educating the children of Federal employees. The fact that local educational agencies have been unduly burdened by Federal installations within and nearby their jurisdictions has been recognized by the Federal Government, specifically in section 3 of Public Law 874.

Any effort on the part of the President's educational revenue sharing scheme to discontinue or reduce aid to impacted areas would be a denial of an obligation that Congress has long acknowledged. Although the impact aid program has provided financial assistance to school districts in which Federal installations are located, it has been misinterpreted by some people. The influx of the children of federally employed parents has added, and continues to add, materially to the costs of educa-

tion in impacted areas. To precipitously deny to these areas the financial assistance presently provided by Public Law 874 would subject them to serious financial problems that the Federal Government has admittedly caused. Any effort to curtail assistance to areas affected by Federal installations should be vigorously opposed. In a society in which education has and is playing such a vital role, and in which education has done so much to promote the welfare of the people, this is no time to dilute its effects by withholding funds from school districts to which they are justly entitled.

The proposal by the administration to revise the impacted area aid program would, in my judgment, destroy the intent of the legislation and further burden the citizens of Prince Georges County. This proposal would exclude children of Federal employees from the program unless their families actually live on a Federal installation. Thus, under Public Law 874, "A" children would continue to qualify, and "B" children would not. Under the existing eligibility criteria we claim over 53,000 students or one-third of the total enrollment. If the administration's revisions are imposed the number of eligible students would drop to approximately 2,000.

In terms of payments, a recent survey report indicates the revenue lost to Prince Georges County would be approximately $8 million. If such a loss in revenue were to be made up by existing sources, an increase of approximately 24 per $100 assessed valuation on property would be required. Frankly, I believe the already weary taxpayers in our county would truly revolt.

Our citizenry has been generous in their support of education. Of the estimated $1,000 required to educate each student, approximately 64 percent comes from local funding. It hardly seems equitable that Prince Georges County should receive reduced payments in lieu of tax revenue considering the fact that over 30 percent of the county's school population is currently eligible under Public Law 874.

Mr. Chairman, you and the other members of this subcommittee are aware that the impact aid formula is a recognition of the tax burden which Federal installations make upon the public. In fact, the school tax revenue which this property would generate is more than the total amount of impact aid our county receives. Therefore, it is difficult for me as superintendent of schools to understand why the President and his administration are trying to further reduce Public Law 874. If anything, it should be increased to a more equitable level.

I do not have to tell this subcommittee what crisis exists in financing public education. The current proposal would deal an almost fatal blow to the educational program in many parts of the country and particularly in Prince Georges County. The $8 million loss could not be absorbed by the property owners. The end result would be to further reduce the minimal program planned for next year. Significant increases in class size and the release of vital personnel are only a few of the measures we would be forced to take. The affects of President Nixon's proposal would be long lasting and make it virtually impossible to provide quality education for the children in Prince Georges County.

The administration is proposing to substitute special educational revenue sharing for these categorical programs. This concept appears to have merit, however, I believe greater attention needs to be given

to the delivery system for expeditiously getting these funds to the local level.

Those of us responsible for establishing budgetary requirements at the local level need stability in Federal programs in order to reasonably predict revenues. A chaotic situation has arisen in trying to estimate revenues from Federal sources for fiscal year 1974. In many school districts, my own included, the 1974 school budgets have been submitted to the fiscal authorities. Obviously the unknown factor is the amount of Federal funds we can expect to continue current programs.

Special educational revenue sharing may well be the direction to take in the future. However, let us not abruptly and those programs which are so vitally needed. If reductions are needed let it be a gradual process in order to permit the necessary adjustments at the local level.

Mr. Chairman, I support the continuation of categorical programs such as those provided by the Elementary and Secondary Education Act and Public Law 874. These programs are equitable and have demonstrated ability to bring immediate relief to local school districts.

I urge this subcommittee to use the limits of its influence to extend all existing categorical programs into 1974.

[Additional information follows:]

MONTGOMERY COUNTY PUBLIC SCHOOLS,
Rockville, Md., May 10, 1973.

DR. CARL W. HASSEL,
Superintendent of Schools, Prince George's County,
Upper Marlboro, Md.

DEAR DR. HASSEL: I appreciate your willingness to convey to the House Appropriations Subcommittee on Labor-Health, Education, and Welfare, the interests and concerns of the administration of the Montgomery County Public Schools regarding the President's proposed education budget for fiscal year 1974.

We are especially concerned that the Administration has not included any support for NDEA, Title III, ESEA, Titles II and V, and Impact Aid, Category "B". Contrary to statements emanating from the Office of Management and Budget. these programs continue to provide the services for which they were designed within the framework of local educational priorities.

The great value of NDEA, Title III and ESEA, Title II is in giving schools increased flexibility in the purchase of equipment and materials to support the instructional program that will appeal to the technologically sophisticated student of today. These programs have been directly responsible for equipping science and mathematics laboratories; providing up-to-date kits and materials in the areas of reading, social studies, and modern foreign languages; and greatly benefiting industrial arts programs.

We hope the Subcommittee will support the continuation funding of NDEA, Title III and ESEA, Title II and to maintain the level of support at least at the fiscal year 1972 level.

We believe that termination of the ESEA, Title V program would be a step backward. These funds have enabled local school systems to obtain valuable, and previously unavailable instructional leadership from the Maryland State Department of Education.

The loss of Impact Aid, Category "B" assistance of approximately $5 million would mean severe curtailment of staff and programs and would be grossly unfair, in our view, to school systems with non-property taxed federal installations. Again thank you for including our testimony with yours.

Sincerely,

DONALD MIEDEMA,
Deputy Superintendent of Schools.

Mr. SMITH. What is the approximate ratio of B's compared to A's?

Dr. HASSEL. 52,000 B's reduced to 2000 students we would stand to

lose 95 percent of our eligibility. Certainly in terms of the impact on the local jurisdiction it is significant.

We would lose in excess of $8 million according to our figures.

As you are aware, local jurisdictions have different budget timetables to meet than perhaps the Federal Establishment. We have had to place our budget before our county officials. We have gone on the assumption we would see a continuance of essentially the same Public Law-874 program we have enjoyed in the past.

We are not putting it in exactly 100 percent of entitlement.

Mr. SMITH. You are assuming approximately the same dollar levels?

Dr. HASSEL. Yes; there are plus and minus items but we have made no substantial change.

Mr. SMITH. Did you also have a statement, Dr. McKenney?

Dr. MCKENNEY. No.

Dr. HASSEL. We appreciate your taking the statement. I think it represents the position of the preponderance of superintendents in Maryland.

We have an attachment for the Montgomery County School System signed by the deputy superintendent in the absence of the superintendent explaining their position as well. Fundamentally it is a question perhaps not of Federal intent as far as the philosophy is concerned as much as the problem of the substantial effect over a short-term basis. Our plea is based on very pragmatic reasons in that respect.

Mr. SMITH. Thank you very much, Mr. Hogan and gentlemen.

Mr. HOGAN. Thank you, Mr. Chairman.

Mr. SMITH. I am sure all the members of the committee will look at this.

MONDAY, MAY 14, 1973.

HEALTH SERVICES, TRAINING AND DISEASE PROGRAMS

WITNESS

HON. TENO RONCALIO, REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING

Mr. SMITH. At this point we shall insert the statement of the Honorable Teno Roncalio, from the State of Wyoming.

[Mr. Roncalio's statement follows:]

Mr. Chairman: I appear before you today to respectfully request your consideration of fiscal year 1964 budget appropriations of particular importance to my State of Wyoming.

Those budget items to which I call the subcommittee's particular attention are funding for regional medical programs, Hill-Burton construction, social work education grants, capitation grants to colleges and schools of pharmacy, vocational education, library services and construction, and the streptococcal disease section of the Center for Disease Control.

The subcommittee has no doubt heard from many of our colleagues in regard to cuts and proposed reductions in funding for several major Federal programs. I will not dwell on these, however, I feel that it is necessary to register my concern over them.

The elimination of the Office of Economic Opportunity through administrative fiat in disregard for congressional authority has been thoroughly discussed. I remain doubtful that adequate revenue-sharing funds will be funneled into a revival or retention of programs which are to be thereby sustained.

I must also voice my concern over proposed cuts in medicare, in social and rehabilitation service programs, and in the Economic Development Administration.

I realize the difficult position in which this subcommittee finds itself. We must have responsibility in Federal spending and I support efforts to maintain a reasonable budget ceiling. However, the Administraton's proposed budget for 1974 does not reflect the end of the Vietnam war. Its priorities are not in line with the needs of the people of Wyoming and the Nation.

I wish to commend Chairman Flood in the passage of House Joint Resolution 496, Supplemental Appropriation, 1973, providing for aid to Federally impacted areas, and for a workable compromise on student financial aids. Proposed reductions in impact aid would have had a disastrous effect on several Wyoming schools. These schools will now be able to plan a regular 9 month, high-quality, school year. In regard to student financial aids, an estimated 3,000 students at the University of Wyoming would have been affected by the elimination of national defense loans, educational opportunity grants, and cuts in work study. An estimated 300 students would have had to leave the university.

I am a cosponsor of the health program extension bill to extend through fiscal year 1974 the expiring appropriations authorizations in the Public Health Service Act, the Community Mental Health Center Act, and the Developmental Disabilities Services and Facilities Construction Act. I would hope that the House gives favorable passage to this extension as has the Senate. In that regard, I also ask that this subcommittee consider full funding for these worthwhile and necessary programs.

Regional medical programs, which have trained 2,500 medical and health personnel in Wyoming, are helping to place new research techniques into the hands of local medical personnel. The programs encourage health manpower development, provide continuing education, develop specialized health centers and assist in improving health services in isolated localities. Each of these program objectives are needed in my State, where there is no medical school, where in some counties there is only one physician, and where there are often great distances between communities. An elimination of regional medical programs would be a step back in efforts to provide quality health care and dissemination of developing research technology. I respectfully request that the subcommittee consider refunding regional medical programs at the full level.

A phase out of the Hill-Burton hospital construction program at this time is inconsistent with our growing awareness of health care needs. The Wyoming Department of Health and Social Services has determined that 409 new beds are needed in my State. Approximately 12 intermediate care facilities will be closed in March 1974 because they are unable to meet the Life Safety Code or State standards. Besides meeting demands for new beds, Wyoming hospitals and health-care facilities are compelled in many cases to undertake extensive modernization in order to meet requirements under the Federal medicare and medicaid programs.

Ten medical facilities in Wyoming are currently under construction or have requested Hill-Burton funding. The bonding capacity of communities in Wyoming is very limited and in most cases they are in dire need of Hill-Burton grant funds to supplement the bond issues passed for construction and modernization of health care facilities. Although Hill-Burton funds have represented only a small portion of the total construction funds expended, the program has been used as a model which has set the pattern by which high quality services have and are being developed in all facilities throughout the State. If the Hill-Burton program were discontinued, the free-care provisions of the Hill-Burton program would have to be picked up by the States. Again, I would hope that the subcommittee would consider allowing a resumption of Hill-Burton hospital construction funding.

I also wish to voice concern over cuts in Federal funding for grants for undergraduate and graduate programs in social work education under Section 707 of the Social Security Act. These grants have had a significant impact at the University of Wyoming. The loss of these funds will not only mean a reduction of faculty staff, but will also affect those minority and/or economically or physically disadvantaged students currently enrolled in the university's social work education programs and eligible for stipends. I strongly support the Honorable Wilbur Mills' bill, H.R. 3149, to extend for 1 year the existing authorization of this program. I ask the subcommittee to restore the funding level of this worthwhile endeavor.

Capitation grants to colleges and schools of pharmacy, under the Comprehensive Health Manpower Training Act of 1971, have made it possible for the school of pharmacy in my State to increase its emphasis on and training in

clinical pharmacy and drug use and abuse. These funds have also been used successfully in an extensive recruitment program resulting in a 12-percent increase in pharmacy students in 1 academic year. These grants have been slated for reduction and elimination by the administration. I would ask the subcommittee to note today's relevance of the programs which these funds support and to consider retaining funding for these grants.

I wish to call the subcommittee's attention to the proposed elimination of separate funds for vocational education. Educational revenue sharing will not provide the impetus required and received in the past for vocational education. Vocational-education will be competing with other education programs for these funds at a time when in my State the enrollment in these courses has increased from 4,941 high school students in 1965 to 14,834 in 1972. This is not the time to terminate separate funding for occupational and vocational education.

The proposed budget for 1974 terminates funding for the Library Services and Construction Act, not due to expire until 1975. Although Wyoming only receives about $270,000 a year, exclusive of construction funds, the loss of these moneys will be a heavy blow for public library services.

Public libraries in Wyoming are already finding out that they will not fare well when competing for revenue sharing. Libraries simply do not have the glamor or attract the attention given to other local government functions. Federal funds received in Wyoming have gone toward statewide, multicounty cooperation, resources for the handicapped and blind, expanding school information services, and tying into the resources of the University of Wyoming Library with public libraries throughout the State. Our libraries and their expanding services and accessibility to all citizens cannot be neglected or deprived of this Federal funding which has so enriched their services and facilities.

One last particular item to which I would like to speak is the Center for Disease Control's decision to close the streptococcal disease section in Fort Collins, Colo. This laboratory has given Wyoming's streptococcal disease control program valuable and needed support and assistance. It has served as a reference laboratory, aided in development of procedures and methods, and im improving the capabilities of Wyoming's own program. It has given assistance for control of epidemics of streptococcal disease reducing the occurance of rheumatic fever and nephritis in children.

Aside from this assistance to Wyoming and to other States in the Rocky Mountain region, the laboratory has produced widely recognized valuable research data. The budget for the section is approximately $155,000 per annum. The $12 million proposed cut in funding for the Center for Disease Control would necessitate a reduction in certain programs under the Center, and this is one of those. I respectfully request the subcommittee to consider an increase in the budgetary level for the Center for Disease Control to allow the continuation of this important facility.

MONDAY, MAY 14, 1973.

HIGHER AND SECONDARY EDUCATION

WITNESS

SAMUEL P. PUNER, PRESIDENT, EDUCATIONAL AUDIO-VISUAL, INC.

Mr. SMITH. Mr. Samuel P. Puner, president, Educational Audio-Visual, Inc.

Please proceed, Mr. Puner.

Mr. PUNER. Mr. Chairman and members of the committee, I come before you today to speak in support of continued funding of the Elementary and Secondary Education Act and of the National Defense Education Act.

Just a word about my background. I am, and have been, the president of a company called Educational Audio Visual Inc., a company that began operations in 1949 supplying audiovisual teaching materials to schools all over the United States. The materials that we

sold in the beginning we sold as dealers—buying from producers or publishers and selling to schools through mail order catalogs.

In 1957 we began to produce some audiovisual teaching materials of our own. In those days the materials we produced were educational phonograph records. Since that time we have gone more deeply into the field of audio and visual teaching materials, and in the early sixties we pioneered the development of something now known as the sound filmstrip—a filmstrip with a correlated sound track (either a phonograph record or tape) so that the student sees pictures and hears a descriptive narration of what he is seeing.

We were therefore producing audiovisual teaching materials before the passage of NDEA and have grown during these years as the movement toward the use of such materials as part of the educational process has matured and expanded in the schools of the United States. We service all of the high schools, junior high schools, and colleges, all of the parochial schools, and about half of the elementary schools in this country.

While we are, of course, a commercial organization, I am sure that I don't have to point out to you that schools cannot function without publishers supplying them with books and now, as audiovisual techniques have become significant in the educational process, with audiovisual teaching materials.

Now to come to the matter of our support of ESEA and NDEA and our support of adequate funding of both of these acts.

Mr. Chairman, the shrinking of the world and the high speed development of education in many other countries was dramatized in 1957 when the Russians put up their first Sputnik.

At that point we as a nation suddenly realized that we had been complacent in our attitudes toward education and that local concern with the educational process wasn't adequate to keep up with the knowledge explosion that was taking place not only in this country but in every other developed and developing country in the world. Sputnik showed us we were behind the Russians in many aspects of science, mathematics, and, indirectly, languages. They could read our scientific periodicals and journals, but we couldn't read theirs.

The result of all this was an unprecedented change of national policy calling for a Federal involvement in education as never before. The result was the National Defense Education Act in 1958 which offered among its aims, I quote, "to improve education in science, mathematics, and modern languages by audio visual means."

In one dramatic stroke the Congress made two innovations—first: It said that education was no longer exclusively a matter of local concern but had become a matter of national concern, and second: It said that teaching had too long been limited to classrooms, books, and laboratories; it should now seek to make use of the new means, methods, and techniques of teaching, means that had been growing up around us for more than half a century but had not yet been integrated into the school process—audio visual means.

Few people outside of the educational community realize that in 1958 teaching methods had hardly changed in more than a century. All of us here today over the age of 20 were taught in exactly the same way as our parents, our grandparents, and even our great grandparents had been taught in the earlier years of this century and well

back into the 19th century. School meant a teacher, books, blackboards, laboratories, and some exposure to local environment. Since the 1890's new methods of communication had been opened—phonograph records, motion pictures, and still photographs—and later radio, television, and now video tape. But despite their obvious value, they weren't brought into the active day-to-day school educational process.

When radio emerged in the early 1920's, despite strong efforts by educators, the movement to bring it into the classroom made little progress. Then came television, but in 1958 television was no more part of the classroom scene in this country than radio. Reasons for this are complex—they revolve around local attitudes, lack of experience, lack of research, lack of funds.

But it was a new ball game with the congressional pronouncement on the use of audio visual materials in the preamble to NDEA in 1958. The Congress stated that our national interests required that we must without further delay take into our educational process 20th century means and technology to teach our young. In effect, a national policy was established, and funds and machinery were provided to make it work.

Spurred by public demand and professional needs, the Congress in 1964 expanded NDEA to cover virtually all major subject areas taught in the schools. In 1965 the Congress took a further giant step when it passed the Elementary and Secondary School Act and in effect declared that the national Government was in education to stay.

The positive effects of ESEA and of NDEA are incalculable. Together they say that education is a matter of grave national concern, that anyone in the United States who wishes to have a college level education may have one, that education problems that exist in local communities are to be dealt with and the means to overcome these problems provided, and beyond this, the means and art of education are to be brought into the 20th century and, with support and research, into the 21st.

This revolution in education had been brewing for a long time—a revolution called for by the parents of our children feeling the effects of overcrowded schools and inadequate teaching. Bold and creative thinking was called for on the part of school administrators and teachers to modify, improve, and expand education and to make it relevant to our times. And new means were called for to expand and supplement the means of education that existed before NDEA and ESEA.

As books are published by a group of professionals called publishers, so the work of creating these new materials fell to the lot of a breed of new publishers, publishers with new professional skills whose finished products were not in the form of the printed word but in the form of pictures and sound tracks. The Congress had called for a revolution in the technology, and under this initiative my company and other companies responded and continue to respond to help fill this national need.

I regret, of course, that time will not permit me to show you examples of these new teaching materials—but I have here the catalog of my own company as well as catalogs of many of my colleagues describing and offering these new materials—none of which were in existence in 1958 and most of them the product of the last 5 years.

Here are materials rich with illustration, with interesting sound tracks, well researched, scholarly, and authentic—all created in these few, short years, all adding a new dimension to education.

But this is only the beginning. From the experience of these few years we see a far brighter future for education than was thought possible before NDEA and ESEA. As this new literature of education grows, the prospects for individualized instruction, for self-study programs, for open schools and open universities become brighter and brighter.

I am sure you are all familiar with what are now called self-instruction carrels—a booth where a student can sit alone and receive both sight and sound. Such carrels are new, and when we consider the national picture, not yet available in most schools. But the movement toward such carrels, with the body of teaching materials to serve them, is a change that will not be denied. Inevitably the classroom and the school itself will take on a new look.

As never before there will be new and better ways of dealing with the education of the disadvantaged.

Gifted students also will have the opportunity and the facilities to move at a speed they couldn't have when they were constricted by the requirements of classroom instruction. Education will move faster—the 3-year high school, the 3-year college, the open university are all close to realization, and they will operate not only without loss in the quality of education but, in my opinion, in most cases with considerable gain.

All of this has been made possible by the enactment of a national policy to seek out and encourage new means and new technology—a policy which in my opinion can only be implemented by nationally mandated categorical programs.

The national policy for the next decade or even longer will still require these categorical programs. Under NDEA the Federal Government first mandated the expansion and improvement of education in science, mathematics, and languages. It stated this as a national need, asked the States for cooperation in meeting this need through new means, and made available funds to help them do it. This national need, certainly in science and mathematics, was soon met.

But broad educational changes come slowly and thoughtfully. Despite the gains to date, the need to change will exist into the foreseeable future—the 21st century.

The changeover from what we may call conventional teaching will take a long time, with much trial and error, and will need much in the way of material resources to support the transition. The local communities couldn't possibly do this themselves even if they had the resources. And we know that they haven't. In the present inflationary trend, the first money, local money, still has to be stretched to meet maintenance and operating costs with, as always, not enough left over for books, materials, and research. This is what stymied progress in American education in the first place and was a major reason for ESEA. The need for Federal money will not go away. It will only grow. The Congress knew this before ESEA and NDEA and knows it now.

On a practical level, the passage of ESEA and NDEA created a well-organized administrative apparatus reaching from HEW in Washington, through 50 State departments of education, into every hamlet and community in the United States.

And, despite any failures or shortcomings in ESEA and NDEA, the fact remains that even their severest critics will agree that there is much good in each of these acts and that both are functioning well.

Fifteen years of NDEA and 8 years of ESEA have shown that these acts have withstood the test of time. You have only to ask the rank and file of school administrators, principals, and teachers in the United States to hear how highly they are regarded and how much more could be derived from them if they were funded fully and on time.

There are, of course, faults. I don't know of any significant act of Congress that was faultless. But these acts are working well—whatever their flaws, they can easily be remedied by amendment, and any changeover to a hastily constructed special revenue sharing program would be unwise and unwarranted.

I would like to add my own word on the subject of funding.

The annual funding battles are well known not only to the education community but to the people of this country. The President's vetoes in recent years are also well known. We are now finishing up another year of uncertainty. Fiscal 1973 is ending without an education budget, operating on continuing resolutions to the dismay of school boards, administrators, and teachers to say nothing of the publishers and producers like ourselves who produce the materials needed for education.

If there is one area of both of these laws which requires improvement it is that of funding. It is not solely a matter of how much. Equally important, it is a matter of when.

In the life of ESEA since 1965 when the law was enacted there has been only 1 year when the act has been funded before schools opened in September. In every other year there have been uncertainties, doubts, question marks, all of which have prevented the orderly development of teaching and research programs that are indispensable to achieve the intent of these acts. Changes in education and educational technique take place slowly, as I have said. In my experience, all progress in education can only be measured over long periods of time. Under our present laws and despite all difficulties, progress has indeed been made—but how much greater it could have been! How much further along our schools would have been in a stable legislative climate with established and timely funding.

I strongly urge this committee and the Congress to give this problem a very high order of priority so that whatever the final decision is on the amount of support to education, the schools of this country can know, yes, years in advance if possible, what they can expect and when can expect it. I can assure you, Mr. Chairman, that we, as a commercial company, have moved haltingly with our research and development because of these uncertainties, but once we know what the schools' pace really is our program would be greatly stimulated and greatly accelerated.

Thank you for this opportunity to speak on behalf of my company and on behalf of many colleagues in the education industry, and I

express our hope that the Congress will not only continue its support of education but will expand its role.

Mr. SMITH. Thank you, Mr. Puner. I think a lot of members agree that time is of the essence, and time is just about as important as the amounts involved.

Mr. PUNER. Thank you. That has been our view for many, many years.

MAY 14, 1973.

EDUCATION AND ECONOMIC OPPORTUNITY PROGRAMS

WITNESS

HON. CARL D. PERKINS, REPRESENTATIVE IN CONGRESS FROM THE STATE OF KENTUCKY

Mr. SMITH. We are pleased to have the Honorable Carl D. Perkins.

Mr. PERKINS. Mr. Chairman, I have for presentation today to your subcommittee a statement covering the Labor-HEW appropriations bill for fiscal year 1974. In essence my statement calls for maintaining the levels of funding for programs as specified in the House-passed version of the appropriations bill for Labor-HEW in fiscal year 1973 (H.R. 15417) of the 92d Congress.

Since this statement is quite lengthy, I will not read it in toto, but I would like to highlight these specific points.

First, I cannot stress too emphatically the alarm throughout school systems, State educational agencies and other agencies directly concerned with the provision of educational services over the timing of the allocation of funds for programs for fiscal year 1974. This is why I have stressed the importance of bringing out a separate appropriation for the U.S. Office of Education in order that this measure could clear the Congress at the earliest possible date. This is the second best means of assuring timely funding of education programs. The first, of course, in my judgment would be to forward fund education programs as authorized by Public Law 91-230. In two recent years appropriations, the committee has seen fit to bring out a separate Office of Education appropriation measure in response to the urgency of letting educational agencies know in timely fashion their precise allocation of funds.

Second, the President's budget ignores the necessity of timely funding in order to make the most effective use of Federal dollars. This is why I view as nothing short of folly the administration proposal that for the school year beginning this September—fiscal year 1974—Federal support for elementary and secondary education, vocational education, and other programs be repealed and support be given under entirely new legislative authorizations which were not submitted to the Congress until 2 months after the submission of the fiscal year 1974 budget.

Either the administration is ignorant of the required legislative process of hearings, committee action, and floor debate in both the House and the Senate—or it does not care that this September there will be a sharp cutback in services to millions of schoolchildren.

Third, with respect to all of these programs that I have listed above for which no appropriation requests have been made, I would urge that at least this subcommittee include the same amount of funds

provided for them in the House-passed appropriations bill for fiscal year 1973, H.R. 15417, of the 92d Congress.

I hope that the appropriations action on these education programs will be expedited so that final congressional action will take place before the expiration of the current fiscal year on June 30, 1973.

But in the event that we are forced into a situation where a continuing resolution is necessary, it is essential that the language of the resolution will not give the administration the option of funding education programs on the budget estimate for fiscal year 1974. This would be at the level of zero for the programs I have discussed. I would urge that such a continuing resolution state a positive level of funding for these programs, preferably with reference to the House-passed 1973 Labor-HEW appropriations bill, H.R. 15417, of the 92d Congress.

Finally let me comment on authorization legislation.

At the time of the budget submission to the Congress the last week in January, the draft of the special education revenue-sharing proposal was not submitted. In fact, it was not submitted until March 19, 1973. At this time the General Subcommittee on Education of the House Education and Labor Committee had held 19 days of hearings on legislation to extend the Elementary and Secondary Education Act and other education programs for 5 years.

On March 19, Secretary of Health, Education, and Welfare Caspar Weinberger, Acting Commissioner of Education John Ottina, and Assistant Secretary of Health, Education, and Welfare for Education Sidney Marland testified recommending the enactment of the special revenue sharing for education legislation they then outlined.

H.R. 5823, the Better Schools Act, was introduced on the following day, March 20, 1973, by Congressman Al Bell—by request—and is one of the pending proposals before the committee with respect to elementary and secondary education.

I say elementary and secondary education advisedly in view of the fact that our current hearings were initiated to deal with elementary and secondary education programs. The Better Schools Act would not only repeal existing elementary and secondary education programs, but also the Vocational Education Act of 1963, as amended, and certain provisions of the National School Lunch Act and the Child Nutrition Act.

It is my expectation and certainly it is my determined goal to see the Congress enact before the end of this Session authorizing legislation for elementary and secondary education and related programs which will extend authorizations to the fiscal year 1975 and beyond so that when this Appropriations Subcommittee is considering appropriations for the fiscal year 1975, it will have the necessary authorizing legislation.

Fortunately, and because of the action of this subcommittee, student aid programs are now on a forward funded cycle. Unfortunately with respect to fiscal year 1974 the President's budget again violates the statutory provisions of the fiscal year 1972 authorizing act. I strongly urge that funding be provided for the three traditional student aid programs at at least the minimum levels specified in the authorizing statute.

It is anticipated that institutional requests for the direct loan program in academic year 1974–75 will exceed $500 million. The statutory

minimum requirement is $286 million. This amount was appropriated in fiscal year 1973. I urge that at least this amount be appropriated in fiscal year 1974.

Requests for work-study funds in academic year 1974–75 are anticipated at the $450 million level. We must appropriate $237,400,000 to fulfill the statutory requirement. In light of the expanded eligibility for students and institutions, I would hope that funding could be provided at the fiscal year 1973 level of $270,200,000.

The authorizing statute requires an appropriation of $130,093,000 for supplemental grants. This is the minimum amount which must be appropriated for the supplemental program. As with the other two programs, institutional requests will far exceed this and accordingly, I hope that additional amounts will be provided.

I strongly support and urge approval of the administration's request for $959 million for the basic opportunity grant program.

I recognize there are certain reservations about the basic opportunity grant program. However, I do not think we have any problems which cannot be satisfactorily resolved. This year we did not get the proposed family contributions schedule from the Office of Education until February 1. The committees had only a brief period of time to approve or disapprove the schedule. I know that the family contribution schedule which will govern the program next year worries many. We hope this year to get the administration's schedule by June or July and we will have from June until after the first of the year to review and work on the new schedule.

Mr. SMITH. Talking about next month?

Mr. PERKINS. Yes.

Mr. SMITH. Revising the family schedule?

Mr. PERKINS. Yes. The bill requires submission of the schedule to the Congress on an annual basis and we hope to begin our review of it at the earliest possible date.

Mr. SMITH. When do you think you will have that out?

Mr. PERKINS. It will take 2 or 3 months at least. Of course it is not applicable until the school term commencing in September of 1974.

Mr. SMITH. We are talking about getting it into the 1974 appropriations.

Mr. PERKINS. I am urging an early appropriation. We will not have our work completed on the schedule before the 1974 appropriations bill is processed. That would be impossible.

My point is that we hope to begin our review before July 1. I would think that you will want to review it also, as will many others in an effort to make improvements. This time there will be ample opportunity to have constructive suggestions incorporated into the schedule.

Mr. SMITH. I agree with what you say with regard to the time factor and that is what bothers me. Time is of the essence in these education programs. They asked for $959 million for BOG's. I believe that if they did not eliminate about a third of the applicants under restrictions in the family schedule, full funding would be $1½ billion. Anyway, the content of the family assistance schedule is important as to whether or not it will go forward as intended. We really need to know what adjustments will be made before we write up the 1974 bill. Otherwise we will be delayed again as we were this year and get involved with a supplemental.

Mr. PERKINS. Next year this situation will be different, Mr. Smith. We didn't enact the program until June of last year. We debated the basic opportunity grant program in conference for over 2 months.

It is my strong suggestion that you appropriate as early as possible. Do it with the understanding that the Education Committees will do their job.

Mr. SMITH. If we don't have updated information based on a revised family schedule, how do we know how much they will need for BOG's?

Mr. PERKINS. I believe we have a good understanding of the numbers involved.

Mr. SMITH. The estimates are based on the present family assistance schedule which arbitrarily excludes a lot of students who should not be excluded under BOG's.

Mr. PERKINS. The point is that before the $959 million would be expanded the family schedule of contributions will be completely reviewed in committee. There will be an opportunity to make it more realistic from your viewpoint. I don't think we should wait 1 minute. The 74 regular bill should carry the full appropriation. It is just impossible to get the schedule and rework it before this committee takes action. It is just impossible for us to do that.

Mr. SMITH. What would you do about direct loans, then?

Mr. PERKINS. I would say that you at least fund the student assistance program at the required statutory level of $286 million on top of the BOG's request for $959 million.

Mr. SMITH. The record here is important inasmuch as you are Chairman of the Education and Labor Committee. You are working on some vocational education amendments, aren't you?

Mr. PERKINS. Yes, we expect to conduct oversight hearings on Vocational Education during this Congress and consider the extension of those programs which expire June 30, 1975.

Mr. SMITH. When do you expect some action on that?

Mr. PERKINS. It will be some while before we get to consider amendments.

Mr. SMITH. Would they affect the 1974 appropriation?

Mr. PERKINS. They would not.

Mr. SMITH. Are you going to do anything on legislation regarding "hold harmless"?

Mr. PERKINS. That is in controversy before our committee.

Mr. SMITH. That would affect 1974, would it not?

Mr. PERKINS. It will not affect 1974. I anticipate that the legislation which we will report will affect programs for fiscal years after June 30, 1974, the year present authorizations expire.

In the allocation of funds among local educational agencies in fiscal year 1974, the U.S. Commissioner of Education will be required for the first time to utilize the 1970 Census data. It has not been available prior to this time because the necessary information concerning the numbers of children from low income families had not been determined on a county-by-county basis as is reqquired under title I.

The utilization of 1970 Census data will result in drastic reductions for some local educational agencies and substantial increases for others. This is due in part to a shift in population from the 1960 to the 1970 census. But more significantly, it is due to the requirement in the title I formula that children coming from families receiving aid for

dependent children under the Welfare Act also be counted when the family income from such sources is above the $2,000 low income factor. This latter requirement is based on a current count and has been increasing steadily each year.

As a result of the AFDC factor, many States' count of eligible children has been increasing year by year in disproportion to the increases in other States, many of which have remained stable. While these increases may to some extent represent an increase in the actual number of disadvantaged children, the increases may well be attributable to more liberalized State standards with respect to welfare eligibility.

When the AFDC provision was put into the law in 1965, it was then estimated to require only $60 million out of a total of approximately $1 billion for title I. In the actual count of such children for the first year (fiscal year 1966) of title I, there were 582,578 of such children. In the fiscal year 1967, the AFDC count had grown to 857,651. In fiscal year 1973, it is estimated to be 3,262,022 and exceeds the number of children coming from families with incomes of less than $2,000 as calculated under the 1970 census.

In any given year, unless additional funds were provided for title I, many States would have suffered losses of title I allocations, and other States would have been the beneficiary of increases. Since title I funding has never been sufficient to serve all eligible children, to shift money in this fashion from year to year would have been taking money away from disadvantaged children in one place in order to serve them in another, and the Appropriations Committee has included language in the appropriations bill saving States harmless from a reduction of funds from the previous year's funding, except in two instances—one of which is under the fiscal year 1973 appropriation governed by the continuing resolution and the other is a year in which additional funds in a supplemental were obtained to bring States which would have lost funds in the regular appropriations bill up to the level of the previous year's allocation.

In this unusual year, fiscal year 1974, I would hope that similar floor language could be included in the appropriations bill at some point.

Mr. SMITH. One thing is sure, adequate attention to financing education cannot be given in a continuing resolution.

Mr. PERKINS. That is where we are in trouble. That is the reason I have gone through all this. With this fight we have in the Congress, maybe North Carolina will follow me, and the gentleman from Pennsylvania, Mr. Pittenger, representing the Council of Chief State School Officers, also will make a statement following me. There is a real necessity for an early appropriation bill.

Mr. SMITH. I agree with almost everything you say, especially about the necessity for early appropriations. One of the problems we get into is what we have done about it three times in the last 4 years. This committee figures out a bill for which we can secure a two-thirds vote, and that is what we have to do. Then we go to the floor. Somebody amends it in such a way that we lose votes when we try to override the veto, and the veto is sustained. We wind up with less than we started out with. We went to work and got a bill out early and one for which we could get a two-thirds vote. We could have overridden the President on the bill that came from the committee. It was amended on the floor. It was vetoed. We could not override the veto because the increases

had been exposed too much, so we have ended up with less than the committee recommended originally. How can we get an early bill enacted into law when members do what we are talking about? They trade victory for a day for an overall loss for the year.

Mr. PERKINS. Put in the amounts that the committee feels reasonable and I feel the amounts I have suggested are all reasonable amounts. Take it to the floor and I think it will pass overwhemingly. I think it will pass over any Presidential veto.

Mr. SMITH. We had that figured out last year. We had a two-thirds vote lined up, you know, and there was added a few million dollars on the floor. The gain was for 1 day, then he vetoed it and it slipped back about five times that much after it was all over.

Mr. PERKINS. The Chairman should not accuse me of doing all this.

Mr. SMITH. I didn't accuse you of doing anything. We will be looking your way for some help this year, though.

Mr. PERKINS. I think the figures we suggest here are all reasonable figures.

Mr. SMITH. This year you will be our ally if we figure out a bill on which we can get a two-thirds vote?

Mr. PERKINS. I think I have always been a good ally. I have always been one of the best allies you have had anywhere.

With your permission I will put everything on a chart and insert these figures in the record, those figures that I have suggested for all of the various programs.

Mr. SMITH. That will be fine.

[The information referred to follows:]

Appropriation/activity (figures in millions of dollars)	Administration's budget fiscal year 1974	House-passed appropriation fiscal year 1973	Recommendation fiscal year 1974
Elementary and Secondary Education:			
(ESEA I)	0	$1,810.0	$1,810.0
Supplementary services—(ESEA III):			
State plan programs	0	145.684	145.684
Special programs	0	25.709	25.709
Subtotal	0	171.393	171.393
Strengthening State Departments of Education—(ESEA V):			
General support (V-A)	0	43.0	43.0
Comprehensive planning and evaluation (V-C)	0	10.0	10.0
Subtotal	0	53.0	53.0
Total	0	2,034.393	2,034.393
School assistance in federally affected areas:			
Maintenance and operations (Public Law 874)	$41.5	635.495	635.495
Construction (Public Law 815)	19.0	25.910	25.910
Public Housing	0	10.0	10.0
Total	60.5	671.405	671.405
Education for the Handicapped:			
State grant programs (EHA-B)	0	50.0	50.0
Special target programs:			
Deaf-blind centers (EHA-C, sec. 622)	10.0	10.0	10.0
Early childhood projects (EHA-C), sec. 623	12.0	12.0	12.0
Specific learning disabilities (EHA-G)	3.25	3.25	3.25
Regional resource centers (EHA-C), sec. 621	7.243	7.243	7.243
Subtotal	32.493	32.493	32.493
Innovation and development (EHA-E, secs. 641, 642)	9.916	9.916	9.916
Technology and communications (EHA-D and F)	13.5	13.5	13.5
Special education and manpower (EHA-D)	37.7	37.7	37.7
Total	93.609	143.609	143.609

Appropriation/activity (figures in millions of dollars)	Administration's budget fiscal year 1974	House-passed appropriation fiscal year 1973	Recommendation fiscal year 1974
Vocational and Adult Education:			
Grants to States for vocational education:			
Basic vocational education programs—(VEA–B):			
Basic grants	0	426,682	426,682
National Advisory Council	0	0,330	0,330
Subtotal	0	427,012	427,012
Programs for students with special needs (VEA, sec. 102b)	0	29,898	29,898
Consumer and homemaking (VEA–F)	0	38,322	38,322
Work-study (VEA–H)	0	10,524	10,524
Cooperative education (VEA–G)	0	19,5	19,5
State Advisory Councils (VEA–A, sec. 104)	0	3,204	3,204
Subtotal	0	528,460	528,460
Vocational research:			
Grants to States for innovation (VEA–D)	8,0	16,0	16,0
Curriculum development (VEA–I)	4,0	6,0	6,0
Grants to States for research (VEA–C)	9,0	18,0	18,0
Subtotal	21,0	40,0	40,0
Adult Education (AEA)	10,0	85,0	85,0
Total	31,0	643,460	643,460
Library resources:			
Public Libraries:			
Services (LSCA I and III)	0	69,5	69,5
Construction (LSCA II)	0	15,0	15,0
Subtotal	0	84,5	84,5
School Library Resources (ESEA II)	0	100,00	100,00

Mr. SMITH. Everybody agrees we need somehow to get figures and appropriations settled settled early in the year. This really needs to be done somehow. I don't know how we will do it, though, when we have this disagreement as to the levels at which we can get a two-thirds vote. That is what it amounts to.

With regard to this BOG problem, this does concern me. What do you think about the committee funding the EOG's, work study, and NDEA direct loans at the levels we did 2 or 3 weeks ago, and then taking whatever money is left over in the budget for BOG's and then later on, after the family schedule has been reviewed, and so forth, and in a supplemental, figure out how much additional might be used for BOG's? What do you think about that?

Mr. PERKINS. From the standpoint of doing justice to the BOG program and to our needy college students that would be a mistake. I feel that students and parents should know early——

Mr. SMITH. How will they know that early unless the family schedule is straightened out?

Mr. PERKINS. Hopefully the schedule will be sent to us in July.

Mr. SMITH. We will have this bill on the floor by then.

Mr. PERKINS. I realize that. We must remember this money will not be spent until September of 1974. We have to trust somebody in this situation. It is impossible to satisfy everybody with a family contribution schedule. Moreover this past year we had to act rapidly in order to get this program into operation at all. The House Committee acted expeditiously. I can assure you that the House Committee will again act expeditiously this year. We will spend several weeks on it if necessary.

Mr. SMITH. Your committee spent time on it but did not revise obvious inequities.

Mr. PERKINS. I think I know what the gentleman has in mind, there may be some inequities. Certainly there are some who feel there are obvious inequities. We did stimulate important changes even this year. However, an early and adequate appropriation and early work on the family contribution schedule for next year certainly will eliminate any future inequities. I think we should adequately forward fund all student aid programs. The programs will have more stability than ever before and such action will let the basic opportunity program get off the ground. Adequate and timely funding of the program will be of greater assistance to the poor students in the country than anything we could do.

Mr. SMITH. We are glad to have your testimony. I took more time than I should have because I thought it was important.

[Discussion held off the record.]

Mr. PERKINS. I appear here also to ask you to refund the Office of Economic Opportunity programs and make appropriations for all the programs, and I shall submit a chart showing those programs and amounts.

[The chart referred to follows:]

OFFICE OF ECONOMIC OPPORTUNITY PROGRAMS

	1973 estimates	1974 budget request	Perkins recommendations for NOA to OEO for 1974
Community action	[1] $285.3	[2] $32.1	$328.9
Senior opportunities	8.0	0	8.0
Legal services	73.8	[3] 71.5	71.5
Health and nutrition	165.2	[2] 146.9	146.9
Emergency food and medical	3.5	0	30.0
Community economic development	30.7	[4] 39.3	39.3
Migrant and seasonal farmworkers	36.3	[5] 40.0	40.0
Research development evaluation	66.7	[6] 78.0	78.0
General support	18.5	[7] 33.0	18.5
Unobligated balance lapsing	92.2	0	0
Total appropriation	790.2	440.8	761.1

[1] This figure contrasts with a level of $351,000,000 for the comparable period for fiscal 1972. The statute requires that a minimum of $328,900,000 be expended in each fiscal year for this activity. Our analysis leads us to conclude that the discrepancy between the estimated level of $285,300,000 and the above-mentioned requirement is due to the planned phase-out of community action support at the time the budget was submitted, which phase-out has now been enjoined by a U.S. District Court. In anticipation of no further support for community action beyond June 30, 1973, OEO had planned to, and has in fact, defunded some, and not refunded other CAA's. Those CAA's which were refunded received funds only for what OEO called "phase-out" grants, and these were for a 6-month period. This situation contrasts sharply with the normal one of routine refunding for a 12-month period. It is easy to see that if you make 6-month instead fo 12-month grants and defund instead of refund, you are going to spend a lot less money than you normally would. This is why the $285,300,000 figure is so low, and why the figure for "unobligated balances lapsing" is so unusually high.

[2] Included in HEW budget request.

[3] For proposed independent corporation.

[4] For Office of Minority Business Enterprise.

[5] Included in Department of Labor budget request.

[6] To various agencies (i.e.) National Institute of Education, Department of Labor, Office of Child Development, HUD.

[7] To GSA for liquidation activities.

Mr. PERKINS. I feel this is reasonable. I don't think we should let these programs go down the drain.

In my judgment if we act we will save these programs, and they should be saved.

Mr. SMITH. What will you have in the way of authorizing legislation?

Mr. PERKINS. The Economic Opportunity Act.

Mr. SMITH. On the manpower program?

Mr. PERKINS. Yes, it authorizes both manpower programs and poverty programs through June 30 of next year. I was going to suggest that you put as much money as possible—the full amount authorized—into title I–A, that is the Job Corps, and 1–B, which includes all of these other manpower programs which are in many ways similar to the programs under the Manpower Development and Training Act.

Mr. SMITH. They don't reach exactly the same people, though, do they?

Mr. PERKINS. At one time they did not, but now they do reach the same people. We have this authorization through June 30 of next year. That is the reason I recommend appropriating the full amount authorized for manpower programs under the Economic Opportunity Act. We need to wind up with $1,549 million in order to not leave any ongoing programs out. We have $950 million authorized for manpower programs under title I of the Economic Opportunity Act. So we would still need to appropriate $600 million under the manpower development training, for which we do not have an authorization beyond June 30 of this year.

Mr. SMITH. That will not be out until July or August?

Mr. PERKINS. We may get it out. Mr. Daniels has already had out the emergency employment bill. They are trying to negotiate over what type of bill should come out, whether comprehensive, limited in certain aspects, and that is really the holdup. I figure it will take a few weeks.

Mr. SMITH. That makes it difficult.

Mr. PERKINS. We have had some problems.

Mr. SMITH. It makes it difficult because both of our committees have arguments with the administration going on at the same time. Then we are working on a budget which started last October and we don't have authorizing legislation as yet. It makes it terribly difficult if we don't at least know what is authorized and what we can argue about.

Mr. PERKINS. I agree with you wholeheartedly. We have this argument of special revenue sharing with the administration, and that is the holdup in committee over the type of bill to bring up. However, we do have the authorization through next June 30 for programs under the Economic Opportunity Act. Title I–B includes many programs, such as J.O.B.S., Job Corps, Neighborhood Youth Corps, concentrated employment programs, Operation Mainstream, Neighborhood Youth Corps Out-of-School, computerized job programs, placement, and so on.

Therefore, if we appropriate the amount I suggested for these programs, which have been delegated to the Labor Department, then we will be out of the woods to a great degree. I am hopeful we will get the MDTA authorization worked out before July 1. I think we can agree to a simple extension if necessary. There will be no holdup, with the understanding we will have to get them to agree to a certain type of legislation we will propose in connection with manpower.

Almost all the activities authorized under MDTA can be continued without difficulty or disruption under the Economic Opportunity Act authority. I have tried to make that clear.

Then we have the employment program authorized by the Emergency Employment Act of 1971. We hope to get legislation there. For

section 5 the 1973 appropriation was $1 billion. For section 6 it was $250 million. The total 1973 appropriation was $1,250 million. This is just for the public employment programs.

Mr. SMITH. We thank you very much, Mr. Perkins. I am sure most of the committee agrees with most of what you say. We will want your counsel on all of this.

Mr. PERKINS. In conclusion, Mr. Chairman, we should have a separate bill on education. I see no way you can separate the wheat from the chaff otherwise.

I would like to submit a comprehensive statement.

Mr. SMITH. That will be fine. We will insert it in the record.

[The statement follows:]

PART I. ELEMENTARY, SECONDARY, SPECIAL AND VOCATIONAL EDUCATION PROGRAMS

Mr. Chairman, I appreciate very much the opportunity to appear before the subcommittee this morning which evidences to me the continuing cooperative interchange between the authorizing committee and the appropriations committee with respect to education programs.

My comments today will be addressed to those education programs administered by the Department of Health, Education, and Welfare from preschool through the college level.

There is greater concern throughout this Nation today about the timeliness and about the level of funding for education programs than at any other time since I have been in the Congress.

At the elementary and secondary education level alone, we are dealing with approximately 17,000 school districts and hundreds of thousands of professional educators. More importantly, we are dealing with the educational opportunities of millions of our young people. The importance of Federal funds for these education programs goes far beyond the relatively small percentage of the total school budget they represent because Federal dollars are focused on special needs and special problems.

There is great alarm nationwide now directed to the level and the timing of appropriations for fiscal year 1974 for elementary and secondary education programs, vocational education programs, the Education of the Handicapped Act, and the Adult Education Act. This concern is justified because the President's fiscal year 1974 budget proposals do not request funds for these programs. Consequently, the first part of my remarks will be addressed to this area of educational need, and, subsequently, I will discuss the needs in postsecondary education.

I cannot stress too emphatically the alarm throughout school systems, State educational agencies and other agencies directly concerned with the provision of educational services over the timing of the allocation of funds for programs for fiscal year 1974. This is why I have stressed the importance of bringing out separate appropriations for the U.S. Office of Education in order that this measure could clear the Congress at the earliest possible date. This is the second best means of assuring timely funding of education programs. The first, of course, in my judgment would be to forward fund education programs as authorized by Public Law 91-230. In 2 recent years' appropriations (fiscal year 1971 and fiscal year 1972), the committee has seen fit to bring out a separate Office of Education appropriation measure in response to the urgency of letting educational agencies know in timely fashion their precise allocation of funds.

I am aware of and have concern for the budget deficiencies for other important programs in the Labor-HEW request. There is an urgency about them too. However, I believe that the education programs involve unique problems. I have already referred to the numbers of educational agencies involved.

It has been estimated that over 80 percent of the funds for education are for personal services, that is to say the money goes to procure the services of special teachers for the handicapped, remedial reading teachers, guidance counselors, vocational education instructors, and special teachers of the disadvantaged. The services provided by these teachers require special college and in-service training to make their skills in demand.

Under most all State laws, teachers must be notified months in advance of the beginning of the academic year of their service contract renewal status or

they are automatically extended. When these contracts depend upon Federal funds and there is no final determination by Congress of the appropriation, these teachers must be notified that their contracts will be terminated unless Federal funds are available. Under these circumstances, it is difficult to rehire highly qualified personnel for Federal programs. The result is inevitably the loss of qualified personnel and a reduction of the effectiveness of Federal dollars in meeting educational objectives.

This is why I view as nothing short of folly the administration proposal that for the school year beginning this September (fiscal year 1974) Federal support for elementary and secondary education, vocational education and other programs be repealed and support be given under entirely new legislative authorizations which were not submitted to the Congress until 2 months after the submission of the fiscal year 1974 budget.

Either the administration is ignorant of the required legislative process of hearings, committee action and floor debate in both the House and the Senate—or it does not care that this September there will be a sharp cutback in services to millions of schoolchildren.

With respect to programs dealing with the secondary school level and levels below the secondary school level, the President's budget proposes no funds for titles I, II, III, and V of the Elementary and Secondary Education Act of 1965. In fact, the only funds requested by the administration under the authority of the Elementary and Secondary Education Act are funds for the discretionary programs of bilingual education under title VII of that act in the amount of $35 million and dropout prevention programs under title VIII in the amount of $4 million.

Similarly, the administration has requested no funds for the Adult Education Act with the exception of the U.S. Office of Education's discretionary portion of the adult education programs.

The administration has requested no funds for the basic grant program to States for vocational education programs, the programs for students with special vocational education needs, for consumer and homemaking education, for vocational work-study, for vocational cooperative education, nor for financing the State Advisory Councils on Vocational Education.

In addition to requesting no funds for title II of the Elementary and Secondary Education Act, providing grants to States for the acquisition of textbooks, library resources, and other instructional materials, the administration proposes to abandon the public library services and construction program.

No funds are recommended for the acquisition of equipment under title III of the National Defense Education Act.

With respect to all of these programs that I have listed above for which no appropriation requests have been made, I would urge that at least this subcommittee include the same amount of funds provided for them in the House-passed appropriations bill for fiscal year 1973, H.R. 15417, of the 92d Congress.

In making this recommendation, I do so in recognition of the fact that all of the evidence before me and before the House Education and Labor Committee is that these amounts will hardly maintain programs at the fiscal year 1972 level of activity because of educational cost increases occasioned since that year.

My suggestion here is dictated by practical considerations on the budget restrictions that confront the Congress and the practical realities of being unable at this point in time to provide higher funding levels justified as being necessary to fulfill program objectives.

I hope that the appropriations action on these education programs will be expedited so that final congressional action will take place before the expiration of the current fiscal year on June 30, 1973.

But in the event that we are forced into a situation where a continuing resolution is necessary, it is essential that the language of the resolution does not give the administration the option of funding education programs on the budget estimate for fiscal year 1974. This would be at the level of zero for the programs I have discussed. I would urge that such a continuing resolution state a positive level of funding for these programs, preferably with reference to the House-passed 1973 Labor-HEW appropriations bill, H.R. 15417, of the 92d Congress.

With the exception of the Vocational Education Act of 1963, the basic grant portions of which are permanent authorizations, and the portions of that act which expire July 1, 1975, authorizations for the other elementary and secondary education programs for fiscal year 1974 are derived from sec. 413(c) of the General Education Provisions Act providing an automatic extension of the authorization for certain education programs under certain circumstances. This authori-

zation was recognized and utilized by the Appropriations Committee in connection with the Office of Education and related agencies appropriations bill for fiscal year 1972, H.R. 7016.

In this connection the subcommittee may well want to again look at House Report 92-99 reporting on that appropriations measure in view of the comparable circumstances confronting the subcommittee this year. On page 7 of that report, the committee stated:

"The committee was faced with a unique situation with regard to the budget request of over $1.8 billion for higher education. This amount, and more, is authorized by virtue of the "contingent extension of expiring appropriation authority" provision contained in Public Law 91-230. However, the major part of the budget request was based on the administration's proposal for revision of the authorization, a proposal that had not even been submitted to Congress when the budget was submitted, and still had not been submitted when the committee started hearings on the budget of the Office of Education. Although requested twice to do so, the Department refused to submit an adaptation of their budget to the existing legislative authorizations, and also declined to give similar information with regard to individual activities when requested to do so when the committee was hearing verbal testimony.

"The committee listened with great interest to the descriptions of these proposals presented by Secretary Richardson, Commissioner Marland, and Deputy Commissioner Muirhead. However, since this legislation is currently under consideration by the Committee on Education and Labor, it would certainly be inappropriate, as well as an obvious violation of the rules of the House, to bring up an appropriation bill based on these proposals.

"The committee was thus faced with two alternatives: Include no funds in the bill for higher education and await the outcome of congressional and Presidential action on the proposed legislation, or include funds to continue the program based on existing legislation. The committee feels that the latter alternative is the responsible one. Regardless of how conscientious everyone is and how hard they work to reach final enactment of the new legislation at an early date, no one can tell what delays may be encountered in the House, the Senate, the inevitable conference, and action on the conference report. Nor can anyone at this point say whether the final product of Congress will be signed or vetoed by the President. To risk the possibility of funds not being appropriated until months after the beginning of next fall's school term seems to the committee to be a very poor second choice to say the least."

I say the situation is comparable to that which this subcommittee faced on the fiscal year 1972 appropriations bill because of the following circumstances.

While undoubted authority exists to appropriate funds for fiscal year 1974 for the reasons and for the programs I have mentioned above, the administration is requesting no funds for them because of its indication that it would submit to Congress a recommendation for special education revenue sharing to be effective in fiscal year 1974.

At the time of the budget submission to the Congress the last week in January, the draft of the special education revenue sharing proposal was not submitted.

In fact, it was not submitted until March 19, 1973. At that time the General Subcommittee on Education of the House Education and Labor Committee had held 19 days of hearings on legislation to extend the Elementary and Secondary Education Act and other education programs for 5 years.

On March 19, Secretary of Health, Education, and Welfare Caspar Weinberger, Acting Commissioner of Education John Ottina, and Assistant Secretary of Health, Education, and Welfare for Education Sidney Marland testified recommending the enactment of the special education revenue sharing legislation they then outlined.

The administration's bill, H.R. 5823, the "Better Schools Act," was introduced on the following day, March 20, 1973, by Congressman Al Bell (by request) and is one of the pending proposals before the committee with respect to elementary and secondary education.

I say "elementary and secondary education" advisedly in view of the fact that our current hearings were initiated to deal with elementary and secondary education programs. The Better Schools Act would not only repeal existing elementary and secondary education programs but also the Vocational Education Act of 1963, as amended, and certain provisions of the National School Lunch Act and the Child Nutrition Act.

It is my expectation and certainly it is my determined goal to see the Congress enact before the end of this session authorizing legislation for elementary and

secondary educatiion and related programs which will extend authorizations to the fiscal year 1975 and beyond so that when this Appropriations Subcommittee is considering appropriations for the fiscal year 1975, it will have the necessary authorizing legislation.

Let me address myself now to the need and justification for funding of the programs I have mentioned above for the fiscal year 1974.

Elementary and secondary education

In connection with its oversight hearings during the Second Session of the 92d Congress, the Education and Labor Committee heard 85 witnesses testifying on the Elementary and Secondary Education Act and its effect at the local level. In addition, the committee received over 100 papers and statements concerning ESEA program operations.

During this session of the Congress, the committe has had 33 days of hearings on the Elementary and Secondary Education Act and other elementary and secondary education programs and received testimony from 222 witnesses. These persons, who have a working knowledge of programs in local school districts funded by the Elementary and Secondary Education Act and other Federal programs, consistently presented the committee with a very positive picture of increased achievement and increased educational opportunities for young people as a result of the authorized Federal programs.

In addition to the hearings, the committee is just now in the process of tabulating the returns of a survey of school districts with respect to the operation of title I ESEA programs for the fiscal year 1971–72. Over 9,000 responses to the survey have been received.

Fifty percent of the responses from this survey indicated that title I ESEA programs were effective in meeting the needs of underachieving and educationally disadvantaged students but that not all disadvantaged children were participating because of the insufficient level of funds provided for the program.

Sixteen percent of the respondents indicated that precise and measurable benefits for disadvantaged children were not available due primarily to the small amount of title I ESEA expenditures per disadvantaged pupil.

Eighty-two percent of the responses indicated the programs were effectively meeting the needs of educationally disadvantaged children.

Eight percent of the respondents indicated that their past program had not been effective but that changes were being made in their programs for the school year 1972–73.

Another eight percent of the respondents indicated that the amount of funds they received was so limited as to not make a material difference.

Two percent responded that the program should be discontinued.

The committee has received from every State of the Union, during the course of its hearings, positive indications of basic educational skill gains by title I participating children.

Each year that I have reviewed the operation of these programs, I have found significantly increasing indications of positive results. In fact, my impression from chairing many hours of hearings and reading many reports on title I is that this major elementary and secondary education program is a remarkable success in providing Federal education support for the neediest children.

It has been a remarkable instrument in directing attention and additional resources to meeting the most severe elementary and secondary education needs.

It has been remarkably more effective in producing positive results than could probably have been expected in view of all of the administrative problems confronting school systems in carrying out the title I mandate.

The title I admonition to local educational agencies was to analyze at the local level the special problems which presented barriers to learning opportunities for the educationally disadvantaged children of the system and to fashion locally conceived programs to meet those special needs.

Under the administrative mechanisms prescribed by title I, dollar entitlements were established for each local educational agency. The State educational agency was given the authority to approve programs and projects developed by the local educational agency for the use of those funds in meeting these special needs.

The Congress recognized that the title I allocation of funds to each district would not be received by that district in the ideal circumstances of fiscally equalized education within the State. As has been subsequently vividly illustrated by the *Rodriquez* and *Serrano v. Priest* court decisions, the per-pupil expend-

itures for school districts within a single State could vary from as little as $300 per pupil to $1,000 or more per pupil.

As anticipated, the Elementary and Secondary Education funds impacted in a variety of ways on local educational agencies. In smaller, rural school districts where the disadvantaged membership of the school constituted, in many instances, 50 percent or more of the total school membership, the title I funds represented a major portion of the school system's total operating budget.

In other school districts, particularly in the core of our major cities with heavy concentrations of disadvantaged children, dollar amounts were equally significant but represented a smaller fraction of the system's total operating budget.

Ranging between these two illustrations of districts benefiting from title I funds, there were to be observed varying degrees of title I impact on the local system's budget.

Obviously, a disadvantaged child in one area could be considerably more disadvantaged than a child in another area. It could, of course, also be expected that the administrative choices at the local level as to the application of dollars to the educational needs of disadvantaged children might be considerably different in the low per-pupil expenditure district from those in the high per-pupil expenditure district.

An Office of Education fiscal year 1968 survey of teachers indicated that there were as many as 16.8 million school-age children who were from poor families or whose teachers did not believe they would finish high school.

The National Education Finance Project estimated the size of target population of disadvantaged children to be between 11.9 to 12.5 million in fiscal year 1970. The actual number of children counted in the title I formula for the purpose of allocating funds is approximately 7 million and the latest year for which complete data from all participating agencies is available (1970) indicates that there are about 7.6 million children participating in the program.

Thus, whether one considers the upper or lower limit of the target population, it is obvious that many school systems were confronted with the difficult administrative decision of either narrowing their target population in order to attain more positive impact or of spreading more thinly the Federal title I dollars so as to serve in some fashion all disadvantaged children.

This choice has been more difficult considering only approximately 25 percent of the total authorization is being appropriated.

Oversight hearings conducted by the House Education and Labor Committee during the 92d Congress indicated pretty clearly a mass of subjective evaluation of title I of a very positive nature. In addition, objective evaluations of achievement gains made by title I children have been more positive and numerous with each year's experience developed in operation of title I programs. There is evidence that school districts are abandoning title I programs which have proved unsuccessful and are adopting new and more promising programs for meeting the needs of disadvantaged children.

The Office of Education evaluation report submitted to the Congress in December of last year, based on fiscal year 1969 and fiscal year 1970 data, was summarized in this fashion:

"The fragmentary evidence on the effect of title I on student achievement is disappointing on the national level, but as the unit of analysis is narrowed from the Nation as a whole to States and then to projects within States, more signs of positive impact on participating children can be identified. It should also be noted that the available data is limited to fiscal year 1970 and before. Since then a number of steps have been taken which are expected to increase the impact of title I. There has not yet been time to assess, for example, the effect of increased technical assistance, the requirement for comparability of expenditures, increased parental involvement and increased concentration of funds."

School library resoruces, textbooks, and other instructional material; public library services and construction

The library programs are among those for which "zero appropriations" were proposed in the budget for the 1974 fiscal year.

This action by the President is hard for me to understand. The original legislation was signed by President Eisenhower in 1956. An extension of the Library Services and Construction Act was signed by President Nixon in 1970. I cannot understand how the President could agree to continuation of these programs, and their expansion to some extent, as enacted by Congress, and then 2 years later recommend that Congress terminate them by ending the appropriations.

In 1970, also, Congress enacted and the President signed legislation creating the National Commission on Libraries and Information Science to advise Congress and the President on the status of libraries and their needs for further progress and development. While the recommendations of the budget for "zero funding" for libraries in the 1974 fiscal year were being developed, I am advised that there was no effort made to learn the views of the members of the National Commission even though all the ladies and gentlemen in question had been appointed by the President.

I recommend appropriation of $100 million for title II of the Elementary and Secondary Education Act and $84.5 million for programs authorized by the Library Services and Construction Act (the amounts contained in the House-passed version of H.R. 15417, 92d Congress).

The $100 million for school libraries and textbooks is urgently required. Nearly one-third of all public elementary schools lack libraries. The Office of Education recently reported that about half the high school libraries in the country do not come up to the standards set by the States themselves. One expert witness stated before our committee this year that "it is imperative that" title II be continued, saying: "A great part of the continuation of reading, viewing, or listening enjoyment is 'desire.' Title II ESEA can provide some materials to use in teaching reading skills—and does in some schools—but we believe our biggest challenge is in making the student want to continue to read, view, or listen. . . . Materials must be available that he can read, view, or listen to at all levels of his reading—skill development and on all of his understanding and interest levels—and in all formats (prints and audiovisual) to suit his needs at that moment. This requires that all children have easy access to maximum numbers of materials."

The Library Services and Construction Act also has demonstrated effective use of Federal funds. It has enabled the States to extend library services to many who had no service before: The rural resident and the urban dweller, the handicapped, the homebound, and the institutionalized. Title III provides for innovative and cooperative activities among all types of libraries: Academic, school, public, institutional, business, and industry libraries. LSCA title III has provided the first Federal funds to encourage the States to develop regional, statewide, and interstate cooperative projects to overcome the fragmentation and consequent waste caused by unnecessary duplication of materials and services. Careful coordination and planning are required to maximize the Nation's limited library resources.

Despite the progress under this legislation, one American in eight is still without access to the services of a public library, or is receiving inadequate service. We have come 88 percent of the way under the Library Services and Construction Act. Let us not deny the last 12 percent of our people assistance under this program. It is needed and appreciated, I can tell you. In my own State of Kentucky, for example, seven small libraries were established on a demonstration basis in five rural counties with a total population of almost 127,000. Bookmobile service was almost provided to these rural residents. The State added $95,000 to the $51,000 in Federal funds, and after 2 years of experience with modern public library services, the people of Estill, Mercer, and Greenup Counties petitioned for a library tax so they could assume responsibility themselves for support of their libraries.

According to the administration, this program can and should be supported from the general revenue-sharing program.

Public libraries are eligible for support from this source, and some of them are receiving some general revenue sharing funds, I have been told. But the Treasury Department has stated that it will take 2 years until we can make any judgments about the impact of general revenue sharing, and I do not believe we can or should slacken our support until all the evidence is in our hands. The full $84.5 million previously voted by Congress for the Library Services and Construction Act programs is therefore a priority item for consideration by this committee this year.

Supplemental educational centers and services

The so-called Supplemental Educational Centers and Services Program is authorized by title III of the Elementary and Secondary Education Act of 1965. The administration does not propose that there be any appropriation for fiscal year 1974 for this program. I would recommend that there be provided in the fiscal year 1974 the amounts provided in the House-passed bill, H.R. 15417, of the 92d Congress.

The $145,684,000 that would thus be provided barely maintains this program at previous years' levels. The amount provided is a small percentage of the total Federal support for elementary and secondary education and yet a smaller percentage of the approximately $54 billion expended from all sources for elementary and secondary schools. Small as these outlays may be, in the total picture their value and importance is, nevertheless, significant. The supplemental educational centers and services program in reality is a program to encourage innovative and new approaches to meeting educational needs. In this role, even a small percentage of those title III programs which have proved themselves to be successful can have a far-reaching and beneficial impact on the entire education process.

The University of Kansas recently completed a project-by-project study of Kansas programs for which title III funding has been terminated, in order to determine the "continuation" rate. This study, useful for its descriptions of specific propect activities, reveals that of 20 programs examined, 10 are continuing 90 percent or more of the activities initiated while under title III funding; only two of the 20 are operating at a level of less than 25 percent of their previous activity.

According to the National Advisory Council on title III, survival of a title III project cannot be measured solely in terms of the continuation of a separate, identifiable entity in a school system. Of the superintendents who responded in the National Advisory Council study, 99 percent said that "materials and concepts" created by their title III projects continued in use in the school system after the termination of Federal funding, with 50 percent indicating that the use was at a "significantly greater" level than during the period of Federal funding. Many who responded that their projects had been "discontinued" qualified that statement with the information that components of the project were continuing.

The superintendents also were asked about the effects of their title III projects on other communities. And 60 percent of the superintendents said that they knew of "at least" one adoption of the project, in whole or in part, by another school district. Many said that on the basis of visitations and inquiries which the projects had entertained, they were sure there were many more adoptions or adaptations of which they were not aware.

State educational agencies support

Mr. Chairman, it would not have been possible to have obtained effective results from Federal dollars for elementary and secondary education had it not been for title V of the Elementary and Secondary Education Act. This title, of course, provides grants to State educational agencies so as to augment their planning, evaluation, technical assistance, and administrative activities in connection with federally funded programs.

Title V of the Elementary and Secondary Education Act of 1965 became the means by which we would assure the implementation of the Federal policy to strongly involve and provide a leadership role for the State educational agencies in meeting the objectives of Federal education legislation.

It would be tragic, indeed, if we were not to continue this financial support to State educational agencies. This State role would be eliminated by the administration's fiscal year 1974 budget because it calls for "zero funding" for title V.

The State agency role in Federal education support programs is also threatened by the "Better Schools Act" (education revenue sharing) because that administration proposal would substitute, in the words of one of my colleagues, "the strings on Federal aid for chains."

I would urge that the subcommittee would include in the bill for fiscal year 1974 at least the amount of funds provided for title V in the House-passed appropriations bill for fiscal year 1973, H.R. 15417—$53 million.

Vocational education

Not only has the administration proposed "zero funding" for the Vocational Education Act of 1963, as amended, but also it has proposed in its so-called Better Schools Act a repeal of this landmark legislation.

To follow this course of action would, indeed, be irresponsible.

Evidence before our committee is mounting with respect to the need for strengthening our vocational education programs. The great majority of young people now leaving our high schools will not embark upon college academic careers. A large number of those who do will neither seek nor find employment without the benefit of further vocational or technical training. We are ever being

reminded in the highly technological society in which we live that during a lifetime of employment, for many there must be four or as many as five retraining opportunities. All of this means that vocational education must fulfill a substancial responsibility for the technical training of young people and adults in various kinds of training situations.

I have been very pleased with the response of this committee and the Congress to vocational educatiion needs, and I would urge that funds be provided for fiscal year 1974 at the levels provided by the House-passed bill, H.R. 15417, of the 92d Congress for the fiscal year 1973.

Impact aid

With respect to the impact aid program, Public Laws 81–874 and 81–815, I would hope that the committee would see fit to provide for fiscal year 1974 the amount of the House-passed bill, H.R. 15417, of the 92d Congress.

There has been much criticism of this program, particularly in recent years. There have been two outside and exhaustive studies of the impact aid program since 1965. Both of these studies have concluded a justification for the program as well as a justification for the payment of both the so-called A and B category children.

Personally, as a member of the House Education and Labor Committtee when this law was first enacted, I would hate to imagine what the opportunities would have been for many thousands of children had they not received the benefit of this program. Until such time as the Congress enacts broad general support for elementary and secondary education to appropriately equalize financial support for education among school districts and States, I do not think it is wise nor do I think it is the best interest of this country to reduce these payments.

Miscellaneous programs

The following programs, according to the President's budget submission for fiscal year 1974, will be reduced below the 1973 estimate: Bilingual education, dropout prevention, Follow Through, drug abuse, the Indian Education Act, and environmental education. There is a need to continue these programs, and most certainly this should be at a funding level at least comparable to the 1973 estimate.

Decentralization of U.S. Office of Education Administration

The U.S. Office of Education has indicated that it plans to regionalize the administration of Federal education programs. That is to say, the administration proposes to duplicate in each of the 10 regional offices of Health, Education, and Welfare the administrative operations now conducted from its central Washington office.

I do not believe we need another layer of Federal bureaucracy with respect to the administration of education programs.

I am also concerned about this proposal because of its potential cost. If the same level of technical services, administration, and evaluation are to be maintained, the present Washington operation will have to be replicated in the 10 regional offices with considerably higher administrative cost.

In view of these concerns, it would appear to be appropriate for there to be included in the appropriations bill restrictive language precluding these administrative changes until—in the course of our current House Education and Labor Committee hearings—the full implication of this proposed administrative change can be evaluated.

PART II—POSTSECONDARY EDUCATION

Turning now to the area of postsecondary education, may I initially complement this distinguished subcommittee on its recent work in providing advanced appropriations for student assistance programs in the Urgent Supplemental Appropriations Bill. The long sought after goal of placing all student assistance programs on the same funding cycle—a forward funding cycle—has been achieved. In my judgment—and I believe it is a view shared by countless college administrators, parents and students across the country—this is indeed a major accomplishment.

As was the case with the 1973 budget submission, we are again faced with an administration request for student assistance moneys which violates not only the intent but also the very statutory requirements of the 1972 authorizing act.

I take the same position today that I took in my testimony earlier this year before this distinguished group concerning the 1973 request. The law must be

obeyed. Accordingly, I strongly urge that the traditional instituionally based student aid programs be funded at at least the threshold amounts required by the authorizing statute.

Moreover, it would be my hope that the subcommittee will see fit to find the college work-study program at at least the 1973 level of $270,200,000. Even at this level, funding would be far less than the anticipated need. Based on the request for the next academic year, it is reasonable to suggest that colleges and universities will request in excess of $450 million for the college work-study program in academic year 1974–75, almost twice as much as the current funding level.

The statutory threshold requirement in the authorizing act of $286 million for the student loan program is identical to the current funding level. I would point out that based on requests for the next academic year, it is reasonable to suggest that over $500 million will be requested for the direct student loan program in academic year 1974–75. This compares with $286 million for capital contribution to student loan funds this year and next year.

It is important that we understand that while appropriations for the three traditional programs have remained at the same level during these 2 years, individual institutional allocations in most cases will be slightly less next year. One cause is that there are more institutions now participating in the program—3,400 in academic year 1973–74 compared with 2,900 for 1972–73. The volume of panel approved requests is up by approximately 7 percent. Furthermore, the education amendments of 1972 extended eligibility to all halftime students as well as to students in accredited proprietary vocational schools.

It is more difficult to anticipate the need for the supplemental EOG program because of the establishment of the new basic opportunity grant program. It is clear, however, that the supplemental program must remain a strong viable program to complement the basic program. In short, we need a dual approach in Federal student aid policy. Both types of programs are required:

A set of institutionally administered programs, including a strong grant program, that provides the flexibility at the campus level to meet the particular supplementary needs of each individual student at the institution he chooses to attend.

And a national standardized program that will assure a floor of assistance rof every eligible student wherever he lives or attends college unaffected by allotment formulas, grantsmanship or other extraneous factors.

Turning to the new program of basic grants, I wish to applaud the administration's request for full funding. I am firmly convinced that it is the basic grants program which holds the greatest promise for meeting the often stated congressional goal that no student be denied an educational opportunity because of financial barriers. Properly funded and efficiently administered, the basic grant program will provide all needy students with assistance in a meaningful, equitable and timely manner. The three institutionally based programs cannot, because of their inherent design and operating mechanisms, provide aid to all students in as equitable and in as timely a manner as can be done under the basic grant program.

It must be recognized that by their nature, the college based programs, even if fully funded, would not cover the universe of need. Because these programs are influenced by state allotment formulas and institutional allocations, there are inevitable disparities and inequities in the distribution of funds among institutions and students.

Funds tend to be concentrated among a relatively small number of institutions; 50 percent of college work-study money, for example is allocated to 283 colleges and universities. Thousands of needy students have not had access to Federal student aid benefits because their institutions, for a variety of reasons do not participate at all or do not participate effectively in the college-based programs. This has been particularly true of 2 year colleges and vocational/technical schools.

I would point out also that the BOG program will clearly aid a wider spectrum of students attending a wider spectrum of institutions than under the traditional programs. This was the intent of the 1972 legislation. It is estimated, for example, that 11 percent of BOG funds will go to students

in proprietary and vocational schools, compared to only 1 percent under the current EOG program.

Finally, Mr. Chairman, in connection with student assistance, I should like to urge that we begin the new program of State incentive grants. The authorizations for this new program are modest. This is a matching Federal program to stimulate greater State efforts to assist financially needy students. A modest Federal investment of approximately $25 million will be of immediate and direct benefit. I am confident that significant gains will result from greater cooperation between the Federal Government and the States in student assistance programs.

The more I study student aid needs and programs, the more I am impressed with the design in the 1972 authorizing statute. A balanced program of student aid has been authorized which appropriately provides significant aid at various income levels. No one program can stand by itself nor should it be judged or evaluated independently. These are companion programs which must be viewed together. We have a balanced authorization. What is needed now is a balanced scheme for funding all programs.

Mr. Chairman, I am likewise impressed with the overall balance in the 1972 authorization act when viewed in a much broader context. During the 3-year debate on the authorizing legislation, there were some who argued that virtually the entire Federal investment should be in the form of student assistance. On the other hand, there were those who were advocating a much greater investment of Federal funds in institutions. The 1972 act struck a compromise between the two extremes.

However, I am now concerned that the budget submission moves away from that compromise which was difficult to reach, and moves in the direction of placing virtually all of the Federal interest in student assistance. I believe it is incumbent upon us to implement the more balanced scheme which was authorized last year. To do so, we must first restore funding for a number of existing traditional programs which the President has scheduled for termination.

Let us consider that there is no request for funds to continue the following programs: (1) University community services; (2) college library resources; (3) land grant colleges; (4) language training and area centers; (5) training opportunities for higher education personnel; and (6) instructional equipment grants. In each and every instance, Mr. Chairman, there is ample justification for funding of these programs at the authorized levels. I find it difficult for anyone to quarrel with the recommendation that they at least be funded at the 1973 level.

This would require an appropriation of $15 million for the title I program of university extension and community services. Funding of the title I program since 1965 has never been commensurate with the authorization nor with the expressed needs of our colleges and universities. I doubt if any member will quarrel with the objectives and purposes of the title I program. If the program were adequately funded, colleges and universities could make a significant impact on solving many of the numerous problems facing both urban and rural communities.

At least last year's level of $17,800,000 is needed for the college library resource program. It is common knoweldge that the budgets of most colleges and universities are becoming more strained with each passing year. Therefore, I was especially pleased to note that the Appropriations Committee declined to accept the proposed rescission from the fiscal year 1973 college library appropriation.

I understand that this year well over 2,000 colleges and universties applied for the basic matching library grants authorized under title II of the Higher Education Act, and that most of them will be eligible to receive these grants of up to $5,000 for college library resources. While the amount of the grants is small, they encourage colleges and universities in all the States to maintain a level of spending for their libraries over the years, and this helps considerably to prevent our college libraries from falling into neglect.

I am hopeful that once Congress has rejected the rescissions, the U.S. Office of Education will take action to make additional awards for supplemental and special purpose grants, also authorized under HEA II. These grants provide aid to institutions with special library needs and they encourage cooperaitve projects among a number of libraries thus contributing to more economical library services and to more rapid delivery of information to larger numbers of library users than any one library on its own could serve.

For the fifth straight year, President Nixon has proposed to eliminate funds for land grant colleges. Although we have never agreed to the elimination of the program, appropriations have been reduced to the $10 million level during the last few years. Even at this level, land grant institutions regard these funds as

invaluable because they represent the only formula-based unrestricted Federal grant given colleges and universities. Funds are used for a variety of instructional purposes, including equipment purchases and faculty salaries. The University of Minnesota provides an example of the value of these funds. Land grant moneys presently support 18 professors whose positions would have to be eliminated if the program were terminated. I urge restoration of these funds in the 1974 budget.

Just as I was pleased with the committee's recent decision to reject the proposed rescissions in higher education for 1973, I am likewise pleased that in the second supplemental moneys were provided for title VI of the NDEA. Again the President is trying to terminate this program. I have a bulging file of personal endorsements of the value of this program from colleges and universities throughout the Nation, written by both faculty and administrators alike. The comments of a professor from the University of Kentucky in my home State are similar to those expressed time and time again:

"Should these funds not be restored and approved, international education would suffer another setback, for there would be no funds for the critically needed language and area studies centers and programs. Moreover, the Office of Education's innovative and very useful efforts in supporting undergraduate and graduate programs in problem or issue-oriented international studies would presumably cease entirely."

We must restore funding for the Higher Education Act program of grants to assist colleges with the acquisition of instructional equipment. Because both your subcommittee, Mr. Chairman, and my committee have been requested by the administration to treminate this program and the similar program for elementary and secondary education (title III of NDEA), I would lke to explain why we have concluded that these two programs are very necessary and funding should be continued in fiscal year 1974.

As you know, after careful consideration by the Education and Labor Committee these two programs were reauthorized in the Education Amendments Act of 1972 for fiscal years 1973–75.

While the administration argues that these programs are no longer needed, the testimony and data submitted prove just the opposite. A recent survey of all States shows that during fiscal year 1973, local education agencies in all States needed $111,049,000 in Federal funds under NDEA title III, and since the administration—despite the very clear intent of Congress—has refused to spend the $50 million appropriated by the Congress, this need still exists unmet to this very day.

With respect to title VI of the Higher Education Act, the same situation exists. Another recent survey of States just completed shows that as of May 4, a total of 958 applications have been received from private colleges and universities, community and junior colleges, totaling $20,736,175. Because the administration has refused to spend the $12,500,000 appropriated by the Congress, this need will go entirely unmet during the current fiscal year.

Because these two programs are 50–50 matching, every Federal dollar invested results in at least one local dollar being spent. This matching provision has been very popular in the schools and colleges and has stimulated an outstanding level of local involvement by teachers, administrators and school boards, with the net result being very successful projects which live on long after the Federal funding for that school is through.

I urge also that $25 million again this year be provided for the veterans' cost of education payments. Again, I am recommending the same figure as was provided in fiscal year 1973.

One of the more controversial items in the 1972 authorizing legislation was the proposed institutional aid program. There was never any serious quarrel, I do not believe, with the concept of institutional aid. Nor was there any strong disagreement with premise that colleges and universities, both public and private, were in desperate need of general purpose funds. The controversy centered rather on the way in which funds were to be distributed. The conference resolution of this issue was not acceptable to all, but I do not think we should allow this to any way thwart the program. It is important that we begin and I strongly recommend an appropriation of $100 million. I recognize that this is far less than what is authorized, but I recognize also the valuable and needed assistance even this small amount will be to many struggling colleges and universities.

Finally, Mr. Chairman, I wish to speak about another series of programs in the 1972 act which enjoyed widespread support in the Congress. I must say that I view with disbelief the administration's failure to request funds for occupational education and community college assistance. It was not to many months

ago that the new Assistant Secretary for Education—then the Commissioner of Education—was parading around the country expounding on the value of career education. It is surprising too in light of the administration's enthusiasm for the new section 1202 State commissions that, because of budgetary constraints, they have now backed off entirely from their former stance. Here again, I feel strongly that these programs must be started and I accordingly recommend an appropriation of $3 million for the section 1202 State commissions, $50 million for the community college assistance and $100 million for occupational and career education.

Finally, Mr. Chairman, I support fully the administration's support for the title III higher education program for developing institutions and the request for the TRIO programs of Upward Bound, Talent Search and special services. I regret that the recently passed 1973 Supplemental Appropriations Bill provided less for developing institutions and less for Talent Search than the President had requested. With respect to these special programs, the needs are great and at a minimum we should provide funding at the requested level.

PART III—EOA AND MANPOWER

Let me now turn my attention to the area of the budget dealing with the Office of Economic Opportunity.

The President requested no funds for the operation of the Office of Economic Opportunity for fiscal year 1974 although the programs under the Economic Opportunity Act are authorized through fiscal 1975 and appropriations are authorized through fiscal 1974.

While the administration proposes that a number of the Economic Opportunity Act programs be carried on by other agencies or departments of the Government, many others find no support in the budget. The most critical omission in my judgment, is the deletion of funds for the operation of Community Action agencies.

The budget says, "Effective July 1, 1973, new funding for Community Action agencies will be at the discretion of local communities. After more than 7 years of existence, Community Action has had an adequate opportunity to demonstrate its value. In addition to private funds, State and local governments may, of course, use general and special revenue sharing funds for these purposes."

What the administration has not said is that after more than 7 years of existence, Community Action has, in fact, demonstrated its value. In a serious and comprehensive study of over 591 Community Action agencies, OEO was prepared in January to issue a report that demonstrated the effectiveness of Community Action agencies. The report shows that Community Action agencies, with relatively small amounts of seed money, have been able to bring significant additional funds and other resources to bear on local community problems. That report, entitled "Utilization Test Survey Data for 591 CAA's," was to have been pub'ished in January 1973. It was never officially released, however.

The annual report of OEO was due to be released September 30, 1972. It was prepared by Howard Phillips' predecessor and, I am told, was published in thousands of copies. To this date, they have remained under lock and key. That document, I am told, also contains very positive recommendations for the continuation of OEO and the programs authorized under the Economic Opportunity Act.

The administration's suggestion that Community Action agencies have had an adequate opportunity to demonstrate their value, that they have been supported long enough by Federal money, and those that are good enough will find funds at the State and local level, is a cynical treatment of the facts. Considered in the context of the total budget request, such reasoning translates into a death sentence for most CAA's. Under the President's budget, every community in this Nation will be faced with serious and substantial reductions in available revenue—serious cuts affecting housing, education, welfare, urban renewal. Virtually every program of Federal assistance to the local level is being reduced. Even if one adds in the so-called revenue-sharing moneys the net result is going to be an overall reduction of Federal assistance at the State and local level.

I hope that this committee will recognize that Community Action is most critical. It is the only flexible fund that the local communities have to carry on the war against poverty. I would urge a restoration of a minimum of $328.9 million for this purpose.

The other critical omission in the budget request for these programs is the elimination of the Emergency Food and Medical Services. Emergency Food and Medical Services has been of tremendous help to the local communities in dealing with crisis situations. These resourecs have been used to provide ambulance services in rural areas to permit the poor to get to hospitals. The Emergency Food and Medical Service program helped feed thousands of chronically unemployed individuals in the aircraft industry in the Northwest in recent years. This program helps meet the needs of people in times of tremendous personal crisis. There is no comparable substitute in all the Government programs that are on the books.

Another program that was omitted in the budget request is the Senior Opportunities and Services program. This program has provided $8 million a year over the past 3 or 4 years. In my judgment, it has a record that would justify a request for a substantial increase. I will not, however, suggest that, but I feel it absolutely necessary that this program be continued at least on a fiscal year 1973 level of $8 million.

I concur in the appropriation requests that have been made for the economic opportunity programs in the fiscal 1974 budget. I will not suggest that programs heretofore appropriated directly to the operating and delegate agency should be appropriated to the Director of the Office of Economic Opportunity. I would respectfully suggest, however, that OEO be retained and that all ongoing programs not heretofore appropriated to the delegate agency be appropriated to the Office of Economic Opportunity.

I would urge that there are very good reasons for the delegate relationship to continue to exist and that Congress retain, for the time being, the power to reconsider and reorganize the OEO program which we will do before the end of fiscal 1975.

I fully support the request of $146.9 million for health and nutrition programs, and it is my position that if these programs can be more effectively administered through the Department of Health, Education, and Welfare, that is where they should be delegated; but I am concerned that some mechanism be retained to insure that the poor are being properly served when this program is operated by the Department of Health, Education, and Welfare.

Likewise, I fully support the request of $40 million for migrant and seasonal farmworker programs, but again I express my concern that it is incumbent upon us to maintain a mechanism to insure that these funds go to those who we intend.

Likewise, for the Indian projects that are proposed to be delegated to the Department of Health, Education, and Welfare, we must insure that the poor are actually being served.

As for community economic development that has been operating within the Office of Economic Opportunity, it might well be that the Office of Minority Business Enterprise is better able to administer this type of program, and when the President sends up the legislation to empower OMBE to run community development programs, I will more than likely support it, but at the present time they do not have the authority to carry on these programs. I feel that the $39.3 million that is requested in the budget should be appropriated and the program should be run at the Office of Economic Opportunity.

Much the same can be said for the Legal Services program. The budget request is $71.5 million for an independent corporation to carry on the activities that have been known as Legal Services. The President, only last Friday, sent up his bill describing the form which this corporation should take. The authority to run Legal Services programs currently rests in the Office of Economic Opportunity. I think it is vital that the committee recommend the appropriation of this $71.5 million to continue Legal Services programs until the Congress can work its will on the establishment of an independent corporation.

Finally, Mr. Chairman, I see no need to to spend $33 million in liquidation activities for the Office of Economic Opportunity. The Congress has authorized the existence of such an agency through fiscal year 1974 and, in my judgment, we should be spending approximately $18 million for general administration to continue the activities of the Office of Economic Opportunity.

If these recommendations are followed, the total appropriation request for fiscal year 1974 would be just slightly less than that of fiscal year 1973.

MANPOWER PROGRAMS AND EMERGENCY EMPLOYMENT

In the area of manpower, we face crippling cuts and additional assaults on our congressional prerogatives. During the current fiscal year, the administration

is seeking through various devices to impound roughly $375.3 million of funds appropriated by the Congress for manpower training activities under the Economic Opportunity Act and the Manpower Development and Training Act. If they are successful—and it appears so far that they will be—this will result in a reduction in these activities of $508 million from fiscal year 1972, only $132.7 million of which was approved by Congress. I believe that we must appropriate at least as much as we did for the fiscal year 1973, notwithstanding the fact that some of these funds have been impounded. This comes to $1.549 billion.

In this connection, I notice that the budget requests funding for a combined Economic Opportunity Act (title I)—MDTA authorization even though the two statutes are separate and distinct. Since neither piece of legislation is alone sufficient to authorize even the administration's requested amount, it seems to me that you will have to appropriate specific sums under each authority. I would suggest that the committee appropriate the full amount of the EOA authorization for title I ($950 million) and make up the difference between that amount and my recommended total by appropriating under MDTA authority. The reason for this is twofold: First, MDTA authority expires June 30 of this year (EOA is authorized through fiscal 1974), and its renewal is behind schedule; and, second, almost all of the activities authorized under MDTA can be continued without difficulty or disruption under EOA authority.

On top of these cuts, the budget contains no request for funds to continue the Emergency Employment Act. During this fiscal year, the Congress appropriated $1.25 billion for this purpose. This has been one of the most highly successful and well-received programs to have ever emerged from our committee. It is preposterous to argue, as the administration does, that this program is no longer needed because unemployment is getting better. It may be getting better, but there are still more than 4.8 million people unemployed. And, I might add, the program automatically shuts down if unemployment drops below 4.5 percent for 3 consecutive months. So their arguments really are not arguments, but mere excuses for a reckless budget cut.

This program could easily be doubled. I don't know of anyone with any experience with it or who has studied it—except for the administration, of course—who does not recommend at least a doubling of the program. But I know that this committee faces many problems and that such a request, under the circumstances, would probably be unreasonable. Accordingly, I will ask today only for a continuation at the fiscal year 1973 appropriation level—$1.25 billion.

I will, with your permission, include two charts at this point in the record, which illustrate the points I have been discussing.

MONDAY, MAY 14, 1973.

EDUCATION APPROPRIATIONS

WITNESSES

HON. CHARLIE ROSE, REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA
ROBERT E. STROTHER, ASSISTANT STATE SUPERINTENDENT, NORTH CAROLINA STATE DEPARTMENT OF EDUCATION
CARLTON FLEETWOOD, DIRECTOR, DIVISION OF FEDERAL-STATE RELATIONS, NORTH CAROLINA DEPARTMENT OF EDUCATION
JOE GOODPASTURE, PUBLIC INFORMATION OFFICER, NORTH CAROLINA DEPARTMENT OF EDUCATION

Mr. SMITH. Mr. Rose, are you with them?

Mr. ROSE. I would like to introduce a statement for the record and make a brief statement for the committee.

[Congressman Rose's statement follows:]

Mr. Chairman and members of the Subcommittee on Labor, Health, Education, and Welfare, in fiscal year 1965, North Carolina received approximately $27 million for the State and local education agencies under the National Defense Education Act, vocational education, school food services, impact aid, and other

Federal programs. With the passage of the Elementary and Secondary Education Act of 1965, Public Law 89–10 funds supporting elementary and secondary education increased markedly and continued to increase until fiscal year 1972, during which North Carolina schools received more than $140 million. The programs supported by Federal funds range from instruction for the economically and educationally disadvantaged, to financial support for school food services.

1. PLANNING IS NECESSARY TO EVALUATION AND ACCOUNTABILITY

Even though North Carolina and other States in the Nation received significant financial support from the Federal Government, the funds have not been made available early enough in the year to allow time for planning. It is our recommendation that Federal categorical programs which are presently authorized should be funded early in the spring of the fiscal year prior to the year in which the programs will operate. Since it is impossible to enact appropriating legislation to give adequate planning time for the fiscal year 1974, we recommend that a separate education budget be enacted during June.

The school calendar is different from other funding cycles, and educators need to know the amounts of money which they will have available for the fall school term. School budgets supported by State and local funds in North Carolina will be approved during this month. Late funding tends to be wasteful in that it forces local education agencies to spend their Federal moneys over a short period of time. During fiscal year 1973, the schools have operated under a continuing resolution which has been periodically extended for short periods of time. This is a poor way to run a business—public education is the biggest business in the Nation.

2. SCHOOLS FACE FINANCIAL CRISIS

It becomes more and more difficult for local and State governments to finance quality education for all young people. Since the Federal Government is most efficient in collecting moneys, it is suggested that the Federal Government become more and more involved in supporting educational programs, possibly paying as much as one-third of the total cost based upon some equitable distribution among States. The schools are in a financial crisis which is not shared by welfare, health, and labor programs. This is evidenced by the property tax revolt and the further evidence of the rush to new school finance plans being proposed throughout the country. It appears to us that the Congress and the administration should be able to evaluate educational funding separately.

3. THE USE OF 1970 CENSUS DATA FOR ALLOCATION OF FUNDS FOR TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT

It appears that in the absence of new authorizing legislation, the Elementary and Secondary Education Act programs will be extended automatically for 1 year in accordance with provisions in Public Law 91–230. The Secretary of Health, Education, and Welfare is required under current legislation to use the most recent data available to him for the purposes of allotting funds to title I of the Elementary and Secondary Education Act. Under this program, the Secretary would use $2,000 as a low-income factor basing the number of children on the 1970 census data. It is no longer reasonable to use a $2,000 low-income factor because of the current high cost of living and inflation. We strongly urge Congress and the administration to evaluate the total allocation formula. Use of the 1970 census data, $2,000 as the low-income factor, and counting of children whose families receive aid for dependent children, is discriminatory. For example, 14 percent of the children counted in North Carolina for low-income allocation purposes qualify under aid for dependent children, while 69 percent of the children counted in New York qualify for title I money under aid for dependent children. The States which have well-funded social services and welfare programs would probably have more children qualifying for title I of the Elementary and Secondary Education Act. This problem will only receive adequate attention if the education budget is considered separate and apart from the appropriations for health, labor, and welfare.

In summary, we believe that the necessity for planning, the use of property tax as a primary source of support for education programs in the Nation, and use of new census data as the basis for allotting money for title I of the Elementary and Secondary Education Act, dictate that the education budget be considered as a separate item.

We thank you for letting us share our concerns with members of the Subcommittee on Labor, Health, Education, and Welfare of the Committee on Appropriations for the U.S. House of Representatives.

Mr. ROSE. I appreciate being here on the day Mr. Perkins is testifying. I am accompanied today by Mr. Robert Strother, assistant State superintendent of North Carolina, and Carlton Fleetwood, the director of the division of Federal-State relations for our department of education, and Mr. Joe Goodpasture, the public information officer for our department of education. The points I wanted to make are contained in my statement.

Mr. SMITH. What did you get last year for title I?

Mr. ROSE. $56 million. The cut that North Carolina will experience will be the largest of any other State in the Nation. This is one of the main reasons I am here today with these people.

We feel a figure of $2,000 for the low-income factor is unrealistic with the cost of living what it is today. We feel $4,000 would be a much more realistic figure. We also feel there should be no counting of aid to families with dependent children used to determine these allocations of title I funds.

You have already expressed problems involved with the "hold harmless" clause. We hope there is some way this can be done if a separate education bill could alleviate that problem. We are in dire need of some relief in our particular situation in North Carolina.

We have come from approximately $27 million of Federal Aid to Education in 1965 to $140 million to State and local units in 1972. It has meant a great deal to the educational structure we have in our State. As a Member of Congress I hope these problems can be ironed out and that this aid can continue because I personally feel the subcommittee that you represent and the committee that Mr. Perkins represents are two of the most important in this Congress. If the future of our country is to remain sound and if we are to solve the problems that more and more people are creating for themselves, our educational system must be operated on a sound financial basis. We would not presume to operate a business as we have operated the education budget in the past several years. I know the problems are many and complex, but I feel that by separating the education budget out and allowing local school units to have an opportunity to plan for the use of that Federal dollar we will reap the benefits in the future.

Mr. SMITH. Thank you, Mr. Rose.

MONDAY, MAY 14, 1973.

IMPACT AID

WITNESSES

HON. STANFORD E. PARRIS, REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA
MYRON E. CALE, ASSISTANT SUPERINTENDENT OF SCHOOLS, FAIRFAX COUNTY PUBLIC SCHOOLS, VIRGINIA
WILLIAM WRIGHT, FINANCE DIRECTOR, PRINCE WILLIAM COUNTY PUBLIC SCHOOLS

Mr. SHRIVER. Mr. Parris, we welcome you before the committee.

Mr. PARRIS. Thank you, Mr. Chairman.

I have Myron Cale, assistant superintendent of schools, Fairfax County Public Schools, and Mr. William Wright, finance director of the Prince William County Schools with me.

Mr. Chairman, I am delighted to have this opportunity to appear before the members of this subcommittee to present testimony on behalf of the reinstatement of the impact aid program.

The impact aid program was first instituted in 1950. Its purpose was to offset, by direct payments to local school districts, the economic "impact" of Federal installations and the resulting large numbers of school-age children of Federal employees. In 1972, the school districts in the Commonwealth of Virginia received $33.9 million in impacted funds, the highest per capita allotment in the Nation. For this reason I am sure that the members of this subcommittee will understand my very real concern over the possibility of a substantial reduction in the impact aid program.

I myself am thoroughly convinced that full funding for the impact aid program must continue until such time as an adequate and viable substitute program has been instituted, and I might add this opinion is shared by a great number of educators with whom I have been in contact in recent months. School fiscal decisions are necessarily made long before annual congressional action on this subject, as local school district operate under the expectation that the Federal Government will continue to assume its traditional share of the cost of educating federally connected children. The majority of school districts are currently in the midst of formulating their budget plans for the coming school year. If a sharp reduction in impacted funds were to be implemented at such a transitory period, school budgets for the forthcoming school year would be in serious jeopardy.

As I am sure you know, the subject of impact aid was debated on the House floor on May 10, 1973. At that time, a majority of Members of the House voted to adopt an amendment to H.R. 7447, making Second Supplemental Appropriations for fiscal year 1974, which removed the inadvertent ceiling on funding for category B students included in Public Law 93–25. The adoption of this amendment clearly indicates to me that a majority of Members will continue to support the existing impact aid program.

Let us consider, as representative of those school systems in northern Virginia which annually receive a substantial amount of impacted funds, the situation in Fairfax County. Because of the phenomenal growth rate of the county in recent years—from a population of 96,611 at the time the impact aid program was first begun to more than 527,000 at present—the Fairfax County school system has been operating under considerable financial strain for some time. A large portion of those students who are enrolled in its schools are both category A and B students, and it was for this reason that the school system received $11.9 million in impacted funds in 1972, or more than one-third of the State total. There can be no question that a reduction in the impact aid program similar to that proposed in the fiscal year 1974 Federal budget would lead to tremendous budgetary difficulties, with an almost inevitable subsequent decline in the quality of educational services.

I frankly do not feel that we should take this sort of risk in an area affecting the future well-being of the youth of this Nation. While I have supported the efforts of this administration to eliminate wasteful

and unnecessary Federal outlays, I do not agree that the impact aid program is an area where economizing should take place. Certainly this step should not be taken until an alternate program has been instituted to provide local school systems with the needed funds.

There are those who erroneously contend that general revenue sharing is to replace, in part, the impact aid program. This has never been my understanding, and it is not the understanding of the officials with whom I have talked. If this were indeed the case, the Special Education Revenue Sharing plan would not have included as one of its purposes the replacement of impact aid.

I strongly urge this subcommittee to continue its traditional support of the impact aid program during fiscal year 1974. Only in this way can we insure that local school districts in federally impacted areas will be able to provide the same high quality of educational services for the betterment of our youth.

Thank you very much for the privilege of being here today.

Do either of you gentlemen have a statement for the record? Certainly they have reviewed my statement.

Mr. CALE. The county board supports the total statement presented by Mr. Parris.

Mr. WRIGHT. Our board certainly agrees with the statement of Mr. Parris.

Mr. PARRIS. We appreciate your consideration.

[Resolution adopted by county board follows:]

THE COUNTY SCHOOL BOARD,
PRINCE WILLIAM COUNTY,
Manassas, Va., May 2, 1973.

RESOLUTION

Resolution passed at a regular meeting of the county school board held at Manassas, Va., on Wednesday, May 2, 1973, with the following members present: Ellis B. Hawkins, chairman, Thomas O. Beane, vice chairman, Paul J. Arrington, Paul K. Boots, William T. Dunn, John F. Pattie, T. Clay Wood, Herbert J. Saunders, division superintendent and William F. Wright, clerk.

On the motion of Mr. Pattie, seconded by Mr. Dunn, the county school board adopted a resolution requesting the members of the U.S. Congress from Virginia to use their influence with the Appropriations Committee to secure 73 percent funding for Public Law 874 Impact Aid Fund for fiscal year 1973 instead of the 54 percent released by the President.

Recorded vote: Ayes, unanimous.

A true copy:

WILLIAM F. WRIGHT,
Clerk.

Mr. SHRIVER. We especially appreciate your conservation of time.

MONDAY, MAY 14, 1973.

TITLE VIII AND MARC

WITNESS

HON. LOUIS STOKES, REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. SHRIVER. Next we will hear from Congressman Louis Stokes.

Congressman, we welcome you to the committee. You are a valued member of the Appropriations Committee and we are especially glad you came before this subcommittee.

Mr. STOKES. Thank you very much, Mr. Chairman.

Mr. SHRIVER. Have you a statement?

Mr. STOKES. Yes, I have. With your indulgence I would like to read it at this time.

Mr. SHRIVER. Very well.

Mr. STOKES. Mr. Chairman, members of the subcommittee, I appreciate the opportunity to come before you to discuss two important programs. The first is the dropout prevention program operated under Title VIII of the Elementary and Secondary Education Act. The program is authorized through fiscal year 1973 and, with the other ESEA programs, will be automatically renewed for 1 more year at the beginning of fiscal year 1974.

The program's objective is to develop innovative methods and materials to reduce the number of students who dropout of school before graduation. A total of 19 projects have been funded under this program. Mr. Chairman, I have a chart which I will submit for the record which shows the reductions in the dropout rate accomplished by these projects:

As the chart indicates, the rate in the original 10 target schools was reduced from 9.24 percent to 4.39 percent in 3 years. The rate for the last nine target schools was reduced from 12.4 percent to 11.01 percent in 1 year. Mr. Chairman, I have another chart which indicates the number of dropouts in the Nation for the years from 1950 through 1974:

The more recent figures are estimates by the Office of Education. It is alarming to me that the senior class which entered in the fall of 1972 and will graduate in a few weeks, has lost 800,000 students between the fifth grade and high school graduation. The Office of Education projects about 700,000 dropouts in the senior classes which begin their final year in the fall of 1973 and in 1974. I understand that from 40 to 70 percent of the students in the target schools are black. The program is an important one which serves primarily minority and disadvantaged students.

The budget request for the program in fiscal year 1974 is $4 million. Funds provided in the fiscal year 1973 appropriation have been used to fund the 10 original projects through their fifth and final year. Funds provided in the fiscal year 1974 budget request would permit operation of the remaining nine projects through their fourth year of operation. They were originally planned as 5 year projects, but under present administration plans, will not be funded for the fifth year.

Mr. Chairman, I urge you and the members of the subcommittee to approve the full $4 million request for this vital program and to consider providing additional funds to enable the last nine projects to complete their planned fifth year.

The second program which concerns me is known as the MARC program. The acronym stands for minority access to research careers. Initiated late in fiscal year 1972, the MARC program has been funded by the National Institute of General Medical Sciences to strengthen biomedical research and teaching at minority institutions. The institutions are 4-year colleges, universities, and health professional schools in which the student populations are drawn largely from minority groups.

The program provides fellowship grants to faculty members at minority schools for advanced study and research in major research

laboratories. It also makes grants to outstanding scientists who agree to serve at minority institutions as visiting professors or researchers. MARC has been very active in identifying minority students who have the potential for professional careers in the biomedical sciences and in directing them to sources of needed financial aid. Financial aid to students does not come from the MARC budget itself but from the various NIGMS training grant programs for which the students qualify.

MARC does not have a line item in the budget. It is simply allotted a portion of the training grant funds available to NIGMS. Because of the very severe cutbacks in training programs proposed by the Nixon administration, the MARC program is seriously jeopardized. In order to continue its work, MARC needs about $300,000 in supplemental funds for fiscal year 1973. This money would be used for applications already on hand. For fiscal year 1974, the need is about $900,000. That amount would allow MARC to continue existing projects and to begin other planned activities. Given adequate funding, the MARC program would move into two new areas. First, it would assist one or two minority schools to develop excellent graduate programs in biomedical sciences. This effort should make a significant impact on the appalling shortage of minority group members holding advanced degrees in the biomedical sciences.

Second, the MARC program could, if properly funded, set up special intensive science programs for undergraduates at minority schools. The level of science education at many minority institutions is woefully inadequate. By means of this new approach, coupled with its existing activities, MARC could help prepare minority students for graduate study in the sciences.

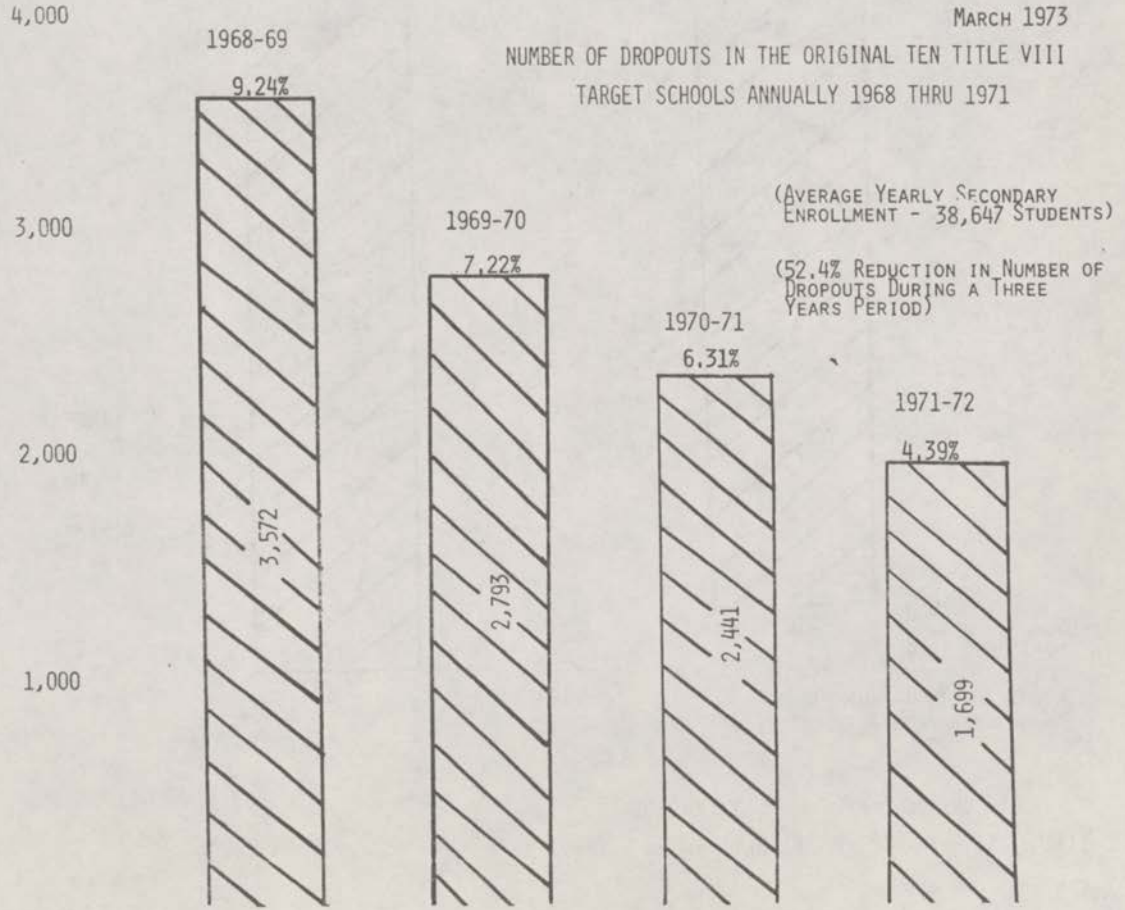
Mr. Chairman, the data on minority scientists are alarming. The institutions of this Nation have produced only 650 to 700 minority scientists in 94 years. Each year only 50 of 13,000 persons earning Ph. D's are members of minority groups. In 100 years, this country has produced only 7,000 black physicians. Mr. Chairman, tomorrow you will hear from an outstanding black scientist, Dr. Luther Williams of Purdue University. Dr. Williams is thoroughly familiar with the MARC program and the need it is meant to fill. I urge you to consider carefully the data he will provide on the need for vastly increased minority participation in the biomedical sciences. In considering the budget for NIGMS, I hope you will provide the funds necessary to continue and to expand this vital program.

I will be pleased to respond to any questions.

[Additional information follows:]

MARCH 1973

NUMBER OF DROPOUTS IN THE ORIGINAL TEN TITLE VIII TARGET SCHOOLS ANNUALLY 1968 THRU 1971

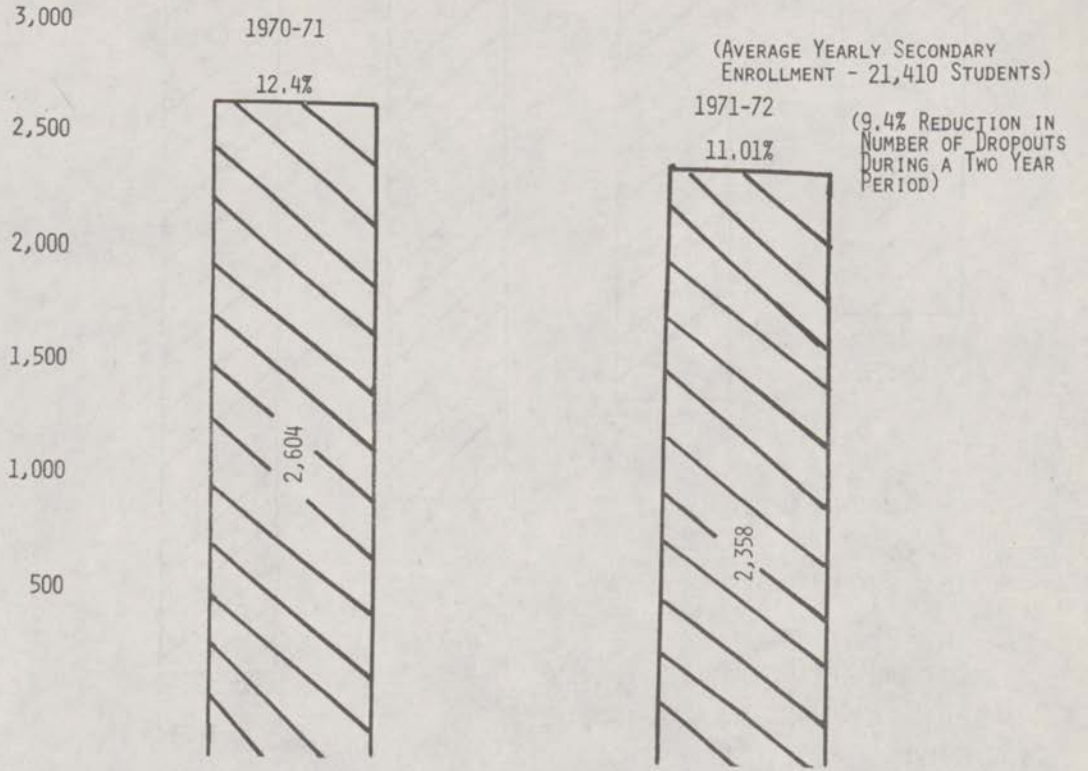


(AVERAGE YEARLY SECONDARY ENROLLMENT - 38,647 STUDENTS)

(52.4% REDUCTION IN NUMBER OF DROPOUTS DURING A THREE YEARS PERIOD)

March 1973

NUMBER OF DROPOUTS IN THE LAST NINE TITLE VIII TARGET SCHOOLS ANNUALLY 1970 THRU 1971



Revised
4/1/73

Estimated fall enrollment in fifth grade compared with high school graduates eight years later: United States, 1950-58 to 1974-82

Fall of--	5th grade enrollment 1/	School year	High school graduates	Dropouts 2/ fifth grade to high school graduation
1	2	3	4	5
1950	2.5 million	1957-58	1.5 million	1.0 million
1951	2.6 million	1958-59	1.6 million	1.0 million
1952	2.9 million	1959-60	1.9 million	1.0 million
1953	3.0 million	1960-61	2.0 million	1.0 million
1954	2.9 million	1961-62	1.9 million	1.0 million
1955	2.9 million	1962-63	2.0 million	.9 million
1956	3.2 million	1963-64	2.3 million	.9 million
1957	3.6 million	1964-65	2.7 million	.9 million
1958	3.6 million	1965-66	2.7 million	.9 million
1959	3.6 million	1966-67	2.7 million	.9 million
1960	3.6 million	1967-68	2.7 million	.9 million
1961	3.7 million	1968-69	2.8 million	.9 million
1962	3.8 million	1969-70	3/ 2.9 million	.9 million
1963	3.9 million	1970-71	3/ 3.0 million	.9 million
1964	4.0 million	1971-72	3/ 3.1 million	.9 million
1965	4.0 million	1972-73	3/ 3.1 million	.9 million
1966	4.1 million	1973-74	3/ 3.2 million	.9 million
1967	4.2 million	1974-75	3/ 3.3 million	.9 million
1968	4.2 million	1975-76	3/ 3.4 million	.8 million
1969	4.2 million	1976-77	3/ 3.4 million	.8 million
1970	3/ 4.2 million	1977-78	3/ 3.4 million	.8 million
1971	3/ 4.2 million	1978-79	3/ 3.4 million	.8 million
1972	3/ 4.2 million	1979-80	3/ 3.4 million	.8 million
1973	3/ 4.1 million	1980-81	3/ 3.4 million	.7 million
1974	3/ 4.0 million	1981-82	3/ 3.3 million	.7 million

1/ Compulsory attendance laws keep virtually all children in school at least until the fifth grade.

2/ Excludes persons who receive high school equivalency certificates and persons who leave the regular school system before graduation to enter trade, business, and Vocational schools and who may consider themselves to be high school graduates. The estimated number of persons in these categories is approximately 200,000 a year.

3/ Projected by Office of Education.

NOTE.--Includes public and nonpublic schools in the 50 States and D.C.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Office of Education
National Center for Educational Statistics
Reference, Estimates, and Projections Branch

Mr. SHRIVER. Thank you very much for your testimony, Mr. Stokes.

MONDAY, MAY 14, 1973.

REHABILITATION SERVICES ADMINISTRATION TRAINING GRANTS

WITNESS

DR. GEORGE G. MALLINSON, DEAN, THE GRADUATE COLLEGE, WEST MICHIGAN UNIVERSITY

Mr. SHRIVER. Next we have Dr. George G. Mallinson, dean, the Graduate College Western Michigan University.

Dr. MALLINSON. Mr. Chairman, my name is George G. Mallinson, and I am dean of the Graduate College, Western Michigan University, Kalamazoo, Mich. I had the privilege of appearing before your subcommittee on Thursday, June 17, 1971, to speak for continued appropriations for the Social and Rehabilitation Service with particular reference to training grants of the Rehabilitation Services Administration for rehabilitation of the blind and severely visually handicapped. These of us concerned with blind rehabilitation were gratified with the legislation that was finally passed to continue these grants in fiscal year 1972. I again requested the privilege of appearing before your subcommittee on this date for reasons that are even more compelling than those in 1971. The current Presidential budget contains no recommendations whatsoever for maintaining training grants for the Rehabilitation Services Administration for fiscal year 1974 which means the demise of Federal support for training personnel to work in the area of blind rehabilitation. The recommendations for eliminating training grants in this area seems most anomalous since other legislation and current needs for rehabilitation of the blind indicate needs far greater than those for fiscal year 1972. It is my minimal hope that your subcommittee will see fit to support vigorously the continuance of support for training personnel for blind rehabilitation through training grants at the current level. It is my maximal hope that measures may be taken to increase the support greatly since I trust my testimony will indicate clearly that the second action is more than defensible. I should point out that some information I am now submitting was presented in my previous testimony. However, I have updated the data in the tables and have provided additional information.

I. THE PROBLEMS OF REHABILITATION OF THE BLIND

Until recently, data concerning the number of blind persons needing rehabilitation in different degrees was fragmentary. However, in the past few years, a series of studies—some of which have been supported by the Rehabilitation Services Administration—have supplied information about the number and distribution of the visually handicapped. They indicate that the problem was considerably more severe than had been anticipated. The efforts to gather the data came from the leadership of two men, namely, Dr. Douglas C. MacFarland, Director, Office for the Blind and Visually Handicapped, Rehabilitation Services Administration, Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare, Washington, D.C., and Mr. Louis

H. Rives, Jr., Director, Health and Social and Services Division, Office of Civil Rights, Department of Health, Education, and Welfare, Washington, D.C. Prior to the efforts of the two men just named, many of the blind remained unidentified because services were not available for either their identification, rehabilitation, and ultimate placement in gainful employment. Now the data that are available indicate the following:

(1) According to a report of the National Society for the Prevention of Blindness published in 1969, approximately 435,000 persons in the United States were legally blind and were in need of major rehabilitation services. According to estimates of the National Center for Health Statistics of the Department of Health, Education, and Welfare, there were probably about twice as many severely visually handicapped persons as there were legally blind persons, the number perhaps reaching 1 million.

(2) Data available in the Rehabilitation Services Administration concerning placement of the visually handicapped in gainful employment in 1970 indicate that there were approximately 20,000 visually handicapped persons placed, two-fifths of these being legaly blind. Thus, these data support the ratios of legally blind to severely visually handicapped indicated in point one above.

(3) A study by Dr. Berthold Lowenfeld of Berkeley, Calif., in 1968, provided data that were rather depressing. Over 50 percent of all blind children who were identified were multiplehandicapped, many of them being deaf-blind from rubella, which is now almost epidemic for a disease of this type. His analysis indicated that about 1,000 of the 1,900 children in the sample in his analysis were blinded from this disease.

There are, of course, many other sources of data that support and extend those given above. It is perfectly obvious that the rehabilitation of the persons listed above cannot be accomplished without professional help.

II. THE ROLE OF REHABILITATION OF THE BLIND

Rehabilitation of the blind and severely visually handicapped involves many different facets depending on the extent of the handicap and whether mutliple handicaps, such as those revealed by Lowenfield's study, exist. Some of these facets are described below:

(1) A blind or a severely visually handicapped person needs a complete reorientation involving mobility training that enables the blind person to travel through his internal and external environment. He no longer needs to be led from chair to chair, from one portion of his home to another, or on the streets of his community, by a person generally not trained to handle his needs. This mobility training, including the use of the long-cane technique or guide dog, involves a man-to-man training approach, namely, an orientation and mobility specialist, and the blind person. The training of the specialist takes longer than the training of the blind man, although the specialist may serve several persons during the course of each day, and the specialists' skills are useful for many years.

(2) The blind man can no longer read, and hence, he must be taught other means of communication, including braille. In addition, he must

be taught to write legibly so that he can carry on his routine of business affairs without marking an "X" on every document he must sign. The problems of training of the blind person to write legibly may be tested simply by blindfolding oneself and attempting to write one's signature on a line on a piece of paper.

(3) The blind man must be taught table etiquette which includes locating his food, so that he may move to it readily and easily without spilling food items on the tablecloth or on himself.

(4) In order to maintain his dignity, he must be taught to select his clothing through his sense of touch and to identify the different colored articles he wears so that he does not resemble a "Peter Max cartoon."

(5) He must be taught appropriate toilet habits and personal cleanliness.

(6) He must be taught how to handle money, so that he does not use $5 bills when he intends to use $1 bills. I shall not go into details about the incredibly unscrupulous who take advantage of the blind who do not know how to handle their money.

The multiplihandicapped, such as the deaf-blind, and those who have lost limbs as well as being blinded during service in the Armed Forces offer many other problems for which skilled personnel are needed for solutions. May I suggest that you reflect briefly on a veteran, industrial worker, or any other person who has been blinded and lost both hands. I ask you to think about the human dignity that must be restored in such a person by enabling him to take care of himself in the bathroom, feed himself, and dress himself. I assure you these cases are not fewer in number.

Once the optimal rehabilitation has been attained, the blind or severely visually handicapped need other services, namely, placement in gainful employment, since the ultimate payoff is such placement. Here, a new breed of specialist is involved—the vocational counselor who is aware of the problems of placing the blind in gainful employment.

Beyond the various facets of rehabilitation described earlier, an accelerating problem is facing those involved in blind rehabilitation. This problem concerns the provision of social services for the geriatric blind. The numbers of geriatric blind are rapidly increasing, possibly by as many as 100,000 per year, the reasons being, of course, the greater longevity of population. Rehabilitation services for these persons need not be so intensive as those for the younger blind, and are less concerned with gainful employment. The geriatric blind need to be taught mainly to live as nearly normally as possible and to take care of their personal needs.

There are other facets that will be referred to in the last section of this statement, where they are more relevant.

III. ACCOMPLISHMENTS IN THE REHABILITATION OF THE BLIND

Table I and table II indicate the extent of support provided by the Rehabilitation Services Administration for Training Grants in the rehabilitation of the blind, 1965–72, and the agencies to which support was granted in 1972. Although the total allotments have increased very slightly since 1965, the basic needs for funding far outstrip the moneys that have been available. Any reduction in funding blind rehabilitation would be catastrophic. Retention of the status quo certainly does not brook enthusiasm, although it does offer some comfort when compared with a reduction. An analysis of two previous sections indicates clearly that an increase in funding is in order, both from the point of reducing the tax burden for supporting the unrehabilitated blind and even more to give human dignity to those who have an affliction which is feared second only to cancer by the American people. The latter finding emerged from a special Gallop poll conducted for Research to Prevent Blindness, Inc.

[Tables I and II follow:]

TABLE I

TRAINING GRANTS IN REHABILITATION OF THE BLIND
1965 through 1972
Division of Training

	1965	1966	1967	1968	1969	1970	1971	1972	Totals
Teaching Grants ($)	$295,447	$248,578	$281,054	$272,064	$261,545	$258,336	$272,810	$256,396	$2,146,230
Traineeship Grants									
Amount	$152,818	$169,043	$206,263	$268,610	$272,577	$273,136	$271,560	$318,831	$1,932,838
Total Traineeships	78	74	87	99	62	56	55	129	640
Total Grants:									
Amounts	$448,265	$417,621	$487,317	$540,674	$534,122	$531,472	$544,370	$575,227	$4,079,068
No. of Grants	7	7	7	6	5	5	5	4	46

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TABLE II

RSA TRAINING GRANTS IN
REHABILITATION OF THE BLIND
1972

Institution	State	Teaching Grant	Traineeship Grant	Indirect Cost	Number of Traineeships	Total Grant
Boston College (Mobility)	Mass.	$ 62,604	$103,060	$ 5,008	22	$170,672
California State College (Mobility)	Cal.	$ 50,685	$ 38,280	$ 4,055	16	$ 93,020
Southern Illinois University (Placement)	Ill.	$ 35,360	$ 27,010		48	$ 62,370
Western Michigan University (Mobility and Rehabilitation Teaching)	Mich.	$ 84,714	$122,336	$ 6,777	24 (9 part-time)	$213,827 1/
TOTALS		$233,363	$290,686	$15,840	120	$539,889

1/ Total Federal Approved Budget-Actual Amount of Award: $193,819

Dr. MALLENSON. It should be mentioned that the moneys listed in tables I and II are expended for training personnel to rehabilitate the blind. There are also other moneys expended on research, the total rehabilitation process, and physical restoration. The annual total expenditure is about $45 million.

But the question still remains, "What are some of the accomplishments of this funding?"

(1) There has been some question as to whether the highly trained orientation and mobility specialists continue for extended periods in the profession of supplying direct service to the blind. The question was resolved in the study by Bruce Blasch and Berdell Wurzburger entitled "Mobility Instruction: A Professional Challenge," that appeared in the January 1971 issue of the *Long Cane News*. An abstract of that research study is appended to this statement. In brief, it indicates that only 3.3 percent to 5.3 percent of the college-trained mobility instructors educated since 1960 are not employed in servicing the visually handicapped. Seventy-five percent are providing direct instruction, whereas the remainder are working in other capacities with the blind and visually handicapped. Although similar data have not been collected for rehabilitation teachers of the blind, tentative data collected at Western Michigan University indicate that the percentage of those continuing work with the blind may even be higher. Thus, the training moneys are not being spent on persons who use their initial employment in blind rehabilitation as a stepping stone.

(2) About 20,000 blind and severely visually handicapped are annually placed in gainful employment. A "rock bottom" estimate of their salaries suggests that they earn at least $4,000 per year, many of them earning considerably more. This puts $80 million of new moneys in terms of salaries paid to the rehabilitated blind into the economy annually for the $45 million expended. However, it must be emphasized that these earnings continue for many years and, therefore, the return per dollar invested may be minimally estimated as at least 20 to 1.

(3) Twenty-five percent of the rehabilitated blind were on public assistance prior to rehabilitation. This percentage is twice as high as for any other group of the disabled, according to data available from the Rehabilitation Services Administration.

The points above indicate clearly that there is a vast "payoff" in return for the moneys expended for rehabilitating the blind.

IV. THE CURRENT SITUATION AND NEEDS

For one to assess the current situation and needs with respect to trained personnel for rehabilitation services to the blind and visually handicapped, a number of points must be examined.

(1) The discipline of orientation and mobility and programs for training orentation and mobility specialists to teach cane travel was initiated by the Department of Health, Education, and Welfare based on experience with programs developed by the Veterans Administration for blinded veterans. The specialists were trained on an "apprenticeship" in-house basis in Veterans Administration hospitals particularly, the one in Hines, Ill. The idea of developing programs for persons other than veterans was then sold to universities. The uni-

versities did not initiate the proposals and submit them to HEW for support. Thus, these programs are basically Federal programs.

(2) The training of orientation and mobility specialists, and to a lesser degree that for the rehabilitation teacher for the blind, and the counselor for the blind, are special kinds of programs involving much direct faculty-student contact, a large part being on a one-to-one basis. It may be noted that there are only three programs currently being supported in the United States for training orientation and mobility specialists to teach mobility to the adult blind. These produce only a small fraction of the personnel that are needed and for whom jobs are available (and unfilled) in the tables of organization of numerous agencies. Each program, therefore, is expected to provide personnel not only for the State in which it is located, but for many other States. No university, public or private, has the resources to train personnel for a national program particularly one whose costs of traning are so high.

One should hasten to add, as indicated in the previous section, that there is a vast payoff for the training moneys that are expended.

(3) Although the cost factor is high, mature professional individuals are trained in the programs that have been supported. These individuals train and supervise paraprofessionals in various aspects of blind rehabilitation which insures maximal utilization of the paraprofessional who cannot function alone.

(4) The person who enters the field of orientation and mobility, as well as other areas of blind rehabilitation, deliberately chooses a restricted profession with little possibility of moving into other occupations since his skills are not transferrable to any great degree. He, therefore, isolates himself as a specialist who will need to be completely retrained if he enters some other field. In view of the highly specialized nature of these programs, there is need to support the extra costs at the Federal level. The student could not possibly subsidize his own cost of training to become an orientation and mobility specialist and hence, there needs to be some financial amelioration or incentive for him to enter the field.

(5) It has been suggested that student loans might well be used for supporting students. However, if one analyzes the expenses involved in the intensive and specialized training, it would be prohibitively costly to place the burden on the shoulders of the students, particularly since the program was initiated from HEW to meet a national need. There has been some suggestion that students might be trained on a "quickie" basis in short courses and there have been about 50 trained on an in-house basis in various agencies serving the blind since 1965. However, it may be noted that of these short-term "wonders" only two still remain in the field of orientation and mobility.

(6) There has been some suggestion that extra training in orientation and mobility may be provided for persons trained in special education and for them to provide the services. This is hardly feasible since personnel in special education are in short supply and there is neither time nor energy to give to mobility training which is physically demanding of the trainers after they perform their teaching functions.

(7) It is noteworthy that two laws have been passed recently that are related to blind rehabilitation services.

(*a*) Title 16–15 provides services to blind persons under the age of 65 and who need financial assistance as judged by the Social Security Office. If a person is judged eligible, the law, as of January 1, 1974, requires mandatory referral of the individual to vocational rehabilitation. The Federal Government is required by the law to provide 100 percent of the funding of the services rendered. One of the high priority services is that of orientation and mobility.

(*b*) Title 6 of the social security amendments provides optional rehabilitation services for the blind for whom vocational rehabilitation is not appropriate. Many of these persons will be geriatric cases who now receive little help if their disabilities involve blindness. In this title, the first optional service specified is that of mobility instruction.

One must raise the question, "Where are the personnel needed for the implementation of title 16–15 and title 6 going to come from?" If Federal support for training grants in the rehabilitation of the blind is abolished, it is obvious that universities cannot carry the fiscal burden for the training programs. Therefore, one can only conclude that there is no defensible rationale for abolishing funding for training mobility personnel or for those who serve as rehabilitation teachers and counselors for the blind.

(8) There are a few programs for training orientation and mobility specialists for school-age children funded by OE. But according to a study of the American Printing House for the Blind in Louisville, Ky. only 18 percent of the blind population are of school age. Thus, the services for school children are available for only 18 percent of the blind population and even those are inadequate.

(9) Current needs suggest that as a bare minimum we should be training 200 orientation and mobility specialists per year. This provides for new job openings as well as for turnover. However, it is important to note that a well-trained orientation and mobility specialist can supervise two paraprofessionals in orientation and mobility thus increasing his output of service.

(10) There are currently about 65,000 elderly blind persons who will be eligible for blind rehabilitation services under title 16–15, 30,000 of whom can profit from some kind of mobility instruction and maintain themselves in the home, thus relieving welfare roles. In addition, 37,000 individuals are newly blind each year. If services to these people are to be met, it is obvious that the abolition of training grants to train people in the field of blind rehabilitation would wipe out any possibility of providing the additional assistance so sorely needed.

(11) It should be pointed out that the United States has taken the leadership throughout the world in assisting other countries in developing their blind rehabilitation programs, particularly in the area of orientation and mobility and rehabilitation teaching. It would not be an inhumane tragedy to abolish support for current programs and self-destruct disciplines that we have developed in the United States and in other countries.

(12) As a final note, perhaps somewhat redundant, the number of trained professionals who enter the field of blind rehabilitation and remain in it, as indicated in section III of this testimony, is astonishingly large.

V. FUTURE NEEDS FOR REHABILITATION OF THE BLIND

If future needs for rehabilitation of the blind are to be satisfied, financial support must be provided by the Federal Government, since the problems of blind rehabilitation are not just local, State, or regional. This means that Federal funding of current programs for blind rehabilitation will need not only to be continued, but expanded, and new programs will need to be developed. Despite the accomplishments listed earlier, the increasing numbers of blind who are being identified and who justifiably deserve services cannot be met by the number of personnel currently being trained in colleges and universities. It is not suggested that all the personnel involved in blind rehabilitation need to be specialists or college trained. Certainly there are many areas in which subprofessionals can function as effectively but more economically than college-trained professionals. In reviewing these particular needs, the following conclusions seem defensible.

1. There needs to be increased Federal funding to provide services for the blind and severely visually handicapped for whom services are not now available.

2. Programs of less than college training need to be developed for training orientation and mobility aides, rehabilitation teacher aides, and community aides who help the geriatric blind to shop and move about their communities.

3. Programs need to be organized to coordinate the work of the many willing volunteers with that of the professionals. The increasing numbers of both geriatric blind and younger blind needing services can be met only by exploiting volunteer services. However, the volunteers need to be recruited, trained, and supervised. The training of subprofessionals and volunteers can be accomplished by short-term training programs in which costs are minimal. Some of these training programs may be only 3 days in length, whereas others may extend to several months.

4. Programs need to be funded for placement counselors who will serve the blind as well as persons with other handicaps in regions in which the population is too small to warrant the services of special counselors for the blind.

5. There needs to be additional funding of programs for the multiplihandicapped blind such as the one at the National Center for Deaf-Blind Youths and Adults in New Hyde Park, N.Y.

In summary, Mr. Chairman and members of the subcommittee, much is being accomplished currently with less than adequate funding, and any reduction of the moneys for blind rehabilitation is difficult, nay impossible, to defend. When one thinks of the monetary return in terms of reduced tax burdens for public assistance for the blind and more humanely of providing human dignity for those who are blind or severely visually handicapped, one can hardly argue for other than increases.

Thank you for the privilege of submitting this statement and giving testimony.

[Additional information follows:]

MOBILITY INSTRUCTION

A Professional Challenge *

by

Bruce Blasch and Berdell Wurzburger **

Many criticisms have been raised since the concept of training mobility instructors at the graduate level was first conceived. Some of these criticisms revolved around such questions as: will mobility instructors be overtrained; does it take a Master's degree to teach a visually handicapped individual to wave a cane; will college trained mobility instructors be content teaching the use of the long cane? From these unanswered questions, various conclusions and criticisms have arisen and appeared in journal articles.

In an attempt to resolve the question of professional challenge and reinforcement in mobility instruction, data was gathered from the various colleges training mobility instructors. The colleges participating were, Boston College, Florida State University, California State College at Los Angeles, San Francisco State College and Western Michigan University. The numbers of graduates from each of these programs range from 19 - 142, with a total number from all programs of 332. This total number of graduates represents college trained mobility instructors beginning in 1960 to the present time. (Data was gathered and inclusive of April, 1970). As of this date, the University of Pittsburgh and the University of Northern Colorado have not had any students complete their training in Orientation and Mobility.

Now, the question arises as to what are these 332 instructors of mobility doing? Are they working with the visually handicapped? Are they teaching Orientation and Mobility? Are they working with children and/or adults? Of this total number, 87%, or 289 mobility instructors, are still working with the visually handicapped.

(Figure 1.) This includes graduates that started as mobility instructors and are now directors of agencies, superintendents, principals and program directors of residential schools and other such administrative positions.

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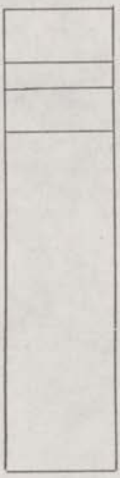
* From the Long Cane News, Vol. IV No. 3, January 1971.

** Bruce Blasch is Director of the Orientation & Mobility Program at the University of Pittsburgh, Pittsburgh, Pennsylvania.

Berdell Wurzburger is an Orientation and Mobility Instructor at San Francisco State College, San Francisco, California.

Figure 1.

Mobility Instructors
from College Programs



No.	Approximate %
332	100%
289	87% - Working with Visually Handicapped
275	83% - Working in Orientation & Mobility (Peripatology)
248	75% - Offering direct instruction to Visually Handicapped

It is also interesting to look at the 13% that are not working with the visually handicapped at this time. Approximately 3.3% are females who, due to family responsibility are unable to work at this time. However, this does not mean that these women, as some have demonstrated, will not teach mobility at a later date. An equal number of graduates or 3.3%, are working in an area other than with the visually handicapped. Approximately 2.5% of the graduates have returned to universities in order to obtain advanced degrees. About 2% are unaccounted for due to lack of communication. The remainder of the 13, or approximately 2%, are accounted for by retirement, military duties and working in Special Education but not specifically with the visually handicapped. To interject some humor, it might be said that some of the major reasons for not pursuing a profession of mobility instruction are those of, thirst for knowledge, service to the country, and motherhood.

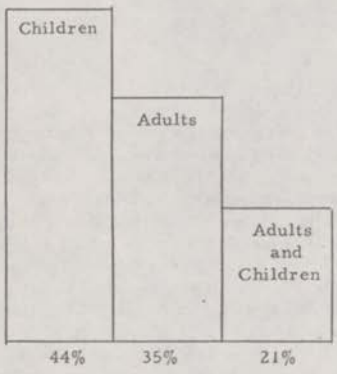
However, even though this 13% is small, it is unfounded to say these graduates are not teaching mobility because they do not find this teaching challenging. In other words, there are only 3.3% or, including the 2% unaccounted for, a maximum of 5.3% of the mobility graduates who do not find themselves suited to teach the visually handicapped.

Of the 87% of the graduates that are working with the visually handicapped, over 95% (275) are directly involved with Orientation and Mobility. This includes graduates who are now in universities training mobility instructors and individuals supervising and coordinating mobility instruction in schools and agencies.

However, the question may arise as to how many graduates working with the visually handicapped are actually out on the streets offering direct mobility instruction? Over 75% of the graduates are actively teaching Orientation and Mobility to visually handicapped individuals. This figure represents 248 graduates from the various mobility programs offering direct mobility training. This data is certainly not in support of criticisms mentioned earlier.

Therefore, mobility instructors are, in fact, finding their positions reinforcing. Initially, formalized mobility training began with the adventitiously war blinded adults at Hines V. A. Hospital. Today mobility instructors are offering their services to all age groups. It has been noted that 35% of the mobility instructors are working with adults, while 44% are teaching children. The remainder of the mobility instructors, or 21%, work with both children and adults. (Figure 2). Although formalized mobility instruction originated with adventitiously blinded adults, its success and application to children are evidenced in the number of mobility graduates employed to teach children.

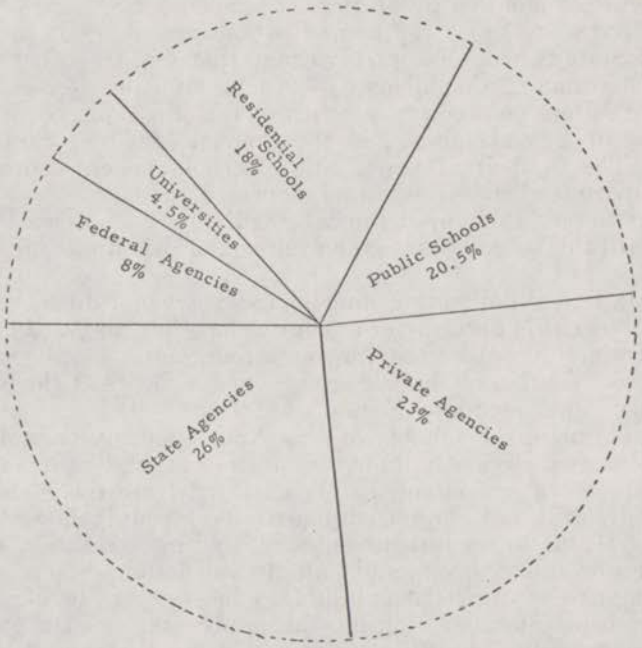
Figure 2.



The 289 mobility graduates have been employed by a variety of agencies and schools (Figure 3). It is important to note that Federal Agencies (where formalized mobility instruction originated), have employed 8% of the mobility graduates as opposed to training their own staff as was once necessary.

In summary, the data indicates that only 3.3% - 5.3% of the college trained mobility instructors are employed in areas other than with the visually handicapped. It is apparent from this data that mobility instructors are, in fact, continuing to work with the visually handicapped.

Figure 3.



Place of Employment - Based on 289 Graduates

Mr. SHRIVER. Thank you, Dr. Mallinson.

MONDAY, MAY 14, 1973.

VARIOUS EDUCATION PROGRAMS

WITNESSES

HON. JOHN C. PITTENGER, SECRETARY OF EDUCATION, COMMONWEALTH OF PENNSYLVANIA, REPRESENTING THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS
DR. NEAL V. MUSMANNO, EXECUTIVE ASSISTANT FOR PUBLIC AFFAIRS, COMMONWEALTH OF PENNSYLVANIA

Mr. SHRIVER. Next we have Mr. John C. Pittinger, secretary of education, Commonwealth of Pennsylvania.

Mr. PITTINGER. I also represent the other members of the Council of Chief State School Officers, my counterparts in the other States.

Mr. Chairman and members of the subcommittee, it is a privilege to appear before you today to represent the education community in the State of Pennsylvania, and the Council of Chief State School Officers. The Council of Chief State School Officers represents all State superintendents and commissioners of education.

I want to take this opportunity to express my appreciation to the members of this subcommittee for your support of education programs over the years.

I would like to limit my comments to some general concerns about the fiscal year 1974 appropriations for elementary and secondary education. I would like also to invite your attention to one program which most directly affects Chief State School Officers, title V of the elementary and Secondary Education Act.

Mr. Chairman, the schools of this Nation simply cannot operate intelligently or efficiently unless educators at the State and local level know how much money can be expected from the Federal Government by July 1. I cannot emphasize too strongly how difficult it has been for us to operate under a continuing resolution this past year. Despite the vigorous and enlightened actions of the Congress in passing two appropriations bills for education for fiscal year 1973, the incumbent administration has taken advantage of the continuing resolution to reduce funding levels and delay the release of funds. I am sure your committee is aware that even at this moment, educators have not yet been fully informed of the total amounts of money to be allocated by the U.S. Office of Education to the States and local school districts for the fiscal year ending June 30, 1973. We do not come before your committee as special pleaders for the interests of school administrators or teachers, or the education establishment in general. It is the children of this country who suffer from delayed appropriations and irresponsible impoundment action on the part of the administration. We urge your committee to assist the schoolchildren of this country by enacting a separate education appropriations bill, with reasonable funding levels, at the earliest possible date.

Mr. Chairman, we believe that Members of Congress, the President, and the general public should have an opportunity to consider adequate levels of funding for schools as a substantive issue, separate

from health, welfare, labor, or OEO. The appropriations which you make for schools, Mr. Chairman, affect more individual lives directly than any other portion of your bill. Attendance in schools is not voluntary or occasional; it is mandated by compulsory education laws in every State in the Union. The local property tax revenues which support the bulk of education are the most regressive, the most visible, and the most vulnerable portion of the entire tax structure of this Nation. The concern which the taxpayers of this country feel about the burden of education programs has been forcefully brought to the Congress, the administration, and most recently, to the Supreme Court. Every family in the United States is affected in their daily lives by your appropriation for local public schools. Every public opinion poll recently taken by Harris and Gallup since January 1, 1973, has shown at least two-thirds of the public supports increased Federal assistance to public education. We believe the Members of Congress and the President, given the opportunity to examine as a separate item your appropriations at an adequate level for education, will support your committee's constructive actions. The major question which we put before your committee, Mr. Chairman, is whether the Congress, the President, and the public will have an opportunity to evaluate education spending by the Federal Government as a separate, identifiable issue.

It is my very strong feeling, Mr. Chairman, that the fiscal priorities of the Federal Government do not meet the country's real needs. You will forgive my presumption, Mr. Chairman, but I must say that your committee has the responsibility to reject this administration's claim that spending for education is inflationary and must be sacrified as a political expedient in a time of fiscal troubles. The most recent in-depth study of the economic effects of Federal spending for education by a committee of the Congress (the report of the Senate Select Committee on Equal Educational Opportunity) clearly shows quite the opposite, that spending for education contributes to the economic well-being of the country. We object, Mr. Chairman, to appropriation priorities which propose an increase in military spending by the Federal Government in fiscal year 1974, which equals the entire Federal appropriation for elementary and secondary education.

Analysis of congressional actions of the last 4 fiscal year budget submissions by the President, of course, shows that the Congress has consistently supported increase appropriations for HEW programs while reducting the President's proposals in other areas, and has annually reduced the President's total budget. We hope to assist the general public to understand the Congress' record on that score, Meanwhile, we support the prerogative of the Congress in setting budget priorities, and urge you to provide adequate funding for education programs.

Your committee knows that the President's budget request for elementary and secondary education for fiscal year 1974 is $1½ billion below the 1972 level. I have attached an explanatory table. I know you are also aware that the largest elementary and secondary program, Title I of the Elementary and Secondary Education Act, must, by statute, be allocated next year on new 1970 census data. Every study completed on Title I ESEA indicates that this wealthy coun-

try is still not meeting the needs of all educationally deprived children adequately in all of the States.

In Philadelphia alone, there are 140,000 title I eligible children. Today we are able to allocate to them only $160 per child. Your studies, our studies, national research, and the administration's studies rarely agree on anything. I am confident in asserting that they all find that spending levels at about $150 barely hold the educational line, if that. I do not believe there is a single school in Philadelphia where there are large numbers of disadvantaged students that the average reading level is not at least one or two grade levels below the national norm. Yet the 1970 census data would cause drastic shifts in allocations of title I funds between States if no increased appropriation occurs for that program. Pennsylvania would lose approximately $4.5 million under the new census data without additional funding. Holding all States harmless under the new census data will require more than a 10-percent increase in funding. I know you are aware, Mr. Chairman, that the funding level for ESEA title I appropriations has been at the same level for the last 3 fiscal years. Not only do we face drastic changes under the application of new census data, but we have made no allowance for inflation factors in meeting the needs of poor children.

The great cities of this country, Mr. Chairman, face fiscal catastrophe. Philadelphia is bankrupt. The minimum deficit of $71 million for its public schools could well prevent the opening of Philadelphia schools next September. The cities of Detroit, St. Louis, and Chicago are also in serious financial difficulties. You are aware that Philadelphia's plight is not the result of indifference or neglect on the part of the State. In the past 6 years, under the administration of both parties, we have more than quadrupled our subsidies to Philadelphia from $50 million to more than $216 million in the current year. But the growing concentration of poverty pupils, and the hastening deterioration of the tax base, means that we are running hard just to stand still.

We believe that the Congress was wise in its appropriations for elementary and secondary education in H.R. 15417, the first Labor/HEW appropriations bill for fiscal year 1973, which the President vetoed. We would urge your committee to appropriate at the levels contained in H.R. 15417 in the last Congress, and to add a factor of 6 percent to 10 percent to the amounts for each education program to allow for an inflation factor. We believe that this addition for inflation should be on top of the additional funds required to compensate for the use of new census data. We would like to assure the committee that we would be eager to support such adequate levels of appropriations by this committee on the floor of the House and with Members of the Senate, to protect a reasonable bill from any excessive additions, and to reestablish the Congress prerogative in spending.

I would like to emphasize to the members of the committee, Mr. Chairman, my support for adequate funding for title V of the Elementary and Secondary Education Act. Title V was written to stimulate and assist States in strengthening the leadership resources of the State education agencies, and to assist those agencies in the establishment and improvement of programs to identify and meet the education needs of the States.

Across the country, it is title V ESEA that has enabled State education agencies to make a successful transition from traditional regulatory functions to increased leadership responsibilities and services to local school districts. The traditional regulatory functions of State education agencies have long been supported by State funds. Since 1965, title V has enabled State agencies to provide such services as dissemination of improved curriculum and teaching methods, assistance to local districts in development of management information systems, planning of improved school finance programs, assistance in upgrading teacher training, provision of human relations programs, and assistance to local districts in long-range planning for educational needs.

In Pennsylvania, we are using the title V funds in a manner which determines whether the department provides leadership or remains a passive observer, conducting "business as usual." I would like to cite three rather strident examples:

(1) *Citizens Commission on Basic Education.*—This is a 43-member gubernatorially appointed body charged with the review of law, regulation, and practice in education in Pennsylvania. They have recommended substantial changes across the board. We used title V money to produce the recommendations. We hope to use it to help implement them.

(2) We are convinced in Pennsylvania that the world of work—the environment out of the classroom—represents an essential component to a student's educational experience. We used title V funds on a model internship program in the capitol complex in Harrisburg. We hope to use title V moneys next year to influence similar programs across the State.

(3) Related to the last item, we do not feel that good teachers are identified by the number of college credit hours they attain. On the other hand, we feel we can identify certain competencies good teachers possess and design teacher training programs to that end. We are using title V moneys for research identifying the competencies and piloting training programs for their development. Success here will allow new departmental program approval guidelines and certification requirements.

Other States are making equally imaginative use of title V moneys to benefit local school districts. In West Virginia, for example, the State agency used title V funds for the planning and development of the statewide kindergarten program. The Oregon Department of Education has used title V funds for a management study and implementation program for improving the productivity of Oregon's community colleges; Oregon has also developed a statewide evaluation of innovative curriculum programs, and a management information system designed to enable local school districts to move to a planning, programing, budgeting system. In the State of Wisconsin, title V funds have enabled the department to employ internal management specialists who have revamped the department's internal administration.

Though the Nixon administration has proposed terminating title V

in fiscal year 1974, a 1973 study released by the Department of Health, Education, and Welfare on State education agencies and the use of title V funds carefully documents the trends in operation of State departments of education away from traditional statistical and regulatory roles into new areas of leadership and service. The study drew on management information surveys run by the U.S. Office of Education and other university and private studies of State education agencies. Copies of the study have been sent to all members of this subcommittee. The conclusion by the author of this exhaustive HEW survey is that the elimination of title V would be seriously detrimental to the progress made in recent years by State education agencies.

Mr. Chairman, I would like to briefly express the concerns of chief State school officers over the recent actions in the USOE decentralizing program decisions to HEW regional offices across the country. You have recently received a letter from the executive secretary of the council expressing our reservations about this development. In brief, we feel that regionalization of the authority of the Commissioner of Education is contrary to the will of the Congress and contrary to the best interests of educators at the State and local level. We feel that the regional offices have recently been used in improper ways to propagandize the administration's education special revenue sharing program.

It is also clear that the activities of the regional offices have contributed to the confusion which already exists over proper handling of USOE contracts and interpretations of guidelines. We request that your subcommittee insert restrictions into its appropriations bill which would prevent the use of fiscal year 1974 funds for any further regionalization of USOE administration until the Congress has had an opportunity to examine a proper budget justification and/or request for legislative authorization.

Finally, Mr. Chairman, we would ask that your committee consider strengthening the language of continuing resolutions whenever that legislative vehicle must be used. The incumbent administration has succeeded in confusing lawyers and laymen as to minimum levels of funding received by your current language. We request that such resolutions state in affirmative language the minimum level of spending required by the Congress, making reference only to the actual level of spending in the previous fiscal year or the last enacted appropriation act. The public has a right to know precisely what minimum spending level Congress intends, and the present language is unnecessarily imprecise.

In conclusion, Mr. Chairman, I would like to reemphasize the critical need seen by chief state school officers for early action by your committee on an education appropriations bill, at funding levels based upon the bill H.R. 15417 vetoed last year with adequate additional funds for inflation.

We have every confidence that your committee will provide adequate Federal support for education and assist in the reestablishment of the congressional prerogative to set Federal spending priorities.

[Additional information follows:]

ELEMENTARY AND SECONDARY EDUCATION (COMPARISON OF FUNDING LEVELS)

[In millions of dollars]

	Fiscal year 1972, actual	Proposed by President for fiscal year 1974
Supportive services:		
ESEA II	90	0
ESEA III	146	(146.0)
ESEA V	33	0
NDEA III	50	0
Adult education	51	(51.0)
Public libraries	58	0
Total	428	(197.0)
Disadvantaged	1,597	1,543.7
Vocational	474	443.1
Handicapped	37	[1] 164.8
SAFA (Public Law 874)	592	194.8
Total	3,128	2,524.9

[1] Includes transferred funds from other categories.

Note: Difference, $603,100,000.

SUMMARY OF PROVISIONS AND APPROPRIATIONS FOR TITLE V FOR FISCAL YEAR 1974

The Elementary and Secondary Education Act of 1965 (Public Law 89-10) provided under title V funds for strengthening State departments of education to enable them to meet the very heavy burdens that would be imposed on them as the result of the authorization of nearly $3 billion for education programs under other titles of the act. As originally enacted, this title had two principal sections: 503, under which the funds went directly to State departments, and section 505, which utilized 5 percent of the title V appropriation for interstate or regional projects. The formula for section 505 allocates 40 percent of the appropriation to States on a flat grant basis and the remaining 60 percent on the ratio of school-age population in each State to total school-age population in the United States. These funds may be used for almost any purpose as determined by the SEA.

In 1970 sections 503 and 505 were made part A and parts B and C were added to title V. Part B authorizes funds for local educational agencies for about the same purpose as the original act did for State educational agencies. Part C authorizes funds for a major thrust in planning, management, and evaluation of educational programs for both State and local educational agencies. The formula for part C allocates 40 percent of the appropriation to States on a flat grant basis and the remaining 60 percent on total population ratios.

APPROPRIATIONS HISTORY

	Fiscal year—				
	1970	1971	1972	1973	1974
Authorization:					
Part A	$80,000	$80,000	$85,000	$90,000	----------
Part C	0	10,000	15,000	20,000	----------
President's budget:					
Part A	29,750	29,750	33,000	33,000	0
Part C	0	0	0	10,000	0
Appropriation:					
Part A	29,750	29,750	33,000	43,000	----------
Part C	0	0	0	[1] 10,000	----------
Obligated by USOE:					
Part A	29,750	29,750	33,000	33,000	----------
Part C	0	0	0	5,000	----------

[1] Vetoed bills.

ESEA TITLE V

ACCOMPLISHMENTS, 1972–1973—SOURCE: DHEW, JUSTIFICATION OF APPROPRIATIONS ESTIMATES FISCAL YEAR 1974

This program has supported the accomplishment of many objectives all aimed at strengthening the States' management capability and their expertise in providing assistance to local school systems. Major accomplishments supported during this period have included the following:

(1) Seventy-five percent of the States have invested title V resources in the development of systems of educational accountability.

(2) Over half of the State departments of education have established definitive objectives on an annual basis for all the activities of the agency. In addition, 28 States have initiated special efforts to utilize evaluative and assessment data to produce a set of practical and meaningful goals for elementary and secondary education on a statewide basis.

(3) One-half of the States utilized a portion of their resources made available under title V to investigate alternatives to their existing organizational and governance structures.

(4) Twenty-five percent of the title V, part A appropriation has been directed toward enhancing the leadership and services functions provided for local education agencies.

Section 505 funds, through 25 projects, will have enabled SEA's to conduct studies and develop strategies and models for dealing with such common problems as improved internal auditing, organizational structure for public education, strengthening career education, role of the SEA in curriculum improvement and in effective ways of linking indstry, private education, and public education together for the optimum exchange of resources, personnel, and educational capabilities. In addition there are eight interstate projects organized regionally designed to permit States to pursue common priorities and exchange strategies for resolution of contemporary issues.

Mr. SHRIVER. You mentioned the Philadelphia system being bankrupt. When we have Federal deficits of $30 billion a year, $25 billion, even $20 billion, we are not exactly in a healthy position at the Federal level.

Mr. PITTENGER. I am aware of that and we are not asking you to exceed the revenues of the Federal Government. We are asking that you take a look at the priorities within budget limits.

Thank you, sir.

MONDAY, MAY 14, 1973.

PSORIASIS

WITNESSES

MRS. BEVERLY W. FOSTER, NATIONAL PSORIASIS FOUNDATION
DR. KENNETH HALPRIN, PROFESSOR OF DERMATOLOGY, UNIVERSITY OF MIAMI

Mr. SHRIVER. Mrs. Beverly W. Foster, National Psoriasis Foundation.

Mrs. FOSTER. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee, I want to thank you for the opportunity to testify. I'm Beverly Foster, a victim of severe psoriasis, a disease that rarely kills, but destroys the lives of millions of people. Psoriasis is often referred to as "the Hidden Disease," and though difficult and sometimes impossible, most of us do try desperately to keep our disease concealed from the public. One has to keep it hidden * * * as it appears contagious, but it's not * * * it is, in fact, hereditary.

Some statistics concerning psoriasis include:

(1) 6 to 8 million Americans suffer from this disorder.

(2) 250,000 sample cases, in a survey made by the National Center for Health Statistics in 1963 reported:

(*a*) 150,000 new cases are diagnosed annually.

(*b*) 1 million days of restricted physical activity (work loss) annually.

(*c*) 365,000 days lost to bed disability due to psoriasis.

(3) 1,093 patients with psoriasis consumed 40,300 days of nursing care, according to Veterans' Administration 1968 hospital records.

(4) 6,400 veterans receive annual compensation for disability of approximately $1 million.

(5) In October 1971, Dr. G. Donald Whedon, Director, National Institute of Arthritis, Metabolism, and Digestive Diseases, reported that a survey on expenditures for treatment of psoriasis revealed that the annual cost approached $1 billion.

Comparing the annual investment of tax dollars for the care and treatment of psoriasis with the total 1972 outlay for all National Institute of Arthritis, Metabolism, and Digestive Diseases support specifically for psoriasis research—under $200,000—it would appear that Federal support is less than optimal. The pictures you have before you express the severity of this disease and why we must make a greater effort, especially when there is a tangible target on the horizon for at least a control. We ask you to consider the number of suicides and broken marriages caused by the mental anguish, economic drain, physical pain and disfigurement of psoriasis, the number of people living the lives of a recluse, and the number of children alienated from their playments due to their appearance.

On behalf of these people, the National Psoriasis Foundation respectfully encourages that a sizable increase in the National Institute of Arthritis, Metabolism, and Digestive Diseases appropriation be itemized specifically for psoriasis research.

Mr. Chairman I have with me a sample of the thousands of letters we receive from people throughout the country.

STATEMENT OF DR. KENNETH HALPRIN

Mr. SHRIVER. Dr. Halprin, do you have a statement?

Dr. HALPRIN. Yes, Mr. Chairman.

Mr. Chairman and members of the committee, Dr. Richard Stoughton, director of dermatology at the Scripps Clinic and chairman of the Medical Advisory Board of the National Psoriasis Foundation, has prepared a statement on the overall scope of the problem which I should like to read to you.

Dr. Stoughton in his statement indicates that answers to the problems are within reach. We believe that to be true and important not only for psoriasis but also for the fields of cancer and wound healing.

You are all aware that the tissues of the body are composed of tiny individual cells. There are millions of individual cells making up these unsightly scaling sores called psoriasis. These cells, which come off at the surface as the scales we see are the product of the division of cells further down in the skin. These germinating or proliferating cells are normally restrained in their activity but in psoriasis, they

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are out of control and make new cells at a most rapid rate—10 times faster than normal—faster than most cancer cells.

This is the prime characteristic of psoriasis, it is a disease where the normal control of cell division has been lost—yet it is not cancer since these cells do not invade other tissues and also it is a reversible defect since lesions can come and go. Because cancer and wound healing also represent processes where control of cell proliferation is dramatically changed, it is obvious that any success in solving the riddle of psoriasis will also lead to immediate benefits in the field of cancer and wound healing.

What do we know about the factors which characterize and control cell division? Not enough obviously but some avenues of research are under investigation. We know a great deal about the way the cells in psoriasis lesion carry out their metabolic functions so that they can support this enormous rate of growth. We are approaching an understanding of how mature cells lying near the surface may secrete a messenger which is carried down to the lower cells and says "Stop, There are enough of us already." In a wound the cells at the top are removed, the message is not made, and the lower cells make new ones without restraint until the upper layers are restored. This is still conjecture but with some good experimental support.

When such messages arrive at the cell wall, what happens inside the cell to turn off the machinery for cell reproduction? Groups at Miami under Dr. Hsia and at Michigan under Dr. Voorhees have suggested that inside the cell it is the level of a small molecule or messenger called cyclic AMP which may be the controlling agent. I would like to read this statement concerning Dr. Voorhees' work.

In conclusion, basic research into the cause of psoriasis attacks a general problem in human biology—the control of cell reproduction. Advances in this field will help not only patients with psoriasis, but also those afflicted with cancer and will probably have other beneficial aspects not yet suspected or imaginable. Time did not permit a more detailed presentation of the work being done by other researchers in psoriasis. A survey of some of this work can be found in the proceedings of a conference held in October 1971, at NIH. I think that they would join with me however in this plea for continuing and increased support.

My active research work in the past 10 years has all been concerned with psoriasis exclusively, so I am wholeheartedly in support of the work which is now going on and the request for increased funding.

I believe that the answers to the problem of psoriasis are within reach and that these answers would be important not only for psoriasis but for the field of cancer.

[The statements of Dr. Voorhees and Dr. Stoughton follow:]

STATEMENT OF JOHN J. VOORHEES, M.D., ASSISTANT PROFESSOR, UNIVERSITY OF MICHIGAN (ANN ARBOR)

Psoriatic epidermis is characterized by rapid cell growth.

Nobel Prize winner Dr. Earl Sutherland discovered cyclic AMP—a chemical that regulates the rate of cell growth in a number of tissues. It is theorized that another chemical, cyclic GMP, opposes events mediated by cyclic AMP. A fall in cyclic AMP and a rise in cyclic GMP promotes cell growth, and a rise in cyclic AMP can stop cell division even in the presence of cyclic GMP.

Dr. John Voorhees and his associates established that cyclic AMP regulates the rate of cell growth in the epidermis and with this knowledge went on to discover low levels of cyclic AMP in the psoriatic lesion. These investigators

also determined, through examination of samples of involved and uninvolved tissue from psoriasis patients, that cyclic GMP concentration is significantly greater in the involved skin. Clinical psoriasis is known to appear and disappear and then reappear spontaneously in different patterns. The defect responsible for the recurrence of the clinical lesion, therefore, may be reversible. It would seem that by balancing the opposing actions of cyclic AMP and cyclic GMP through the oral or parenteral administration of a combination of agents with tissue specificity, the result may be a treatment that is efficacious and relatively safe for the suppression of the psoriatic lesion.

Dr. Voorhees' recent discovery represents the first specific lead in the attempt to uncover the basic biochemical defect in psoriasis and other proliferative disorders. It would appear, therefore, that further investment in research to find out why the rapidly dividing cells of psoriasis have temporarily reduced levels of cyclic AMP, whereas cancer may have permanently reduced levels, would result in a better understanding of both diseases.

STATEMENT OF DR. RICHARD B. STOUGHTON

Over 1 million people in this country suffer the disastrous consequences of bearing leprosy-like scales and sores of psoriasis. This is a lifetime disease which has no cure and can be passed on to children.

There is no peace. It is a life of mental anguish. In addition, a large number are so severely affected they can't work or must be hospitalized. It rarely kills but most of the sufferers wish it did.

Over $1 billion a year in productive labor is lost to the country and the medications these poor souls purchase (usually of little help) cost over $100 million a year.

Medical research is now sophisticated. Answers to the problem of psoriasis are within reach. Solution through research will require an honest effort and not token support (currently under $300,000 per year).

A significant program to help these suffering citizens is long overdue.

Mr. SHRIVER. Thank you Mrs. Foster and Dr. Halprin.

MONDAY, MAY 14, 1973.

UNDERGRADUATE AND GRADUATE EDUCATION OF PHYSICIANS

WITNESSES

DR. JOHN A. D. COOPER, PRESIDENT, ASSOCIATION OF AMERICAN MEDICAL COLLEGES
SUSAN F. SEGRET, EXECUTIVE DIRECTOR, ASSOCIATION FOR ACADEMIC HEALTH CENTERS
PRENTICE BANSHER, DIRECTOR OF FEDERAL LIAISON, ASSOCIATION OF AMERICAN MEDICAL COLLEGES

Mr. SHRIVER. Next is Dr. John A. D. Cooper, president, Association of American Medical Colleges.

Dr. COOPER. Mr. Chairman and members of the subcommittee, the Association of American Medical Colleges welcomes this opportunity to appear before the subcommittee during its consideration of the President's fiscal 1974 budget for the health programs of the Department of Health, Education, and Welfare.

Now in its 97th year, the Association represents the whole complex of persons and institutions charged with the undergraduate and graduate education of physicians. It serves as a national spokesman for all of the 114 operational U.S. medical schools and their students, 400 of the major teaching hospitals, and 51 learned academic societies whose members are engaged in medical education and research. The Association and its membership thus have a deep and direct involve-

ment in the many programs whose appropriations requests this subcommittee is now reviewing.

Before discussing those elements of the administration's budget which directly affect the capability of the Nation's medical schools and teaching hospitals in advancing the national attack upon our health problems, the Association considers it useful to set the fiscal 1974 health budget in a broader context. This context is comprised of five major elements.

(1) The first element is the uncertainty surrounding comparative budget data for fiscal 1973, in light of the absence of congressionally approved fiscal 1973 appropriations and of the resulting reliance on administration-determined spending levels under a continuing resolution. As a result of the uncertainty, it is difficult to select a basis for assessing the fiscal 1974 budget. The situation is this. Two appropriations measures for the health activities of the Department of Health, Education, and Welfare were passed in 1972 by the Congress. Both were vetoed by the President. In January 1973, the administration submitted an amended fiscal 1973 health budget which was substantially lower than the original fiscal 1973 budget, submitted in January 1972. There was no congressional participation in preparing the administration's amended fiscal 1973 budget. Lacking a regular appropriations bill, the DHEW is to operate for an entire fiscal year under a continuing resolution, which allows the administration to select spending levels from among a number of options. The most recent congressionally approved health budget is either the second fiscal 1973 appropriations measure (HR 16654) or the enacted fiscal 1972 appropriations measure.

(2) Within the Department of Health, Education, and Welfare budget, funds for the health programs, while made to appear moving upward, are in fact increasing only imperceptibly or decreasing. The fiscal 1974 budget for the health agencies in the DHEW is about $4.9 billion. Although this appears to be some $828 million above the amended fiscal 1973 budget and $335 million above the fiscal 1972 appropriations, the fiscal 1974 request includes a number of budget changes which inflate the apparent increase. Included in the $828 million increase are the following special items: $636 million in forward funding for support of community mental health center programs through 1980; $102 million for additional neighborhood health centers transferred from the Office of Economic Opportunity; and $60 million to carry out the administration's legislative proposal for Federal support for health maintenance organization development. The total of these special items is $798 million. If these items are excluded from the fiscal 1974 budget, then it appears that the proposed budget is only $30 million above the amended fiscal 1973 budget and $463 million below fiscal 1972 appropriations. Thus the fiscal 1974 request for the DHEW's health agencies is only 0.7 percent higher than its amended fiscal 1973 request and is 10 percent lower than the fiscal 1972 funds appropriated by the Congress and approved by the President.

(3) The fiscal 1974 health budget proposes to eliminate some programs without substituting alternative approaches for meeting the continuing needs for which the initial programs were developed. For example, regional medical programs are to be terminated without the

substitution of an alternative method for fostering interaction between various health professionals and the medical schools. There is still a need to promote the flow to the practicing community of the new discoveries in prevention, diagnosis, and treatment developed in the medical schools. Elimination of research training grants, which are used to attract to careers of research and teaching promising young biomedical investigators, also is being proposed. There is a continuing and growing need for biomedical research scientists to conduct both basic research and research in highly targeted programs, as well as for medical educators to staff the expanding number of medical schools as they strive to increase the supply of health professionals. Further, the budget proposes elimination of the 26-year-old Hill-Burton program, in spite of a need to remodel and modernize the aging facilities of many hospitals, particularly those in urban settings, and to construct ambulatory care facilities to reduce the need for expensive hospitalization. No satisfactory proposals are offered for replacing these programs.

(4) The fiscal 1974 manpower budget does not meet adequately a number of moral commitments of Federal assistance to the medical schools. In previous years, responding to direct Government pleas to increase enrollments, the schools made strong efforts to expand their first-year classes. It was implied by the Government, and anticipated by the schools, that additional funds required to offset the cost of the enrollment increase would be forthcoming in subsequent years. These funds in the past have been included in the special projects item of institutional support. The fiscal 1974 request for special project funds is some $19 million lower than the amount appropriated in fiscal 1972, dropping to $34 million from $53 million. The resulting loss of financial support for the schools' physician augmentation projects seriously affects the ability of the institutions to continue those projects. Another example also involves medical school enrollment increases. The Comprehensive Health Manpower Training Act of 1971 required the scools to meet certain enrollment increases in order to qualify for capitation grants. Actual capitation grant support never has met the authorized levels of such support (and in fact drops from the 1972 level of 70 percent to a proposed 1974 level of 64.9 percent), but the schools have been required to meet a full 100 percent of the legislatively mandated enrollment increases. One more example involves medical school construction programs. Many schools, faced with major facilities construction programs, decided to carry out the program in a series of steps. The schools sought construction grants for the first steps, with the understanding that subsequent grants would be available for later steps. Subsequent decisions to eliminate construction grants have left such schools with only partially completed construction projects. As a result, the schools' planned expansion programs—undertaken to permit the increased production of M.D.'s—are stalled.

(5) The final element in the overall context of the fiscal 1974 health budget is the current period of fiscal restraint that is appropriate in the present economic situation. The Nation appears headed in fiscal 1973 for its third consecutive budget deficit of $20 billion or more. This has produced an acute awareness of the need to hold down Federal spending and to revise the congressional budget review and appropriations process. The association agrees completely with these sentiments.

Its budget recommendations for fiscal 1974 are essentially a reprograming of the budget requests, within the total amount of the request. Only in those instances in which a strong factual argument can be made for special increases has the association proposed modest increments based on rising costs.

To assess the impact of the administration's fiscal 1974 health budget, the association asked the Nation's medical schools to review their expenditures of Federal funds for the support of programs in research, teaching, and services in fiscal 1972 and their expectations of funds for such programs in fiscal 1974. Following are the principal findings of that review:

(1) Federal funds available in fiscal 1974 for support of programs of research, teaching, and service would drop 11 percent from the fiscal 1972 level, more than 15 percent from the level in the current fiscal year, and 26 percent from the level planned by the schools in fiscal 1974, prior to the release of the budget recommendations.

(2) Income to the schools from other sources is expected to increase in fiscal 1974. But this increase will not offset the anticipated decrease in Federal funds. A number of schools reported either that State legislatures would not grant requests for higher State appropriations or would not be in session even to consider such requests. Private schools have no source of income to replace lost Federal funds.

(3) The proposed reduced levels of fiscal 1974 Federal support would require the schools to terminate the employment of 1 out of every 12 faculty members, unless other sources of salary support can be found. Additional income for the next academic year would be difficult to obtain at this late date.

(4) In terms of undergraduate medical education, one-third of the schools reporting indicated the strong possibility of having to reduce the size of future entering classes. For a considerable number of schools, future increases in first-year enrollments will not be possible. And for a majority of the reporting schools, programs for curriculum innovation may have to be abandoned or curtailed.

(5) Regional medical programs termination—as proposed in the budget—may force about 1 out of 2 medical schools to phase out or to curtail their health care programs in rural or neighborhood ghetto areas; their referral services in such significant areas as cancer, heart disease, stroke, kidney transplants, radiation and emergency care; and their formal programs for instruction, lectures and seminars for the continuing education of practicing physicians.

The Association would like now to comment in some detail on those aspects of the health budget which directly affect its constituency. While the Association has a deep concern with all health programs covered in the budget, this statement, in the interest of brevity and emphasis, concentrates on those programs upon which the national role of its institutional constituents is vitally dependent. In addition to speaking for its own constituency in this statement, the Association is also commenting as a member of the Coalition for Health Funding. The Association is in full support of all of the appropriations increases recommended by members of the coalition.

ASSOCIATION PRIORITIES

Charts of the Association's recommendations for the research institutes and divisions of the National Institutes of Health and for med-

ical, dental and related health professions in the NIH health manpower budget are attached to this statement. Of its recommendations, the Association has identified five as being of the highest priority. They follow, in descending order of importance.

CAPITATION GRANTS

Appropriate $168 million for capitation-grant institutional support for schools of medicine, osteopathy and dentistry, the level necessary to maintain the fiscal 1972 dollar level of support per student.

REGULAR RESEARCH GRANTS

Add $79.5 million to the NIH budget for research institutes and divisions and direct that the funds are to be used to raise regular research grants for each Institute to at least the fiscal 1972 level plus a cost-of-research increase of 12 percent.

TRAINING GRANTS AND FELLOWSHIP

Direct the continuation of the NIH research training grants and fellowships and the support of new trainees and fellows and add $82.4 million to the NIH research budget to maintain these activities at the fiscal 1972 level plus a cost-of-training increase of 12 percent. Of the $82.4-million increase, $61 million is to be allocated for training grants and $21.4 million is to be allocated for fellowships.

STUDENT ASSISTANCE

Appropriate $46 million for health professions student loans and $19.2 million for health professions scholarships, the levels necessary to keep pace with enrollment increases or to maintain past levels of assistance. Direct that these programs are to be continued.

CONSTRUCTION GRANTS

Appropriate $140 million for construction grants for health professions teaching facilities, the same level appropriated in fiscal 1972.

Two of the Association's priority concerns—regular research grants and training grants and fellowships—are part of the NIH research budget. The budget shows the effect of plans for phasing out these programs. This deeply concerns the Association, because these programs profoundly affect both the conduct of research and the training of research scientists and medical school faculty members.

The principal effect of the fiscal 1974 budget on the conduct of biomedical research is to accelerate past trends away from investigator-initiated research and toward targeted research-by-contract. Further, the increased Federal support for heart and cancer research, proposed in the fiscal 1974 budget, draws funds away from research in other fields. This can thwart the synergistic benefits of a balanced, coordinated national program of research into the physical and mental diseases and impairments of man. Biomedical research in any single field is related to and supported by simultaneous research and investigation in every other life science. Moreover, it is the basis for the development of new targeted areas. Thus to reduce the research activity in other

fields, while increasing activity in a highly targeted field, may in fact foreclose important, unforeseen advances in the highly targeted field.

These developments are, perhaps best illustrated in the budget figures for new and competing research grants, for research and development contracts, for multidisciplinary centers, and for general research support.

[The budget figures follow:]

[Budget authority in thousands of dollars]

	Actual, 1972	Original, 1973	Amended, 1973	Request, 1974
Conduct of research, total	1,287,630	1,385,879	1,334,188	1,405,782
Regular research grants, total	564,314	607,566	587,044	582,882
Noncompeting	357,081	428,094	427,846	460,607
Competing	207,233	179,472	159,198	122,275
Other research grants, total	237,558	249,130	225,371	243,636
General research support	55,212	54,624	26,124	17,000
Multidisciplinary centers	102,996	111,374	116,690	139,806
Other special programs	79,350	83,132	82,557	86,830
Direct operations, total	434,755	476,183	468,773	525,264
Intramural research	77,993	116,353	82,496	83,481
R. & D. contracts	228,630	265,265	243,659	288,241
Collaborative research	35,151	42,427	42,349	42,954
Other direct operations	92,981	52,138	100,269	110,588
Cancer control		4,000	4,000	34,000
Cancer construction	51,003	49,000	49,000	20,000

Dr. COOPER. Funds for new and competing research grants are down—in every Institute. Funds for general research support are down. Funds for contract research are up, and virtually all of the increase is in the contract programs of the National Cancer Institute and the National Heart and Lung Institute. Funds for multidisciplinary centers are up, and virtually all of the increase is to go for cancer specialized research centers.

Responding to the Association's survey, the medical schools indicated that fiscal 1974 Federal funds for research were substantially below expectations and that the effect on faculty salaries supported from Federal research funds would be serious. This drop in Federal research funds is to come at the same time the schools expect non-Federal research support to remain virtually unchanged. Overall, the schools reported, Federal research support would drop 16 percent from anticipated levels. Funds for new research grants are down 39 percent; contract funds are down 7 percent; funds for specialized centers are down 18 percent; general research support funds are down 71 percent. Faculty support from research grants and contracts is down 17 percent, and from genereal research support funds is down 71 percent.

The thrust of biomedical research is to find the scientific basis for the subsequent development of improved methods for the treatment of disease. The leading edge in biomedicine is comprised of the new ideas and the new researchers which can be developed and encouraged through new research grants. The value of funds directed to the support of specific research projects is, in turn, multiplied by funds providing general research support. These can be used at the discre-

tion of an institution in the development of new research programs, providing initial support for young investigators, undertaking pilot projects and feasibility studies, and supporting centralized facilities and services needed by multiple investigators. General research support funds enable an institution to balance its various research programs and to support research along a broad front of related fields.

Over the past decade, wide-ranging efforts in biomedical research have built up an impressive momentum against the diseases and impairments of man. The availability, for example, of appropriate vaccines developed through research has reduced the death rates from polio and whooping cough by 100 percent. The availability of appropriate antibiotics has reduced the death rates from tuberculosis and dysentery by 50 percent and the death rates from meningitis and syphilis by 30 percent.

While most efforts at measuring the economic benefits of biomedical research suffer from the difficulty of measuring the vast array of imponderables that must be included in any assessment, it is possible in some specific disease areas to produce meaningful information. The use of polio vaccine, for example, resulted in savings in medical care costs alone of more than $326.8 million between 1955 and 1961, according to a study prepared by James W. Colbert, Jr., M.D., vice president for academic affairs of the Medical University of South Carolina, for an American Biology Council task force on the contributions of biology to human welfare. Similarly, he estimated that the benefit from 1963 to 1968 due to immunization against measles amounted to more than $531.5 million. Other studies have reported on savings in other fields. Improved treatment of tuberculosis produced savings of $5 billion in the period 1954 to 1969. Still other illustrations of the value of basic research include: L-Dopa for Parkinson's disease, an annual savings of $1.2 billion; prophylaxis of carcinoma of the cervix by the Papanicolaou smear, an annual saving of $1.1 billion.

Research also is important in meeting public expectations of progress against disability and disease. It is not clear how public expectations raised by recent legislative initiatives in health research—and clearly anticipated in the array of pending legislative proposals in still other fields—are to be met in the fiscal 1974 health research budget. Congress already has enacted major research efforts against cancer; diseases of the heart, blood vessels, lungs, and blood; sickle cell anemia; Cooley's anemia; digestive diseases. Already pending in the current Congress is legislation dealing with autism, diabetes, dysautonomia, and hemophilia.

The fiscal 1974 budget proposes phasing out the research training and fellowship programs supported through the National Institutes of Health. The budget cites three reasons for the decision:

(1) Research budgets, except in special areas, are now being stabilized, and the general need for a greater number of trained biomedical research scientists has passed.

(2) It seems appropriate now to rely on the normal mechanisms in the professional manpower market to produce any additional manpower needed.

(3) Trainees who need financial aid should look to the general programs available for student assistance through Office of Education or other scholarship sources.

[The budget data follow:]

[In thousands of dollars]

	Actual, 1972	Original, 1973	Amended, 1973	Request, 1974
Fellowships	46,248	49,051	36,677	30,592
Training grants	139,650	137,312	112,783	95,402
Total	185,898	186,363	149,460	125,994

Funds for fellowships and training grants decline steadily from the fiscal 1972 appropriations level, with only one minor exception.

Responding to the Association's survey, the schools reported significant unexpected drops in fiscal 1974 funds for research training and resulting drops in numbers of trainees, student stipends, and faculty support. Funds for training grants are down 42 percent; funds for fellowships are down 27 percent. As a result, numbers of trainees or fellows, student stipends and faculty support are down comparable amounts. Because of the cut in training grants, for example, the number of trainees is to drop 44 percent, stipends are to drop 39 percent, and faculty support is to drop 45 percent.

In contrast to the proposed budget actions, an October 1972 National Institutes of Health study of research training included the following recommendations:

(1) That direct support of the training of candidate biomedical scientists for careers in research be reaffirmed as an appropriate and necessary role for the Federal Government;

(2) That the existing instruments of support—the graduate training grants and the research fellowship—continue to be the key elements in the NIH training program; and

(3) That alternative proposals for producing the manpower required for existing and contemplated levels of federally supported bio-medical research seem upon analysis to be at best of dubious merit and potentially disastrous.

These recommendations were echoed in a similar report by the President's Science Advisory Committee.

To phase out training grant programs would reduce support for graduate education and for stipends available to students preparing themselves for careers in biomedical research and teaching. Institutional support under training grants has made it possible for the medical schools to develop formal educational programs to prepare students with advanced knowledge in their field of interest and related disciplinary fields. This background has given them the basis to move the disciplines beyond a simple extrapolation of current investigative approaches. After the students have had this initial preparation, their support usually has been transferred to research project grants during the period in which they actually have been obtaining research training at the laboratory bench under the tutelage of their faculty preceptor. Replacement of training grants by direct support to students would not permit the institutions to maintain this essential organization of graduate programs which has so distinguished them from programs in other nations.

It is difficult to understand the proposal that the marketplace be permitted to determine the interest of young people in preparing themselves for biomedical research and training. Those who enter these fields would have the prospect of a smaller income than they would have if they entered the practice of medicine. The M.D. graduate who becomes a research investigator can expect to be earning $24,000 per year at an age when his classmate who went into practice is earning $43,000 per year. Further, residency training for clinical practice is supported by stipends. In the absence of training grants, future research investigators would be forced to finance their training through loans. Expecting young people to go into debt in order to pursue careers which provide a lower income when a far more attractive economic option is available does not seem consistent with the usual interpretation of the effect of economic forces operating in the marketplace.

Training grants and fellowships have been highly successful in producing career researchers and teachers. A recent study at the University of Washington indicated that 79 percent of basic science trainees have assumed full-time academic positions; an additional 17 percent have entered full-time research outside the academic health center. Thus, at a single university medical center, the NIH training programs have resulted in 96 percent of the trainees entering careers toward which the training grant program is directed. The University of Minnesota reported that of 1,040 trainees directly supported by training grants, almost 70 percent have taken academic positions. A recent survey of 68 medical schools revealed that of 3,267 internal medicine faculty members, 82 percent had received NIH training grant support during their academic development.

Not only are the NIH training programs important and meeting the need they were designed to meet, but also major alternatives suffer important defects. None of the alternatives will meet the increased demand for biomedical investigators, which is expected to rise from 30,000 man-years in 1970–71 to 50,000 man-years by 1980. Furthermore, none of the alternatives will provide the additional faculty and staff needed by the expanding number of medical schools. Neither a loan program, nor a work-study program, nor a departmentally related research allowance, nor capitation grants will meet the needs.

Legislation is pending in this Congress to provide specific statutory authority for the training grant and fellowship programs operated by the National Institutes of Health and by the National Institute of Mental Health. These programs have been operated up to now under broad, general authorities of the DHEW Secretary. The Association has testified in support of the legislation.

To correct the identified problems in the proposed fiscal 1974 biomedical research budget, the Association recommends:

(1) Redistributing the funds in the budget to improve the balance between investigator-initiated research and contract research;

(2) Continuing at previous levels the programs of research training and general research support; and

(3) Appropriating $1,690,055,000 for the NIH research institutes and divisions, and using the $158.3-million increase over the proposed

budget to raise funds for regular reserach grants, training grants and fellowships, general research support grants and general clinical research centers.

A table following this page compares the President's fiscal 1974 research budget with the recommendations of the Association and indicates the details of the Association's recommendations.

[The table follows:]

PRESIDENT'S FISCAL 1974 BUDGET

Research Institutes and Divisions	Regular Research Grants	Training Grants	Fellowships	General Research Support Grants	General Clinical Research Centers	Other Activities	Total
Cancer	$ 99,000	$ 10,546	$ 1,650	$ ---	$ ---	$388,804	$ 500,000
Heart	124,061	11,489	5,650	---	---	123,800	265,000
Dental	11,544	4,191	1,100	---	---	21,617	38,452
Arthritis	88,763	9,551	3,851	---	---	31,443	133,608
Neurology	53,425	11,000	1,500	---	---	35,273	101,198
Allergy	52,615	6,113	1,730	---	---	38,235	98,693
Gen. med. sci.	71,242	31,903	10,970	---	---	24,458	138,573
Child health	53,412	6,200	2,500	---	---	44,567	106,679
Eye	20,953	2,174	742	---	---	8,223	32,092
Envir. health	7,867	2,000	130	---	---	15,266	25,263
Research resources	---	235	72	17,000	40,674	30,651	88,632
Fogarty Intern'l. Ctr.	---	---	697	---	---	2,889	3,586
TOTAL	$582,882	$ 95,402	$ 30,592	$ 17,000	$ 40,674	$765,226	$1,531,776

ASSOCIATION OF AMERICAN MEDICAL COLLEGES FISCAL 1974 RECOMMENDATIONS

Research Institutes and Divisions	Regular Research Grants	Training Grants	Fellowships	General Research Support Grants	General Clinical Research Centers	Other Activities	Total
Cancer	$ 99,000	$ 18,451	$ 4,421	*	---	$380,579	$ 502,451
Heart	124,061	21,596	6,498	*	---	116,034	268,189
Dental	15,497	5,902	1,531	$ 1,040	---	21,890	45,860
Arthritis	104,824	16,881	6,429	8,301	---	30,619	167,054
Neurology	65,468	15,999	3,116	5,136	---	36,065	125,784
Allergy	62,046	9,993	4,008	5,149	---	36,108	117,304
Gen. med. sci.	94,052	48,996	17,479	7,126	---	23,008	190,661
Child health	61,223	11,359	4,090	3,980	---	44,073	124,725
Eye	26,178	3,358	1,877	1,585	---	7,500	40,498
Envir. health	10,042	3,480	307	491	---	13,570	27,890
Research resources	---	394	140	---	$ 42,181	32,342	75,057
Fogarty Intern'l. Ctr.	---	---	2,102	---	---	2,480	4,582
TOTAL	$662,391	$156,409	$51,998	$32,808	$ 42,181	$744,268	$1,690,055

NOTE: In thousands

*To be reprogrammed from other funds

Dr. COOPER. Three of the Association's priority concerns—capitation grants, student assistance and construction grants—are part of the NIH health manpower budget for medical, dental, and related health professions. The fiscal 1974 request of $271,206,000 is $14.1 million below the amended fiscal 1973 budget and $173.6 million below the level of fiscal 1972 appropriations. These reductions are a direct result of the lower per-student capitation support, of plans to shift health professions scholarship assistance to the national health service scholarship program of the Health Services and Mental Health Administration, and of a decision to terminate grant assistance for the construction of health profession teaching facilities.

Aside from special start-up assistance for new schools or for schools of basic science converting to degree-granting medical schools, institutional support is comprised of capitation grants, special project grants and financial distress grants. Capitation grants are by far the most important type of assistance, accounting for 75 percent of the fiscal 1974 request for institutional support. While funds for capitation grants are up, the increase fails to maintain previous dollar levels of support per student. Funds for other categories of institutional support either remain unchanged or drop.

[The budget data follow:]

[In thousands of dollars]

	Actual, 1972	Original, 1973	Amended, 1973	Request, 1974
Capitation grants	155,200	165,900	152,200	152,500
MOD schools, total	(130,000)	(138,500)	(138,500)	(152,500)
Medicine	90,244	96,530	96,530	106,465
Osteopathy	4,616	5,090	5,090	6,080
Dentistry	35,140	36,880	36,880	39,955
VOPP schools, total	(25,200)	(27,400)	(13,700)	
Startup assistance:				
New schools	2,580	2,800	6,000	6,000
Converting schools	4,700	5,500		
Financial distress	20,000	15,000	15,000	10,000
Special projects	53,000	53,000	34,400	34,000
Total	235,480	242,200	207,600	202,500

Dr. COOPER. Capitation payments to the MOD schools in fiscal 1972 amounted to 70 percent of the entitlement under the Comprehensive Health Manpower Training Act of 1971, and the capitation request for fiscal 1974 was expected to provide the same percentage of entitlement. In fact, it does not. Against a $240 million capitation entitlement for schools of medicine, osteopathy, and dentistry in fiscal 1974, the $152.5 million request amounts to a 64.5-percent payment rate. An additional $15.5 million are needed to raise the capitation support to the 70-percent level of $168 million. This unexpected drop in a major source of medical school income, occurring at a time when other income sources also are dropping sharply, seriously affects the schools.

While the fiscal 1974 request of $34 million for special project grants is designed to provide continuing support to existing projects of physician augmentation, curriculum improvement, and minority enrollment, it is the understanding of the Association that ongoing com-

mitments to existing programs total $53 million—substantially more than the amount of funds requested. The drop in the fiscal 1974 request for financial distress grants is required by the 1971 health manpower legislation, which intended the grants to be phased out by the end of fiscal 1974, and represents the full legislative authorization for grants in fiscal 1974.

Responding to the Association's survey, the schools reported unexpected fiscal 1974 drops in each of the major programs of institutional support. Fiscal 1974 capitation grant funds are down 16 percent from anticipated levels. Special project support is down 34 percent for physician augmentation projects, down 36 percent for curriculum improvement projects, and down 35 percent for minority enrollment projects. Financial distress assistance is down 69 percent. As a result of this unexpected loss in Federal institutional support, the schools reported plans to reduce enrollment, to reduce faculty and staff (or leave vacancies unfilled), and to abandon proposed curriculum improvement projects.

Faced with an immediate need for sizable budget savings, medical schools have virtually no choice but to cut back on the number of faculty and staff. These faculty members are, for the most part, very intimately involved with the education of medical students; and a reduction in faculty size cannot help but have a significant impact on the quality of educational programs. The terms under which faculty are hired pose additional problems in this matter. There is either a legal or moral obligation to give them at least 1 year's notice before dismissal. Thus, the institutions are not able to respond promptly in reducing costs if support decreases.

The reason the schools are forced to turn to their salary budgets for savings of any major proportions is that salaries and fringe benefits account for some 60 to 70 percent of the operating budgets of the schools. Medical education is highly labor intensive. In industry, for example, salaries and fringe benefits normally account for some 30 percent of operating budgets. The medical schools already anticipate having to terminate or find other means of support for about one out of 12 faculty members as a result of indicated fiscal 1974 budget reductions. As grave as such reductions are in their effect on medical education programs in the coming year, the implications for future years are even more serious. This is so, because a talented and imaginative faculty, once disassembled, is not easily reassembled. Thus, dismantling a school's faculty in order to save money in fiscal 1974, affects not only the short-term prospects for progress in health but also the long-term prospects.

For health professions student loans, the fiscal 1974 budget requests $36 million, a $6 million increase over the fiscal 1972 appropriations. For health professions scholarships, the budget requests $10 million, down $5.5 million from the fiscal 1972 level, reflecting a policy decision to shift health professions scholarship assistance to an expanded national health service scholarship program.

An examination of student loan funds requested by the schools, and of scholarship funds to which the schools are entitled, shows that the proposed fiscal 1974 funds are not adequate to the need.

[The data follows:]

[In thousands of dollars]

	1974 budget	1974 request or entitlement
Student loans, total	36,000	73,000
Medicine	19,500	37,000
Scholarships, total	10,000	35,000
Medicine	4,400	15,000

Dr. COOPER. Responding to the Association's survey, the schools were particularly discouraged at the proposed changes in health professions student assistance. Most seriously affected, the schools reported, will be efforts to broaden the socioeconomic mix of medical school enrollments. Economically disadvantaged students account for a disproportionately large share of scholarship assistance, and the proposed drop in health professions scholarships will force the schools to abandon plans to enroll more disadvantaged students. More than half the schools reporting, for example, said they would be unable to increase the enrollment of low-income students in the face of reduced scholarship aid. Nearly a third of the reporting schools were concerned that new entering classes would be composed almost exclusively of students from affluent families.

The lack of adequate scholarship and loan funds to support students from lower socioeconomic levels makes it difficult for the medical schools to continue their efforts to expand minority enrollments and to broaden the socioeconomic background of the student body. In the current academic year, it is estimated that 27 percent of medical students received health professions loans and that 15 percent received health professions scholarships.

The heavy reliance of low-income students on scholarship assistance was documented in the Association's survey. While 19 percent of the total enrollment at reporting public schools was low-income (students whose parents' combined gross annual income was less than $10,000), these students received 72 percent of all scholarships. At the reporting private schools, 17 percent of the students were from low-income backgrounds; but they accounted for 53 percent of all scholarship assistance. Furthermore, low-income students were not disposed to incur large amounts of indebtedness early in their medical careers, in anticipation of higher-than-average earnings later.

The association is not confident that plans to shift health professions scholarship support to the national health service scholarship program can result in an effective new program in time for September 1973 entering classes. Such a change would require approval of new legislation, and it does not appear that such approval would be forthcoming in time. Therefore, the Association recommends continued support of the health professions scholarship program.

The fiscal 1974 budget requests no construction grants for health professions teaching facilities. Instead, its only request for construction assistance is $1 million for Federal interest subsidies on federally guaranteed loans. These funds are to be used to make payments on at least 6 previously approved projects which will add approximately 80 first-year places upon completion.

A number of problems arise with such an approach. First, the loan guarantee-interest subsidy program is available only for private

schools, thus effectively blocking the 71 public medical schools from Federal construction assistance, and forcing them to rely upon debt financing. Yet voter approval of bond issues is a far from certain process. In November 1972 elections, for example, nearly 30 percent of the various bond requests was rejected. One year earlier, nearly 80 percent of the November election bond requests was rejected.

A second problem is that the number of first-year places to be added under projects supported by the budget is pitifully small when compared to the number of medical school applicants who are turned down each year because the schools are unable to expand their facilities in order to accommodate increased enrollments. For the 1972–73 and the 1973–74 academic years, there are nearly three applicants for every first-year place in a medical school.

A third problem is that the schools are being required to increase their enrollment in order to qualify for capitation-grant institutional support. Yet at the same time, they are being denied the funds they need to erect the facilities for the larger enrollment. One example from the association's survey illustrates the problem. "The expansion of enrollment and faculty at this school," it was reported, "has proceeded far more rapidly than the expansion of the physical plant, and the faculty is now housed in cramped quarters, including 25 trailers, three 'temporary' buildings, and 78,400 square feet of rented space. Planning funds for an additional building have been approved by the State legislature; but with the loss of Federal grants, there is a serious question of whether the State can provide 100-percent funding for the needed construction. Since this is a State institution, the program of guaranteed loans and interest subsidy will not solve our construction needs."

There appears just as much need now for construction grants for health professions teaching facilities as there was when the program was approved in the Comprehensive Health Manpower Training Act of 1971. The fiscal 1974 authorization for the program is $275 million. That is one measure of need. Another measure has been provided by Dr. Kenneth M. Endicott, Director of the Bureau of Health Manpower Education, the NIH agency administering the health professions assistance program. About $350 million in approved but unfunded construction grant applications remained after the award of fiscal 1972 construction grants, Dr. Endicott on April 4, 1973, told the House Labor-HEW Appropriations Subcommittee. Still another measure is the amount required to maintain the existing physical facilities of the schools. The Association estimates that amount to be some $150 million per year.

To correct the identified problems in the proposed fiscal 1974 health manpower budget for medical, dental and related health professions, the association recommends:

(1) Appropriating $507,042,000 for health professions education assistance, and using the $235.8 million increase over the proposed budget to increase funds for capitation grants, for student assistance, and for construction grants;

(2) Adding $15.5 million to the request for capitation-grant institutional support for schools of medicine, osteopathy, and dentistry, to maintain the fiscal 1972 dollar level of support per student;

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(3) Adding $10 million to the request for health professions student loans and adding $9.2 million to the request for health professions scholarships, to keep pace with enrollment increases or to maintain past levels of assistance;

(4) Directing the continuation of the present health professions student assistance programs; and

(5) Adding $140 million to the request for grants for the construction of health professions teaching facilities, thus providing in fiscal 1974 the same amount appropriated in fiscal 1972.

A table following this page analyzes the NIH health manpower budget for medical, dental, and related health professions, comparing actual fiscal 1972 appropriations, the original fiscal 1973 budget, the amended fiscal 1973 budget, and the fiscal 1974 budget; and indicates the details of the association's recommendations.

[The table follows:]

[illegible] FOR THE NATIONAL INSTITUTES OF HEALTH
(fiscal years)
(in thousands)

	FY 72 APPROPRIATIONS	FY 73 Pkg Jan 1972	FY 73 Budget Amdmts Jan 1973	FY 74 Request	FY 74 Coalition Minimum	FY 74 Coalition Maximum
Health Manpower						
1. Medical, dental and related health professions						
a. Institutional support						
(1) Capitation grants						
Med	$130,000	$138,500)	$ 152,200	$152,500	[illegible]38,000	$168,000
OsteP	25,200	27,400)		--	41,000	44,000
(2) Start-up assistance						
New schools	2,530	2,000)	6,000	6,000	10,000	2,500
Converting schools	1,700	5,500)			6,000	4,700
(3) Financial distress	20,000	15,000	15,000	10,000	10,000	19,992 **
(4) Special projects	53,050	53,000	34,400	34,900	[illegible]58,000	69,000
Subtotal, institutional support	235,480	242,200	207,600	202,500	[illegible]61,000	[illegible]78,000
b. Student assistance						
(1) Loans						
United States	30,000	36,000	36,000	36,000	60,000	46,000
Foreign	--	--	--	--	1,750	
(2) Scholarships						
United States	15,500	15,500	15,500	10,000	33,500	19,220
Foreign	--	--	--	--	150	
Shortage area	--	--	--	--	3,500	
(3) Loan forgiveness	--	--	--	400	--	400
Subtotal, student assistance	45,500	51,500	51,500	46,400	99,000	[illegible]66,620
c. Construction						
(1) Grants	139,985	--	--	--	275,000	136,085
(2) Interest subsidy	800	1,000	1,000	1,000	24,000	1,000
Subtotal, construction	140,785	1,000	1,000	1,000	299,000	[illegible]37,085

** Regarding the category of "Financial Distress" [1.a.(3)], the Coalition's Minimum recommendation equals that of the Administration for FY 74, since the request equals the Authorization.

FUNDS FOR THE NATIONAL INSTITUTES OF HEALTH
(fiscal years)
(in thousands)

	FY 72 APPROPRIATIONS	ADMINISTRATION BUDGET REQUEST FY 73 Orig. Jan 72	FY 73 Amended Jan 1973	FY 74 Request	FY 1974 BOTH CH[illegible]	COMMITTEE [illegible]
1. Medical, Dental and related Health professions (continued):						
d. Dental health activities						
(1) Educational grants and contracts	$ 5,909	$ 6,409	$ 6,409)	$ 12,993	$ 12,500	$12,[illegible]
(2) Direct operations	5,950	6,570	6,570)		7,450	
Subtotal, dental health	11,859	12,979	12,979	12,993	19,950	12,993
e. Educational assistance						
(1) Family medicine	5,100	5,000	5,000	5,000	40,000	5,[illegible]00
(2) Health professions teachers	1,000	1,000	1,000	--	20,000	1,000
(3) Grants and contracts)			2,905	--	--	
)	5,071	7,881				5,071
f. Direct operations)			3,278	3,313	--	3,[illegible]13
Subtotal, health professions	$444,795	$321,560	$285,262	$271,206	$939,250	$507,[illegible]43

Dr. COOPER. The medical library assistance programs of the National Library of Medicine are important concerns of the Association. The programs of training, development of library resources, and support of regional medical libraries are essential in helping libraries meet today's challenges. The most serious challenge facing medical libraries today is the explosive increase of scientific information and the requirement to keep responsible practitioners abreast of new knowledge. The Association appreciates that the legislative authority for these programs is to expire June 30. It notes that extension of the programs, with some slight modifications, is part of the administration's program, and that legislation to this effect has been introduced.

The Association recommends that the fiscal 1974 request for the National Library of Medicine of $24,994,000 be increased by $415,550, and that these additional funds be used to restore the medical library assistance programs to their fiscal 1972 level of $6,937,550.

Mr. SHRIVER. What is the amount of the increase your testimony indicates?

Dr. COOPER. In all the programs, for those departments and agencies we have discussed, which is the National Institutes of Health, Health Services and Mental Health Administration, FDA, Social Rehabilitation Services, with some redistribution of funds, for example, removal of advanced funding for the community mental health centers, alcoholism and drug abuse so they can be funded annually in the future, and with some shifts in funds, total recommendation is $183 million above the President's budget.

Mr. SHRIVER. Thank you.

Mrs. Segrest?

Mrs. SEGREST. I appreciate the opportunity to appear before you and the subcommittee in behalf of the Association for Academic Health Centers. We support the testimony you have heard from Dr. Cooper and the testimony you have heard and will be hearing from the coalition, of which we are also a member. I would like to leave with you a letter to that effect which explains in more detail what our association is and what our concerns are.

Mr. SHRIVER. Very good.

[The letter referred to follows:]

ASSOCIATION FOR ACADEMIC HEALTH CENTERS, INC.,
Washington, D.C., May 14, 1973.

Hon. DANIEL J. FLOOD,
House of Representatives,
Cannon House Office Building, Washington, D.C.

DEAR CONGRESSMAN FLOOD: The Association for Academic Health Centers appreciates this opportunity to appear before you and members of your subcommittee, with Dr. John A. D. Cooper, president of the Association of American Medical Colleges. We are grateful to Dr. Cooper for allowing us to share his time with you, and we fully endorse his testimony in terms of support to this Nation's medical schools.

Our concern, however, reaches out to all of the health professional schools. The association represents 83 health science centers in the United States. We define an academic health center or a health sciences center as an institution including a school or college of medicine, a teaching hospital, and at least one other health professional school. The individuals representing these institutions making up our membership are usually known as vice presidents, provosts, or chancellors for health affairs. As such, they are the senior health officer of their universities responsible for the administrative, educational, and more importantly, financial affairs of the health schools contained within their universities.

The second category of membership applies to those individuals who are responsible for the health educational programs of statewide systems.

Through our membership, in addition to the schools of medicine, we represent 32 schools of allied health, 40 schools of dentistry, 56 schools of nursing, 3 schools of optometry, 28 schools of pharmacy, and 10 schools of public health. All of these schools are, of course, contained within the university complex. In addition, we represent 5 schools of veterinary medicine, 5 schools of social work, 2 schools of community medicine, 21 graduate schools in the medical sciences, and over 50 special health training programs which do not have the status of a school or college.

The association is a member of the Coalition for Health Funding and is greatly concerned for the support needs of the various health schools and programs which are included within the coalition's membership. We would welcome the opportunity to go on record in support of the testimony in behalf of these health professions which you have heard and will be hearing. We would like especially to call attention to the critical need to increase capitation, at a minimum, to the 1972 funding level for schools of medicine, osteopathy, and dentistry; and for schools of nursing, veterinary medicine, optometry, pharmacy, and podiatry.

To highlight other outstanding areas of need among the many we endorse, we feel that if our health educational programs are to continue at their present level and attain even a fraction of the growth we hopefully anticipate, construction for schools of medicine and nursing must be funded at the 1972 level, and training grants for young scientists and investigator-initiated research awards must be increased by a minimum of 12 percent.

The association recognizes that funding these minimal requests will require appropriating a level which exceeds the President's budget. We believe, however, that we have reviewed the requests with a critical eye and with appreciation for the need to pare them to the core in light of the overwhelming fiscal crisis facing our great country. But we are at a critical threshold now. The health crisis looms above even our financial problems. We either cross over to the continued growth and productivity in health education which results in manpower equipped for battle against this health crisis, or we fall behind and watch the odds against us multiply.

Thank you for your consideration of this letter. We remain available at any time to supply additional information, to answer questions, or to serve you and the members of your subcommittee in any way you might find helpful and appropriate.

Sincerely yours,

(Mrs.) Susan Segrest,
Executive Director.

Mr. Shriver. Thank you, ladies and gentlemen.

Monday, May 14, 1973.

Basic Education Programs

WITNESSES

MRS. CATHERINE BARRETT, PRESIDENT, NATIONAL EDUCATION ASSOCIATION

JEAN M. FLANIGAN, RESEARCH DIVISION, COMMITTEE ON EDUCATIONAL FINANCE

JAMES W. GREEN, ASSISTANT DIRECTOR FOR LEGISLATION, GOVERNMENT RELATIONS DIVISION, NATIONAL EDUCATION ASSOCIATION

Mr. Shriver. Mrs. Catherine Barrett, president, National Education Association.

Do you have a statement?

Mrs. Barrett. With me are Mrs. Jean Flanigan and Mr. Green. We appreciate this opportunity to discuss the views of the National

Education Association on the President's budget request for 1974. We also appreciate the difficult task the Congress faces in formulating and enacting a budget for the next fiscal year for the Education Division of the Department of Health, Education, and Welfare.

Our first concern is the extremely low level of funding requested for the basic education programs of elementary, secondary, and post-secondary institutions. The administration's budget request fails to sustain the amount or level of Federal support for 1972. It is indeed a bare-bones budget. Further, because of the rapid inroads of inflation on items of school expenditure, the Federal moneys requested for 1974 will buy even less than a similar amount would have in 1972. We believe that the Federal Government should pay one-third of the costs of public education.

Budget planning in most local school systems begins early in the year—prior to the Federal fiscal year. Many school systems have already adopted budgets for the school year 1973–74. Employees have been or soon will be notified of their contracts for next year. Many school systems have no choice but to notify school employees paid with Federal funds of the termination of their contracts. We do not know exactly how many school personnel are paid in full or in part with Federal funds. Our best estimate is about 350,000. Loss of experienced personnel and other elements of program continuity is at stake. Failure to provide sufficient funds to permit continuation of programs and contracts would be a breach of faith with disastrous consequences for the Nation's schools and schoolchildren.

We urge this committee to act immediately to prepare and report a resolution which will continue the funding of Federal programs at appropriation levels which leave no doubt about the level of funding intended by Congress. We urge that the level of funding be at least that prevailing in 1972. This is extremely important since even at this late date, the level of actual funding of many programs for the current fiscal year is in doubt.

Although the authorizations of major Federal programs expire at the end of fiscal 1973, their extension is provided for 1 year at the level authorized in the terminal year unless Congress by resolution acts to provide otherwise. For your reference, the relevant section of Public Law 91–230 is reproduced and attached to this statement.

An increase to account for the impact of inflation on school expenditures is essential if the program levels of 1972 are to prevail.

We are also concerned with the form of the budget request. It is extremely difficult to compare with last year's budget request. Let me illustrate. In testimony on the 1973 appropriation, Commissioner Marland said:

> For our new initiative in career education we are requesting a $55 million increase—from $112 to $167 million. It involves various program areas such as basic research, development of models to apply and test the best ideas in this field, special tutorial type services for disadvantaged college students, and retraining of school personnel. This modest increase reflects our determination to validate the necessary changes before requesting new, large sums of money.

However, no expenditures for career education are reported for 1972 or 1973. There may be a logical explanation for this, but it is not apparent from the printed budget or administration testimony to date. The budget request for "career education, model installation" for 1974 is $14 million, down from $167 million in 1973.

Of serious concern is that the administration's budget regards the initiatives requested for special education revenue sharing, for example, as authorized programs, and in other instances makes no request for authorized programs such as section 3(b) of Public Law 874.

Again this committee is being asked to legislate new initiatives and to repeal others through the appropriations process. We do not support the budget proposal for special education revenue sharing or the administration's authorizing proposal known as the Better Schools Act.

Special education revenue sharing is purported to give maximum flexibility to State and local school districts and to eliminate redtape and Federal control. It is odd that only formula grants are subject to these bureaucratic ills while discretionary grants, of which a multitude are retained, are not so affected. The other side of the coin is that formula grants are not subject to wheeling and dealing and political payoff.

We find the two broad purposes of the administration's education plan in direct conflict. It is not reasonable to move on the one hand to provide States and their localities "greater freedom to determine their own priorities and to decide how best to meet those priorities" and on the other hand to be "a catalyst for change in the education system." One is a "hands-off" and the other is a "hands-on" approach.

We alert you to the fact that Acting Commissioner John Ottina has announced plans to reorganize the U.S. Office of Education and decentralize administrative authority and staff to the regional offices. This move, however, uses as its rationale the administration of the revenue-sharing program which Congress has not passed and may not pass. We oppose this move.

We would now like to speak to some specific programs.

Title I of ESEA has provided a powerful impetus for the improvement of the education of disadvantaged pupils. Your attention is directed to the 1973 annual report of the National Advisory Council on the Education of Disadvantaged Children. A review of this report is attached. We urge you to give top priority to funding of title I.

Because the allocation of funds under title I will be made in fiscal year 1974 on the basis of 1970 rather than 1960 census data, we believe it will be necessary to protect local school systems in some areas against a reduction in available funds. To hold districts harmless under this provision, we recommend an appropriation of approximately $1.9 billion for title I.

In relation to impact aid, let us point out that the Federal Government is the largest landowner in the United States, holding up to one-third of the total land area. This property is tax exempt and is located in very wealthy, as well as very poor, local taxing jurisdictions.

The local property tax is the mainstay of school support in more than half of the States. On the average, residential property contributes 50 percent of the property tax receipts, and business-related property pays the other half. Impact aid is given in lieu of property tax payments. Where the pupil resides on, and his parents work on, Federal property there is no local property tax base to pay for this pupil's education. In addition, in the case of some classes of "A" pupils, the parents' income and expenditures are also protected from State taxes on income and sales—the main sources of State tax receipts for education and other services. The Federal obligation for the education of these children is clear.

"B" pupils, whose parents work but do not live on the Federal installation, are supported to some extent by virtue of the taxable status of their residences. However, there is no employers' property to tax. An adequate property tax base cannot be comprised mainly of residential-type property. States which are heavily dependent on local property taxes for school support and which have a high concentration of "B" pupils simply cannot afford good schools without confiscatory property tax rates. Service- connected "B" pupils are also a severe drain on a State because the military family frequently does not pay State income taxes by virtue of claiming another State as residence and escapes a large part of the State's sales taxes by shopping on the posts.

Most military installations also employ a large number of civilians from the local labor market. While this brings some economic advantage to the local community, it still does not offset the lack of an employer's share of the local school tax, especially when high numbers of such Federal employees are concentrated in a school system. Here, again, the impact is most severe in school districts in which State aid is low and schools depend primarily on local property taxes for school support.

Several education grants were eliminated and programs terminated in the request for fiscal 1974 on the assumption that funds would be available from the Better Schools Act—the name for special education revenue sharing. However, program funds were not added to the Better Schools Act to offset the loss of Federal funds. If a State wishes to use Better Schools Act funds to continue the programs for follow through, drug abuse education, environmental education, and dropout prevention, it can do so only by decreasing the funding of another program or by decreasing nonfederally supported programs. We do not support the administration's contention that the federally funded programs in these areas can be terminated because their purpose has been fulfilled. These programs have produced promising results, but the claim that their mission has been fulfilled is simply not true. In addition, the evaluations and prototype programs promised are not as yet available. If the administration's request is granted, the programs will probably not be continued to serve as demonstrations.

We would like to comment briefly on several other program terminations.

Aid to State departments of education has been extremely important in building the State departments' staff capability to carry out Federal programs. The time for budgeting general revenue-sharing funds for next year has passed in many States. If title V is not funded for 1974, the State departments of education will be hit with losses of personnel which will cripple the operations of State and Federal education programs. The alternative—to take the funds from the Better Schools Act—is not viable.

The seriousness of this withdrawal of Federal support of State departments can be illustrated. According to an NEA survey for 1969–70:

> The total payroll of all state departments of education for 1969–70 was approximately $270,993,227, of which $112,191,196, or 41.1 percent, came from federal funds. Grants from federal sources ranged from a low of 15.0 percent by one state department to as much as 80.0 percent of the total payroll of another state department. Five departments reported that 70 percent or more of their payroll was derived from federal sources, and 14 reported that at least 60 percent came from federal funds.

We agree that improved Federal programs to strengthen State agencies could be developed, but the solution is certainly not to cripple many of the agencies by withdrawing support funds abruptly.

The budget request for programs in higher education is almost as paltry as the request in the elementary and secondary sector. For example, the work-study program request for $250 million is down 40 percent from fiscal 1972.

The full funding of the basic opportunity grants received our full support, and we do commend the administration in this respect. However, basic opportunity grants alone will not provide adequate funding for even low-income students to attend any but the least expensive publicly funded schools. This budget request falls far short of fulfilling the promise of guaranteeing the financial ability of all students to afford a postsecondary education.

Overreliance on basic opportunity grants and guaranteed loans may inadevertently deprive large numbers of youth of adequate financial support. What of the youths who are disqualified from the basic opportnity —grants because their parents, though able, elect not to pay for college education? We urge that Congress allow sufficient time to evaluate the new programs before eliminating or curtaling direct loans and work-study programs.

Landmark legislation in higher education was enacted by the last Congress. We are extremely disappointed that the administration has selected from among programs authorized and has not requested funding for the total program.

We are concerned with the decrease in funds availble for school and public libraries. The continuation of the flow of funds to libraries is critically important to many other programs. Libraries—school and public—are used extensively by students of all grade levels and from all kinds of public and private schools. Public libraries, especially, are a resource which can be used by parochial school pupils with no taint of church-state relations. Libraries add to the total community resources for education and leisure. Curtailing the funding of these programs is unconscionable.

We were pleased to note that the $18 million appropriated for Indian education under title IV of Public Law 92–318 was released from impoundment by court order last week. We urge the committee to appropriate at least $36 million for fiscal 1974 so that this program can be carried on through the 1973–74 school year. The budget request before the committee ignores this act. We believe it is essential that the program be funded ultimately to the full authorization.

In conclusioin, we urge the members of this committee to reject the administration's meager appropriations request. We urge you to continue funding the existing programs under the authority cited to permit the authorizing committee's full opportunity to renew or revise the existing programs. We also urge you again to separate the appropriation for the education programs of HEW from the Department's overall appropriation so that advance funding of education programs will be feasible.

[Additional information follows:]

"(c) There are hereby authorized to be appropriated for any fiscal year, as part of the appropriations for salaries and expenses for the Office of Education, such sums as the Congress may determine to be necessary to carry out the provisions of this title. Appropriation.

"(d) This title may be cited as the 'General Education Provisions Act'." Citation of title.

(3) Section 402 of such title is amended to read as follows: 81 Stat. 814. 20 USC 1222.

"PROGRAM PLANNING AND EVALUATION

"SEC. 402. (a) Sums appropriated pursuant to section 401(c) may include for any fiscal year for which appropriations are otherwise authorized under any applicable program not to exceed $25,000,000 which shall be available to the Secretary, in accordance with regulations prescribed by him, for expenses, including grants, contracts, or other payments, for (1) planning for the succeeding year for any such program, and (2) evaluation of such programs. Supra.

"(b) No later than July 31 of each calendar year, the Secretary shall transmit to the respective committees of the Congress having legislative jurisdiction over any applicable program a report containing (1) a brief description of each contract or grant for evaluation of such program or programs (whether or not such contract or grant was made under this section), any part of the performance of which occurred during the preceding fiscal year, (2) the name of the firm or individual who is to carry out the evaluation, and (3) the amount to be paid under the contract or grant." Report to congressional committees.

(4) Section 403 of such title is amended by striking out "Act referred to in section 401" and inserting in lieu thereof "applicable program" and by striking out "under any such Act" and inserting in lieu thereof "under such program". 20 USC 1223.

(5) Sections 404 and 405 of such title are amended by striking out "Act referred to in section 401" and inserting in lieu thereof "applicable program". 20 USC 1224, 1225.

(6) Section 404 of such title is amended—

(A) in the caption head thereof, by striking out "AND" and inserting in lieu thereof a semicolon and by inserting "CONTINGENT EXTENSION OF EXPIRING APPROPRIATION AUTHORITY" at the end thereof; and

(B) by inserting at the end thereof the following new subsection:

"(c) Unless the Congress—

"(1) in the regular session in which a comprehensive evaluation report required by subsection (b) is submitted to Congress, has passed or formally rejected legislation extending the authorization for appropriations then specified for any title, part, or section of law to which such evaluation relates, or

"(2) prior to July 1, 1973, by action of either House approves a resolution stating that the provisions of this subsection shall no longer apply,

such authorization is hereby automatically extended, at the level specified for the terminal year of such authorization for one fiscal year beyond such terminal year, as specified in such legislation.".

(7) Section 405 of such title is amended by inserting "loans," after "grants,".

(8) Section 405 of such title is further amended by inserting "(a)" after "SEC. 405." and by inserting at the end thereof the following new subsection:

"(b) Notwithstanding any other provision of law, unless enacted in specific limitation of the provisions of this subsection, any funds from appropriations to carry out any programs to which this title is Availability of funds.

Washington Monitor

May 7, 1973

COUNCIL SELECTS 216 SUCCESSFUL TITLE I PROGRAMS

Calling many previous evaluations "narrow" and "deficient," a presidential advisory council has identified 216 successful compensatory education programs. In the draft of its 1973 annual report, the National Advisory Council on the Education of Disadvantaged Children says these programs, funded under Title I of the Elementary and Secondary Education Act, have "significantly improved the educational attainment of educationally deprived children." Major national evaluations have been "disappointing," says the council, because they have tried to assess programs by some national standard. And a number of programs have been ignored because evaluators overlooked the opinions and judgments of parents, teachers and other educators.

The council says "broader criteria" should be used in evaluating Title I programs: student attendance, the number of discipline problems, and the extent of parent participation, as well as math and reading achievement. Over 600 programs were submitted to the council by local, state and federal officials and by parents. The council selected 216 of these after reviewing math and reading data, and after conducting on-site interviews with teachers, administrators and children. "Our evaluation judged whether the program met its goal. Others have focused on the narrow criteria of math and reading only, even if that was not the goal of the program," says the council's executive director, Roberta Lovenheim.

The council recommends a state matching program to encourage further state and federal spending for compensatory education. Thirteen states now run their own compensatory programs, down from 14 last year. The council suggests that the federal government continue to fund local districts at the current level of $1.2 billion, matched by another $1.2 billion if states contribute accordingly. State spending in fiscal 1973 was $148.3 million for compensatory programs. The council debunks the Nixon Administration theory that a "critical mass" of $300 per child will make a difference in providing equal educational opportunity. "There is no magic dollar amount which, as a national prescription, will alleviate the educational deprivation of children. If there were a 'critical mass,' it would vary from district to district," the report says. As in the past three years, the report recommends that Title I be amended to include a "bypass" provision to provide aid to nonpublic school children if the state or the local district fails to provide these children with Title I services.

The council also recommends that the definition of an educationally deprived child be broadened to include children whose native tongue is not English. At least five million children in this country are unable to speak English fluently when they enter school, the report says. Although there is a federal bilingual program, funds are limited, and districts must compete for them. Broadening Title I's definition would encourage districts to fund bilingual programs under Title I, says Ms. Lovenheim. The council, a long-time advocate of "comparability," also thinks this concept should be broadened. Districts must now provide "comparable" services to all Title I schools before receiving additional federal aid. But the council wants to expand "comparability" to require districts to show they are meeting each child's educational needs, as defined in the required Title I "needs assessment." In addition, districts with more than 5% non-English speaking children would have to spend state and local funds for "appropriate" bilingual personnel to be eligible for Title I funds.

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ON THE WASHINGTON NEWS FRONT

▶ Pres. Nixon has signed a fiscal 1973 supplemental appropriation bill raising funding for impact aid to $501 million and providing $872 million for student aid. (See WASHINGTON MONITOR, April 23, 1973.) HEW has indicated that the President intends to spend the additional $86 million for impact aid included in the supplemental bill, raising the fiscal 1973 level for impact funds from $415 million to $501 million. However, another $134 million approved by Congress earlier is still being "impounded." The $86 million will go only to the most heavily impacted school districts--those with category "A" children whose parents both live and work on federal property. The $872 million student aid provision puts most of the money into three existing programs: college work-study, low-interest loans, and grants to needy students. There is only a small amount for the Administration's new basic opportunity grant program to provide funds for needy students. The Senate has passed an amendment permitting the Administration to award the new grants only to freshmen, in order to stretch the funds. The House is expected to accept the amendment, without which officials estimate the average grant would be only $80.

▶ The nation's libraries will dim their lights tomorrow as a symbolic gesture against Pres. Nixon's proposal to eliminate federal aid for libraries. The protest is part of a program begun by the American Library Assn. to inform the public that the President is "dimming the lights on the public's right to know." Last year school and public libraries received $165 million in federal aid. In fiscal 1973 the Administration allotted $140 million, about $60 million less than Congress approved. The President's fiscal 1974 budget calls for zero funding for library programs.

▶ Fulfilling a long-standing promise, Pres. Nixon has unveiled his proposal to provide income tax credits to parents of children attending nonpublic schools. In testimony before the House Ways and Means Committee, Treasury Secy. George Shultz explained the proposal. It would provide a tax credit for one-half the tuition paid for children attending nonprofit, nonpublic elementary and secondary schools, including special schools for the handicapped. The maximum credit would be $200 a year for each child and would be deducted directly from the amount of federal taxes paid. The credit would not apply to kindergarten or preschool education or to segregated private schools. Parents earning over $18,000 would be able to deduct less than the maximum $200--$1 less for every $20 of adjusted gross income over $18,000. If approved by Congress, and sustained by a court test, the plan could go into effect for the 1973-74 school year. The constitutionality of tax credits is currently being considered by the U.S. Supreme Court. The plan is expected to cost the Treasury $450 million a year.

▶ Four more states have been added to the growing list of states asked to pay back allegedly misspent funds. The U.S. Office of Education (USOE) has asked the following states for repayment of funds under Title I of the Elementary and Secondary Education Act: Alaska, $159,119; Delaware, $5,110; Nebraska, $235,946; and New Jersey, $1,306. Delaware had originally been given a "clean bill of health," but new audits showed the current amount due. Further investigations have also cleared Montana and Washington state, exempting them from any repayment, and have reduced the amount owed by Michigan, from $928,640 to $532,874. Twenty states and the District of Columbia now have been ordered to repay about $19 million, USOE officials say. So far, only Wisconsin has repaid any funds.

▶ NAMES IN THE NEWS: Peter P. Muirhead, former USOE executive deputy commissioner, has resumed the post of deputy commissioner for higher education, on an acting basis.

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ELEVENTH DISTRICT PA. – CITIES: Ashland (part), Ashley, Askam, Avoca, Berwick, Bloomsburg, Catawissa, Conyngham, Dallas, Drifton, Duryea, East Berwick, Edwardsville, Espy, Exeter, Ferry Fort, Freeland, Glen Lyon, Harveys Lake, Hazleton, Jim Thorpe, Kingston, Lansford, Larksville, Lehighton, Luzerne, Nanticoke, Nescopeck, Nescopeck Township, Palmerton, Pittston, Plains, Plymouth, Shickshinny, Summit Hill, Swoyersville, Weatherly, Wilkinson Estates, West Hazleton, West Pittston, West Wyoming, White Haven, Wilkes-Barre, and Wyoming. COUNTIES (3): Carbon, Columbia, and Luzerne. Dist. pop. 470 447,088.

DANIEL J. FLOOD (D) of Wilkes-Barre. Office, 108 CHOB, dial 225-6511. Pa. office year round: Rm. 1015 United Penn Bank Bldg., Wilkes Barre 18701, dial 717-822-2184. House sec. Jan. 3, 1945 to Jan. 3, 1947; Jan. 3, 1949 to Jan. 3, 1963; and Jan. 3, 1965 to present. Born Nov. 26, 1903 in Hazleton, Syracuse Univ., A.B. 1924; M.A.; Harvard, 1925-26; Dickinson, LL.B. 1929. Sigma Alpha Epsilon, Delta Sigma Rho. Practicing attorney, 1930–; deputy atty. gen., Pa. and counsel for Pa. Liquor Control Bd., 1935-39; dir., Bur. of Public Asst. Disbursements and exec. asst. to State Treas., 1941-44; spec. Ambassador to Peru, 1945, Trustee, Misericordia Coll., Kingston Natl. Bank, Mercy Hospital.

Stephen Elko — Admin. Asst. — Helen M. Tomaszik — Exec. Secretary

SECOND DISTRICT KY. – CITIES: Bardstown, Beaver Dam, Bowling Green, Brandenburg, Cave City Elizabethtown, Fort Knox, Franklin, Glasgow, Hindsburg, Hartford, Hodgenville, Horse Cave, Lawrenceburg, Lebanon, Lebanon Junction, Leitchfield, Lewisport, Mount Washington, Muldraugh, Owensboro, Owensboro East, Radcliff, Scottsville, Shepherdsville, Springfield, Vine Grove, and West Point. COUNTIES (20): Allen, Anderson, Barren, Breckinridge, Bullitt, Daviess, Edmonson, Grayson, Hancock, Hardin, Hart, Larue, Marion, Meade, Nelson, Ohio, Simpson, Spencer, Warren, and Washington. Dist. pop. (70) 470,826.

WILLIAM H. NATCHER (D) of Bowling Green. Office, 2333 RHOB, dial 225-3501. Kentucky offices year round: 414 E. 10th St., Bowling Green 42101, dial 502 843 1378; and 50 Public Square, Elizabethtown 42701, dial 502 765-4360. House rec. Aug. 1, 1953 to present. Born Sept. 11, 1909 in Bowling Green, Western Ky. State Coll., A.B. 1930; Ohio State Univ., LL.B. 1933. WWII Navy svc. Practicing attorney 1934; Fed. conciliation commissioner, Western Dist. of Ky., 1936-37; atty., Warren Co., 1937-49; commonwealth's atty., 8th Jud. dist., 1951-53.

Virginia R. Newton — Exec. Secretary

FIFTH DISTRICT IOWA – CITIES: Altoona, Ames, Ankeny, Bondurant, Clive, Des Moines, Fort Dodge, Madrid, Nevada, Ogden, Pleasant Hill, Story City, Urbandale, West Des Moines, and Windsor Heights. COUNTIES (4): Boone, Polk, Story and Webster. Dist. pop. (70) 423,745.

NEAL SMITH (D) of Altoona. Office, 2408 RHOB, dial 225-4426. Iowa office year round: 644 Insurance Exchange Bldg., Des Moines 50309, dial 515 284-4624. House rec. Jan. 3, 1959 to present. Born March 22, 1920 in Hartwick, Univ. of Mo., 1945-46; Syracuse Univ., 1946-47; Drake Univ., LL.B. 1950. WWII Army Air Corps sgt. Practicing attorney, 1950-58; President, Young Democrats 1953-55; asst. co. atty., Polk Co., 1951.

Tom Davison — Admin. Asst. — John Blarney — Legislative Asst.

TWENTY-SECOND DISTRICT TEX. – CITIES: Bellaire, Deer Park, Friendswood (part), La Porte, Pasadena, Seabrook, Shore Acres, South Houston, South Side Place, Webster, and West University Place. COUNTY: Harris (part). Dist. pop. (70) 905,772.

ROBERT (BOB) RANDOLPH CASEY (D) of Houston. Office, 2353 RHOB, dial 225-5951. Texas office year round: Rm. 17102, Fed. Bldg., 515 Rusk St., Houston 77002, dial 713- 226-4416. House sec. Jan. 3, 1959 to present. Born July 29, 1915 in Nacogdoches, Texas Sch. of Law, 1934-40. Practicing attorney, 1941-43, 1947-51; asst. dist. atty., Harris Co., 1943-47; co. judge, 1951-58; Texas House of Reps., 1949-50.

Florence G. Tinka — Exec. Secretary

FIFTEENTH DISTRICT N.J. – CITIES: Carteret, Dunellen, East Brunswick, Highland Park, Hopelawn, Iselin, Jamesburg, Kendall Park, Metuchen, Middlesex, Milltown, Milltown, New Brunswick, New Brunswick Heights, Nixon, North Brunswick, Perth Amboy, Sayreville, Sewaren, South Amboy, South Plainfield, South River, Spotswood and Woodbridge. COUNTY: Middlesex (part). Dist. pop. (70) 535,099.

EDWARD JAMES PATTEN (D) of Perth Amboy. Office, 2332 RHOB, dial 225-5301. N.J. office year round: Natl. Bank Bldg., Perth Amboy 08861, dial 201-826-4010. House rec. Jan. 3, 1963 to present. Born Aug. 22, 1909 in Perth Amboy, Newark State Coll.; Rutgers Univ., LL.B. 1935; B.S.Ed. 1938. Practicing attorney, 1937–; teacher, 1937-39; Taylor, Perth Amboy, 1939-40; Middlesex Co. Clerk 1940-54; campn. mgr. for Gov. Robert B. Meyner, 1953, 1957; N.J. Sec. of State, 1954-62; pres., Salvation Army Bd.

Olga Brown — Exec. Secretary — Stephen Callos — Admin. Asst.

SEVENTH DISTRICT WIS. – CITIES: Antigo, Berry (part), Cloverdale, Crandon, Elderfield, Medford, Merrill, Mosinee, Nichlville, Nokomis, Rock Lundin (part), Port Edwards, Rhinefield, Schofield, Shawano, Stevens Point, Tomahawk, Wausau, Wausau West, Wausau, Weston, Whiting, and Wisconsin Rapids. COUNTIES (15): Ashland, Clark, Florence, Forest, Langlade, Lincoln, Marathon, Marquette, Menominee, Portage, Shawano, Taylor, Vilas, Wausau and Wood. Dist. pop. (70) 417,318.

DAVID R. OBEY (D) of Wausau. Office, 415 CHOB, dial 225-3365. Wis. office year round: Fed. Bldg., 317 First St., Wausau 54401, dial 715-842-5570. House sec. April 3, 1963 to present. Born Oct. 3, 1938 in Okmulgee, Okla, Univ. of Wis. M.A. 1965. Wis. Legislature 1962-69.

Lyle H. Stitt — Admin. Asst. — Linda Reiste — Legislative Asst.

Gerald Sturgis — Legislative Asst.

THIRD DISTRICT ORE. – CITIES: Cherry Park, Gresham, Hazelwood, Oswego (part), Park Rose, Portland (part), Powellhurst, West Powellhurst, and Wood Village. COUNTY: Multnomah (part). Dist. pop. (70) 477,020.

EDITH GREEN (D) of Portland. Office, 2461 RHOB, dial 225-6611. Oregon office year round: 344 U. S. Courthouse, Portland 97205, dial 503-221-2133. House sec. Jan. 3, 1955 to present. Born Jan. 17, 1910 in Trent, S. D. Willamette Univ., 1927-29; Univ. of Oregon, B.S. 1929; Stanford Univ., 1944. Teacher, 1930-41. Free-lance radio work, 1944-48; dir. of public relations, O.E.A., 1952-55.

Marilyn Stapleton — Legislative Asst. — Bland J. Ballard — Legislative Asst.

EIGHTEENTH DISTRICT ILL. – CITIES: Bartonville, Chillicothe, Circle Court, Dickson, Dreisbach, East Peoria, Elmwood, El Paso, Eureka, Hanna, Henry, Lacon, Marquette Heights, Metamora, Minonk, Morton, North Chillicothe, North Pekin, Pekin, Peoria, Peoria Heights, Petersburg, Princeton, Roanoke, Rome, Spring Valley, Tremont, Washington, West Peoria, and Wyoming. COUNTIES (9): Bureau, Marshall, Mason, Menard, Peoria, Putnam, Stark, Tazewell, and Woodford. Dist. pop. (70) 432,185.

ROBERT H. MICHEL (R) of Peoria. Office, 2112 RHOB, dial 225-6701, 18. office year round: 1007 First Natl. Bank, Peoria 61602, dial 309 673 8308. House sec. Jan. 3, 1957 to present. Born Mar. 2, 1923 in Peoria, Bradley Univ., B.S. 1949. Sigma Nu. Pi Kappa Delta. WWII Army svc.

Admin. asst., Rep. Harold Velde, 1949-56.

Ralph Vinovich — Admin. Asst. — Sharon Yard — Exec. Secretary

FOURTH DISTRICT KANSAS – CITIES: Haysville, Hesston, Hillsboro, Inman, Kingman, Lindsborg, Lyons, McPherson, Marion, Newton, Nickerson, Park City, South Hutchinson, Sterling, Valley Center, West Link, and Wichita. COUNTIES (13): Harvey, Kingman, McPherson, Marion, Reno, Rice and Sedgwick (part). Dist. pop. (70) 470,208.

GARNER E. SHRIVER (R) of Wichita. Office, 2418 RHOB, dial 225-6216. Kansas offices year round: 830 N. Main, Wichita 67203, dial 316 265-7111; and 210 P. O. Bldg., Hutchinson 67501, dial 316-662-0737. House sec. Jan. 3, 1961 to present. Born July 6, 1912 in Texanda, Okla. Univ. of Wichita, A.B. 1934; Univ. of So. Calif., 1938; Washburn Univ., J.D. 1948. Phi Alpha Delta, Phi Delta Theta, Kappa Delta Pi. WWII Navy svc. English-speech instructor, 1936-37, practicing attorney, 1940-60; Kansas House of Rep., 1947-51; Kansas Senate 1953-60. Methodist.

Lester L. Rosen — Admin. Asst.

FIRST DISTRICT MASS. – CITIES: Adams, Agawam, Amherst, Athol, Belchertown, Bernardston, Buckland, Cheshire, Clarksburg, Dalton, Deerfield, Easthampton, Erving, Farmington, Gill, Greenfield, Hadley, Hardwick, Hatfield, Holyoke, Huntington, Lanesborough, Lee, Leeds, Monterey, Montgomery, North Adams, North Amherst, Northampton, Northfield, Orange, Pittsfield, Portland, Sheffield, Shelburne, Shelburne Falls, Southampton, South Deerfield, Southwick, Stockbridge, Sunderland, Templeton, Westfield, West Springfield, Williamsburg, and Williamstown. COUNTIES (5): Berkshire, Franklin, Hampden (part), Hampshire (part), and Worcester (part). Dist. pop. (70) 470,956.

SILVIO O. CONTE (R) of Pittsfield. Office, 329 CHOB, dial 225-5335. Mass. office year round: Berkshire Common, South Street, Pittsfield 01201, dial 413-442-0946. House sec. Jan. 3, 1959 to present. Born Nov. 9, 1921 in Pittsfield, Boston Coll., LL.B. 1949. Practicing attorney, 1949 - 58; Mass. Senate, 1950-58. Knights of Columbus outstanding young man, 1954.

James E. Donahue — Admin. Asst. — Sally S. Donner — Office Manager

SEVENTH DISTRICT VA. – CITIES: Berryville, Bridgewater, Buena Vista, Charlottesville, Culpeper, Elkton, Front Royal, Harrisonburg, Lexington, Luray, Orange, Shenandoah, Staunton, Strasburg, Waynesboro, Winchester and Woodstock. COUNTIES (13): Albemarle, Augusta, Clarke, Culpeper, Fluvanna, Frederick, Greene, Highland, Madison, Orange, Page, Rockbridge, Rockingham, Shenandoah, and Warren. Dist. pop. (70) 428,014.

KENNETH ROBINSON (R) of Winchester. Office, 1723 LHOB, dial 225-6561. Va. office year round: 36 Rouss Ave., Winchester 22601, dial 703-667-0990; and Post Ofc. Bldg., Charlottesville 22901, dial 703-295-2106. House rec. Jan. 3, 1971 to present. Born May 14, 1918 in Whitehaven, Va. Polytechnic Inst., B.S. 1937. WWII Army svc. President, Winchester Cold Storage Co.; owner, J.K. Robinson's Orchard. Director, Winchester Apple Growers Assn., Green Chemical Co., Shenandoah Apple Corp.; mbr., Dulles Intl. Airport Comm. Virginia Senate 1965-70. Quaker.

Chris Mathisen — Admin. Asst. — Rubye B. Hines — Secretary

Mr. SHRIVER. Thank you very much, Mrs. Barrett.

TUESDAY, MAY 15, 1973.

PODIATRIC MEDICINE

WITNESSES

H. D. BAILEY, ED. D., PRESIDENT, AMERICAN ASSOCIATION OF COLLEGES OF PODIATRIC MEDICINE, AND PRESIDENT, CALIFORNIA COLLEGE OF PODIATRIC MEDICINE
JAMES E. BATES, D.P.M., PRESIDENT, PENNSYLVANIA COLLEGE OF PODIATRIC MEDICINE
PHILIP BRACHMAN, D.P.M., PRESIDENT, ILLINOIS COLLEGE OF PODIATRIC MEDICINE
ABE RUBIN, D.P.M., PRESIDENT, OHIO COLLEGE OF PODIATRIC MEDICINE
RICHARD BAERG, D.P.M., PRESIDENT, NEW YORK COLLEGE OF PODIATRIC MEDICINE
ROBERT A. HEIL, EXECUTIVE DIRECTOR, AMERICAN ASSOCIATION OF COLLEGES OF PODIATRIC MEDICINE
JOHN L. BENNETT, DIRECTOR, COUNCIL ON PODIATRY EDUCATION, AMERICAN PODIATRY ASSOCIATION

Mr. PATTEN. The committee will come to order. We will proceed with Dr. Bailey first.

Dr. BAILEY. First, we want to thank you for the opportunity to appear.

I am H. D. Bailey, president of the American Association of Colleges of Podiatric Medicine. I have with me the presidents of the other four podiatric medical colleges of the United States, who came to express their great concern about the future of our colleges. We have with us Dr. Brachman, Dr. Baerg, Dr. Bates, and Dr. Rubin. These are all listed in my statement, Mr. Chairman, with their full titles.

I would like to have our written statement entered into the record, with your permission, Mr. Chairman.

Mr. PATTEN. The statement will appear in the record in its entirety at this point.

[The statement follows:]

Mr. Chairman and members of the subcommittee, I am Dr. Higgins Bailey, president of the California College of Podiatric Medicine and also president of the American Association of Colleges of Podiatric Medicine.

I am grateful for the opportunity to appear before you today on behalf of the students and faculty of our Nation's colleges of podiatric medicine and those practitioners dedicated to the preservation of this vital health profession and the colleges which serve them.

However, I would also like to speak on behalf of the millions of patients we serve—over 30 million patient-visits were made last year—and all of those Americans who should receive good foot care but who cannot because there are too few doctors of podiatric medicine to serve them. The care of all these Americans will be affected by the decisions this committee will make.

I am pleased to have with me today the presidents of all of the other colleges of podiatric medicine. These doctors and educators share with me a grave concern about the future of podiatric education and the profession of podiatric medicine, and offered to accompany me here to today to present our concern before this subcommittee. Allow me to introduce them to you.

Accompanying me here this morning are Dr. James E. Bates, president of the Pennsylvania college; Dr. Philip Brachman, president of the Illinois college;

Dr. Abe Rubin, president of the Ohio college; and Dr. Richard Baerg, acting president of the New York college.

Attached to our testimony are the curriculum vitae of all of the presidents.

I also would like to introduce Mr. Robert A. Heil, executive director of the American Association of Colleges of Podiatric Medicine, whose office is located here in Washington.

These men, Mr. Chairman, have taken the time to travel from all over the country to show by their presence and their comments how gravely we all view the present situation.

INTRODUCTION

Mr. Chairman, I recognize that it is not necessary for me to define podiatric medicine for you and the other knowledgeable members of this subcommittee. However, since the role of the doctor of podiatric medicine has been markedly upgraded in recent years, and for the benefit of those who will read the record or who may be yet unclear about exactly what we do, allow me to briefly describe our profession.

The doctor of podiatric medicine is a health professional who, in the scope of his practice and independence of judgment, is very similar to a medical doctor. Podiatric medicine is that health service specifically concerned with the examination, diagnosis, treatment, prevention, and care of conditions and functions of the human foot by medical and surgical means. Podiatrists are the only health professionals who share with doctors of medicine, osteopathy, and dentistry the legal authority to make independent professional judgments, and in their own discretion, to administer medical and surgical treatment. This last point is a vital one in understanding the contribution of the podiatrist in America's system of comprehensive health care, and cannot be stressed too strongly. Podiatrists are licensed by examination to practice in all 50 States, plus the District of Columbia and Puerto Rico.

There are five private, nonprofit, freestanding colleges offering instruction leading to the degree of Doctor of Podiatric Medicine. They are located in San Francisco, Chicago, Cleveland, Philadelphia, and New York. And it is on behalf of these colleges, the students enrolled therein, and the thousands of graduates who are now practitioners, that I appear before you today.

Although the colleges number only five, in five separate States, they are the only source for new practitioners in the field. The last four first year classes have had students drawn from all but three States and territories in the Union, and all States are served by their graduates—they are truly a precious national resource.

However, because they are a national resource, they are not supported to any significant degree by State and local funds. Further, graduates of these colleges serve in virtually every kind of health institution in America, including: private practices, group practices, medical health centers, hospital clinics, indistrial clinics, health maintenance organizations, state mental hospitals, penal institutions, city and county institutions, armed services—Army, Navy, Air Force, Veterans Administration hospitals, and nursing homes.

FEDERAL AID HISTORY

Mr. Chairman, in 1963, Congress passed the Health Professions Educational Assistance Act (Public Law 88–129), authorizing matching grants for the expansion and improvement of teaching facilities in the health professions schools. In 1965, this act was amended (Public Law 89–290), establishing an innovative approach to governmental educational assistance, providing direct institutional support instead of primarily funding research projects, as had previously been the case. This concept was extended with passage of the Health Manpower Act of 1968 (Public Law 90–490).

Rising public demand for increased health manpower and the sense and conscience of Congress to this critical need led, in 1971, to passage of the Comprehensive Health Manpower Training Act of 1971 (Public Law 92–157). This law was designed to alleviate health manpower shortages in all the health professions by providing direct operating formula grants (capitation), as well as supplemental, "start-up," financial distress and special project grants to schools in the health professions.

The role and responsibility of the Federal Government in providing financial assistance to health professions schools is an historic one. Recognizing the critical shortage of well-trained health manpower, and the financial crisis facing the

health professions schools (due, in part, to increased inflationary pressures, reduced private and governmental support, the need for expanded facilities, outmoded and obsolete equipment, etc.), the Congress, with the concurrence and support of the administration, encouraged expansion of facilities, increased enrollments of students, and improvement of educational programs in the health professions schools by authorizing funds at levels sufficient to insure a continuity of objectives. Indeed, the Congress approved increasing authorizations to meet this need through fiscal 1974.

THE NEED FOR DOCTORS OF PODIATRIC MEDICINE

The need for additional doctors of podiatric medicine was critical at the time these laws were passed, and is much more critical today. The National Center for Health Statistics has indicated that there were 8,000 podiatrists in active practice in the United States as of December, 1967. A survey by the same agency in 1970 showed a total of 7,045 actively practicing doctors of podiatric medicine. In relation to the expanding population, the ratio has dropped from an initially low of 4.2 active podiatrists per 100,000 population in 1967 to an even more critical low of 3.5 per 100,000 in 1970.

Maryland Pennell of the U.S. Public Health Service, Bureau of Health Professions Education and Manpower Training, has predicted that this ratio of doctors of pordiatric medicine to population will increase only to 4.2 per 100,000 by 1980, the same ratio that existed 30 years before, in 1950. And even this level can only be achieved by an anticipated 275 percent increase in graduates from the colleges of podiatric medicine from 1960 to 1968; and, further, this projected increase would only be possible with at least the capitation funding level provided in the 1972 appropriation. If capitation funding is eliminated, as the administration proposes, the ratio of podiatrists to populatoin will plummet to new all-time low levels.

If the above Pub'ic Health Service projections prove accurate, by 1980 there would be 9,900 active doctors of podiatric medicine in the country. This projection (again, entirely dependent on continued Federal support) is, we believe, still critically low.

For several years we, as an association of colleges, have been working with the American Podiatry Association, NIH, consultants, and others, in an attempt to ascertain a reasonable projected need for doctors of podiatric medicine. As you know only too well, the question of need in all areas of health professions manpower is a difficult one, as yet answered by no one to the satisfaction of all. We recognize that the question is very important: The public is not served if we use its tax dollars to over-produce graduates in our profession, and the profession would not be served well, either. However, using every method of projection we know of, and after surveying the field and constructing models of need, we now conclude that no less than 15,000 doctors of podiatric medicine are needed now, just to meet the perceived health care needs of the American people (there are now 7,045 doctors of podiatric medicine), and some reasonable projections go above 20,000.

And the need for podiatric services is increasing as well as public pressure to insure adequate number to care for our Nation's foot health problems. Consider this:

(1) The average age of active doctors of podiatric medicine is greater than that of any other health profession. Thus, a greater proportion will be reaching retirement age soon, emphasizing the need for increased enrollments in podiatric colleges to offset the losses.

(2) A National Health Survey conducted by the U.S. Public Health Service indicates that persons over 65 have a need for podiatric services nearly four times greater than that of other age groups. America's population over 65 years of age is growing rapidly, as is the ratio of that age bracket to the total population. Bureau of Census studies show that in 1900, only 4.1 percent of the population was over 65; by 1960, 9.3 percent were over 65; and in 1970, 9.9 percent had reached their 65th birthday.

(3) The need for podiatric services, although prevalent in the aged, is certainly not confined to that category. For example, many of the foot problems of the adult begin as foot problems of the young, and preventive medical care of the young is an equally important and inherent function of the podiatrist. In a survey involving the Harlem community in New York, several thousand children were examined in the clinics of the New York College of Podiatric Medicine on

a random basis. Over 250 children were found to have congenital abnormalities of their feet which could lead to serious permanent joint dysfunction. Over 150 children were found to have diseases of the secondary growth centers of the bones of the feet. A thousand children were in-toe walkers. One thousand six hundred twenty-four were found to have overlapping toes. Each of the children was treated properly at the clinics, preventing life-long crippling in many cases, and insuring ambulation and productivity which otherwise would have been in jeopardy. Further, some chronic illnesses cause increased foot problems. It is estimated that about 85 percent of children with cerebral palsy need extensive foot care.

(4) Because of the strong medical background and education of the doctor of podiatric medicine, he is, in many cases, in the best position to diagnose other illnesses which have manifestations in the feet which would otherwise go unnoticed during a normal physical examination. In the survey mentioned above, two cases of sickle-cell anemia were detected. Sickle-cell anemia has a propensity to produce angle ulcers called sickle-cell ulcers. Thirteen children were found to have secondary syphillis, recognized by the presence of small cornlike lesions on soles of the palms. These children, and many other podiatric patients, were saved from consequences of the most serious nature by early detection and treatment of serious diseases by doctors of podiatric medicine.

Other diseases are frequently first identified by members of our profession: Podiatric medical disorders as related to systemic diseases include diabetes, mellitus, peripheral vascular disease, arteriosclerosis, cancer, heart disease, and stroke.

(5) When we speak of need for increased manpower in this profession, it should be realized that podiatric medicine evolved historically because care of conditions affecting the foot were being neglected in the education and training of other health professionals. Today, modern podiatric medicine is becoming a recognized medical specialty, and our colleges are functioning as effective single-track medical schools, which, because of their specialization, are putting graduates into practice in a shorter length of time than traditional medical schools.

(6) Finally, there is the cost of illness, in terms of pain, social contact, and economics. It has been demonstrated many times in many ways that an ambulatory patient who has good foot care recovers more quickly than a patient who is bedridden because poor foot care exacerbates the primary illness, thus saving bed space in an institution, and money. But also social contact, which assist in mental attitude improvement, are improved, and the emotional, as well as physical pain, is thereby shortened.

It is evident that the need for podiatric services is not diminishing; indeed, it is becoming more and more critical as Government medical payment plans increase demand.

PODIATRIC MEDICINE'S RESPONSE TO GOVERNMENT'S CALL FOR MORE AND BETTER PRACTITIONERS

With the advent of governmental awareness of the health professions schools' critical need for financial support came a reevaluation of podiatric curricula and a reassessment of the scope of our practice. We increased enrollments markedly, from a total of 922 students enrolled in the 1967–68 academic year to 1,403 in 1972–73—an increase of 51 percent.

Curricula during this period also underwent enormous changes in order to provide medical specialty education and training opportunities for our students. Facilities were expanded and improved, equipment replaced, the number and standards of faculty resources increased. Today, as never before, podiatric education and training has reached a level of competence never before achieved in the history of the profession. In fact, the first 2 years of podiatric instruction parallels the first 2 years of medical school instruction. Podiatric medicine truly has become a bona-fide medical specialty. At this time, it is a profession to which Americans can look with pride and call upon with confidence.

Further, in order to assure the quality of care, and to assure that our professionals have a level of competence to meet their legal responsibilities given to them by licensure through examination in every State of the Union, Federal assistance may become vital to our colleges. But, Mr. Chairman, distinguished members of the subcommittee, podiatric medicine as a profession could well become nonexistent in the near future because the colleges which provide practicing podiatrists might be forced to close or cut back education programs to merely technician, rather than professional levels.

Why will this occur? Because the administration has, for fiscal year 1973, cut capitation support by 50 percent, and plans to eliminate it entirely in fiscal year 1974.

A recent survey of our colleges, all free standing, not affiliated with universities, suggested that with a loss of capitation, three colleges would shut down in 3 to 4 years, one might last as long as 8 years, and one college is uncertain, given the unknown variables, just how long it could survive. That, gentlemen, is what I call a critical need and what I'm sure you will agree is a critical need. Without capitation, only with almost superhuman effort, could any of the colleges justifiably enroll another first-year class equal to, or larger than, the present first-year class. All would be smaller, and each college would soon consider whether or not to enroll a first-year class at all, and whether or not to begin to phase out the college.

All our colleges have used up their endowments in our recent efforts to upgrade; all are borrowing at an increasing rate; tuitions have become nearly intolerable.

ARE THERE OTHER SOURCES OF FUNDS?

The administration has declared that there are other sources of funds available, and that they should be utilized. We have looked at these other sources, and find that they do not, in fact, exist. For example:

(1) *"Backup" support from parent educational institutions.*—In the case of podiatry, there are no parent institutions from which to draw support. All five colleges are free-standing, with no university affiliation. And the podiatry survey indicates that there is very little chance of any form of affiliation in the near future for any of the colleges, for as presently funded they would offer only a financial liability to any affiliating institution. Of course, we would all prefer to be more deeply involved in the emerging comprehensive health science centers.

(2) *State or local funds, including Revenue Sharing.*—As you know, there are only five colleges of podiatric medicine, located in California, Illinois, Ohio, New York, and Pennsylvania. Over the past 4 years, first-year classes at these colleges were comprised of students from every State in the country, except Alaska, Hawaii, South Carolina, and Wyoming. As indicated earlier, the colleges, obviously, are a national resource, and State or local governments would prefer not to commit funds to support students from outside their jurisdictions. (Only Pennsylvania and New York grant small amounts of funds to our colleges.)

(3) *Public support.*—Of all the health professions academic institutions, as a group, only the Colleges of Podiatric Medicine are entirely private institutions. Each of the other professions has some publicly-controlled facilities, ranging from one in osteopathy to 54 public schools of nursing and 63 in medicine. Obviously, this is not a source to which we can look.

(4) *Increased tuition.*—Those of us who work with students know that rapid rises in tuition, in combination with increasing inflationary cost-of-living pressures, have already placed a heavy financial burden on students and their families. Further increases would be counter-productive, resulting in fewer students, not more.

Tuition in the five Colleges of Podiatric Medicine now averages $2,458 a year. This compares with an average tuition of $1,040 just 5 years ago, representing an average increase of $1,418, or a jump of 136 percent in just 5 years. Tuition will be increased to an even higher average of $2,736 for the 1973–74 school year, and by 1975, it will be at or above the $3,000 level. To ask the students to bear an additional burden just is not possible, and further, podiatric medicine must be a career option for all, not just the rich.

Mr. Chairman, I believe we have demonstrated, within the time constraints placed upon us, that there is indeed, evidence of a continuing national need for greater numbers of podiatrists, and we have shown that, even with continued Federal support at 1972 levels, we would fall short of the projected need.

We also have shown, Mr. Chairman, that the need for continued Federal support is not only critical, but the very survival of podiatric education is dependent on it.

If the colleges manage to survive a loss of Federal support, which indeed is questionable, it may be in vain, since accreditation may be lost. In a recent survey of our five colleges, every college indicated that a certain result of loss of capitation would be to place the college's accreditation in serious jeopardy. The Council on Podiatry Education, the agency recognized by the U.S. Commissioner of Education and the National Commission on Accrediting for accrediting colleges of podiatric medicine, believes that the accreditation would be seriously jeopardized in that a reduction or elimination of financial assistance would likely result in a deterioration of the quality of education offered by these colleges.

How exactly would podiatric education deteriorate with a loss of Federal support? Where would cutbacks be made? Where could the funds be made up?

The answer to where the money could be made up is simple. It can't! None of our five colleges has the resources to make up what capitation currently provides. Key, vital, and required faculty, facilities, and programs would have to be cut back.

In the survey which you have heard me refer to from time to time this morning, the colleges were asked exactly where cutbacks would have to be made, assuming a loss of capitation. The answer was startling, because it indicated virtual across the board cutbacks. Four of the colleges would have to cut back key faculty; four, the support staff; three, administration, equipment, and supplies; two said maintenance; and at least one college said that patient services, clinical training programs, salaries, student aid, enrollment, and community health programs would be cut back, and tuition would have to be doubled. All this, because less than $\$1\frac{1}{2}$ million appears to have been impounded in fiscal year 1973 and about $1 million is intended to be impounded in fiscal year 1974 even if the Congress appropriates at the same levels.

It is clear that our colleges of podiatric medicine could survive only with great effort such a massive cutback recommended by the administration. We have taken the Federal Government at its word. We have increased enrollments, expanded facilities, and improved educational programs in response to the promise of Federal funds. We must have the continued support from the Federal Government in order to survive and continue to provide the top-quality medical foot health care Americans have learned to expect, and are entitled to receive. *Make no mistake about it: There is a direct connection between Federal assistance and the quality of our profession and the medical care it can deliver.*

Mr. Chairman and members of the subcommittee, we are grateful to you and to the Congress for your support in the past. When the administration threatened to withhold mandated capitation funding in fiscal year 1973. you stood firm and indicated clearly that it was the intent of Congress that capitation be funded at fully appropriated levels for the schools of veterinary medicine, optometry, pharmacy, nursing, and podiatry. We are especially grateful to you, Mr. Chairman, for clearly indicating on the floor of the House on February 21, 1973, that the continuing resolution, extending Labor-HEW funding through June 30, 1973, had the full force and effect of a regular appropriations measure, thus implying that all appropriated funds should be released.

In a similar action in the Senate, a colloquy took place between Senator Jacob Javits and Senator John L. McClellan on February 26, establishing that it was the full intention of the Senate Appropriations Committee that capitation for podiatric colleges and other VOPP schools be considered mandated funding and not subject to impoundment. We, therefore, fully expected the administration to fund the mandated capitation at the levels indicated by the continuing resolution.

It appears now that, for fiscal year 1973, the administration will ignore the Congress and operate under a fiat, cutting back capitation levels by 50 percent for certain professions, including podiatry.

Mr. Chairman, the Coalition for Health Funding, an organization composed of member groups in health-related fields, including ours, has recommended that capitation for the VOPP schools be funded at $34.68 million for fiscal year 1974.

We concur with the Coalition recommendation as a minimum, and request that you favorably consider these proposals. The sums for podiatry are relatively modest. When compared with other categories in the budget, even the health

budget, they are almost trifling. But they are the very lifeblood to the Colleges of Podiatric Medicine, spelling the difference between survival and possible extinction. In keeping with the objective to provide the best possible health care for all Americans, we ask respectfully for your support for continued and adequate funding for the Colleges of Podiatric Medicine.

Mr. Chairman, I thank you for the opportunity to present this testimony.

Dr. BAILEY. Accompanying that statement is a statement from the Council on Podiatry Education, and with your permission, we would like to have that in the record, also.

[The statement follows:]

STATEMENT OF THE COUNCIL ON PODIATRY EDUCATION, AMERICAN PODIATRY ASSOCIATION

The Comprehensive Health Manpower Training Act of 1971 authorizes grant funding to certain health professional colleges in an effort to improve the quality of education provided and to increase capacities and, ultimately, manpower supplies of these health professions.

The colleges of podiatric medicine met the challenge of government in improving facilities, faculty, curriculum, and programs, seeking goals which the Council on Podiatry Education approved and encouraged.

The colleges of podiatric medicine increased their enrollments, in concert with the Government's objectives, to meet the indicated manpower requirements for podiatrists which are in short supply.

The proposed Federal budget for fiscal year 1973 reflects a drastic reduction of funding available to colleges of podiatric medicine, including a 50-percent reduction in capitation grants, an apparent cut equivalent to 64 cents on the dollar for previously awarded special project grants, and an apparent 35-percent reduction in financial distress funds.

The proposed budget for fiscal year 1974 calls for the elimination of all capitation funds to colleges of podiatric medicine.

The Nation's five colleges of podiatric medicine are all fully accredited and are private, nonprofit institutions not affiliated with universities or health science centers. They depend on Federal aid to assist in the financing of the education of the Nation's podiatrists who provide a vitally needed segment of the Nation's health care system.

The Council on Podiatry Education is the agency recognized by the U.S. Commissioner of Education and the National Commission on Accrediting for accrediting colleges of podiatric medicine. The council believes the reduction of Federal assistance will affect the very survival of the colleges of podiatric medicine and will cause the quality of education to deteriorate. Consequently, the council feels the situation is so serious that accreditation of some of the colleges would be immediately placed in jeopardy.

The council urges that every consideration be given to continuing federal support in order to maintain quality education in the Nation's colleges of podiatric medicine. Quality programs are vital for the health, safety, and welfare of the public served by doctors of podiatric medicine.

Dr. BAILEY. I will ask Dr. Bates to present some additional information to you.

Mr. PATTEN. Very well, Dr. Bates, you may proceed.

STATEMENT OF DR. JAMES E. BATES

Dr. BATES. First of all, Mr. Chairman, I would like to begin by expressing that podiatrists are the only health professionals who share with doctors of medicine, osteopathy and dentistry the legal authority in all 50 States to make independent professional judgments, and in their own discretion to administer medical and surgical treatment and assume primary patient responsibility. There are no others but they who hold this responsibility. This fact must be kept in mind when one considers the type and quality of medical education program necessary to prepare doctors of podiatric medicine.

All students entering our colleges today have completed a premedical program. Eighty-five percent have received a BA or BS degree and many have advanced degrees. The curriculum of our colleges is parallel to the medical school program. Approximately 50 percent of all graduates take a residency training program. All five colleges are private, nonprofit freestanding institutions. All colleges are proud of their independence. We are also proud that only minimal public funds have been used in the past to educate podiatrists. Unique to podiatry is the fact that these five independent colleges supply all the podiatrists for this great Nation, and truly these colleges are a national resource.

In 1960 Dr. William Selden, then the executive secretary of the National Commission on Accrediting, directed a study on podiatric medical education. This is comparable to the Flexner Report done for medicine in 1910.

The Selden Report recognized the need for educating podiatrists as medical specialists in view of the scope of practice laws enacted in every State. The study made numerous recommendations to improve the programs in the colleges. In 1963 podiatric medical education was included in the first health manpower bill and the funds provided in that law and in laws that were enacted in 1965, 1967, 1958, and 1971 have helped our colleges to improve facilities, faculties, and curriculums.

Congress on five separate occasions authorized such programs, and Mr. Chairman, in 10 consecutive years your committee has appropriated funds for such programs. As a result of your concern, and the Federal funds provided therein, the graduates in the last 8 years have obtained a continually improved education and have become increasingly competent medical foot health specialists. The need for doctors of podiatric medicine is great. General medicine does not train, nor is it interested in training a specialist in foot care.

According to several studies, 50 to 75 percent of people in this Nation suffer from foot problems. About 33 million patient-visits are made annually to approximately 7,000 podiatrists serving this Nation. Very often the patient first enters the health care system through a visit to the podiatrist's office. The reason for this becomes more evident when one realizes that the majority of podiatrists' services are used by lower, lower middle, and middle-income people due to the incidence of foot problems in this select population. Many patients, after receiving a physical examination from a doctor of podiatric medicine, are referred to other medical specialists for the first time. The National Safety Council reported that in 1971 $2,610 million was paid for work-related injuries. They also said that 23 percent of these injuries occurred in the lower extremities. This computes to over $500 million paid out for foot-related injuries in 1971. Good foot care keeps people working, keeps them ambulatory, absenteeism is reduced, productive life is extended and enhanced, and most importantly medical costs are lowered.

Three separate studies reported in the past few years have indicated there will be a need for 15,000 to 25,000 doctors of podiatric medicine by 1980. Our colleges have expanded enrollments by 51 percent since 1967 when the Federal Government first began to support our educa-

tional programs in a significant way to meet the national goals for increased health manpower.

The colleges require Federal funds previously agreed upon by Congress time and time again, but they now are denied by the present administration. We need funds for the following reasons: No. 1, to improve our educational programs. We have come a long way since the initial infusion of funds. Almost every dollar of income goes into educating students to practice as doctors of podiatric medicine. There is very little money spent on research, developing researchers or training teachers. Our primary purpose is to prepare practitioners. We do this at less cost than the cost of educating dentists and medical doctors. The cost per podiatry student this year will range up to $8,000 per student. As a group of "have-not" colleges, we have learned to stretch a dollar many, many ways.

Second, the administration proposal would result in a loss of 30 percent of income in the overall budget for the five colleges. This would be an overwhelming blow to the colleges and the education of future podiatrists.

Such a loss may seriously hamper the profession as we now know it.

Third, spiraling inflation is taking a heavy toll on the buying power of available dollars for podiatric education. Fourth, the colleges have used all their meager endowments and are now borrowing commercially in order to maintain the current level of programs.

This borrowing can continue only for a year or so, but after that the colleges face possible bankruptcy. Finally, tuition must be raised to about $3,000 per year. This is the limit. Otherwise, our education would be available only to children of well-to-do families.

Mr. Chairman, the Coalition for Health Funding, an organization composed of member groups in health-related fields, has recommended a capitation for the VOPP schools be funded at a minimum of $34.68 million for fiscal year 1974. We concur with this and other Coalition recommendations and request that you consider favorably these proposals. It should be stressed that dollar amounts for podiatric medical education are relatively modest. When compared with other categories in the health budget, they are almost trifling. For example, podiatric medicine in 1972 received less than $1 million in capitation and approximately the same amount in special operational grants. However, this approximate $2 million per year support has been the very life blood of the colleges of podiatric medicine and a loss of these funds may lead to economic failure of the colleges.

Mr. Chairman, your committee has responded to our needs in the past, for which we are most grateful. Today the need for podiatric care continues to grow. Thus the challenge is clear to us that we must educate more doctors. We accept that challenge. We will graduate more dedicated practitioners. We ask you to continue the partnership with us by providing adequate funds in fiscal year 1974. We do not come to you with hat in hand, and we do not come here looking for a handout. We are here to demonstrate our united dedication to better health care for all Americans and we want to work with you, other Members of Congress, and the administration in obtaining these lofty goals.

Thank you very much.

Mr. PATTEN. Thank you, Doctor. Do any of your cohorts wish to add anything for the record at this point?

Dr. RUBIN. I would like to make one point.

The proposal by the administration is not to reduce the total appropriation by the amount to be cut off from our group but to add it to the medical school group. It does not provide any savings. It makes a small contribution of the total going to other groups but it is of vital difference to us. I think that is rather significant. It would make a significant difference to us and it would mean very little to the other group.

Mr. PATTEN. As far as I am concerned, I would like you to know that we have a few podiatrists in my building and I am close to them personally, and they have manifested great interest along the same lines as you have testified to. I know of the good work they have done, which is unrelated to podiatry because, as you say, they meet people and they see their feet. In one case, a fellow came in and the doctor said, "You have blood poisoning." He showed him the red streak going up his leg.

He really had blood poisoning. He referred him to another doctor in the building and they had to put the fellow in the hospital. He had an opening in the foot and ran an infection. I recall another case where a fellow came in with swollen feet, which was a symptom of a general condition. I know they do a good job and I am happy they are in the building.

Dr. BAILEY. It is interesting you should mention that. Our men are qualified to do physical workups on people. Many of the folks that we deal with come into the health delivery system for the first time through a podiatrist. In the physical history the podiatrist often identifies systemic diseases and refers the patients to other physicians.

Mr. PATTEN. In their own line I happen to know they have done some marvelous things and made people comfortable and healthy who were not when they first went in the office.

Dr. RUBIN. If we can keep people on their feet even if they are institutionalized, it is a lot cheaper than to have a wheelchair for them. This makes a tremendous psychological, sociological, and economic saving.

STATEMENT OF DR. BRACHMAN

Dr. BRACHMAN. Mr. Chairman, I think from what you heard this morning, my statement would be along as lightly different line. I do not think most people, and that probably includes the administration, realize that men like myself have for years treated crippled children, cerebral palsy, clubfoot children. In many of our institutions as I have been doing for 35 years, people don't realize that we treat stroke victims. It is not possible for them to start walking again unless they can get on their feet. We take care of them. They don't realize that we see millions of geriatrics in nursing homes who would be completely bedridden if we did not take care of them. It is just impossible for us to think in terms of eliminating this profession. There was one statement that was made in the material you received from the administration, stating that it might be interesting if some of these colleges would close because we cannot support them.

It is just unrealistic to me that we can save $500 million in industry, and at the cost of $1 million to keep us going, somebody would refuse to give this small, paltry sum of money, actually.

Frankly, they want to pile this money in the medical area which would give them one-tenth of 1 percent more than they are getting now. It wouldn't make a flyspeck dent. They would never miss it.

Mr. PATTEN. Doctor, I have been on the Crippled Children Committee of the local Elks lodge since 1934. Every Saturday we have a clinic in our hospital. Under social security we have a registered nurse who is with us all the time. I can tell you that we have had the podiatrists at the clinic, donating their time and service. Their help has been wonderful.

Thank you, gentlemen.

GERONTOLOGY

WITNESSES

DR. GEORGE MADDOX, DIRECTOR, CENTER FOR THE STUDY OF AGING AND HUMAN DEVELOPMENT, DUKE UNIVERSITY MEDICAL CENTER

DR. MAROTT SINEX, CHAIRMAN, BIOCHEMISTRY, BOSTON UNIVERSITY SCHOOL OF MEDICINE

TUESDAY, MAY 15, 1973.

Mr. PATTEN. We will next hear Dr. Maddox, director, Center for the Study of Aging and Human Development, Duke University Medical Center, representing the Gerontological Society.

Dr. MADDOX. Mr. Chairman, I am George L. Maddox, director of the Center for the Study of Aging and Human Development, Duke University. Today I appear as chairman of the Education Committee of the Gerontological Society.

For over a decade, I have been actively involved in research and teaching on problems of the aging and have served continually in an advisory capacity to NIMH, NICHD, and the Administration on Aging in recent years. I was an author of the technical background paper on research and demonstration for the 1971 White House Conference on Aging, and Chairman of the Committee on Research and Training for the Post Conference Board.

The Gerontological Society, and I personally, vigorously support increased Federal appropriations for research and training in the interest of improving the quality of life of elderly persons. The prospect that Federal support for training and research in aging will decline or, at best, will remain constant, disturbs all informed persons. The prospect is disturbing because it comes at a time when the number of older persons in our society is increasing at an unprecendented rate and increasing faster than any other age group in our population. The elderly now constitute 10 percent of our population, a percentage which has doubled since the turn of the century. Population projections indicate that the proportion of the elderly may be as high as 16 percent within the next 50 years.

As a nation, we have received convincing evidence that our current social services and institutional arrangements for the elderly are barely adequate, and often appear to be neither effective nor efficient. A sizable minority of the elderly live in poverty; many of them are at high risk for extensive medical care and for spending their last years in special care facilities of dubious quality. Many lack adequate transportation and housing and are at high risk for losing vital contact with the social world around them.

Our intention as a nation, and the announced intention of the administration, is that our elderly citizens must be assured an adequate quality of life. We concur. But the representatives to the 1971 White House Conference on Aging which included the best informed laymen and professionals in the United States, argued persuasively that our national objectives for the elderly will not be achieved without increased investment in research and training. Improved organization and delivery of services to the elderly are predicated on adequate information and on trained manpower.

Representatives to the White House Conference on Aging noted that, until very recently, research and training in aging have suffered from neglect. Consequently, trained manpower for research and training in aging is quite limited, and the number of academic institutions committed to producing this manpower remains small.

We need to be frank about the manpower situation in aging. Working with the aged, in spite of its societal importance, is not glamorous and does not appeal to many when they are considering alternative careers. This is why the Education Committee of the Gerontological Society has attacked so vigorously the administration's application of its principle of "no categorical training" to research and training in aging.

The administration, using as its illustration biomedical research and training, argues that goals for planned expansion in specialized manpower have been reached and that the law of supply and demand will now suffice to produce needed manpower. This argument is generalized to training in aging. Both the White House Conference on Aging Postconference Board and the Education Committee of the Gerontological Society are on record as rejecting the applicability of this conclusion to the field of aging. The facts indicate the contrary. The detailed statement from the Gerontological Society is submitted for the record.

We understand and accept the need for fiscal responsibility. But we argue that our estimates of immediate and long-range need for trained manpower in aging indicate the need for an increased, not a decreased, investment at this time. Efficient, effective service for the elderly will not be insured by reduction of support for research and training. The contrary is true.

Based on a decade of service as a study section member in the NIH and on continuing evaluation of the fiscal needs of the Adult Development Branch of NICHD, I estimate that NICHD could spend responsibly at least $16 million in research and training in fiscal 1974. This is $4 million more than currently requested. My detailed estimates are as follows:

ADULT DEVELOPMENT BRANCH, NICHD

[In millions of dollars]

	Agency request, 1974	Minimum needed, 1974
Research	6.0	9.0
Contracts	.6	1.5
Training	1.6	2.0
Intramural	3.6	3.6
Total	11.8	16.1

As a related matter, I call your attention to the research and training titles of the recently passed amendments to the Older Americans Act. Responsible estimates of minimum budgetary needs for the Administration on Aging to carry forward its program of research and training in the interest of improved services for the elderly in fiscal 1974 are:

Administration on Aging Research and Demonstration and Training Needs, Fiscal 1974

	Millions
Training	$8
Research and demonstration	9
Regional gerontology centers	12
Total	29

In this presentation I have not made a distinction between the need for research and the need for training. Both are important, and each develops best in the presence of the other. Both research and training develop most adequately when they are coordinated in the interest of securing more accurate information about and more effective services for the elderly.

We think the evidence is compelling. Research and training, which support adequately the growing need of elderly persons for efficient and effective services, must receive additional support, not less.

Appropriating less than the amounts indicated above will diminish considerably our capacity to insure our elderly citizens access to the understanding and services they need and deserve.

[The statement referred to follows:]

ATTACHMENT, TESTIMONY MAY 15, 1973, BY GEORGE L. MADDOX, DUKE UNIVERSITY

GERONTOLOGICAL SOCIETY,
Washington, D.C., February 28, 1973.

DR. ARTHUR S. FLEMMING,
Special Consultant to the President on Aging,
The White House
Washington, D.C.

DEAR MR. FLEMMING: The attached statement on training in gerontology was adopted by the Committee on Education of the Gerontological Society at a meeting on February 23, 1973. This statement has been forwarded to the Public Policy Committee of that society for distribution to interested persons. A copy is being forwarded directly to you, since you earlier expressed interest in the work of the committee.

While the committee was in session, we heard very disturbing reports regarding the rapidity and extent of termination of Federal support for gerontological training in both NICHD and AOA. We understand that currently limited support for training in gerontology will be reduced by as much as 50 percent as soon as the next fiscal year.

Our considered opinion is that such reductions will have disastrous effects on gerontological research and service. We therefore ask you to bring our concern and the bases of our concern to the attention of appropriate persons in the administration.

With best wishes, I am,

Sincerely yours,

GEORGE L. MADDOX, Ph. D.,
Chairman, Education Committee.

Why Federal Support for Training in Gerontology Should Be Continued

The Education Committee of the Gerontological Society, meeting at the offices of the society in Washington, D.C., on February 23, 1973, adopted the following statement:

At the outset we need to distinguish between a statement of principle regarding continued Federal support for training and the specific application of that principle. For example, the current administration is said to have announced: "No further support of training programs."

A specific application of this principle to biomedical research training appearing in a HEW document argues, for example, that this particular type of training should be discontinued for the following reasons:

1. The justification for biomedical research training in the first instance was that a planned expansion of biomedical research in the two previous decades required expansion of trained manpower. Correspondingly, as the period of expansion of research activities has come to an end, the research training programs tied to this activity should come to an end.

2. It follows that the law of supply and demand should regulate the number of persons with advanced training in biomedical research in the future.

3. This is a reasonable assumption, since income expectations for biomedical research investigators are such that special financial incentives are unnecessary.

Now, look at the general principle again. It asserts that special support of training must be specifically justified, and its application to biomedical research leads to the conclusion that further research training in biomedical disciplines is unwarranted.

If one analyzed the case for training in gerontology in the same way, would the conclusion be the same?

Decidedly not. No authoritative manpower study has demonstrated that the number of persons engaged in gerontological research, training, and service is adequate. On the contrary, experienced observers are unanimous in arguing that manpower in gerontological research, manpower for teaching gerontology at every level in higher education, and trained service personnel in programs serving the elderly are in very short supply. These observers expect this shortage to continue in the absence of systematic, vigorous intervention.

This is the unequivocal conclusion reported in the technical background papers for the 1972 White House Conference on Aging and in the final report and recommendations of that conference. For example, on page 97, volume II, of the final report of the White House Conference, the major theme of the section on training is captured in this passage: "The delegates to the section on training were well aware that if the policies and programs being proposed by other conference sections were to be implemented, there would be need for the immediate recruitment and training of new personnel at all levels * * * and a significant increase in the number of institutions offering training."

This conclusion was reviewed by very knowledgeable and experienced people in government, higher education, and service in the postconference review of recommendations. Administration spokesmen have never publicly contested the need for additional manpower in gerontology or argued publicly that continued investment in gerontological training is unwarranted.

Gerontology has never experienced a period of substained, substantial, systematic Federal support such as that experienced by biomedical research and related training. On the contrary, the 1972 White House Conference documents demonstrate that support of gerontological research and training has been fragmented, shallow, and underdeveloped. Thus, the Conference recommendations unequivocally called for increased Federal support for a variety of training programs in gerontology. When the Post-Conference Board requested a response from the administration to these recommendations, the recorded response in December 1972, indicates that the administration planned to increase its support for both research and training in gerontology substantially.

Members of the Education Committee of the Gerontological Society continue to assert categorically that research manpower in gerontology is inadequate, that the cadre of trained teachers at all levels of higher education is inadequately small, and that the number of trained service personnel to meet demonstrated needs of elderly citizens is inadequate.

Given the unchallenged testimony on training needs recorded in the recommendations of the 1972 White House Conference, we feel that the burden of proof lies on those who assert that continued special investments in gerontological training is not needed.

Consider further the case against training in biomedical research training as it might apply to gerontology. The law of supply and demand is expected to work in the first instance because biomedical research activities are an established and integral activity in a large number of educational and industrial organizations. Further, the prestige and economic incentives for careers in biomedical research are matters of common knowledge.

We assert that no informed person would argue that this characterization of biomedical research activity can be appropriately applied to gerontology.

When one considers that gerontology as an identifiable area of substantial research, training, and service activity is hardly two decades old, the strides forward have been considerable. But the tasks remain enormous and, in relation to the task, manpower is demonstrably inadequate. Gerontology has increasingly established itself in a small number of prestigeful institutions, but the effort required to achieve this goal has been substantial. The capacity of these beachheads to survive without continued external support remains to be demonstrated. Informed opinion would not lead one to be optimistic. Without external support, there is a substantial risk that the interdisciplinary research, training, and service teams so painstakingly assembled at a few locations in the United States will be seriously weakened if not dismantled. In the long run, States may assume, and may reasonably be expected to assume, an increasing share of the responsibility for research and training in gerontology. In the short run, a great deal of care needs to be given to the achievement of a new balance of Federal and State support of training in gerontology if serious disruption is to be avoided.

The fact is that the elderly in this society continue to face cultural biases which favor the young rather than the old. Institutional barriers which militate against the social integration of the elderly persist. These same attitudes and institutional barriers limit the attractiveness of gerontology as an interest which competes effectively with alternative careers in other areas of research, training, and service.

The argument that the prestige and economic incentives which insure an adequate flow of manpower to gerontology as well as to biomedical research does not apply. Reports at the 1972 White House Conference make this quite clear. The burden of proof lies on the person who asserts otherwise.

The above argument does not necessarily lead one to reject the principle that, in general, Federal support for research training should be terminated. One would, however, want to add that particular proposals for training in gerontology require specific justifications and should be considered on their merit.

Any person informed about the current state of affairs in social service agencies, nursing homes, and community mental health centers would be incredulous if informed that there is no need for short-term and inservice training of personnel who work with the elderly. As educators, we believe that training in gerontology makes a difference. We believe that training in gerontology has had an impact on the quality and quantity of research on human aging. We believe that training in gerontology has made a difference in the quality and quantity of service available to the elderly. We are not aware that anyone has publicly advanced the argument that these beliefs are unwarranted. We are prepared to accept a specific challenge to our conclusions. Our cinsidered opinion is that indiscriminate termination of Federal support for gerontological training will have a disastrous effect not only on gerontological research but also on the quality of service provided for the elderly in this country. If the small number of training programs and cadres are weakened or dismantled, we are convinced that a decade of reconstruction will be required to reestablish the potential for improved service to the elderly that has been achieved in the past decade. If this pessimistic conclusion is unwarranted, the proof that it is unwarranted should be presented convincingly. The consequences are too serious to allow assumptions to be substituted for evidence.

Mr. PATTEN. Thank you, Doctor.
Dr. MADDOX. Dr. Sinex would like to make a statement.

STATEMENT OF DR. MAROTT SINEX

Dr. SINEX. I support very heartily what Dr. Maddox has said. I support the budgetary figures which he has given for the program at the National Institutes of Health. I believe it is appropriate that this committee pay particular attention to those figures because I feel this year or next the National Institute of Aging will be created at NIH and we should be building a budget somewhere up to the level that this Institute will take form and if money is not to be wasted it is important that we build toward an appropriate budgetary figure.

I think the day is past when we can approach research on aging in a peaceful fashion. I think by a chemical technology it has reached a point where we can do something about the problems of the aged. I think the cost of caring for people in chronic care institutions is both tragic and perhaps completely unnecessary, and research programs should be designed to get people out of chronic care institutions and in their homes where they can be supported with their families and without such unbearable cost to society.

Mr. PATTEN. I am advised you gentlemen did not use preventive care. You never used it once. So many people in your line use that expression.

Dr. SINEX. Preventive programs are very important. Social scientists like Dr. Maddox have made a good deal of progress in predicting those factors that really tell us about our projected longevity and health. We have done a lot of work in places like Framingham and VA in what you can tell about a person to project their health and influence their longevity. One of the programs in child health and human development is to sort of turn this around. You realize that the elderly person really needs total support. They need support in housing, economics, and health care and the health care system must be made to work. The time has come now where I think we can put a person's life history and blood chemistry into computers and have the computers tell us where they are a hazard in respect to their health and what they might change in regard to their lifestyle that would let them live better and longer.

Dr. MADDOX. Preventive care has always been difficult in this country. Medical schools have spent most of their resources picking up pieces and only rarely get around to working in preventive care. I think the same thing is true in the area of aging.

We have allowed the problems of aging to slip up on us. We find no recognition in this country that there was a social problem related to aging before the 1940's. Now that we understand better how to deal with the people who are currently the aged we are clearly beginning to work toward seeing how we can anticipate these problems. There is no question that the field of gerontology is paying more and more attention to people who are in their 40's, trying to help them to anticipate the kinds of changes they will have to adapt to 20 years later.

Mr. PATTEN. Doctor, would you make one quick observation about the White House Conference? Do you have any feelings about it? Has anything been done? Was it worthwhile?

Dr. MADDOX. I think definitely it was worthwhile. Those who anticipated, and I was one, the bringing together of large numbers of interested lay people and interested profssional people to talk frankly about the problems of aging in the society, considered it in itself valuable. But beyond that there were a number of very specific recommendations. The White House Conferences Post-Conference Board, which had its last meeting about 1 month ago, was extraordinarily useful. For over 1 year following the conference, a group of active committees looked specifically at the recommendations and the arguments underlying those recommendations, asked for and got very specific White House response to the recommendations and then argued whether or not the response of the administration was adequate to the recommendation. As you would expect in that process, there was not absolute agreement between the administration and its critics in terms of whether the recommendations were met.

But the exchange, I think, was extraordinarily useful. We are about to have as a matter of record the White House Conference recommendations, the White House response and the criticism of that response all bound in one document. So we will come out of that much better informed. It will not be a matter of guessing who said what. We have it as a matter of record.

I am not pleased to the extent that the White House Conference recommendations have been implemented but I think the exchange has been useful and we have taken a step forward to proper discussion.

Mr. PATTEN. Thank you.

TUESDAY, MAY 15, 1973.

SUDDEN INFANT DEATH

WITNESS

MS. JUDITH CHOATE, EXECUTIVE DIRECTOR, NATIONAL FOUNDATION FOR SUDDEN INFANT DEATH, INC.

Mr. PATTEN. Next we will hear from Ms. Judith Choate, executive director, National Foundation for Sudden Infant Death, Inc.

Ms. CHOATE. Thank you, Mr. Chairman.

Mr. PATTEN. You may proceed, Ms. Choate.

Ms. CHOATE. Mr. Chairman, I am Judith Choate, executive director of the National Foundation for Sudden Infant Death, Inc., and parent of a victim of the sudden infant death syndrome. Thank you for giving me the opportunity to appear before this subcommittee.

Approximately 10,000 American babies die every year as a result of the sudden infant death syndrome (SIDS or "crib death"). More lives are lost from this disease than any other striking between the ages of 1 week and 1 year. SIDS ranks second only to accidents as the greatest killer of children from age 1 week to 15 years. About 1 out of every 350 babies born in this country will die of the syndrome.

SIDS is neither predictable nor preventable. Because it occurs suddenly without warning and because of widespread ignorance about the disease, both among health professionals and laymen, its aftermath is one of extreme grief and overwhelming guilt within the surviving family members. Besides the death of thriving children, SIDS

produces countless broken homes and broken spirits; tragic byproducts which are needless and preventable.

The "facts" about SIDS became a part of my life in 1965 with the death of my son: a lively, healthy 5-month-old. His death came sometime during his normal nighttime sleep; discovery at 6:30 in the morning. We immediately called our pediatrician and the fire and police resuscitation units, but it was, of course, useless. However, when a death is unattended and unexpected, one is, at first, suspect and we were, in fact, suspected of criminal neglect and not treated as parents grieving over the death of a loved infant.

With my son's death, I learned that not only could a healthy baby die without warning but that his family could be treated as criminals. Our baby's body was left in our house, in a closed room, with a policeman guarding the door, until late in the afternoon when a medical investigator interviewed us and examined the baby's body. We were asked such questions as "How many times did you hit the baby?" "Did your other child choke or abuse the baby?" "Did you let your dog bite the baby?" If we had not been confident that our child had been a victim of SIDS, one can imagine the guilt and self-accusation such questions would have brought into our lives.

I began my work with the National Foundation for Sudden Infant Death, Inc., 1 week after the death of my son. In the 8 years of my involvement, I have spoken to, consoled, and informed thousands of families, families who have not only suffered the loss of a treasured baby but agonized over their own feelings of responsibility for it, the ignorance of their communities, the accusations of infanticide by relatives and neighbors, the lack of knowledge of their physicians and countless other emotional strains. I have appended to my statement some representative letters received at our office from parents who have lost babies to the syndrome. Letters that can break your heart. Within the last year, we have dealt with three families who have been jailed on criminal charges ranging from abandonment and neglect to homicide when, in fact, their infants were victims of SIDS.

Also, throughout my 8 years' involvement, little new has been learned about a possible cause and subsequent cure of the syndrome. We still have no answer to that lingering question "Why did my baby die?" Why is this when modern medicine seems to be able to perform miracles?

First of all, there are only a handful of qualified scientific investigators working in the field of infant deaths. A great number of qualified scientists who could make a contribution don't know of the existence of the problem. These babies are not sick, they have no long hospitalization, they are not seen in large university affiliated teaching institutions: They are born, they die, and are forgotten by medicine.

The National Foudnation for Sudden Infant Death, Inc., estimates that a minimum of $10 million must be added to the budget request for the National Institute of Child Health and Human Development to conduct a substantial attack on sudden infant death syndrome in the United States. The Institute has given SIDS research top priority but is hampered by the lack of available funds. In fact, the most prominent SIDS research project in this country (in Seattle, Wash.) has been notified by NICHD that, although the project has the greatest scientific merit and has been given high priority, no funds are cur-

rently available for continued support. Good intentions do not result in finding solutions.

Were additional funds appropriated, substantial progress could be made in the field of sudden infant death. Federal funding should be available for both grant and directed grant research work. The National Institute of Child Health and Human Development should take the initiative in contracting for scientific work that needs to be done instead of passively waiting for grant applications to come in. We desperately need more studies in the sleep physiology of infants. The search for animal models must be pursued. Consideration should be given to the establishment of regional infant death research centers. Such centers could perform autopsies on infants from localities which lack adequate facilities and provide skilled counseling for families. Technical assistance should be provided to coroners and medical examiners offices both to conduct research and to provide counseling for surviving family members.

Educational efforts must be undertaken to acquaint health professionals with the facts about SIDS and methods of assisting grief stricken families. In other words, we are asking that funds not only be directed to finding a cause and cure of SIDS, but also in dealing with the human aspects of the disease. We would also earnestly request the committee not to take funds from other research programs at NICHD for an attack on SIDS. The budget of that Institute is already less than marginal.

Last week, Senator Walter F. Mondale (D., Minn.) introduced a bill (No. 1745) in the Senate "To provide financial assistance for research activities for the study of sudden infant death syndrome, and for other purposes." We anticipate a corresponding bill being introduced in the House of Representatives, shortly. Although this bill is excellent in intent, a total amount of only $2 million in appropriations is therein requested for fiscal year ending June 1974, to carry out the provisions of the act. A sum that we estimate to be much too modest to even begin a national attack on the problem.

For 8 years I have listened to the anguished voices of parents pleading for an answer to "Why did my baby die?" I urge this committee to respond to their plea.

Thank you for the privilege of appearing before you.

[The insert follows:]

[From the Los Angeles Times, July 17, 1972]

THE DEATH OF BABY MAY NOT BE PARENTS' FAULT

(by Judith Choate)

Judith Choate, a mother of four, is executive director of the New York-based National Foundation for Sudden Infant Death.

There is no greater miracle than the birth of a perfect child. Cigars are passed by proud papas; dreams bloom on mama's face. Life begins!

The trip home from the hospital sets the precedent for "Firsts" entered in the Baby Book: First car ride, first bath, first smile, the longed-for first full night's sleep.

We had hit all these milestones, and more, when, on a March morning in 1965, my 3-year-old son and I began our day with a quiet peek at "Our Baby." With three words—"Robbie looks funny"—I learned how abruptly this perfect miracle could end. My thriving, beautiful 5-month-old son lay dead in his crib.

No warning sickness, no struggle, no cry; a quiet death had come.

A quiet death came in this country for Robbie and 10,000 other Robbies that year. And for 10,000 apparently healthy babies every year—before, since, and to come—life is over before it has begun.

Robbie was a victim of the sudden infant death syndrome (SIDS or also called "crib death"); a disease neither predictable nor preventable that is, after the first 2 weeks of life, the No. 1 cause of infant death in the United States. A disease that in its silence and unpredictability takes an incredible toll on the lives of surviving family members.

The death of any child is heartbreaking but no other disease leaves, in its wake, such guilt, self-doubt, incrimination, psychosis and charges of criminal neglect. Yet, every day, 30 to 35 families in this country suffer not only the loss of a loved infant but agonize over their own feelings of responsibility for it, accusations of infanticide by neighbors and relatives, ignorance from their physicians, suspicion by legal authorities and, often, they are never told why their baby died.

With one exception, our case was "classic." On March 15, Robbie was a gurgling, cheerful bright new member of our household; loved and cherished, put to bed with a full tummy and a comforting burp. His death came sometime during his normal nighttime sleep, discovery at 6:30 in the morning. However, unlike most families who are faced with the death of an infant to the sudden infant death syndrome, we were aware of "crib death" and of a foundation begun by parents of a lost child.

We immediately called our pediatrician and the fire and police resuscitation units. We knew it was useless but felt we had to try to revive our son. And, indeed, he was pronounced dead by his pediatrician—the very same doctor who, the week before, had pronounced him "a perfect baby."

His body was left in our apartment, in a closed bedroom, with a policeman in attendance until the midafternoon at which time a medical investigator from the Medical Examiner's office observed the body and interviewed us. We were asked such questions as "How many times did you hit the baby?", "Did your other child choke or in any way abuse the baby?", "Did you let your dog bite the baby?" If we had not been aware of SIDS and confident that we had done absolutely nothing wrong, one can imagine the guilt and self-accusation such questions would have brought into our lives. In this way, our loss differed from that of thousands of other families across the country, families who live for months and, sometimes, years, with torment over the death of their baby.

I began my work with the National Foundation for Sudden Infant Death, Inc., 1 week after the death of my son. In the 7 years that I have been involved, national awareness about the magnitude of the problem has increased greatly; however families are still sometimes faced with criminal charges, still faced with lack of autopsy and still faced with long months of waiting to be told why their baby died. We still do not know the cause of the sudden infant death syndrome but we do know that SIDS families are not criminals.

The National Foundation for Sudden Infant Death proposes a standardized procedure in every community in the United States for the humane handling of cases of infants who die suddenly and unexpectedly; a method that is both compassionate and medically sound. Autopsies must be performed and parents promptly informed of the results. The criteria for the diagnosis of sudden infant death syndrome should be disseminated to coroners and medical examiners throughout the country and the term, "sudden infant death syndrome," should be utilized. Every family should receive authoritative information about SIDS from a health professional who is both knowledgeable about the disease and skilled in dealing with characteristic grief reactions. These services should be available to every family regardless of financial status or type of medical care.

The U.S. Senate, as a result of hearings held on SIDS by Senator Walter F. Mondale's subcommittee on children and youth, has given a rare unanimous endorsement for an addition of $8 million to the Department of Health, Education, and Welfare appropriations bill to be devoted to SIDS research and related educational activities. It is the deep hope of every parent who has lost a treasured infant to this tragic disease that this modest funding will be implemented.

A quiet death comes; tragedy and despair follow. Only time and concerted research efforts will assure us that there will be no more lost Robbies; let's use that time to insure that the surviving family be treated with dignity and respect.

[From the Washington Post, May 9, 1973]

THE SUDDEN INFANT DEATH SYNDROME

Among the mysteries of American health care, few are as persistently complex as the disease known as suddent infant death syndrome (SIDS). Like cancer, its causes are unknown. Yet, an estimated 10,000 infants die annually from SIDS. Serious research began only a few years ago but even this research was limited; there has been a lack of trained scientific investigators interested in the problem.

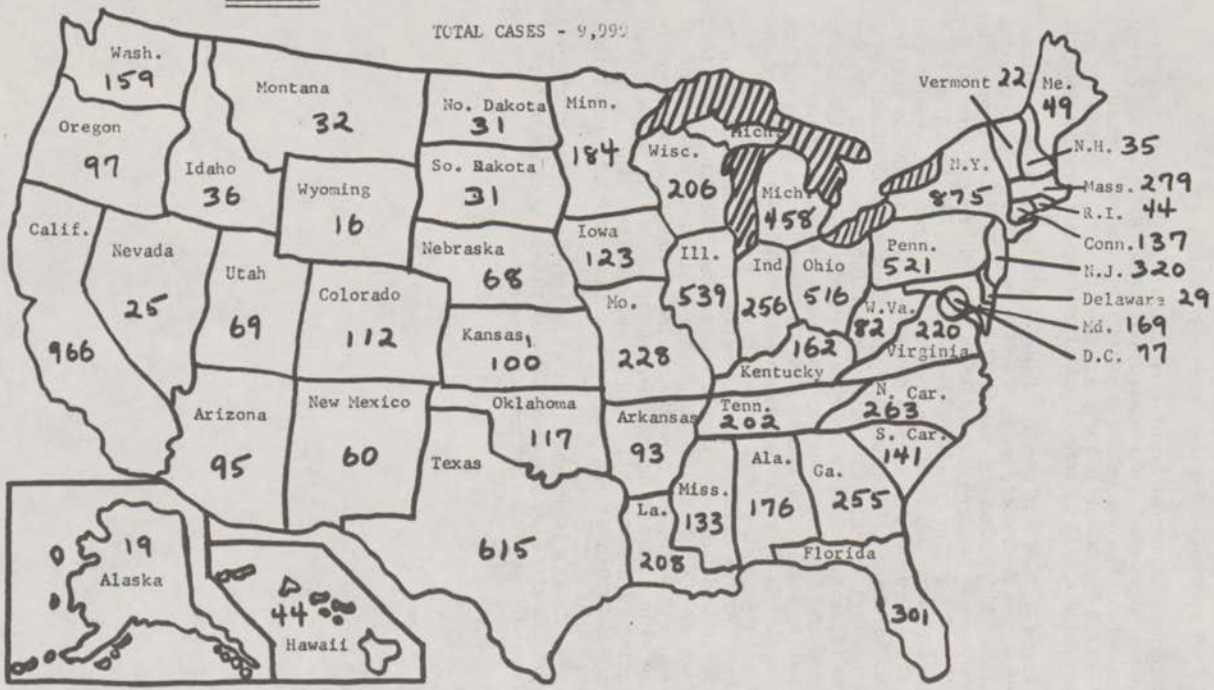
As a means of increasing concern in SIDS, Senator Walter Mondale (D-Minn.) has introduced legislation to promote research activities in this area. In Congress last session, a similar bill passed the Senate 72–0, but it went nowhere in the House. The importance of research into SIDS is not only that a cure for the disease might be found, but that even if children continue to die from it at least the parents and community will know the reason. At the moment, serious and tragic injustices often occur because parents of SIDS victims are falsely accused of child abuse. Dr. Abraham B. Bergman, M.D., president of the National Foundation for Sudden Infant Death, points to a recent California case in which a young couple was taken to jail while their baby's body still lay in the house. The parents were charged with involuntary manslaughter but the charges were eventually dismissed by a municipal court judge. Dr. Bergman, in discussing the event, said "it was clearly a case of ignorance and prejudice against a couple who were young and poor and couldn't defend themselves."

Even those parents well established in middle-class life are often subjected to harassment and insult following a crib death misfortune. The point is not that possible child abuse should be ignored but rather that unwarranted criminal investigations should not occur. The parents are already undergoing severe emotional pain. As one witness said in hearings last year, the parents "have enough to do just attempting to maintain their sanity and marriage while trying to explain to their not-too-understanding relatives how their happy, healthy infant could possibly have died."

Obviously, we are only at a beginning in our understanding of SIDS. What is crucial is that serious research begin at once, not only to save lives among infants but to protect parents in the event that tragedy does occur.

ESTIMATED CASES OF SUDDEN INFANT DEATH SYNDROME IN THE U.S. - 1969

TOTAL CASES - 9,999



Key: Based on registered live births by occurrence from the National Center for Health Statistics, Public Health Service, United States Department of Health, Education, and Welfare.

Calculated at 2.8 deaths (due to SIDS) per 1000 live births, according to "Sudden Infant Death Syndrome" (proceedings of the Second International Conference of Causes of Sudden Death in Infants), University of Washington Press, 1970, edited by Bergman, Beckwith, and Ray.

(Compiled by the Washington State Chapter of the National Foundation for Sudden Infant Death)

Sudden Infant Death Syndrome—the Event of the Problem in the United States

PROBLEM

The suddent infant death syndrome—the death of an apparently healthy infant which remains unexplained after a complete post mortem.

INCIDENCE

Annually, 10,000 thriving, well-cared for infants die as victims of the suddent infant death syndrome. This three in every 1,000 live births, almost one-sixth of all infant mortalities in the United States. In a large metropolitan area, such as New York City, one bady dies every day. The attached map illustrates the incidence of SIDS, per state, yearly.

VICTIMS

SIDS has no regard for race or economics; it strikes babies in every level of our society. However, babies who are black, Indian, Mexican or poor white Americans and whose families live in urban ghettos will more frequently be SIDS victims than babies of the more privileged classes. This is also the case with babies born prematurely or of a low birth weight.

PSYCHOLOGICAL TRAUMA

Virtually every family losing an infant to SIDS feels responsible for the death, due to ignorance of the disease on the part of health professionals and the lay public. Without immediate understanding, the problems of guilt and deep grief are long lasting and destructive to the entire family unit.

MEDICOLEGAL SYSTEM

Since SIDS strikes without warning and without a physician in attendance, infant victims are delegated to the medical examiner or coroner for investigation. In many areas of the United States, autopsy is neither mandatory nor is it performed on SIDS victims. Deaths are often certified by the neighborhood funeral director or a coroner unskilled at pediatric pathology. Consequently, SIDS is too often dealt with as a criminal case or certified as suffiocation (or other unsubstantiated theories) which carry a connotation of negligence on the part of the family. For accurate statistics, new mecical data and an ethical standard in dealing with the SIDS family, there must be a concerted effort to revise the entire medicolegal system.

MEDICAL AWARENESS

SIDS warrants only perfunctory discussion in medical textbooks and is almost never examined in the classroom. Since the victims are not hospitalized, rarely are they seen in teaching hospitals where the major thrust of modern medical ideas originate. In every community, in private practice or in clinics, physicians and nurses are completely unprepared to deal with the death of a healthy infant or to offer understanding and knowledge to the family.

RESEARCH STATUS

Although support of research on sudden infant death syndrome is a high priority at the National Institute of Child Health and Human Development, there are few applicants for the available funds. As long as SIDS continues to be nonexistant in medical training, there will be no new impetus for research.

MODEL SYSTEM

In the entire United States, there is but one community committed to an organized, humane system of dealing with SIDS. In King County, Washington (Seattle), every SIDS is autopsied at a teaching hospital, the family is immediately contacted by the attending pathologist, a visit is made to the family by a public health nurse and a subsequent visit, two weeks later, is again made. With cooperative efforts of the NFSID and government agencies, this system could exist nationwide and no family would have to face the torment of not knowing why their baby died.

PARENT'S LETTERS

DEAR MRS. CHOATE: We thank you for your very nice letter plus all of the articles you enclosed on SIDS. They sure helped to answer questions which needed answering. And you gave us more information than we could have ever hoped for. Thank you from the bottom of our hearts.

There is one thing that left a doubt on my mind. In all the articles they mention a peak age for SIDS. Two to four months, rarely over 6 months. Our daughter was 13½ months old. She had been to the doctor 6 days before she died. He checked her and found her healthy. He gave her a vaccination shot. Six days later she ran a slight fever (100) then after that she was dead. No other sign of sickness, no cough, no runny nose, no sore throat. We had an autopsy performed. The doctor told us "bronchial pneumonia" was all they could come up with. He said it was a common thing to list this as "crib death". He had no explanation as to why, or how. All he said was "the vaccination had nothing to do with it, it was a "crib death". Why would they say "bronchial pneumonia" if it was "crib death"? We asked him for information or who we could write or talk to for answers. He had nothing to tell us.

It wasn't until a few months ago, 2 years after our daughter's death, that we found out about your organization. It is a long time to go around wondering and feeling guilty. We hadn't known that so many babies die from SIDS. For the longest time after our son was born, we were so frightened it would happen again. We feel relieved now. But I guess it will be some time before I am really secure.

Again, we thank you for your letter and for sharing your baby's death with us. It made us feel less alone. We deeply appreciate your literature and all of the work you are doing.

(Signed ———, *Massachusetts*).

DEAR SIRS: I am very interested in helping your organization with public awareness on the different aspects of sudden infant death.

I have followed the Senate investigations through the news media. But I want to do something about it! Be an active participator. Possibly my circumstances will be different.

On August 26, 1966, my first son (my only son) was born; in Millard Fillmore Hospital in Buffalo, N.Y. He weighed 7 pounds 8 ounces, was 21 inches long and was just fine. A week later, my neighbor gave birth to a girl, it was a joke of how they would probably be sweethearts. Both babies prospered. In November, on 21st, 1966, my girlfriends baby was found dead in her crib. A victim of crib death. I was so stunned I couldn't think of words to comfort the parents, who were my friends. Thursday was Thanksgiving.

At home, no one talked much about the "lost baby" but rather of the parents.

Sunday, November 27, 1966, we all slept late. I got breakfast ready and went upstairs to get the children. Tracey, age 15 months was wide awake in her crib; I glanced over at my son's crib and he was still sleeping. I brought Tracey downstairs and put her into her high chair, set her breakfast in front of her and went to get my husband up. He sat down at the kitchen table, I poured him coffee and went upstairs to bring my son down. I looked at him and he seemed so peaceful. I began to pick him up and his hand was limp. I looked at his face—one side was white, the other was blue. I screamed for my husband and we shook him and nothing! I ran downstairs and called the police. (At the time, we lived in a small town of 1,500 people.) I ran outside to get a neighbor to care for Tracey, as the police car pulled in.

The policeman didn't ask me any questions. He picked up my son, and laid him on the sofa and began to give him mouth-to-mouth rescusitation. The police chief then came in and asked us for our pediatrician's name and phone number. The doctor was in a town some 15 miles away and of course, no one could reach him. There were 3 doctors in Angola (our town) but none of them would come to the house. The chief called for an ambulance with first-aid team. It took a half an hour. As they pulled in with their oxygen, I had hope. The police chief asked us a few questions regarding the health of the baby and the circumstances regarding him and how I found him. I was terrified, I answered the questions, but I knew they would think I did something to him.

The oxygen brought color into his face and I felt sure he would live. The ambulance men were going to take him to the nearest hospital which is 18 miles away, in Chautauqua County, as there would be a doctor there. Just as they

carried him out to the ambulance, our family dentist, who lived 2 houses away came over with a bag to see if he could help. He was the only doctor willing to try, and he advised us to go to the hospital.

As we got to the emergency room door of the hospital, we could see the ambulance backing in. The available doctor wouldn't even allow my son into the hospital. He examined him quickly in the ambulance, said he was "sorry" and said he had been dead quite awhile. I never saw my son again.

The police asked us a few more questions as to where we wanted the body taken, et cetera and the rest was all routine.

Two weeks later, a baby at the other end of town died the same way and the three babies are all buried together in Angola.

I couldn't really thank the police for their help. They were wonderful. But the doctors involved, as well as the pathologist, and the medical examiner should have been brought before some board of inquiry as to why they wouldn't come to our house? and why they kept questioning over and over again?

It took me 5 years to decide to have another baby; plus I left my husband and remarried. We kept blaming each other and it got worse. In September 1971, I had another baby girl. The first 3 or 4 months were hard. I couldn't bear to go into her room to check on her. I also had a pediatrician who would come to the house. I moved into the city of Buffalo, and I am 5 minutes from two hospitals.

Even though I've changed my entire life style, I still have the nightmares and the eery feeling in my heart. If I only knew why? how could this happen? what causes this?

Please help me to get involved in this. Is there a Buffalo group formed of parents who have lost babies this way? What can be done?

(Signed ———, *Buffalo, N.Y.*).

DEAR SIRS: I am 18 years old, my husband is 21. We were married October 12, 1968. June 19, 1969 we had a baby girl. She would have been 3 months old September 19, 1969—the day she died.

We had left her with my mother-in-law for 3 days. We went back to pick her up the evening of September 18, 1969. My mother-in-law informed me she thought "——" was catching a cold. She said she had a runny nose.

She was in a playful mood when we arrived home. My husband wanted me to let her stay up later and play. However—I had her on a schedule. She was to go to bed at 9 p.m.—she usually woke up about 7 a.m. Then after she had her bath and ate she usually went back to sleep for an hour or 2.

I put Vicks on her back, chest, and throat—then I put a heating pad under her sheet and turned it on to medium.

I worked from the time she was 2 weeks old until she was about 2½ months. (My husband was in jail at this time, that's why we left her at my mother-in-law's—because he just got out and we wanted to be alone—so we could go places and have fun.)

So, she was used to being with her grandmother and uncles. Naturally, she was spoiled and didn't like to go to bed. So she cried until about 10 or 10:30. At 11 just before we went to bed my husband went in to check on her. She was asleep on her stomach (she wouldn't sleep on her back). He asked me to come in the bedroom and showed me that she was covered with perspiration, her clothes were soaked. I presumed the heating pad was on too high although it didn't feel too warm when I touched it. I turned it on low. We had just moved to the apartment and didn't have the heat turned on yet so I didn't want to turn the heating pad all the way off.

At about 2:30 or 3 I woke up. "——" was screaming—not just crying but screaming. I thought that she just had a bad dream. I went to her room and tried to give her a bottle but she wouldn't take it. She just kept on screaming. I went back to bed and she shut up in about 15 or 20 minutes—but all this time she was screaming.

At 6 we got up because I was going to take my husband to look for a job. I went into get her to give her a bath. I picked her up and she was stiff—I dropped her back down. Her little fists were purple and they were gripping the sheet. There was white foam in her mouth.

The coroner said she had been dead probably 3 or 4 hours. I guess she stopped crying when she died. They said it was "crib death" but never did tell me anything more than that. I think she suffocated from the heat of the heating pad. My husband and mother-in-law both told me that it wasn't because of the

heating pad and told me to call the autopsy man a few days later when I was off tranquilizers. He again told me it was "crib death." But no one ever told me what that meant.

We now have a 7-month old baby. When he was 5 months old he was put in the hospital for 3 days for what doctors thought was bronchitis. They found he was only sick from allergy to a drug another doctor had prescribed for his cold while my baby's doctor was away.

The first day he went to the hospital my husband and I got into an argument. He said I never took care of the baby and that it was my fault he was in the hospital.

We were living with my mother-in-law then, too (neither her nor my father-in-law could drive so I had to take each of them back and forth to work every day plus I had to do all the housework). So, about all I could do with the baby was give him a bath and my husband took care of him the rest of the time.

Also, when he said it was my fault that the baby was in the hospital, he said, "At least I never killed our little girl." He had never said that to me before and didn't mean to say it then, it just slipped out. But that proved to me that he does think I killed her. Since then, I wonder all the time if it was my fault and if I really did kill her with the heating pad. Maybe my mother-in-law and the autopsy guy know I killed her with the heating pad and are hiding it from me. I don't know why, but I feel that they are lying to me. I am afraid to ask my husband.

(This letter goes on for three more pages pleading for answers to questions related to sleep, eating habits, and so forth, but is mainly repetitive.)

Well, there are probably more questions I could ask, but I mainly want to know if you think I killed my baby or did she really die from "crib death?" And what is "crib death?" Please help me as soon as possible. I don't want to kill my new baby.

(Signed—Oregon).

DEAR SIRS: I lost my baby last week and they called it a crib death. My heart aches so I just can't explain it. I keep asking if there was something I could of done. Please send me some information.

Sometimes I feel I am losing my mind. I even fear going home to the place she died. Her crib is still there, along with her clothing. What should I do? I have only one other child, a 4-year old. Should I go home and try all over or should I look for another house? I am with my parents now. My husband is a truck driver and he's not home all the time. This means I am alone a great deal.

If you can, please help me.

Waiting to hear from you.

(Signed—Pennsylvania).

GENTLEMEN: I read an article in the Kansas City Star about your national convention and wrote to J. Bruce Beckwith, M.D., who was kind enough to send me literature containing your address.

I lost my son almost 24 years ago in Lima, Peru, with this syndrome. An autopsy was not performed. I have since divorced and my exhusband has told both my daughters that I killed the baby. I fed him at 3 a.m., and at 6 a.m. he was dying when I went in to check him. He was still warm and there was no vomitus in his crib. I have seen two psychiatrists but I still have terrible guilt feelings.

I am wondering whether there is a chapter of the MFSID that I can join in my area. How can I help? There is an occasional local newspaper coverage of an infant death but there is usually no mention of this syndrome.

I would do anything I could to help relieve some tortured parent from going through what I have for 24 years and probably for the rest of my life.

I deeply appreciate the work you are doing and only wish that there had been people like you to help me when my baby died.

(Signed—Missouri.)

DEAR SIRS: I have just finished reading a story in a magazine about "crib death." I can't begin to tell you how much I appreciate it. On April 16, 1969, we lost our 7-week-old baby. Coroner's report crib death. I had heard little about these deaths, still we searched magazines, newspapers for anything we

could find on the subject, anything to enlighten us to the facts about these deaths. I kept asking myself, did I do anything wrong? Did I overfeed him, should I have laid him on his back instead of his stomach? Will this happen again? All kinds of endless torturing questions. Thank God, I had a doctor who explained to me that it was nothing I had done wrong and a husband who assured me that I gave my baby the best care in the world. You know when this thing happens to you it makes you more aware of other infants dying. I pick up a newspaper and see where a baby has died, and my heart goes out to those parents, I think if only I could talk to them, help them and their family to learn the facts of these deaths, to tell them it wasn't their fault in any way—that there was nothing they could of done.

You would be surprised how ignorant the general public is about this; people would ask us what did your baby die from, and when we would say SID they'd look at us like we were crazy. For instance, Jedd Roe's case when the detective asked him that silly question. The coroner showed us a clipping that he carried in his wallet about these deaths; he told us that he had seen marriages break up because one mate would blame the other, why? because most people don't know or have never read about crib death.

Please tell us how we can help others to understand. If there is a volunteer group near my hometown put us in touch with them or tell me how to start one. We would sincerely like to help your cause. I thank you for this wonderful article—I hope millions of other people read it. Send us more information if you can.

(Signed—Kentucky.)

Mr. PATTEN. How many bills have been introduced?

Ms. CHOATE. Only one.

Mr. PATTEN. I introduced a bill last year and this year.

Ms. CHOATE. That is right, in the House.

Mr. PATTEN. Yes.

Ms. CHOATE. As you must also know, there has been no action taken on the bills either.

Mr. PATTEN. I have spoken to the people involved in the authorization bill and there is more interest than you think.

Ms. CHOATE. I think there is interest and we deeply appreciate it. Those of us who have lost babies have been crying in the wind a long time and we are delighted with the interest on the part of our representatives in the House and in the Senate. We earnestly plead that this year we will see a major change and some moneys appropriated for this purpose.

Mr. SMITH. Ms. Choate, we were told here in this committee a few years ago that some of the scientists working on this have a lead. It is not conclusive, but a possibility exists that it is a lack of sugar; and, if this is the case, that possibly if they know that the baby is susceptible to this they may be able to give him some special food before he goes to sleep.

The question that came to my mind was this: I have heard of a number of pediatricians that are putting babies on diets because they think that the baby should not be fat. Your baby did not happen to be on a diet?

Ms. CHOATE. Not only was my baby not on a diet, he was breast fed, had no supplemental feedings. He was perfectly healthy, a term baby, looked fine, proper weight. I would suggest, although you will note that we had a little discussion earlier that I was not a doctor, I do not believe that most reputable scientists working in the field of sudden infant death today feel that it has anything to do with the dietary imbalance or problem.

Mr. SMITH. These are the people who were working on this, so I would not say that.

Ms. CHOATE. The doctors I know, and I cannot say I know all of them, but I certainly know most of the physicians who have in the last 10 years been involved in SIDS research, have never discussed that problem.

Mr. SMITH. This seems to be the lead that they are going to follow now. It was just announced a week or 10 days ago. That does not mean that it occurs in all babies. It could occur in certain babies where the dietary adjustment could take care of it.

Ms. CHOATE. The current most acceptable theory is that the babies have some immaturity in their central nervous system and a number of things have to be active at the same time to cause the baby's death. But we still are supposing as we have been supposing for a good many years. There is a lot of fine work going on now, much more than ever in the past. There is work being done in Syracuse and Los Angeles. We feel in Seattle they have the beginnings of the discovery of an animal model in some experiments they are doing in monkeys, which is terribly important.

Mr. SMITH. That is all I have.

Mr. PATTEN. Thank you, and good luck to you.

Ms. CHOATE. Thank you very much.

TUESDAY, MAY 15, 1973.

HEMATOLOGY RESEARCH TRAINING

WITNESS

DR. DAVID G. NATHAN, CHIEF, DIVISION OF HEMATOLOGY, THE CHILDREN'S HOSPITAL MEDICAL CENTER

Mr. PATTEN. Dr. David G. Nathan, chief, Division of Hematology, the Children's Hospital Medical Center, Boston.

Dr. Nathan, we will be pleased to hear from you at this time.

Dr. NATHAN. Thank you, Mr. Chairman.

I am Dr. David Nathan, chief of hematology at Children's Hospital Medical Center, and associate professor of pediatrics at the Harvard Medical School.

Thank you for the opportunity to discuss the importance of training in hematology research as it relates to the future of research in medicine in this country.

Twenty years ago a wise decision was made by the National Institutes of Health. Recognizing that certain critical areas of research in human diseases could only be carried out by physicians with clinical training, it was decided to invest in the further scientific training of physicians, surgeons, and pediatricians in an effort to develop a group of individuals who would be capable of performing immediately relevant investigations of human disease. It was recognized that such a program was an ambitious one, since many holders of the M.D. degree do not have sufficient background in the biomedical sciences to launch into productive investigations. A training grant system was developed within the various medical specialties which was designed to develop these skills, and as a result the great impetus in medical research observed in the last 15 years occurred. That remarkable story needs no repeating here except to point out that the opportunities for

clinical investigation and the results of that investigation are, in fact, important achievements which have led to improved medical care for the critically ill as well as to the development of increased funds of knowledge in many basic scientific areas. The research hematologists who have been trained are now exploring cancer, thrombosis, sickle cell anemia. Cooley's anemia, and other diseases for which special health programs have been designed.

Today the mechanism by which personnel might be recruited into such research training has been seriously questioned. Justifiably the administration has asked why the United States should enter the marketplace to generate such research personnel when the fields themselves are sufficiently attractive and prestigious and when the individuals who graduate from the programs allegedly earn very high incomes. Why should they not merely take out low interest loans during their training period in order to develop their career objectives? Furthermore it has been asked why the United States should select out clinical investigation as a field to support when there is no Federal presence in so many other fields of endeavor. Finally it has been pointed out, with some justification, that very little data has been generated concerning the actual numerical need for such trained personnel. We might, it is stated, be instituting a supply and demand crisis by continuing to train research personnel as the rate of increase of available NIH grant support declines.

It seems to me that such serious questions cannot be answered by breast beating or reflexic howls of indignation. I don't personally believe that this administration, or any other administration, wishes to preside over a decline in the great surge of research in medicine that occurred in the last 20 years in the United States, or that this administration is out to destroy the medical schools and the teaching hospitals or that it is against the development of a strong cadre of research personnel. Such a conclusion is not only unfair to the individuals who have presented their objections to current programs, but it also skirts the issues which have been justifiably raised. On the other hand I certainly do hope that this committee will not participate in an abrupt decision to phase out training grants without demanding the kind of careful response to administration questions that is required before such a momentous decision can be made. The long-term effects of a sudden arrest of training programs, even a phase out program, might have such deleterious consequences that we would regret the action for many years to come. Furthermore, the actual percentage of the NIH budget involved here is so small, and the numbers of medical graduates involved in these programs (4 percent) so vestigial, that no significant effect on medical manpower in general practice or on the NIH budget is made by the termination plan now in effect. For these reasons I would request this committee to put the training grant programs back into the Health, Education, and Welfare budget for 1974 while demanding a careful response to administration questions both by the NIH and by those of us involved in the training programs in this country.

I have attempted to answer some of the administration questions on a small scale within the field of hematology and have come up with data which I think will be of importance and value. First of all it has been possible by analysis of a careful study of manpower in hematology in the United States, developed by Dr. Helen Ranney and her

colleagues at the State University of New York at Buffalo, to provide a fairly firm concept of the number of fulltime equivalent research hematology positions currently in the United States. There are approximately 400 to 500 such positions. Since the active working lifespan of a career investigator is approximately 20 years, we believe that at least 25 new research trained hematologists must emerge on the national scene per year in order to renew this group. We estimate that we must have at least 70 such trainees within programs at all times in order to provide this group of 25. Now this is considerably less than the number of hematology trainees presently in programs funded by the National Institute of Arthritis and Metabolic Diseases and therefore suggests that the administration's position on training, even on research training, is not entirely incorrect. We may in fact be training too many people for particular tasks, and this must be studied very carefully throughout the other fields. I have also attempted to answer the administration's questions about the entrance of the United States into the marketplace in the search for such manpower. As I have mentioned, the administration has wondered why it is necessary to provide Federal stipends for young men who are about to enter lucrative careers. Here I think is a mistaken impression has been gained, one generated perhaps by a tendency to develop concepts from computers without a sufficient data base. In addition, confusion has arisen by lumping trainees trained for clinical practice with those trained for research. Of course if one examines certain clinical training grants, such as those in psychiatry, neurology, and orthopedics, grants that were generated mainly to provide skilled clinicians for this country, there is no question that many of the graduates of these programs now in clinical practice are earning sufficient incomes and really could have payed for their training by low interest loans. However, a view of those in fulltime academic research provides quite a different picture. Without belaboring you will all of the data I can assure you that the mean debt burden of 71 individuals entering four such programs for research hematology training was high, ranging between $2,000 to $15,000 at the time that they entered the program following internship and residency. The mean earned income of these individuals now embarked on research careers as faculty members is $24,000, much too low to repay an aditional $50,000 debt burden that would be required to support them for 3 to 4 years of research training. There is very little question that such individuals, married and with children, would never have been recruited to face the uncertainties of an academic career if a tremendous debt burden was the price of admission. Only the children of the affluent would be candidates of the future.

I have therefore concluded that it is absolutely imperative for the United States to remain in the marketplace to recruit this very small number of individuals who must in fact replace the present leadership in the field. As to other methods of supporting them, methods other than training grants per se, I have attempted to investigate this. Certainly the notion that we might simply add them to the personnel budgets of research grants is much too wasteful since payment on research grants requires both fringe benefits and markedly elevated indirect costs that would at least double the cost of the development of the personnel as compared to the training grant system which is presently in force.

I hope, therefore, that this committee will not at this time remove training from the health budget. Instead I hope that you will request a thoughtful and careful analysis of the administration's position by the research community and by the NIH administrators involved while retaining present programs during the interim period. There should be a meeting of minds by the four interested parties—the Congress, representing the taxpayers; the trainers, representing the universities; the administration, overseeing the entire health budget; and the National Institutes of Health personnel who must evaluate the total picture of national health research. Only by such a complete meeting of minds, without shibboleth or accusation, will we generate the kind of research training programs which will renew research leadership and remain within reasonable budget limits. It is to this end that I have lent whatever effort I can, and I am deeply grateful for the opportunity to speak to you today.

So I merely want to say, Mr. Chairman, I think we just put a hold on this, and sit down with the administration and carefully and really go over these positions and try to come up with a program that will suit the taxpayer as well as the needs for health research in this country.

Thank you.

Mr. PATTEN. Thank you, Doctor.

TUESDAY, MAY 15, 1973.

MATERNAL AND CHILD HEALTH

WITNESSES

DR. JAMES HUGHES, CHAIRMAN, DEPARTMENT OF PEDIATRICS, UNIVERSITY OF TENNESSEE

GEORGE DEGNON, AMERICAN ACADEMY OF PEDIATRICS, DIRECTOR OF GOVERNMENTAL LIAISON

Mr. PATTEN. Dr. James Hughes, chairman, Department of Pediatrics, University of Tennessee, representing the American Academy of Pediatrics.

Dr. HUGHES. Mr. Chairman, I am James G. Hughes, M.D., professor and chairman of the Department of Pediatrics of the University of Tennessee and Medical Director of the Le Bonheur Children's Hospital. Accompanying me is Mr. George Degnon, director of the Academy's Department of Government Liaison. I am here on behalf of the American Academy of Pediatrics, the leading national organization of certified physicians providing health care to infants, children and adolescents. Our membership represents pediatricians in private practice, community pediatrics, teaching, research, and medical administration.

The academy is deeply committed to affording better health services to the millions of children throughout the Nation and those yet to be born—to the children now receiving good medical care and especially to the many not yet so fortunate.

The academy has demonstrated its sense of national responsibility by repeated appearances before you to stress the need for more adequate funding of maternal and child health services. We have empha-

sized the urgency of funding a variety of programs benefiting children: maternal and child health programs, crippled children's programs, migrant health care activities, communicable disease control, health manpower training, elimination of lead-based paint poisoning, and research in pediatrics—including funding for research on the sudden infant death syndrome.

The academy has also been increasingly active in presenting recommendations to authorization committees so that program modification and innovation might be offered to make the best possible use of our limited national financial resources.

The academy's repeated appearances before this subcommittee over the past 3 years have taught us to be more realistic in requesting funding for worthy maternal and child health purposes. Thanks to guidance from Chairman Flood and subcommittee members, we have learned to accept some compromise between the idea of full funding and the realities of the national budget. But, when maternal and child health problems continue to exist on a broad scale because adequate funding for their solution has not yet been achieved, we must continue to emphasize the need for firmer financial support.

Direct Federal support of maternal and child health programs has permitted great advances to be made, but many gaps in services remain, and many serious conditions that could be eliminated by adequate program funding continue to plague the Nation.

The central purpose of maternal and child health programs is to conserve the Nation's most precious resource—its children of today who will be the leaders of tomorrow. We must devote our attention and national resources to making the reproduction and preservation of Americans as safe and as sound as humanly possible. We have a long way to go to achieve that goal, but we have the ability and technical knowledge to bring about vast improvements, if we have adequate financial support. It is that support we are asking for today. That support is essential if we are to make widely available the demonstrated advances in care of the pregnant woman, the newborn infant, and the growing child. Mr. Chairman, we are at a critical period where scientific knowledge permits superb medical care, but insufficient manpower and financial resources impair broad-scale application of these advances to the population.

Improved maternal health care is essential in order that the unborn child may grow and develop normally, be carried to term, and be delivered safely. Child health programs are essential to assure that children have available the advances in medicine that preserve their health so that they may reach their full potential. America's maternal and child health programs have demonstrated their ability to achieve these goals for segments of the population participating in these programs. The problem is that the programs do not reach out to encompass enough people. Our Nation still has too many women who never receive prenatal care, too many whose complications remain undetected and untreated, too many who lose their unborn children by miscarriage for preventable reasons, and too many who die in childbirth. Because of inadequate prenatal care many a child is stillborn or is born with defects directly traceable to inadequate maternal care during pregnancy. Granted that the child is born safely, we still have a high infant mortality rate compared to certain other developed

countries. And we still have too many children who contract preventable diseases, too many who receive inadequate medical care for one reason or another.

It is against this background that the American Academy of Pediatrics emphasizes the urgent need to maintain maternal and child health programs at a proper Federal funding level, and to maintain the programs that have already proved so effective for those who participate in them.

The situation with regard to chronically handicapped children is also a matter of deep concern. It has been estimated that 10–20 percent of all children in the United States suffer from chonic health conditions, that at least one-third of these conditions could be prevented or corrected by appropriate care during the preschool years, and that comprehensive care through 18 years of age would prevent or correct up to 60 percent of these conditions. Thus, it is clear that comprehensive programs for children and youth may result in eventual better health for the entire population. Also, investment in prevention and early treatment, through maternal and child health programs, further reduces long-term expenditures for medical services, hospitalization, and rehabilitative services. Therefore, through prevention and early treatment, we might control to some extent the spiraling costs of health care.

As serious as the above-mentioned problems are from the standpoints of death, disability, family tragedies, costs of medical care, et cetera, the indirect costs of death or disability in childhood are enormous. Heart disease and cancer victims have generally led a productive life, but when infants and children die an entire lifetime of productivity is lost to the Nation. It has been estimated that the loss to the gross national product and the loss to the Government in terms of ungenerated taxes due to earnings not produced by victims of death in infancy or from birth defects far exceeds three times the loss of earning of victims of heart disease and cancer combined.

Before we discuss our specific recommendations let us review the recent history of the Federal health dollar. In 1960 about 50 percent of each Federal health dollar went toward meeting the needs of children. During the past 13 years this percentage has steadily decreased, principally because of the advent of medicare and medicaid. Last year the President's proposed budget called for the expenditure of only 10 percent for children. The President's budget for 1974 calls for no increase in maternal and child health programs, yet the outlays for medicare will increase by $2.5 billion. This increase, alone, for medical services to adults and the elderly will amount to approximately 10 times the total budget for our national maternal and child health programs. Mr. Chairman, the American Academy of Pediatrics is deeply concerned that the proportion of Federal health dollars for maternal and child health are steadily dwindling.

The academy recommends that a greater investment of the health dollar be made in maternal and child health programs. The proposal is a modest one. Mr. Chairman, we ask that at least a dime—10 cents—one-tenth of the Federal health dollar be spent on maternal and child health programs.

We are grateful to the Congress for its initiative last year in increasing the maternal and child health budget $17 million, but the needs

still exist for which those funds would have been utilized, and the need is now even more profound.

Specifically, the American Academy of Pediatrics recommends that the appropriations for maternal and child health be increased to $269,876,000—the amount agreed to and appropriated by the Congress last year. This is a modest sum considering the tremendous return for the investment in terms of better maternal and child health. Such a figure will help assure that we will come closer to devoting 10 percent of the Federal health dollar to children.

Mr. Chairman, there is an additional recommendation the academy wishes to make—one which we hope will capture the interest and support of the subcommittee because, if granted, it will not cause an increase in the President's budget. Request is made that the committee's bill restore the 58 staff positions in the maternal and child health service that are already budgeted. New responsibilities are to be assumed by the States for establishing additional programs as a result of statutory language in authorization (title V of the Social Security Act). With these expanding responsibilities being assumed by the States, the Federal Government will have an increased obligation for consultation, monitoring, and program evaluation which can be achieved adequately only with a full staff complement. Your action in restoring these 58 staff positions is earnestly solicited.

On behalf of the American Academy of Pediatrics, I wish to thank you for the opportunity to again participate in this very important process of Government. Attached to my testimony is a further statement discussing the program accomplishment, unmet needs, and further clarification as to the utilization of the recommended budgetary increase. I will be pleased to answer any questions.

Mr. PATTEN. Thank you, Dr. Hughes.

You don't have to bring up that $2½ million for medicare. That has nothing to do with your argument.

Dr. HUGHES. No.

Mr. PATTEN. We worked very hard for that, you know. We even voted a new tax to pay for that $2½ million.

Dr. HUGHES. Yes, I am getting progressively toward the geriatric stage myself. I am interested in adequate funding. As a pediatrician I am even more interested in adequate funding for some of the things we can do.

Mr. PATTEN. On the medicare we levied the taxes to raise the funds. It would be a pleasure to talk to you at length because your work is so broad.

Dr. HUGHES. Thank you, sir.

[Formal statement follows:]

TESTIMONY OF AMERICAN ACADEMY OF PEDIATRICS, PRESENTED BY JAMES G. HUGHES, M.D.

Mr. Chairman, I am James G. Hughes, M.D., here today on behalf of the American Academy of Pediatrics which is a national organization of certified physicians providing health care to infants, children, and adolescents. Our membership represents physicians in private practice, administrators, researchers, and teachers. In many ways we feel a special responsibility to the millions of children throughout the Nation and those yet to be born, those who receive medical attention and those not yet so fortunate. This responsibility of which I speak is manifest by our repeated appearance before you to address the need for more adequate funding of maternal and child health activities.

During the past 3 years the academy has spoken to the health care issues of the day and the desirability of funding activities benefiting children. We have made recommendations for maternal and child health programs, crippled children's programs, migrant health care activities, lead-based paint poisoning, communicable disease control, health manpower training, and research in pediatrics which included funding for sudden infant death research. The academy has also been increasingly active in presenting recommendations to authorization committees so that program modification and innovation might be offered to make the best possible use of our limited financial resources.

Repeated appearances before this subcommittee over the past few years have provided a learning experience. Initially academy representatives appeared requesting "full funding" and we were concerned when the committee did not raise the President's budget figures. But thanks to the guidance from Chairman Flood and subcommittee members, our recommendations in recent years have been more modest. Each year the academy has documented program shortcomings and needs, and we have carefully developed recommendations designed to meet those needs. But perhaps our requests and recommendations for funding continue to be a bit ambitious, for the problems we had hoped to eliminate continue to exist because adequate resources have not focused upon obviating these problems.

Great advances have been made in health care of children which might not otherwise have been possible without direct Federal support. But, despite these many advances, we have fallen behind and numerous conditions yet exist which should be eliminated, indeed could be eliminated if appropriations were made available. In reviewing Federal funding for health it is startling to note that in 1960 the Federal dollar for personal health care was so divided that about half of each dollar, 50 percent, went toward meeting the needs of children. Principally because of the advent of medicare and medicaid, the proportion of Federal resources being devoted to children has dropped each year. This drop has been so dramatic that in 1972, 11 percent of the Federal dollar for personal health care went to children. Last year the President's proposed budget called for the expenditure of only 10 percent for children. We are concerned, Mr. Chairman, with this decrease in proportion of Federal dollars being applied to the needs of children. The President's budget for 1974 calls for no increase in maternal and child health programs, yet the outlays for medicare will increase $2.5 billion—just the increases for care of the elderly are more than 10 times the total budget for our national maternal and child health program.

So, we come today to present our recommendations on appropriations for maternal and child health, and bearing in mind our past experiences, we come with a very modest request. Mr. Chairman, we ask that at least a dime, just 10 cents, just one-tenth of the Federal dollar for personal health care services be spent upon children. Can we afford a dime out of the Federal dollar for children?

The American Academy of Pediatrics recommends that a greater investment be made in maternal and child health programs. Indeed, I speak of this as an investment because the benefit of this approach is obvious to us in pediatrics where we see the improved quality of life and the greater productivity of future citizens.

There are two periods in life requiring increased medical attention, the retirement years and the early formative days from conception through the first year of life. There is only one day during our existence more traumatic and more life threatening than the day of death itself, and that is the day of birth. We all here have survived that crisis, but thousands of infants each year do not. I need not remind you of our unfavorable standing among other developed countries regarding infant mortality rates, but I do wish to remind you that we have the knowledge and the skills and indeed the program models to do something about it—we only lack the will of the Nation and the commitment of a greater proportion of our financial resources.

Maternal and child health programs are primarily preventive in nature. In discussing child health, you will note we are concerned for the health of the mother, for her health status directly relates to the quality of her offspring. There is much concern today in society for the environment, and indeed action programs to clean up the water and the air are underway. At the risk of oversimplifying a significant consideration, a greater effort must be undertaken to assure adequate maternity care to the thousands of women who yet go without medical attention during pregnancy so that the quality of man's first environment as a fetus might be enhanced. Part of the dime we seek will go to improved maternity care.

It is encouraging to note in this Nation that when we set our sights on an objective we generously commit resources until the task is accomplished, whether it be placing a man on the moon or conquering heart disease, cancer, or stroke. In looking at the leading causes of death in the United States, one notes that three of the five major causes are now under vigorous attack. The academy favors the national efforts to conquer heart disease and to find a cure for cancer, not only because children do suffer from three maladies but also because it is in the national interest. However, the paradox of birth being the second leading cause of death needs further attention. State maternal and child health programs provide the programmatic framework to impact upon this problem. Programs have been designed, developed, and are operating but again we are not as effective in these efforts as we might be because more adequate funding is still needed.

I spoke earlier of appropriations for maternal and child health as an investment, an investment in improving the quality and quantity of life. Mr. Chairman, it is also an investment in the economic sense for there is a great financial yield. Generally heart disease and cancer victims have led productive lives, yet the fetus and the young infant still have ahead a lifetime of productivity. The loss of the gross national product and the loss to Government in terms of ungenerated taxes due to earnings not produced by victims of infant mortality and birth defects far exceeds three times the loss of earning of victims from heart disease and cancer combined. As compelling as the economics of the issue appear, as a pediatrician I think in terms of a healthy happy baby, in terms of a dynamic lifetime full with potential, and I think in terms of preventing or curing early any impediments which may stand in the way of achieving that potential.

State health plans also include crippled children's programs which are designed to provide care for children who have chronic disabling health problems. It has been estimated that 10 to 20 percent of all children in the U.S. suffer from chronic handicapping conditions, that at least one-third of these conditions could be corrected or prevented by appropriate care during the preschool years, and that comprehensive care through age 18 would correct or prevent up to 60 percent of these conditions. It is thus clear that comprehensive programs for children and youth provide a corridor to eventual better health for the entire population. There is also evidence to indicate that an investment in prevention and early treatment, through maternal and child health programs, will further reduce long-term expenditures for medical services, hospitalization, and rehabilitative services. Thus, through prevention and early treatment we might begin to control the spiraling costs of health care. Costs are escalating because we pay so little attention to preventing disease and treating it early.

My oral presentation this morning has been designed to give you some background and some justification for an increase in the maternal and child health budget. We are all grateful to the Congress for its initiative last year, increasing maternal and child health $17 million. Since the bill was vetoed the purposes still exist for which those funds would have been utilized, the need is only more profound. I therefore recommend that the appropriation for maternal and child health be increased to $269,876,000, the amount agreed to and appropriated by the Congress last year. This is a modest sum considering the tremendous return for the investment. Such a figure will help assure that we will come closer to providing 10 percent of the Federal health care dollar for children. Stated succinctly, I am asking if you can spare a dime.

Mr. Chairman, there is one more recommendation I wish to make, one which I hope will captivate the interest and support of the subcommittee because, if granted, it will not cause an increase in the President's budget. Request is made that the committee's bill restore the 53 staff positions in the maternal and child health service which are already budgeted. New responsibilities are to be assumed by the States for establishing additional programs as a result of statutory language in the authorization (title V of the Social Security Act). With these expanding responsibilities being placed upon the States, the Federal Government will have an increased obligation for consultation, monitoring, and program evaluation which can only be adequately achieved with a full staff complement. Your action in restoring to 132 the number of staff positions is earnestly solicited.

On behalf of the American Academy of Pediatrics, I wish to thank you for the opportunity to again participate in this very important process of Government. Attached to my testimony is a further statement discussing he program accomplishments, unmet needs, and further clarification as to the utilization of the recommended budgetary increase. I will be pleased to answer any questions.

RECOMMENDATIONS

That a dime out of the health care dollar be devoted to children by raising maternal and child health budget to $269,876,000.

That 53 staff positions be restored to Maternal and Child Health Service to a complement of 132 as presently exists.

MATERNAL AND CHILD HEALTH

Health care activities for women and children are authorized by title V of the Social Security Act, providing Federal financial support for a coordinated, multifaceted approach within each State. Formula grants, project grants, research and training activities are supported through this effort. The authorization provides that in July 1973 project grants will no longer be made available directly from the Federal Government but instead the project grant funds will be merged with formula funds for distribution to the States. However, all States will be required to establish one each of the various special projects. Although the Academy supports the extension of the project grant authority and legislation has been proposed to this end, no specific recommendation is made at this time regarding separate appropriations for project grants and formula grants. The following is a review of the benefits of each component of the title V authority.

A. MATERNAL AND CHILD HEALTH SERVICES

States use Federal funds, together with the State and local funds, for the conduct of programs to promote the health of mothers and children. These programs include such services as prenatal and postpartum clinics, visits by public health nurses to homes before and after babies are born to help mothers care for their infants, well-child clinics where mothers can bring their babies and young children for examination and immunizations, and conferences where mothers may receive competent advice on how to prevent illness and any questions about the care of infants can be answered. Early detection and prevention are the basis of this program wherein children receive visual screening, audiometric screening, dental screening, immunizations and periodic examinations. The program assists in meeting inpatient hospital or maternity home expenses for mothers in connection with the maternity cycle. These programs have made significant contribution to improving maternity care for mothers and thereby contributing to the reduction in infant mortality.

B. CRIPPLED CHILDREN'S SERVICES

The authorizing legislation for Crippled Children's Services provides that such services should be made available to all children in every State by 1975. Last year approximately over one-half million children received physician services under the crippled children's program and approximately 80,000 received hospitalization services.

The scope of services provided has been expanded since the program was established in 1935 from the provision of service to children with orthopedic handicaps capable of surgical correction to multiply handicapped children; mentally retarded children; children with cystic fibrosis, hemophilia, and leukemia; and so forth; 35,000 children with congential heart defects were treated through crippled children's programs in 1969, a sixteenfold increase in the number since 1950 when 2,200 were treated.

States are attempting to extend the program to rural areas periodically traveling from town to town to conduct clinics, locating handicapped children, providing diagnostic evaluation and then attempting to provide medical care, hospitalization and continuing care to those youngsters in need. States are innovating through the crippled children's program attempting to reduce the length and frequency of hospitalization, establishing regional treatment centers, and combining the health and educational needs of children through preschool rehabilitation projects.

Unfortunately, many crippled children's projects are making little or no progress toward the inclusion of more handicapped children, and indeed many States have been forced to keep their programs at a stationary level refusing to include children in need of service. Such is the case each year, yet no significant increase in appropriation for this program has been provided in recent years.

C. MATERNITY AND INFANT CARE PROJECTS AND CHILDREN AND YOUTH PROJECTS

The infant mortality rate in the United States reached an alltime record low last year as the rates are being decreased significantly in large cities of this nation due to the tremendous impact of maternity and infant care projects (M & I). These projects have been established in areas where infant and maternal mortality rates were among the highest.

The need for these special projects currently exceeds the resources being made available. New project applications cannot be funded and currently existing programs are unable to expand services to an estimated quarter-million high risk women. Despite this inadequacy, the proposed budget of the President makes no provision for an expansion of the number of mothers and infants served. The importance of these projects reaches beyond a statistical justification, for the fundamental benefit of these efforts is the improved quality of life for mothers and their newborn infants.

Children and youth projects provide comprehensive health services to school and preschool children in areas where low-income families are concentrated. Forty-one percent of those registered were under one year of age, 57 percent were ages 1 to 9. The impact of these projects toward improving the quality of life for the children of this nation are borne out in data reflecting the decrease in illness among children served, a 50 percent decrease in the number of children requiring hospitalization, and a reduction in the length of stay of hospitalization.

Children are most responsive to therapy, and one of the important objectives of the children and youth projects is screening for correctable defects. Screening programs for visual impairment, hearing loss, lead-based paint poisoning and associated followup treatment have been components of many projects. Work is underway to document the prevalence of malnutrition in children and youth registrants and to develop innovative programs to correct this serious problem.

Through preventive health services, diagnosis and treatment these projects are assuring that the advances and advantages of pediatrics are provided to low income children. These programs document improved health of children served, yet the areas of unmet need are many. Expansion of present programs and the establishment of new projects in areas where health care services are badly needed will not be achieved by a token increase in appropriations.

The members of the Academy are acutely aware of the shortage of physicians needed to provide care in the centers of our cities and we are aware how difficult it is to provide comprehensive health services for that population. It would be a disaster if these services were discontinued for in fact we have no available alternative system in providing high-risk pregnant women, infants, and children with health care now and possibly for some time to come. As we attempt to develop new systems, these projects will serve as models. For the HMO concept is not new to pediatrics, these programs are providing preventive as well as curative service to selected population groups. The Academy supports the special program as a necessary method of providing health care for children who live in our cities. These programs now serve as the "family physician" for these children and their families.

In considering the C & Y and M & I projects, it is easy to identify their merit in terms of the number of children they care for and in the decrease in infant mortality that has occurred, reduced morbidity, the declining rate and duration of hospitalization. Of particular interest to the committee should be the steady, continuing decrease in per capita expenditures due to the programs' ability to prevent disease and illness and treat it early among poor children, as is done in private medical practice.

These factors are important, but perhaps of equal importance from the medical point of view is the fact that these programs have been the cutting edge, the social laboratory, where we as a society have developed new and very important policies related to health. These programs have identified methods for solving such matters as community determination. They have identified methods of providing health education to a population who necessarily gives health a low priority. The spin off of this experience is affecting all of child care and will no doubt influence the design of tomorrow's health care system.

At the present time there are viable applications pending in the Department of Health, Education and Welfare for the establishment of 35 new special projects. An estimated $25 million is needed so that these projects might be initiated. If we look at the "fundable but no funds available" pile of applications

we would find the level of need increases to over $100 million. And these are the best of the applications received—not to consider the sums needed if other applications were rewritten and the influx of grant requests which might be generated if it were known that funds were available to establish needed health care projects.

In addition to discussing the children and youth and maternity and infant care projects, I would like to focus attention upon one of the most promising programs designed to reduce infant mortality. I refer to the newborn intensive care projects.

D. REGIONAL NEWBORN PROJECTS

At the risk of simplifying a very complicated problem, it can be said that it is unlikely that we will be able to achieve a significant reduction in infant mortality until we organize the special care required for the infant at risk. Critics of our health care system point to our international rating in infant mortality, and perhaps rightly so since it is within our potential to cut this rate significantly. We are here today to request the funds for an area which is almost completely overlooked, despite all the planning and spending in relation to health care delivery.

The infant high risk unit is to infant mortality what the intensive coronary care unit is to heart disease. There is a difference. The coronary care unit determines the life or death of the adult. The newborn intensive care unit may not only save a life, but a lifetime. Perhaps of equal importance, it may prevent a crippling central nervous system disease in a young infant.

We are again grateful to the Congress for its responsiveness to our recommendations in fiscal year 1972. Your budget increase in this area of $258,000 was responsible for the establishment of three new programs. I wish I could tell you how many young infants are alive and healthy today due to your wonderful efforts. Unfortunately the increases granted last year by the Congress were not enacted.

E. RESEARCH AND TRAINING

Studies which show promise of substantially contributing to the advancement of Maternal and Child Health and Crippled Children's Services are supported through research grants authorized under title V of the Social Security Act. Current studies include the unwanted pregnancy, the unwanted child, long-term results of care for children and limb deficiencies, a national study of maternity care, development of models of family planning programs, systems analysis of pediatric efficiency, and studies designed to identify factors contributing to interstate differences in infant mortality. Research into health delivery systems for mothers and also for children has received a priority.

The maternal and child health title of the Social Security Act authorizes training of personnel for health care and related services provided to mothers and children, particularly mentally retarded children and chidren with multiple handicaps. This training support is helping to increase the health manpower pool and is assisting also in the development of an expanded role for allied health personnel. Maternal and child health funds have been used in the past to assist in the development of the nurse midwife and pediatric nurse associate so that more effective nursing skills might extend the scope of health services and increase their availability. Various allied health training programs are supported through this authorization and several projects have been established to assure that trainees might move up the career ladder as they gain experience and increase their health knowledge.

F. STAFFING

Under the present staffing pattern, health professionals representing a variety of disciplines such as pediatrics, nutrition, medical social work, dentistry, and nursing provide consultation to State health agencies and project grantees. This regional pattern has been supplemented by one-of-a-kind specialists from the central office as necessary. The proposed reduction of staff positions from 132 to 79 will impede the consultation capability of MCHS at a time when more, rather than less, consultation to State health agencies becomes imperative.

The position reduction was presumably based on the anticipated transition of special project grants into State formula grants. Direct Federal project grant authority expires June 30, 1973. Funds formerly administered by the Federal agency will be apportioned to the States by formula and States become responsible for a program containing one of each type special project providing direct

health services to mothers and children. These projects which each State must develop are maternity and infant care, intensive care for high risk infants, family planning services, comprehensive health services for school and preschool children, and dental health care for school and preschool children. To comply with the statutory requirements for State plan approval in fiscal year 1974, approximately 150 new projects will have to be developed by the State health agencies. There are 56 maternity and infant projects in 38 jurisdictions, 59 children and youth projects in 31 jurisdictions, 8 intensive care units in 8 States and 18 dental health projects in 15 States. All States will be initiating some new activity. In addition to mounting these additional projects, States must evaluate, continue, or redesign the existing projects as integral parts of their maternal and child health plans. It will be impossible for the Federal Government to carry out its responsibility for consultation, monitoring, and program evaluation without a full staff complement.

It is recommended that the committee restore these 53 positions, to a total of 132 positions.

PRESENCE OF DR. EDWARD J. BLOUSTEIN

Mr. PATTEN. I would like to recognize Dr. Edward J. Bloustein, president of Rutgers University, who is with us in the hearing room today.

Doctor, it is a pleasure to have you with us in our committee.

Dr. BLOUSTEIN. Thank you, sir.

Mr. PATTEN. Rutgers has one of the finest medical libraries in the country, as far as I know. The doctor thinks they can be as great as Duke University and the other medical centers. I might say the total budget for the agencies and departments that came before this committee is over $100 billion.

I'm glad you dropped in with your entourage.

Dr. BLOUSTEIN. Thank you, sir.

TUESDAY, MAY 15, 1973.

CLINICAL RESEARCH

WITNESSES

DR. SAMUEL D. THIER, UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

DR. DAVID CHALLONER, UNIVERSITY OF INDIANA

Mr. PATTEN. We will now hear from Dr. Samuel O. Thier.

Dr. THIER. Thank you, Doctor. We are here as national counselors of the American Federation for Clinical Research.

The American Federation for Clinical Research is the largest clinical research organization in the United States and is comprised of more than 7,000 medical scientists interested in promoting and encouraging original research in clinical and laboratory medicine. Our primary goal is to stimulate the interest of young persons in clinical research by providing a forum for the young investigator to present his work and by publishing this work in abstract form in our journal, "Clinical Research." The majority of our members are physicians working in schools of medicine throughout the country.

We would like to address our statement to the portion of the Labor-HEW appropriations bill dealing with the budget for fiscal 1974 for the general clinical research centers of the Division of Research Resources of the National Institutes of Health.

The recent and proposed reductions in Federal expenditures for biomedical research and training are of great concern to those of us involved in clinical research. The problems of regaining lost investigative momentum and of repleting thinned ranks of medical educators and investigators will have to be faced if the current trend continues. We are aware of, and agree with, the view that the public must share in the fruits of the medical research which it supports. We and other similar organizations have two major responsibilities. First, we must champion the support of basic investigation without which applied research would wither. We must do a better job of educating the public to recognize the importance of those studies which, though not immediately applicable to their needs, will have long-term value. It is also our responsibility to apply basic information to the understanding of human disease whenever possible. It is for this reason that we are so concerned about the budget for the general clinical research centers.

We are all aware that, regardless of the quality of basic research, its relevance to human disease requires studies in man. The general clinical research centers were founded in 1959 to meet that requirement and have proven themselves to be of unique and critical value in the study of human disease. They provide a distinct unit of beds staffed by specially trained nurses, dietitians, and technicians required for highly accurate studies which cannot be performed in routine hospital beds. It is in these units that new forms of treatment and new drugs must be tested before they can ethically be considered acceptable therapy for the general public. Studies in man are at once necessary and complex. The complexity stems from the ethical questions implicit in human investigation, the many problems inherent in a single diagnosis such as cancer, and the expense of human studies.

The general clinical research centers with their criteria for informed consent and patient study committees have moved effectively to protect patients' rights. The multicategorical nature of these centers allows investigators to share interests, ideas, and expertise. Thus, complex problems such as cancer can be dealt with via a multidisciplinary approach. The expense of human studies should not be borne by the subject of the study, will not be borne by hospitals or insurance carriers, and is frequently not covered by categorical research grants and contracts. Most research grants and contracts which provide laboratory support for human studies do not support the patient bed-and-care costs. Even when grants and contracts provide for such costs, special facilities are still required; regular hospital beds are not adequate. It seems clear then that to conduct human studies in which human rights are safeguarded, in which a multidisciplinary approach is possible, and in which expenses are met, facilities such as those provided by general clinical research centers are essential. In addition to the importance of the general clinical research centers in the study of human disease, they provide several other benefits to biomedical research and training. Resources and responsibility for the general clinical research centers are placed at the institutional level. Thus, decisions may be made at the institutional level to support projects of great promise precisely in the areas of most critical need. The opportunity to apply new and exciting information as it becomes available can be quickly grasped. It is in this setting that we are likely to develop the young investigators capable of applying basic information to human disease.

I need not emphasize that, with the curtailing of training grants and postdoctoral research support, the development of such talent is greatly threatened.

The more concrete benefits of the general clinical research centers are already being experienced. For example, dialytic treatment of chronic renal disease has progressed from an experimental form of therapy to an accepted widely available form of treatment soon to be supported by Federal funds under H.R. 1. Renal transplantation and now the transplantation of other organs is under vigorous investigation. The interplay of the most basic immunological information and the life-threatening problems of organ rejection has exemplified the purpose of general clinical research centers. Hypertension, diabetes mellitus, heart disease, and cancer represent disorders of great national importance, and all are under aggressive study in the general clinical research centers of this country.

That general clinical research centers are the key facilities for bringing the advances of basic science to bear on human disease has not even been seriously questioned. Yet the proposed budget for fiscal 1974 reduces support for these units. General clinical research centers numbered 93 in fiscal 1969. Since that time, a decrease in funding has necessitated a reduction to approximately 84 during 1972. There has been no increase in the general clinical research centers' budget since fiscal 1972 despite a 9.5-percent per year increased cost of operation. Now we face a budget for fiscal 1974 of $40.7 million, a decrease of nearly 5 percent from the budgets for fiscal 1972 and 1973. It will now no longer be possible to even maintain present operations, let alone fund new and meritorious applications. At a time when there is a clamor for goal-directed and applied research directed at human disease, funding for the critical facilities in which this research must take place is being curtailed.

It seems clear to us that the general clinical research centers are filling a unique role and filling it well. They represent the type of laboratory for human study which is demanded by pressures for goal-directed research. They provide a breadth of expertise not available in categorical studies. They represent the most important remaining facility for training young scientists in the complexities of clinical research, and they have yielded concrete benefits to the public which supported them. We feel that a program this successful should be supported and expanded, not reduced. We therefore urge that you consider the proposed budget of $40.7 million inadequate, as $47.5 million would be required just to mamintain operation at the level of fiscal 1972. In fact, we believe expansion of these units allowing their development in a larger number of institutions, particularly in new medical schools, is necessary if these institutions are expected to produce goal-directed human investigation. We suggest that instead of a reduction of over $1 million in the budget for the general clinical research centers, an increase of $5 million is the minimum support necessary for maintaining the status quo, and an increase of $10 million is required to provide the desirable expansion of these unique health resources.

Mr. PATTEN. Thank you, Doctor.

Dr. Challoner, would you like to make a statement for the record?

STATEMENT OF DR. DAVID CHALLONER

Dr. CHALLONER. Sir, I would support what Dr. Thier said and emphasize once again to the committee that this is a resource which is necessary for the support of research in human disease which cuts across all of the many disciplines. It is used in support of all of them. Moreover, as the total research budget, whether it goes up or down, is shifted in emphasis, as the Congress wishes, more to human directed disease, it obviously requires more resources with which to do this human-oriented research. The general clinical research centers are this resource. It is real folly at this time even with a standpat budget to cut the budget of the resources for human research.

Mr. PATTEN. Doctor, I do not have to tell you that our people have been served by the University of Pennsylvania Medical School for a long time. We are deeply appreciative of your work and facilities. I am glad you made an appearance before the committee.

Mr. Casey?

Mr. CASEY. Thank you, Mr. Chairman. This is an area in which I am quite interested.

We have run into these cuts before, I might say. Dr. Marston called the general clinical research centers the place where the action is. They are small clinics, are they not?

Dr. THIER. Yes.

Mr. CASEY. What size is yours?

Dr. THIER. Ours is 10 beds. I cannot emphasize strongly enough the kind of careful work that is necessary to be sure that what is being learned about patients is accurate and can be applied broadly. It requires a facility and a degree of expertise which one cannot hope for on the open-bed floors on which generally ill patients are being cared for.

Mr. CASEY. We have an excellent one in the Houston Medical Center with which you are probably familiar. We are quite excited about their accomplishments as well as what goes on in the other general clinical research centers throughout the country. At least I am. I think we probably get more for our money from these new methods of treatment, which are disseminated as soon as they are proven effective. As you pointed out, the renal transplant originated in the clinical research centers.

As I understand it, what you get doesn't completely finance your operation. It does not in Houston, anyway.

Dr. THIER. No. Up to 40 to 60 percent of the costs are borne by categorical grants. It is specifically the patient care and support facilities which are not borne that way and which require these special facilities.

Mr. CASEY. I know in years back there was no charge to the patients in some of the general clinical research centers. But now you are required to charge, if they are able to pay, to some degree.

Dr. THIER. I am not really quite certain. We do not in our center.

Mr. CASEY. You still do not?

Dr. THIER. As far as I know.

Mr. CASEY. That is one of the arguments they used for cutting it. They say most people now have some type of insurance or they are

under some other type of resources whereby they should contribute more themselves.

Dr. THIER. This is a main concern of ours, and I think a serious ethical question, that is, whether a patient who volunteers his own health and body for experimentation should be asked to bear the expense of that experiment. It seems to us that person is making an enormous contribution to the rest of the public to begin with.

Mr. CASEY. You are not dealing with healthy people, are you?

Dr. THIER. No, but we are not dealing with an offer to them of any direct immediate help. I think the informed consent issue really deals with the fact that what we are doing in these centers is experimental and it is not a foregone conclusion that what we do will necessarily help the patient. It may. It may give us information which may help us perform more adequately with the next patient. The patient is making an enormous contribution by his presence and willingness to cooperate. We would find it difficult to ask a patient not only to do that but to pay for that opportunity.

Mr. CASEY. If he does have insurance, does it play any part in this?

Dr. THIER. The insurance coverage in Pennsylvania, particularly, is very unlikely to cover anything other than a documented required in-hospital treatment, it will not cover investigative studies in patients who are admitted for those studies, let alone cover research.

One of the things that our Insurance Commissioner has tried to do is to reduce the component of costs that are generated by being part of a medical school or investigative program.

[The following was submitted for the record:]

Review of the procedures used in CRC's in various parts of the country indicates that, as suggested by Mr. Casey, patients may be billed via their insurance carriers if their admission to the CRC involves usual and generally accepted treatment for a disease requiring hospitalization. This form of reimbursement applies to a small percentage of patients in CRC's since most admissions are for study of a disease process or for study of a form of treatment which is experimental and therefore not the generally accepted therapy covered under insurance.

Mr. CASEY. The cost is a million and a half over last year, is that correct?

Dr. THIER. That is right.

Mr. CASEY. There are about 1½ million less than last year and we still have the inflation and increase in costs, which they expect you to absorb plus a cut.

Dr. THIER. Yes.

Mr. CASEY. When I say "you," I am talking about all of the clinics. In fact, they closed some of them about 3 years ago. I am pleased to have your testimony. As I say, I am enthusiastic about the clinics myself.

Dr. THIER. Thank you very much.

Mr. CASEY. Thank you, Mr. Chairman.

Mr. PATTEN. Are there any further questions?

If not, thank you, gentlemen.

TUESDAY, MAY 15, 1973.

HEALTH MANPOWER PROGRAM

WITNESSES

DR. PAUL S. FRIEDMAN, AMERICAN MEDICAL ASSOCIATION
DR. GLEN R. LEYMASTER, M.D., DIRECTOR OF THE DEPARTMENT OF UNDERGRADUATE MEDICAL EDUCATION
HARRY N. PETERSON, DIRECTOR, LEGISLATIVE DEPARTMENT

Mr. PATTEN. Dr. Paul Friedman, representing the American Medical Association.

Will you proceed, please?

Dr. FRIEDMAN. Thank you, Mr. Chairman. Mr. Chairman and members of the subcommittee: I am Dr. Paul S. Friedman, a physician in the practice of radiology in Philadelphia, Pa. As a member of the American Medical Association's council on legislation, I am pleased to present views of the association concerning certain health programs in the fiscal year 1974 budget of the Department of Health, Education, and Welfare. With me are Glen R. Leymaster, M.D., director of the department of undergraduate medical education, and Mr. Harry N. Peterson, director of our legislative department.

Our association has appeared before this subcommittee on many previous occasions stressing the need for adequate funding of programs to develop medical manpower. The need still continues to provide financial support for medical education in order to produce physicians necessary to meet our national health goals. Approximately 1½ years ago the Congress enacted the Comprehensive Health Manpower Act of 1971, which became Public Law 92-157. This enactment, which in part revised the previous method of support of medical education, was very broad and comprehensive. It was the result of extensive hearings and consideration in the Congress. If the goals sought in that legislation are to be achieved, funding must be provided. In many of our appearances before your committee we have asked for full funding for medical education. This level of funding would again be appropriate, but in recognition of fiscal limitations, we will offer, as we did last year, alternative suggestions.

We will comment specifically on the following categories of assistance: (a) capitation grants; (b) special project and financial distress grants; (c) family practice training; (d) student assistance; and (e) construction grants.

At the outset, it might be well to point to the growth in medical education that has taken place over recent years. Medical schools have been making strong efforts to increase the number of students being trained as physicians. The number of medical students has been increasing substantially. In the fall of 1970, 11,360 students were admitted to medical schools; in 1971, the number of students admitted totaled

12,361; and in 1972 the number reached 13,570. In the fall of this year it is expected that the number of entering students will exceed 14,500. Through the combined effects of the expansion of existing schools and the establishment of new ones, the number of medical students admitted has been increasing substantially. Nevertheless, there remains a large pool of applicants who cannot be admitted. Continued financial support is necessary to sustain the growth of medical education capacity.

Under Public Law 92–157 the main source of continuing support for medical schools is through capitation grants. This form of assistance was supported by this association in that legislation and we had recommended that the capitation level be a figure higher than the one finally adopted in the legislation. Notwithstanding that the figure was eventually set at $2,500 in the law, the level of Federal assistance actually provided in the last fiscal year was at a lesser amount. A capitation level at less than the authorized amount might compromise the quality of medical education. In any event, continuing inflationary trends of our economy tend to erode even the amounts fixed in the law. We recommend full funding as essential if the medical schools are to discharge the obligations and meet the expectations which were embodied in the deliberations of the Congress when it enacted Public Law 92–157. We believe this support is necessary if we are to meet our needs for medical manpower.

In our statement last year we pointed out that while the recommended capitation grants would provide essential basic financial support for the medical schools, special problems will remain. Some schools will continue to have serious financial problems. These problems were intended, under the law, to be met through the financial distress grants. Moreover, if the schools are to develop special programs intended to improve the educational process, to improve the training of scarce personnel, and to initiate innovative programs, there should be financing available on a project basis. The recommendations of the administration for these purposes should represent minimal assistance levels.

Public Law 92–157 authorizes $40 million for family practice training. One of the more serious shortages within the medical profession is for family practitioners. Certainly the need for such practitioners is particularly marked in our rural and innercity areas. It is reassuring that the number of family practice training programs is growing and has shown very favorable increase in the past 2 years. It is equally reassuring to note that the interest of students intending to go into family practice training continues to grow, and this is evident by the substantial increase in the number of family practice residents. Nonetheless, it is important that adequate support should be provided to continue the development of this stimulus. We believe that this portion of the manpower development law should be supported strongly. Accordingly we recommend that financial support in the amount of $25 million should be provided during fiscal 1974.

Financial assistance to aid needy medical students is provided under the law through scholarships and loans. It is the administration's intention to terminate scholarship assistance for new medical students. In embarking on this course, the administration has recommended only $10 million for scholarships, thus enabling assistance to continue only

for students who have already received scholarship aid. That recommendation is $5.5 million less than last year's level of scholarship assistance. The budget request for loans remains the same as last year's level at $36 million. Medical school tuition costs continue to increase for medical students, as do their other costs of living. The problem of obtaining adequate financial assistance is, of course, a special problem for minority groups since they are likely to be in need of special financial assistance.

The American Medical Association believes that the minority students should be encouraged to prepare for and apply to medical schools. Appropriate financial assistance must be available if medical school enrollment is to be a realistic opportunity for them. We recommend a restoration of the scholarship funds and that loans and scholarship assistance should be available under the Manpower Act at least at the level of assistance provided in last year's fiscal budget.

We have indicated, above, the growth in enrollment of students in medical schools. This desirable result has been accomplished as a result of several factors, notably the expansion of existing schools and the establishment of new ones. This facility growth has been accomplished with direct assistance from the Federal program of support through construction grants. In 1959 there were 85 medical schools enrolling students, and in 1971 there were 108. As of June 1973, the number will be 113, and one or two additional schools are expected to receive students in fiscal 1974. In our testimony last year we pointed to the fact that many schools have plans to implement projected increases in enrollments; almost all are dependent upon continued Federal assistance, particularly through the aid for construction on a matching basis. Continuing, we said:

> We are convinced that the Federal Government must continue to make substantial construction grants to the medical schools over the next few years if the schools' plans for expansion of their student body and increase in the number of graduates are to be implemented. We believe that, instead of terminating the federal construction program for medical schools at the end of fiscal year 1973 as has been proposed by the administration, at least $200 million per year, beginning immediately and continuing for at least 3 years, is going to be necessary.

Consequently, we are dismayed that the fiscal 1974 HEW budget does not provide for construction assistance.

We do, of course, recognize that overall some limitations must be provided in the Federal budget. Within the health budget, we feel it would not be prudent to terminate construction assistance at this time. We believe our recommendations of last year are still pertinent. We then suggested that:

> Priorities for Federal aid for construction might be set in approximately the following order of importance: first, fulfillment of commitments by the Federal Government for continuing phases in an expansion project, the initial phases of which have been funded with Federal assistance; second, construction of facilities to be used strictly for education; for example, classrooms, faculty facilities, and so forth; third, ambulatory care facilities to strengthen the teaching program in this field; and last in importance, construction of in-patient teaching facilities, since many schools could make more complete use of existing community, patient-care facilities.

We further stated that Federal assistance provided only through the means of guaranteed loan and interest subsidy programs would not be a feasible method of assuring that needed educational facilities will be provided.

As we have indicated, we believe there is a definite need for construction grant funds as authorized in Public Law 92–157. That law authorizes $275 million. We recommend as a minimum that $200 million be made available for construction grants.

Under the administration's proposed budget for fiscal 1974, there would be no capitation grants for institutional assistance for nursing schools. Moreover, there would be no scholarship assistance provided to new nursing students. The Nurse Training Act, Public Law 92–158, was enacted following extensive consideration of the needs of nursing schools and students. The need for increasing numbers of nurses continues today. We recommend the strongest support possible for the program embodied in the law providing assistance to nursing schools and students. We believe this course is necessary if we are going to meet as early as possible our goal of providing an adequate number of such health personnel.

Mr. Chairman, there are many additional programs under consideration in HEW's budget proposal. At this time the Congress has under consideration the extention or revision of many of these programs. Accordingly, we have limited our presentation to the ongoing programs supporting health manpower development. Before closing, however, we would speak to the necessity of adequate support for one additional program, the maternal and child health program under title V of the Social Security Act.

Under the maternal and child health program, project grant authorization expires in June. The administration has proposed support during fiscal 1974 at a level of $244 million for formula grants, with the expectation that this amount would also continue to fund the projects previously supported.

Legislation is currently pending to continue the project grants authorizations. Regardless of the ultimate place of project funding, we view the administration's total funding of $244 million as a minimum level. The maternal and infant care projects have substantially reduced infant mortality rates in areas where they have traditionally been highest, by providing early and comprehensive medical care to high risk women and followup treatment for mothers and infants. Children and youth programs have provided preventive health services, diagnosis, treatment, and aftercare as well as early identification of defects which are correctable. The formula grant programs are the major source of care for mothers and children who do not have access to private care or preventive care and treatment of sickness. We believe that these programs have proven their value in improving the quality of life for countless individuals. We recommend the fullest funding possible.

In closing, we want to thank the committee for this opportunity to provide these views and trust they will be of assistance to you in your deliberations on the 1974 budget.

Mr. PATTEN. Thank you, Dr. Friedman. I am sure they will be.

Before I turn to the other members, does Dr. Leymaster want to get on the record, or Mr. Peterson?

STATEMENT OF DR. GLEN R. LEYMASTER

Dr. LEYMASTER. If I could, very briefly, I think I noticed some concern about the suggestion of the priorities for construction. If I may, I would like to tell you that when it became apparent that no

new money for medical school construction was going to become available unless something happened, my colleagues made personal contact with a number of schools to find out just what this cessation of funding would mean. We found out first of all that there were several schools which had undertaken major steps toward expansion with the promise of Federal money.

The funding had been provided for the first stage, and the assumption was by everyone that it would be possible to complete this expansion with additional construction money. Those schools were really embarking on a program of expansion and accepted the students and the money was cut off. That is the reason for the first priority.

The second is that the belief that, particularly in the new schools where they was a very determined effort to use community facilities, it was absolutely necessary that there be clinical teaching facilities, classrooms and so on, if the development of the new schools was to occur. That was the reason for the second category.

The third was the attempt to make better utilization of community hospitals which would move the students and the medical school into more contact with the community and to avoid some of the very expensive and expanded building of university hospitals. Those are the reasons for those priorities. I believe that this kind of priority would be quite in keeping with the modern trends in medical education.

Mr. MICHEL. On that construction item, what was the list of the new schools? In Illinois I know we have a number of new ones in conjunction with the University of Illinois. One in my hometown. I question whether or not the only way we were going to get that is if we depend on the Federal Government building it for us. That was not my understanding.

You tell me where I am wrong in making that observation.

Dr. LEYMASTER. No, I think that is right. The University of Southern Illinois was the one I was thinking of at the time where they are developing a new medical school in conjunction with two private hospitals. In this instance—and I think Illinois has done a far better job of providing State funding, as they have at Rockford and Peoria, than in other States which have not been able to do this to the same extent.

Mr. MICHEL. They have not been able to do it because they have not addressed themselves to it. That is why.

Dr. LEYMASTER. I would not want to claim that it is better for the Federal Government to do it than the States. Somebody has to do it if we are going to have expansion of facilities.

Dr. FRIEDMAN. Mr. Chairman, may I address myself briefly to that question? As a philosophic thesis we feel that the stimulus should come possibly from the Federal Government. But without the local initiative, without the intense involvement of both individuals, groups, and the State in the carrying out of these new projects, this would be a self-defeating process. We have the feeling that it is a combination of efforts that really produces the most satisfactory results.

Over the long term it would probably be desirable to stimulate this development and then have local processes carry on the continuing preservation of these institutions.

Mr. MICHEL. Would you say that we just absolutely have to have seed money in construction items for hospitals to get any of them started anyplace.

Dr. LEYMASTER. We are not talking about hospitals. At least I am not.

Mr. MICHEL. I mean teaching facility.

Mr. PATTEN. What are you talking about on the next point where you speak of inpatients? I thought that was a hospital.

Dr. LEYMASTER. Yes. The new medical schools that come along will probably have to make very extensive use of community hospitals. Those hospitals have been built for and are oriented toward taking care of patients. There is very little additional space for offices of faculty, for classrooms, conference rooms, and this sort of thing. That is what we are talking about in the third category. It is awfully hard to say what is absolutely essential but I think we all believe that we should have a continuing expansion of medical education.

The schools have been crowding people into corners now for 10 years under the stimulus of public expectations and Federal and State pressures. There are not that many spare corners left anymore.

Mr. MICHEL. Let me ask one question in the area of nurses. We say, we still have a shortage of them. Why do we have special assistance for people to get into nursing? Why not a special assist to go into auto mechanics or anything else, if there is a sure job at the end of training? Why does the Federal Government have to get in there and pay for part of that training, particularly in the field of nursing, when we know there is a job at the end of the training. Is that such an undesirable kind of job, nursing? I do not think so.

Nobody wants to be against women. I love them all. I recommend to young girls, go into the field of nursing. You have a job at the end of the training as sure as we are sitting in this room. I cannot say that for a number of other programs. I am not sure my own child will have a job at the end of the road with the kind of nebulous stuff they are learning in school.

They will have a great academic liberal arts education but unless they go into a profession and specialize, I am not sure they have a job. Where am I wrong? You make mention in your testimony of the need for capitation grants for nursing.

Dr. LEYMASTER. I am certainly not going to testify against women either. I think in part it is the hope by stimulating better and more effective education for nursing that we can do something useful in helping to solve the shortage.

Mr. MICHEL. We say that $300 capitation for grant for nursing is peanuts.

People say if you are going to do something; make it worthwhile; make it a grant.

Dr. FRIEDMAN. I appreciate fully everything you are saying because it has a great deal of validity. What we hope all of us are trying to do is to periodically reassess the progress toward supplying the need and the need for extra stimulus to see that occurs. It may be a point will come where the supply is so satisfactorily meeting the need that extra stimulus may not be necessary. Certainly I think we would strongly support the type of critical evaluation you are raising in the remarks you have made.

As of now we think we are still not at the point where we can feel it has its own impetus. I think really that is a very basic consideration. I think you are addressing yourself to it at all times.

Mr. CASEY. If the gentleman will yield, I might say that the Secretary stated there are other educational funds available to them, especially in the nursing field. There is the educational opportunity grant and also student loans. Is that true?

Dr. FRIEDMAN. There are some available to my knowledge.

Dr. LEYMASTER. I am afraid I do not know enough of the details. I would rather not try to defend this in too much depth.

Mr. CASEY. That is the defense of their position, that there are other educational funds available to nursing. If the gentleman will yield further, with reference to the grants for training of physicians—which the budget has eliminated entirely in an effort to move support more toward the loan program although the loan funds were not increased—I cannot quarrel with that too much. I think as my colleague said, there is plenty of work waiting at the end of the line for a doctor. We have a shortage and will have for some time. Of course, I know some in the medical professional protest but I think the medical profession is one of the highest paid professions. Due to the length of time of their training and the highly trained skills, naturally they should be well compensated for the time they put in and the knowledge they acquire. I would certainly think they would be able to repay a loan if the loan were stretched out long enough. As far as I know—we did hear one instance of a doctor taking bankruptcy in trying to get out of it. His mother wrote me. I sent it to the AMA and I think they prevailed on him to stop that nonsense. His mother was ashamed of him. She wrote me and said, "I don't want this boy to get away with it."

Dr. FRIEDMAN. That is interesting. Through the American Medical Association we have set up a loan program of that type whereby there is temporary funding which is to be repaid when the young physicians are in a position economically to do that.

We think that is one of the accepted roads of helping to develop an adequate supply of physicians.

Mr. CASEY. I am sure with all the applicants you have at the medical schools you could find plenty of qualified applicants to fill them. If they could go through school on loans they would be glad to pay them back when they get in practice.

Dr. LEYMASTER. I think I personally agree with what you say. One of our concerns about putting all of this on loans is that none of us want the medical profession to be made up only of the sons and daughters of the well to do. We have all of us made a great effort to attract minority and disadvantaged students into medicine.

For those students who never had a dime, the idea of a $12,000 or $20,000 debt at the end of school is something they cannot encompass. This would clearly be a deterrent for their entering medicine, as it is for many women who shun the thought of taking into marriage a debt of $15,000 or $20,000. This is very real. These are the reasons for some scholarship assistance.

Mr. PATTEN. Are there any further questions?

Mr. CASEY. All I can tell you, I wish all I owed was $15,000 or $20,000 right now.

Mr. PATTEN. There will be many more hours spent on this subject, gentlemen. Thank you for your appearance.

Dr. FRIEDMAN. May I say, Mr. Chairman, that we have presented this material on manpower because we felt that was the basic thing.

But if the subcommittee would wish us to contribute any further information on any of the other subjects in the budget, we would be delighted to present it to you in report form.

Mr. PATTEN. I have just a one-sentence statement. Comparing the number of schools to 1959, we have 50 million more Americans than we had in 1959.

Dr. FRIEDMAN. The interesting thing is that the rise in the number of physicians is proceeding at a higher pace than is the rise in our population. So we feel we are effectively starting to meet that particular problem.

Dr. LEYMASTER. I believe we have almost twice as many entering medical schools as we had in 1959.

Mr. PATTEN. We helped that.

Dr. LEYMASTER. Yes, indeed. We would like to see that continue.

Mr. PATTEN. With more than just money.

Thank you.

TUESDAY, MAY 15, 1973.

CHILD WELFARE-CHILD MENTAL HEALTH-MANPOWER TRAINING

WITNESSES

DR. REGINALD S. LOURIE, JOINT COMMISSION ON MENTAL HEALTH OF CHILDREN, INC., AND THE AMERICAN ASSOCIATION OF PSYCHIATRIC SERVICES FOR CHILDREN

NORMAN V. LOURIE, JOINT COMMISSION ON MENTAL HEALTH OF CHILDREN, INC., AND THE AMERICAN ASSOCIATION OF PSYCHIATRIC SERVICES FOR CHILDREN

Mr. PATTEN. Dr. Reginald S. Lourie, and Mr. Norman V. Lourie.

NORMAN LOURIE. Thank you, Mr. Chairman. We would like to insert our statements in the record and comment on them.

Mr. PATTEN. So ordered.

(The statements follow:)

TESTIMONY OF THE JOINT COMMISSION ON THE MENTAL HEALTH OF CHILDREN AND THE AMERICAN BRANCH OF THE INTERNATIONAL ASSOCIATION OF WORKERS FOR MALADJUSTED CHILDREN

(Presented by Norman V. Lourie, chairman, Committee on Studies, Joint Commission on the Mental Health of Children, president, American Branch, International Association of Workers for Maladjusted Children, Executive Deputy secretary, Pennsylvania Department of Public Welfare, Harrisburg, Pa., and Reginald S. Lourie, MD., president, Joint Commission on the Mental Health of Children, Director, Hillcrest Children's Center, Washington, D.C.)

My name is Norman V. Lourie. I am the executive deputy secretary for Federal policies and programs for the Department of Public Welfare, Commonwealth of Pennsylvania. I am grateful for the opportunity to join Dr. Reginald S. Lourie, president of the Joint Commission on the Mental Health of Children, in this testimony.

I am the chairman of the Committee on Studies of the Joint Commission and also president of the American Branch of the International Association of Workers for Maladjusted Children.

This statement deals with some aspects of the proposed 1973–74 Federal budget as they affect children.

1. Child welfare

Under present law, grants are made to States for child welfare services (including foster care, adoption services, and protective services for children). In 1967

the authorization for Federal grants for child welfare services was raised to $110 million; however, the appropriation for child welfare services has remained at $46 million since 1967.

A variety of services for children and their parents are provided by child welfare agencies through the Federal grants for child welfare services. Child welfare agencies have developed services to help children before and after trouble occurs and have worked to develop community resources that will supplement or substitute for (1) parental care and supervision for the purpose of preventing, remedying, or assisting in the solution of problems which may result in the neglect, abuse, exploitation, or delinquency of children; (2) protecting and caring for homeless, dependent, or neglected children: (3) protecting and promoting the welfare of children of working mothers; and (4) otherwise protecting and promoting the welfare of children, such as strengthening their own homes where possible or, where needed, the provision of adequate care of children away from their homes.

Major child welfare services include the following:

1. Foster care in foster family homes or institutions when children must be removed from their own homes.
2. Emergency care and protection of children reported to be abused, neglected, abandoned, or exploited by parents or guardians.
3. Services and assistance for unmarried mothers and their babies including education and training of the mothers and family planning services.
4. Homemaker services for care of children in their own home or in a foster home during the absence or incapacity of parents or to help parents improve inadequat child care and household practices to keep a family intact.
5. Counseling children and their parents in relation to behavior problems, parent-child conflicts, and physical and mental handicaps, and emotional and social adjustment.
6. Recruitment and licensing of child care facilities to assure adequacy of care of children and to prevent their exploitation or neglect.
7. Day care services to protect children whose mothers are temporarily absent from the home and for children who need day care for such reasons as training to compensate for a physical or mental handicap.
8. Adoption placement services to provide a permanent family home for children who have lost their parents or whose parents' rights to them have been legally terminated.

Despite the effect of inflation and the increase of children in need of protection and services in the United States, the child welfare appropriation (title IV–B sec. 420 Social Security Act) has remained at $46 million since fiscal year 1967. The president's fiscal year 1974 budget request maintains this inadequate figure. It is interesting to note that Congress in 1967 authorized $55 million for fiscal year 1968, $100 million for fiscal year 1969, and $110 million for each fiscal year thereafter.

The 92d Congress recognized the inadequacy of the $46 million appropriation when, in the Social Security Amendments of 1972 (Public Law 92–603) (H.R.–1), they authorized $196 million for fiscal year 1973, $211 million for fiscal year 1974, $226 million for fiscal year 1975, $246 million for fiscal year 1976, and $266 million for each year thereafter. We urge that this committee recommend a minimum of $110 million for fiscal year 1974—a relatively small step towards the fiscal 1973 authorization of $196 million.

The restrictions imposed by the new (May 1, 1973) social services regulations, under the social services titles of the Social Security Act, and the requirement that, with certain exceptions, 90 percent of the funds be spent on cash recipients or applicants, will serve to aggravate an already critical situation in the child welfare program which is not based on financial eligibility, but rather on ability to pay. Broken homes, abuse, adoption, and other child welfare problems, are not confined to poor families alone.

The need for an increase over the $46 million for child welfare agencies is sharpened by the restrictions placed by the new social services regulations for other Social Security Act programs. Under these regulations 90 percent of the services funds must be spent on public assistance recipients, with some exceptions. As a result thousands of families formerly eligible for preventive social services will no longer be eligible.

The child welfare agencies will be overwhelmed with demands to protect children and prevent family breakdown in families whose incomes are higher than the 150 percent above assistance payment levels—the level at which

public assistance agencies cannot give services to families who do not receive cash assistance.

Children are our most precious resource; our only future. If we have a commitment to the most vulnerable of these—an increase from the $46 million for child welfare services is essential and we hope you will respond.

Title IV–A has a congressional mandate to provide services to all children in need of them—without respect to family income. We urge that this committee act to carry out that mandate.

2. CHILD MENTAL HEALTH

It was a major landmark for America's children when, on July 2, 1971 the report of this committee on H.R. 10061 stated:

"The last Congress overwhelmingly passed legislation authorizing a program for child mental health services. The report of the Joint Commission on Mental Health of Children convincingly tells us that this is where we should put our best efforts. The need for such services seems unquestionable. Yet, last year with a $12 million authorization there was nothing requested and this year with a $20 million authorization nothing is requested. The committee has included $10 million in the bill to get this important program started."

The $10 million was appropriated for fiscal 1972 with Senate concurrence and Presidential signature.

In approaching the fiscal 1973 budget (still not with us) your committee again took recognition of child mental health needs and said in its June 8, 1972 report on H.R. 15417.

"The budget did not reflect any increase in the current level of $10 million allocated to mental health of children under part F of the Community Mental Health Centers Act. This would provide sufficient resources for only four new projects in 1973, with the bulk of the money required to continue projects initiated in 1972. Although the past 16 years have brought a steady decrease in the total number of residents in the Nation's State mental hospitals, it is quite disturbing to note the fact that during the past decade the number of children aged 10 to 14 in our State mental hospitals has doubled. During the past year our 360 community mental health centers were flooded with an unanticipated caseload of children with all kinds of problems from school maladjustments to drug addiction and alcoholism. The committee has been told that more than 150,000 children came to these centers for help, but only about 10 percent could be cared for. The committee therefore recommends $20 million, an increase of $10 million over the budget, so that we can at least make a start in providing proper care for these children, many of whom are in State mental hospitals and jails."

Your committee's argument was so persuasive to the Senate committee that in its June 21 report on H.R. 15417 the Senate Subcommittee on Appropriations for the Departments of Labor and Health, Education, and Welfare said:

"The budget did not reflect any increase in the current level of funding to the mental health of children under part F of the Community Mental Health Centers Act. The budget provides sufficient resources for four new projects in 1973, with the bulk of the money required to continue projects initiated in 1972. The House increased the budget request from $10 million to $20 million, making possible the funding of 57 additional new awards. With a steady decrease in the total number of residents in the Nation's State mental hospitals, it is disturbing to note that in recent years the child resident population has increased in these hospitals, along with the rate of first admissions. With this trend in mind, the committee is increasing the House allowance for mental health of children by another $10 million".

And now, as you know, the administration has recommended no funds for this program for fiscal 1974.

The funds made available for this special program have been used to overcome the longstanding neglect of the emotional needs of children and adolescents. Emphasis has been placed on services which make the best possible use of existing resources of other child care systems, such as juvenile courts, day care agencies, public schools, maternal child health clinics, etc. The emphasis has been on developing preventive and early case finding services so that the need for inpatient services can be substantially reduced. The projects supported to date graphically demonstrate two major facts:

The first is the extent of the unmet need of services for emotionally disturbed and mentally ill children.

The second is the extent to which limited resources in the hands of community mental health centers can have a major impact on child mental health services being provided in a community.

3. Use of FY 1974 Funds

A minimum of $15 million (to continue existing projects and to initiate new projects) is required for fiscal year 1974. As I have just indicated, the initial projects reported in fiscal year 1972 and 1973 have amply demonstrated the value and should be continued. In adition, funds for new projects would allow communities to initiate programs in areas such as the following:

1. Provision of consultative, educational and supportive services to preschool and day care programs in both urban and rural poverty areas.
2. Utilization of specialized professional and paraprofessional mental health personnel in the children's wards of general hospitals.
3. Establishment of case findings, diagnostics and treatment programs in a selected number of juvenile institutions.
4. Organization of collaborative outreach services with public health agencies in areas of high social pathology.

All of the above types of programs will be developed by local community mental health programs in collaboration with other types of care-giving agencies.

Here again, we join with the American Association of Psychiatric Services for Children in its testimony. The issue is clear. In the face of the eloquence of your previous Reports (quoted above) and this committee's understanding of the child mental health needs in the United States, there is no need to repeat here, as we have in past testimony, the findings of the Joint Commission on the Mental Health of Children. We know you understand the problem. We are comforted that the needs of these children are safe with your judgments.

4. Manpower Training

We join with the American Association of Psychiatric Services for Children in their testimony on training. The Federal Government should not, as is suggested in the proposed budget, divest itself of so much human services training responsibility.

The future will need more manpower, not less, in the human services fields.

We do believe that all programs, including manpower training, need periodic evaluation and re-ordering based on findings. Therefore, we recommend that this committee review the major human services training programs that affect children. We suggest that this committee direct the National Institute of Mental Health, the Social and Rehabilitation Service and the Office of Child Development to provide your committee with in depth information within the next year with a preliminary report by January 1, 1974 for use in fiscal year 1975 planning.

The studies for your committee should include such information as: kinds of manpower, professional and nonprofessional, needed to continue the community mental health program with projections for manpower needed for 1976, 1981, 1982; evaluation of training, including the roles of different types of manpower training institutions; a rundown on the numbers and types of manpower trained to include analysis of geographical distribution of mental health manpower in different parts of the country; development of manpower after training and means of insuring maximally effective use of manpower following training, etc.

We appreciate the opportunity to give you our views.

And we appreciate all of your understanding and effort in the interest of America's children.

Thank you very much.

TESTIMONY SUBMITTED ON BEHALF OF THE AMERICAN ASSOCIATION OF PSYCHIATRIC SERVICES FOR CHILDREN, INC.

By Reginald S. Lourie, M.D., Medical Director of Hillcrest Children's Center, Washington, D.C.

Mr. Chairman, members of the committee, I appear before you today on behalf of the American Association of Psychiatric Services for Children. The Association is an organization of some 170 clinics and services delivering mental health services to children in need. We are here today to speak on behalf of the 10 million young people in this country who are in need of mental health services and who are the concern of this organization.

The 1969 report of the Joint Commission on Mental Health of Children produced helpful congressional action on a number of its recommendations. For example, in 1970, the 91st Congress added a new part F to the Community Mental Health Centers legislation authorizing the funding of community based facilities specifically for the purpose of providing mental health services to children. This authorization was in response to the fact that the centers were not doing an adequate job of serving the mental health needs of our younger population.

Two years ago, thanks to the leadership of this committee, Congress appropriated $10 million for children's mental health services. Last year, although the appropriation was vetoed by the President, $25 million was appropriated for the child mental health program. The Senate has passed, and I am sure the House will shortly, a 1-year extension of this program. We are asking you to repeat your appropriation of last year, to set aside $25 million for the child mental health program.

Many excellent projects have resulted from your earlier appropriations. In the first year of this program's operation, the National Institute of Mental Health received 136 applications of which 64 were approved. Those approved projects by themselves required $12 million but not all of that was available. $2 million of those approved projects were to have to wait until fiscal year 1973 for their funding. As of November of 1972, the National Institute of Mental Health had approved 11 new child mental health projects that would require $3.6 million of new moneys. These projects have remained unfunded in spite of their merit and in spite of the needs of our children, because the President's budget did not include any new moneys for them. The NIMH has informed us that many additional applications for part F funds have been submitted to the regional offices but were returned to the applicants because funds were not available for them. We hope that the Congress will see to it that funds are made available for the child mental health program and that the gains we have made by beginning this program in 1972 will not be lost. On the basis of need alone and as word of availability of help has spread, there have been an increasing number of new applications for child mental health programs—many of which should be approved. We hope that this committee will see to it that funds are made available for this purpose.

The projects that have resulted from the initial implementation of the legislation represent innovative treatment and preventive programs for our mentally ill children and youth. The report of the Joint Commission on Mental Health of Children provides ample testimony that the needs of these children are great and that dollars spent on their behalf not only mitigate the dreadful suffering undergone by these children and their families, but also result in actual savings to the Nation in terms of later treatment costs and manpower productivity. Our success rate is higher and the ultimate costs are lower if mental handicaps can be diagnosed and treated early in life; if preventive treatment programs can be begun sooner rather than later in communities where we know that much of the population is at risk; if we can tie early case-funding programs in with our educational, welfare, and rehabilitation system and thus avoid the fragmentation that frequently occurs among our service programs. These are the kinds of programs that need to be funded. These are the kinds of applications that are coming in.

But to put money into these new programs without the assurance of sufficient numbers of qualified personnel to staff them seems to us to be failing to face up to the realities of the situation. The service needs of our mentally ill children and youth can only be met by adequately trained manpower. We do not quarrel with the monies being spent for new career training in the mental health fields but we must emphasize the need for people to train the new careerists. We need trained psychiatrists, psychologists, and social workers to supervise the wide range of paraprofessional personnel who are beginning to make a significant contribution in our child mental health programs. We do not agree with the budget item that would eliminate support for our psychiatric residency training programs.

The administration testimony before this committee on the fiscal year 1973 budget estimated the manpower deficit at that time to be at 25,000 in the mental health field. What was not emphasized then and still is a major manpower deficit is the need for trained child psychiatrists. To cut back on our child psychiatric manpower training programs at this point in time appears paradoxical in light of the unmet staffing needs of our mental health facilities. There are only a

little over 1,000 accredited child psychiatrists in the country to meet the increasing needs of close to one half of the total population of this country—our children and youth. The psychiatric profession has demonstrated that 35 percent of all psychiatric residency training positions will be lost as a result of this action. Those of our clinics that are training centers for child psychiatry have indicated that a substantial number of their residency positions would be lost if this program were eliminated. They foresee the result as a drastic reduction in the quality and quantity of the mental health services they provide to children and their families. They foresee the need to shift to a fee for service basis if they are to survive which would substantially curtail their service to those who cannot afford to pay except in the relatively few fortunate clinics which have State support. It would be unwise to terminate this training program, including support for the staff to train the students, until alternate means of financing these positions are actually in place.

The administration's budget request also proposes a drastic reduction in the funds available to provide psychiatric training to undergraduate medical students as well as graduate training for those in pediatrics and the social work, psychologist, and nursing professions. The impact of these cuts would be to vastly reduce our capability to deliver front line mental health services to those in need. Our future physicians need the training to be able to identify high risk child patients early and to be able to treat them effectively. The capitation grants to the medical schools will not replace the monies earmarked for psychiatric training for medical students. Our medical schools are in no position to assume the funding of these programs today at a time when they are crying out for emergency funds so that they may keep open their doors. The size of our mental health manpower pool at every level would be sifinificantly diminished if these programs are abolished.

These are days of social turmoil when our children and youth are undergoing a period of unusual internal and external stress. We as a nation must be able to mobilize adequate resources to evaluate and guide them in their time of need. We ask that this committee commit the resources that will enable our child mental health programs to continue to expand. We ask that you fund part F of the Community Mental Health Centers at a level of $25 million and that you prevent the elimination of our mental health training programs by continuing to fund them. Failure to act now will mean that at a time when the need and the demand for such services is greatly increasing, the child mental health program in this country will suffer a severe setback.

Mr. LOURIE. I would like to comment on three aspects of the written material. First, in respect to child welfare: Child welfare services in the United States, as you know, are present in every county. They really represent the first bulwark against family breakdown and child breakdown in the United States. These agencies provide services that have to do with substitute parental care and supervision of children in foster homes. They deal with problems of abuse; they deal with problems of neglect, adoption, and so on.

The problems are increasing and not decreasing for reasons that are in the material that we presented for the record.

I would like to point out that since 1967, based on recommendation from your committee, the child welfare services appropriation has remained at $46 million, although the authorization was $110 million in 1967. In the 92d Congress, the authorization was raised to $196 million for 1973 to $211 million for 1974 and $226 million for 1975. It goes to $246 million in 1976 and $266 million for each year thereafter. We believe that the pressures on the child welfare agencies are going to be tremendously increased as the result of the changes that Congress made in the social services provisions under social security, that demands for service on child welfare agencies will increase markedly, as they have been.

There is now a closed end of $2.5 billion for the title IV–A, social services in the Social Security Act. Of those services, 90 percent have

to be provided for families who receive cash assistance. As a result, we think that the approximately 1 million children now served by the child welfare agencies will be tremendously increased because the child welfare programs deal not only with children from public assistance families, but they deal with children from families of any economic level. This has always been a program that required people to pay when they could. That takes in the whole range of middle-income families who cannot pay the full cost of foster care or adoption. We are asking that at least the appropriation go from $46 million to $110 million this year.

The second comment I should like to make has to do with part F of the Community Mental Health Centers Act. I should like to recall to this committee that in approaching the subject of child mental health in respect to the 1972 appropriation, this committee pointed out that the last Congress overwhelmingly passed legislation authorizing a program for child mental health services, and the report of the Joint Commission on Mental Health of Children convincingly tells us that this is where we should put our best efforts. The need for such services seems unquestionable.

The committee has included $10 million in the bill to get this important program started.

Then, in approaching the fiscal 1973 budget, which you gentlemen know better than we is still not with us, you looked at the experience of the National Institute of Mental Health, and you said in your report on H.R. 15417, that the budget did not reflect any increase in the current level of $10 million allocated to mental health of children under part F of the Community Mental Health Centers Act. Then you went on to point out that this needed to be increased, and you increased it and the Senate increased it; and as a result your recommended appropriation was $25 million. It is going to take at least $15 million to maintain what has already been started under that program. As Dr. Lourie will point out, there are tremendous demands beyond that.

We are urging that you at least stay with the figure that you and the Senate recommended.

Third, I want to comment very briefly on the issue of manpower training. We have no commitment on the fact that all manpower training programs forever should remain as they are. We have very clear understanding that any kind of program in this field needs constantly to be looked at. My own opinion is that it should not be done precipitously. I think one of the issues here is that with a great deal of suddenness we are knocking out manpower in the entire field of health, social welfare, and mental health. It is my recommendation that this committee direct the National Institute of Mental Health, the Social Rehabilitation Service, and the Office of Child Development to provide your committee with in-depth information on manpower problems and needs within this next year, with a preliminary report by January 1, 1974, which can be used in 1975 planning. I think that to decimate the manpower training without this kind of study would be a mistake. I think your committee should direct these organizations of government to provide you with such information on the kind of manpower that is needed to continue the community mental health program, and ask for projections into 1976 and 1981 and 1982, to ask

for evaluation of the training, including the roles of the different types of manpower training institutions.

You ought to get a rundown on the numbers and types of manpower that are trained. That ought to include an analysis of the geographical distribution of health manpower in different parts of the country.

There is a whole series of facts which has to do with the deployment of manpower after training. I think once we have that material put together, then we will have a basis for making changes that might be needed in the manpower program. Those are the comments I would like to make. I am sure Dr. Lourie has some brief comments to make.

Mr. PATTEN. Are you gentlemen related?

Mr. LOURIE. Yes, we are brothers.

Mr. PATTEN. Doctor, would you proceed?

STATEMENT OF DR. REGINALD S. LOURIE

Dr. LOURIE. It is a pleasure to appear again before this committee because it is in this room and with this committee that the concept of funding for child mental health as such originated. It was the first time in history that had been accomplished. It opened a new road. Into that road poured all sorts of services. Some of it is detailed in our submitted report for the record.

I am reminded of a story, because I know how well you like to illustrate points with stories, of the man who saw a sign in the hardware store that they were having a sale on powersaws. These saws could cut down 30 trees a day and were guaranteed to be good for 10 years. This fellow thought this was a wonderful way to clear the road he planned in back of his house. He bought one, brought it back. At the end of the day, he said to the salesman, "What you said about those powersaws is not really true. I worked all day long and I only got eight trees." The salesman said, "Let us see what you are doing with the powersaw." He pulls on the string and starts the motor, and the fellow says, "What is that noise?" [Laughter.]

Dr. LOURIE. Well, you pulled on the string, you started the noise, and that spread all over the country. Only what has happened is that the noise is quieting down because the source of support, the power for that saw that is cutting that road, is phasing out and not available. We would be very much hopeful that you would be reconsidering this item of $25 million for the child mental health services. I would like to emphasize that we are not just talking about child mental health services, because the Joint Commission in its findings—as you know, this was a congressionally authorized study carried out by the Joint Commission on the Mental Health of Children—the major finding was that you could not separate mental health from health, and you could not separate both of them from education, and you could not separate all three from the social and cultural forces that influence children and families. On that basis, this investment in child mental health services, clearing this new road, influences programs up and down the line, because it is inseparable from what our colleagues were talking about earlier today in relation to maternal child health services and the comprehensive health program for children and youth which is threatened by funds phasing out.

Mental health programs are built in for reaching out for the inner-city children and the rural areas. We get into day care with

mental health. We get into the courts. We get into probation. We are heavily involved in all the programs related to children, including education. So that the investment goes across the board in all these fields.

A word about training, I think, is essential, particularly in the child mental health field. Even though one of the bases for eliminating training support in the psychiatric area has been that 25,000 psychiatrists have been trained by this program, it is not true in the area of child mental health professionals. There are a little more than 1,000 accredited child psychiatrists in this country. The Joint Commission pointed out that there are at least 10 million children who need the services, of which only 500,000 were receiving services. This small core of trained child psychiatrists has the responsibility for the problems of children and youth making up between 40 and 50 percent of the population of this country. So from that point of view, it would seem shortsighted to close the door that has been open in the training of child psychiatrists.

It is the fastest growing subspecialty in the area of medicine, and in that sense it is being closed. A final word on the concept of child advocacy. I hope as we talk about it, we are not beating a dead horse. That was one of the major recommendations of the Joint Commission, which interestingly has had little support at the Federal level, but it has been picked up as a concept, as a partnership of services around the country. It is now in State laws, in local programs: it is spreading over the country. But without the kind of support at the top level of government that makes it possible to move in concerted appropriate ways that point the way for those parts of the country which have not responded. In other words, we are talking about a program, when we talk about child advocacy, that knows all the children; and at this point, we certainly don't know them. Most of them have their births registered, except those that are born in the communes these days. Then we lost sight of them except that the law says you have to produce them for school. Those are the most important years. We do not know where those children are.

Second, this child advocacy concept means we have to have the services to meet the needs that we get to know about.

Third, we need to have the children available to the services or the services available to the children, and insure that the children are served. I would hope that this child advocacy concept, the funds that were requested earlier to establish pilot child advocacy projects, could be reintroduced.

Mr. PATTEN. Thank you Doctor. We watch your work at Hillcrest with a great deal of interest. You know that.

TUESDAY, MAY 15, 1973.

CANCER RESEARCH

WITNESS

DR. MICHAEL SHIMKIN, PRESIDENT, AMERICAN ASSOCIATION FOR CANCER RESEARCH

Mr. PATTEN. Dr. Shimkin, president of the American Association for Cancer Research.

[The biographical sketch follows:]

Shimkin, Dr. Michael B. (oris). Professor of Community Medicine and Oncology, School of Medicine, University of California, San Diego; coordinator, area VII, California regional medical programs.

Born, Tomsk, Siberia, Oct. 7, 1912, U.S. citizen 1928. Married, 1938, to Mary North. 3 children. A.B., California, 1933; M.D., 1937. Resident, internal medicine, University of Texas, Galveston, 1937–38; Research Fellow, National Cancer Institute, Harvard, 1938–39. U.S. Public Health Service, assistant surgeon, 1949–50; medical director, 1950–63; retired, 1963; professor of medicine, Temple University School of Medicine, Philadelphia, 1963–69; chief, cancer biology, Fels Research Institute, Philadelphia, 1963–66; assistant vice-president for research, Temple University Health Sciences Center, 1966–69. School of Medicine, University of California, San Diego, Associate dean for health manpower, 1970–71; professor of community medicine and oncology, coordinator, California regional medical programs, 1969–present.

National Cancer Institute, Bethesda, Md., 1939–45, 1947–63. Assistant chief, Office of International Health Relation, U.S.P.H.S., 1945–46; director, Laboratory experience oncology and clinical professor of medicine (oncology), University of California School of Medicine, San Francisco, 1947–54; chief, biometry and epidemiology branch, National Cancer Institute, 1954–60; associate director for field studies, National Cancer Institute, 1960–63.

Consultant, Medical Research Mission, Office Science Research and Development, U.S.S.R. 1943–44; United National Relief & Rehabilitation Administration, 1944–45; Public Health Officer, U.S. Army, 1944–45; adviser, U.S. Delegation International Health Congress, World Health Organization, 1946. Scientific Editor, J. National Cancer Institute, 1955–60. Member and chairman, American Cancer Society Committee on Lung Cancer, 1955–57, Breast Cancer, 1960. Editor, Cancer Research, 1964–69. Consultant, National Research Council, 1963–71; Food and Drugs Administration, 1970–71; U.S. Department of Agriculture, 1970–71; National Cancer Institute, 1963–present; State of California Department of Public Health, 1969–73. Associate editor, Cancer Research, 1969–present.

Diplomate, American Board of Internal Medicine, 1950; American Board of Preventive Medicine, 1958. Member, American Society of Experimental Pathology, Society of Experimental Biology & Medicine; Fellow, American College of Physicians, American College of Preventive Medicine, College of Physician of Philadelphia. Board of Directors, American Society of Clinical Oncology, 1970–73; vice-president, American Association of Cancer Research, 1972–73.

Contirbutor to technical journals, over 200 publications on clinical and laboratory cancer research, mammary, pulmonary and testicular tumors in mice, biologic effects of carcinogens, bioassay, pharmacology, experimental clinical chemotherapy of cancer, cancer statistics, international aspects of medicine, especially U.S.S.R. Author, "Science and Cancer," 1964.

Mr. PATTEN. Doctor, we will be very pleased to hear from you. Will you proceed?

Dr. SHIMKIN. Thank you, Mr. Chairman. Mr. Chairman and members of the committee:

I am Michael Shimkin, professor of Community Medicine and Oncology at the University of California in San Diego. I appear before the committee as the incumbent president of the American Association for Cancer Research.

The association was founded in 1907 and today has about 2,000 research scientists as members; it is the oldest, largest, and most prestigious organization of its kind in the world. It publishes Cancer Research, one of the prime outlets of cancer research communications.

At its 64th annual meeting in Atlantic City on April 12, 1973, the association unanimously endorsed a policy statement which addresses itself to the expanded cancer program authorized by Congress and the President in the National Cancer Act of 1971.

The policy statement reads as follows:

The American Association for Cancer Research includes in its membership a high proportion of the total research force of the United States that is involved in work leading to the solution of the cancer problem.

The association gratefully acknowledges the national confidence in cancer research expressed in the Cancer Act of 1971. It accepts the responsibilities implied in this confidence.

The association wishes to emphasize that problem-oriented research directed against cancer will prosper to the degree that it can draw on the nutrient soil of basic biological research. Research investment in cancer alone, without adequate investment in broad biologic research, will be less productive.

Truly original discoveries in science are often unpredictable and cannot be conveniently programed. A sound research strategy must carefully balance centrally directed research with studies originating with the individual scientist.

The basis of scientific discovery is the prepared mind confronted by new or unanticipated findings. Such minds are most likely to be found among young scientists. Moreover, significant shortages have been clearly identified in several critical manpower areas. A cancer research program devoid of funds that can be applied to training is unsound, not only for the best development of new talent, but for technical capacities to translate new discoveries into improved care and treatment of the cancer patient.

The American Association for Cancer Research therefore recommends the following steps to the responsible Federal fiscal decisionmakers and administrators of the national cancer program:

(1) Prompt completion of review and prompt implementation of the national cancer plan.

(2) Prompt release of authorized funds for cancer research for the present and future years.

(3) Continued assignment of an adequate portion of the total available funds to training in critical cancer research areas.

(4) Utilization of the peer-review system for the allocation of National Cancer Institute funds to assure high quality of both programed and individual cancer research.

(5) Reallocation of available funds to increase significantly the support of individual research projects, including competing initial applications.

(6) Augmentation of the number of scientific staff positions at the National Cancer Institute commensurate with its expanded responsibilities.

The association statement takes a positive position in regard to the expanded national cancer program. We have confidence in it and wish to assist in making it a success. However, the association also expresses concern regarding certain administrative policies that are being applied to biomedical research, of which cancer is but one application. I wish to elaborate briefly on two points.

The first point focuses on the threatened training programs.

Training is as essential for research as it is for football. The value of training for football is not measured by the number of active football players at any given time, but on the quality of the championship teams. We will not be able to compete effectively against the unknown unless we continue to encourage young men and women to enter biomedical research, by offering training and fellowships. This is a must if we are to win the cancer campaign.

The second point focuses on a proper division of resources between coordinated and investigator-initiated research, which in part is manifested by allocations to contract-supported programs and programs supported by grants. Cancer, despite its great advances, is still primarily in the research area, where all the skillful foresight available to man will not be able to predict some fortuitous discovery, probably by some unknown but well-trained young man or woman.

The policy committee of the association has examined the fiscal year 1974 budget request for the NCI. We believe that the amount requested

for research grants is inadequate. We would like to support an overall figure of $550 million. This represents $50 million more than the President's budget of $500 million. It is $90 million less than the authorization approved by the House and Senate, and signed by the President, in the National Cancer Act of 1971.

One reason for asking for the lower figure is the delay in the national cancer program, but we had hoped that the pace would have been a little faster from that day. The American Association for Cancer Research recommends that all of the additional $50 million be allocated specifically for grants. This will allow payment of 42 percent of already reviewed and approved grant requests rather than the 23 percent that will be possible in the $500 million budget. This, we believe, would balance the contract programs with a more proportionate, continuing infusion of new ideas from individual scientists in the field.

I thank you for this opportunity to appear before you.

Mr. PATTEN. Doctor, as you know, we could have a million questions for you but we have a time limitation. Thank you ever so much. You have a terriffic background. I think you are the only fellow I know who was born in Siberia.

Dr. SHIMKIN. I am glad I am not there.

I might say we have a strong program with the U.S.S.R. in a mutual exchange of fellows and programs and groups of people are going there all the time.

Incidentally, we got a few interesting bits of information that might help us in the program. One of the reasons that the Russians are very strong in this cancer program is because they look at what the United States is doing, and saying, we must have the same.

Mr. PATTEN. Thank you, Doctor.

TUESDAY, MAY 15, 1973.

DIABETES

WITNESSES

CARL STENZLER, GOVERNOR'S COMMONWEALTH OF PENNSYLVANIA COMMITTEE ON DIABETES

DR. JOSEPH F. MORRISON, CHIEF OF OPHTHALMOLOGY, MERCY HOSPITAL, MEMBER OF GOVERNOR'S COMMITTEE ON DIABETES AND BLINDNESS OF THE COMMONWEALTH OF PENNSYLVANIA

Mr. PATTEN. Dr. Carl Stenzler, Governor's Commonwealth Committee on Diabetes, Harrisburg, Pa.

Mr. STENZLER. Thank you, gentlemen. I apologize. I am new. I was not aware that I should have copies of what we are going to say. Through the good offices of a friendly Senator I had four copies xeroxed. They are rough. Additional testimony, with your permission, will be submitted later.

Mr. PATTEN. Yes, and it will be received and placed in the record.

Mr. STENZLER. I want to make a correction. I am a layman, I am not a doctor.

My name is Carl Stenzler. I am a concerned layman, a diabetic and the chairman of the Commonwealth of Pennsylvania Committee on Diabetes and Blindness. I have a longstanding interest in needed diabetes and blindness research and education.

A position paper describing the Commonwealth of Pennsylvania committee origin, function, and membership is offered into the record.

I would like to introduce my colleague, Dr. Joseph Morrison. He is an ophthalmologist, and he comes from Wilkes-Barre, Pa. I asked Dr. Morrison specifically because the committee membership goes from world famous to locally respected. I wanted a man whose roots are close to people, because diabetes is impacting far beyond most people's comprehension. I am going to ask Dr. Morrison to lead off with his comments.

Mr. PATTEN. May I say this? We will insert Mr. Stenzler's statement in the record for the benefit of all Members of Congress.

[The statement follows:]

Fifty years ago, the world applauded the discovery of insulin as one of the great medical events of the 20th century. Prior to this discovery, the average lifespan of a diabetic was 4 to 6 years after onset of the disease. Aided by insulin therapy and controlled diet, diabetics would be able to live normal, useful lives. They married, had children, and experienced the responsibilities of family and work.

Twenty years later, hope for normal life began to fade. Surviving diabetics developed serious vascular problems: limited vision or blindness, heart and kidney disease, stroke and brain damage.

In recent years, we have come to understand diabetes as a far more complex disease than was originally conceived. Since 1942, the United States Public Health Service has recorded frightening increases in diabetes-caused morbidity and mortality. For, not only does the disease impair the body's ability to utilize carbohydrates—once thought to be the only mode of attack and still its most apparent manifestation—the disease also involves fat and protein metabolism and causes insidious angiopathy, the premature breakdown of the large and small blood vessel system. This factor destructs virtually every part of the body.

Conservatively estimated, there are currently more than 5 million diabetics in the United States. It is estimated another 5 million Americans will develope diabetes during their lifetime because of a genetic predisposition. Each year, an additional 325,000 persons become diabetic. Eighty percent of these persons are over 40 years of age. About 70 percent of these diagnosed diabetics suffer from one or more additional chronic conditions. Large scale studies funded by the United States Health Service show aging and heart disease as cause or effect of diabetes. The longer one lives the greater is the probability of developing "mature" diabetes. Substantial numbers of heart patients, without manifestations of diabetes, have been found with abnormal sugar tolerances.

In 1935, 500,000 diabetics were recorded in the United States. In 1967 the American Diabetes Association Fact Sheet estimated 1 out of every 20 Americans was a diagnosed, undiagnosed, or potential diabetic. This figure is considered conservative.

One out of every four Americans—50 million people—or 25 percent of the population, carries the recessive gene that transmits the disease to children or grandchildren in his genttic makeup (A.D.A. Fact Sheet, 1967). By the year 2000 an additional 10 million persons are estimated to become diabetic.

In 1969, in a study outlining the seriousness of the disease, the U.S. Department of Health, Education, and Welfare cited diabetes as the third leading cause of blindness and the eighth cause of death in the United States. Subsequent research has placed diabetes as the first cause of adult blindness, and as the seventh cause of death. Independent agencies list diabetes as the fifth cause of death. It is also reported diabetes is the first cause of male impotence and a serious cause of female sexual incompetence; the first cause of pregnancy loss.

A U.S. Public Health Bulletin (*Diabetes Control*, USPHS publication No. 506, 1969, page 3.) identified diabetes as a major cause of cardiovascular-renal impairment: "Since most diabetics die because of cardiovascular-renal diseases, the life shortening effects of diabetes may be seen as more threatening than might appear on the surface. Current research suggests a relationship between hyperglycemia and arteriosclerosis, atherosclerosis, and coronary thrombosis—all among the leading causes of death. Inherent blood-vessel degeneration leads to premature heart disease which reduces the lifespan of the diabetic to an average 18.1 years after onset or two-thirds that of the general population. (appendix 9) "Experience," Joslin Clinic, Boston, Mass.

This same study noted the Nation's economy sustains at least a $2 billion cost annually that is attributable directly and indirectly through lost revenues, medical expenses, and lost man-hours to the effects of diabetes. Each year 500,000 people are forced to withdraw from the normal activities of work, housekeeping, and education. The documentation for the above can be found in Diabetes Source Book, U.S. Public Health, 1969. Portions of this text are appended to my testimony.

Since the discovery of insulin the usual course of diabetes has changed and may be divided into two stages:

1. During the first of these, the disease is relatively benign and ordinarily for a decade or longer only the acute complications limit normal activity.

2. The second stage is marked by degenerative processes in which blood changes are the most prominent. Capillary lesions with ultimate blindness and renal failure and arteriosclerosis occur in diabetic patients of all ages [Diabetes Mellitus, vol. 1, p. 63, Robert C. Hardin, M.D., Professor and Dean of Medicine, State University of Iowa College of Medicine, Iowa City, Iowa.]

How can a doctor tell a "healthy" patient that he is a candidate for premature death or blindness or heart disease some 15 or 20 years after he became diabetic? Most didn't!

The National Institutes of Health, The American Diabetes Association, and the World Health Organization resurrected a hope never fullfilled: "diabetes could be controlled with insulin, diet, and discipline"; "a normal life was assured." While doctors talked to doctors about the growing devastation that is diabetes, patients were screened from truth, knowledge, and understanding their disease. You and I, the Congress of the United States, and the general public were insulated from learning the impact of diabetes on virtually all body systems.

This doctrine of well-intentioned hoax is accepted worldwide. The result: People are indifferent; legislators are apathetic; funding for research and preventive therapy is minimal. For 50 years diabetes has been a stepchild of decisionmakers. It is time we . . . you . . . looked at the problem for what it is—one of the most serious, long-term health threats man has ever known.

Fifty years after the dischovery of insulin we have no answers to: What causes diabetes? Why hastened vascular degeneration? What are the causes of retinopathy, nephropathy, neuropathy? Why do so many with heart disease come down with diabetes? Why do so many with diabetes come down with heart disease? Why does a diabetic age more rapidly than a nondiabetic? Why are children born of diabetic mothers malformed and brain-damaged? Why does maternity precipitate diabetes in one of every 300 women? Why does diabetes attack the central nervous system, the peripheral nervous system?

There are no acceptable answers to these questions. And more tragic is the fact there is nothing we can do about stopping the relentless progression of the disease.

This year, the administration recommends reduced expenditure for program for diabetes for fiscal year 1974 to $7,100,000, an estimated decrease of $1,082,000 from the funding level for fiscal year 1972. NIAMDD, 1973 Special Report on Diabetes, which is appended.

In testimony prepared by the National Institute of Arthritis, Metabolism, and Digestive Diseases for hearing before the House Subcommittee on Appropriations the administration justified this reduction with the false statement: "the discovery of insulin" has "enabled most diabetics * * * (to) keep their disease under control, (to) enjoy a normal home life and family life, and (to) work with only minor complications."

In this limitation of diabetes to the overt, benign state, the administration has consciously ignored the terrible impact of vascular degeneration on diabetics of all ages at all times in their lives. I doubt whether any doctor in or out of NIH can support this contention which was archaic 30 years ago; that denies the validity of virtually every research funded by NIH or conducted independently since 1950; that contradicts every publication issued by the U.S. Public Health Service since 1960.

The facts cited in my testimony publicly challenge the administration position. The full impact of diabetes and the distortions of fact now being perpetuated must be exposed. Not to do so is to question the integrity of the highest and most respected agency for scientific research in the United States—The National Institutes of Health. In defense of a reduced budget can one in good conscience ignore 25 years of scientific research?

I have been authorized by the director of the National Institute of Arthritis, Metabolism, and Digestive Diseases to say "he agrees with my general thesis."

RECOMMENDATIONS

1. Because diabetes is a systemic disease that is a major contributor to the disciplines of each Institute: I recommend this Appropriations Committee block out of existing National Institute funds $61 million for comprehensive, broad-based, cooperative diabetes research to be performed singularly and collectively by the respective concerned Institutes.

Agency	*Requested funding*
National Eye Institute	$5,000,000
Develop dogs for research [1]	1,000,000
National Institute of Arthritis, Metabolism, and Digestive Diseases	
(a) Diabetes	4,000,000
(b) Kidney	7,000,000
(c) Endocrine	6,000,000
(d) Nutrition	3,000,000
Subtotal	20,000,000
National Institute Neurological Diseases	10,000,000
National Heart and Lung Institute	15,000,000
National Institute of General Medical Sciences	5,000,000
Training: Doctor education, patient education	2,500,000
Planning: Health care, health delivery at the local level	2,500,000
Stopgap needs for diabetes research and education	61,000,000

[1] Virtually all diabetic eye patients receiving available therapy are guinea pigs. The number blinded while receiving therapy is considerable.

2. Because diabetes is complex and diverse, affecting virtually every part of the body, placing in jeopardy the life potential of unborn children and grandchildren to whom we owe a responsibility; instigating the insidious destruction of all major body system.

Because the existing mchanisms within the NIH are unable to cope with a systemic problem of monumental proportions, I recommend:

The Director of the NIH and/or the Under Secretary for Health of the Department of HEW working within the existing legislative prerogatives granted the executive branch of Government.

Preempt within 30 days a National Diabetes Commission

This National Diabetes Commission should represent the major threats inherent in the syndrome: eyes, heart, diabetology, kidneys, endocrinology, nutrition, neurologic, vascular, genetic—in addition there should be two concerned laypeople with comprehensive knowledge of the disease and its problems.

Two Chairmen should be designated by the President of the United States; one to be drawn from the doctors, the other from lay representatives.

The Commission will function as a planning body. Working with involved Directors of Institutes they will design a blueprint for effective cooperative action by the Institutes. Responsibility for coordination will be assumed by the Commission which will report to the Director of NIH and the Under Secretary for Health, HEW.

Such plan should be complete at the end of 6 months or in time for 1975 budget considerations.

Funding for the Commission should be derived from the existing agencies administering comprehensive health planning grants. The cost involved should not exceed $150,000.

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Diabetes: A definition.
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APPENDICES

1. NIAMDD 1973 Special Report on Diabetes.
2. Position Statement, The Commonwealth of Pennsylvania Committee on Diabetes and Blindness.
3. List of Commonwealth committee membership.

4. Rebuttal letters of NIAMDD 1973 Special Report on Diabetes:
   (*a*) Thomas Beherndt, M.D., Professor of Opthalmology, Jefferson Medical College, Philadelphia.
   (*b*) Harold G. Scheie, M.D., chairman and director, Scheie Eye Institute, Professor of Opthalmology, University of Pennsylvania School of Medicine, Philadelphia.
   (*c*) Robert F. Bradley, M.D., medical director, Joslin Clinic, Boston, Mass.
   (*d*) Christian R. Klimt, M.D., Dr. P.H., professor and director, Division of Clinical Investigation, University of Maryland School of Medicine.
5. Diabetic Retinopathy: Facts and figures published by the Scheie Eye Institute, Philadelphia.
6. Chapters from the to be published Commonwealth of Pennsylvania Committee report—Diabetes: The Disaster Syndrome.
   1. Diabetes Millitus and Degenerative Vascular Disease by Robert F. Bradley, M.D.
   2. Kidney Disease in Diabetes, by Arnold S. Relman, M.D., chairman of the department of medicine, University of Pennsylvania.
7. Four random reports on diabetes published by the Department of HEW.
8. National Society for the Prevention of Blindness report, "prevelance legal blindness in the United States."
9. Joslin Clinic report—Average Duration of Life of Diabetic After Onset.

DIABETES MELLITUS—THREAT TO A NATION

What is diabetes?

Diabetes is a systemic disease that can and does erode virtually every part of the body.

Diabetes is a vast, complex, little-understood syndrome or series of events, beginning with a "cause" that is not understood . . . moving to a stage, "overt diabetes" or "visible diabetes" which lasts for a decade or more when the disease is responsive to applied controls such as insulin, diet and discipline . . . during this apparently benign period the small and large blood vessels degenerate . . . for this quiet insidious destruction of the vascular system there is no known cause and no effective therapy . . . other than luck. Some doctors say "control" will retard: others deny this thesis . . . on a day, usually without warning, the disease is no longer benign . . . "mature diabetes," with blood vessel damage is clinically detectable. The degree of severity will range from mild to malignant . . . The circulation is broadcasting catastrophe to virtually every part of the body . . . eyes, heart, kidneys, brain, lower extremities, nervous system, and vascular system, male and female sex competence, maternity, child-bearing ability of diabetic mothers, and children of diabetic mothers, who too frequently are born malformed and/or with brain damage. . . . Considering just the eyes and heart/diabetes is already the largest cause of new adult blindness as well as a major contributor to deaths listed as heart disease but caused by diabetes. Both major tragedies are increasing at an alarming rate.

For the entire generation of health indignities, there are no preventive, remedial or arresting therapies.

How many Americans are affected?

Every diabetic is a candidate for one or several of the diabetes-caused complications; the disease will cause one or several disaster complications for 50 percent of those who live with disease for 10 to 15 years and for 95 percent of those who survive 25 years.

10,000,000 diabetics are in jeopardy of blindness, heart disease, kidney failure, stroke, vascular degeneration, hypertension, nervous system breakdown, sexual incompetence, amputation.

Prior to the discovery of insulin, almost ⅔ of all diabetics died in coma. Now they live long enough to become partially or totally blind and die from "heart disease."

STATEMENT OF DR. JOSEPH M. MORRISON

Dr. MORRISON. I am Joseph F. Morrison, physician from Wilkes-Barre, Pa. I am chief of ophthalmology at Mercy Hospital, Wilkes-Barre, and a member of Governor Shapp's committee on diabetes and blindness of the Commonwealth of Pennsylvania.

My presentation will deal with diabetes mellitus. In a brief general discussion of the disease and more detailed discussion of the very serious eye complications and blindness which results from diabetes.

Diabetes mellitus is a complex metabolic disorder characterized by a relative or absolute insulin dificiency and other unknown factors and as a result the body is unable to metabolize carbohydrates normally. The carbohydrate accumulate in the blood in the form of glucose and high concentration of glucose overflow in the urine. Abnormal carbohydrate metabolism in the course of time becomes associated with derangement of fat and protein metabolism and cardiovascular disease.

The main complications of diabetes are:

1. Cardiovascular disease involving the arteries as well as the smaller arteries and arterioles. The disease affects the coronary arteries of the heart and cerebral vasculature; the vascular system of the kidney and the eye.

2. The diabetic kidney: Diabetes causes marked changes in the vascular system which results in impaired kidney function (dilatation of the peripheral capillary loops; involvement of basement membrane and epithelial cells).

3. Eye complications:

1. Blindness is the most feared and distressing problem that patients must face. How often is the question asked of the physician "Doctor, will I go blind"? Diabetes causes severe and irreversible disease involving the retina; referred to as diabetic retinopathy.

It is unfartunate to report that diabetic retinopathy ranks No. 1 as the cause of blindness. Glaucoma and cataracts are the No. 2 and No. 3 cause and both are preventable. Senator Richard S. Schweiker reported that "a study by the Harvard School of Public Health prepared in September 1971 estimates that compared to the then current 154,700 persons blind from diabetic retinopathy in the year 2000 a staggering 573,500 will be blind from the disease. This figure is greater than the number blind from all causes today.

Surveys conducted by the Bureau of Census within the past few years have uncovered approximately 2,400,000 persons in whom a diagnosis of diabetes has been established and estimate on the basis of 200 million population there are possibly a million and a half undiagnosed diabetics.

Progress is being made in the treatment of diabetic retinopathy.

Your committee is to be complimented for the support given to the National Institutes of Health and in particular to Dr. Carl Kuppfer, Director of the National Eye Institute.

My recommendation would be the creation of a National Health Commission on Diabetes. The primary purpose of this Commission would be to:

1. Direct the research to determine the primary cause and nature of diabetes.

2. To aid in improving our method of treating the many complications of diabetes.

3. To inform the public of the serious nature of diabetes and to aid in screening test to diagnose unknown diabetics.

Mr. MICHEL (presiding). Is there anything else you wish to add?

Mr. STENZLER. I would like to read a definition of total diabetes. Most descriptions of diabetes do not identify all events experienced by a diabetic.

This definition is the result of discussion with members of the Governor's committee, I would like to explain—this Commonwealth of Pennsylvania Committee is not a State body in the pure sense of the word. The appended position paper identifies origin, purpose, and structure.

Let me go on with a description of the problem.

Diabetes is a vast, complex, little-understood syndrome or series of events, beginning with a "cause" that is not understood, moving to a stage, "overt diabetes" or "visible diabetes" which lasts for a decade or more when the disease is responsive to applied controls such as insulin, diet, and discipline—during this apparently benign period, the small and large blood vessels degenerate—for this quiet insidious destruction of the vasular system there is no known cause and no effective therapy—other than luck. Some doctors say "control" will retard; others deny this thesis—on a day, usually without warning the disease is no longer benign—"mature diabetes," with blood vessel damage is clinically detectable.

The degree of severity will range from mild to malignant—the circulation is broadcasting catastrophe to virtually every part of the body—eyes, heart, kidneys, brain, lower extremities, nervous system and vascular system, male and female sex competence, maternity, child-bearing ability of diabetic mothers and children of diabetic mothers who too frequently are born malformed and/or with brain damage—considering just the eyes and heart, diabetes is already the largest cause of new adult blindness as well as a major contributor to deaths listed as heart disease but caused by diabetes. Both major tragedies are increasing at an alarming rate.

For the entire generation of health indignities, there are no preventative, remedial or arresting therapies.

What this means is 10 million diabetics are candidates for one or several of the diabetes caused complications; 50 percent of those who live with the disease for 10 to 15 years, and 95 percent of those who survive 25 years are in jeopardy of blindness, heart disease, kidney failure, stroke, vascular degeneration, hypertension, sexual impotency, and amputation. Prior to insulin, two-thirds of all diabetics died in coma. Now they live long enough to become partially or totally blind and die from heart disease. Fifty years ago diabetes affected few people. Fifty years later, 5 percent of our population are diagnosed, undiagnosed, or potential diabetics.

Insulin extended the average life of a diabetic after onset to 18 years. Long enough to bear children, long enough to develop blindness or heart disease or any of the multitude of systemic problems. The documentation is voluminous. Every paper issued by the National Institute of Health since its creation in 1950 stated and restated the problem.

The model reporting area for blindness proceedings of the 1968 conference published by U.S. Public Health Service, appendix 7–4 identifies diabetes as the first cause of blindness in the 40- to 60-year age group, as the second cause for 30- to 40-year age group and as the fourth cause of blindness for those over 60. The tragedy is there is no therapy that is remedial.

During the 50 years that has gone by the problems of the vascular degeneration have become apparent. Seventy-five percent of those with diabetes die from cardio-renal vascular causes, 52 percent die from heart disease. There is nothing that can be done to stop it. There is no

therapy, and there are no answers. Today there are many questions. What causes diabetes? What hastens vascular degeneration? What causes blindness? What causes kidney failure which kills approximately half the juveniles 10 years after onset?

Neuropathy is a problem affecting the central nervous system. It renders 50 percent of the diabetic males impotent. It renders the same number of female diabetics incapable of completing a sex act.

No one has ever talked about what neuropathy does to family structure. Why do so many with heart disease come down with diabetes? The same factors involved in heart disease are common to diabetes and vice versa, the one difference being that in the diabetic the degeneration of the large and small blood vessels is hastened and results in premature death.

Diabetes is the first cause of premature death from heart disease in the United States, in the world, because it is a worldwide problem.

Why does a diabetic age more rapidly? Nobody knows. Why are children born of diabetic mothers malformed and brain damaged? Why does maternity precipitate diabetes in one of 300 women who go in for child-bearing?

Why does it attack the Central nervous system? There are no acceptable answers. Yet this year the administration reduced expenditure for programs for diabetes for the fiscal year 1974 to $7,100,000, an estimated decrease of $1,082,000 from the funding level of fiscal 1972. In testimony prepared by the National Institute of Arthritis, metabolism and digestive diseases for hearing before this committee, the administration justified this reduction with the false statement that the discovery of insulin has enabled "most diabetics to keep their disease under control" and "to enjoy a normal home and family life and to work with only minor complications." In this limitation of diabetes to the overt benign state, the administration has consciously ignored the terrible impact of vascular degeneration on diabetics of all ages, at all times in their lives. I doubt whether any doctor in or out of NIH, can support this contention that was archaic 30 years ago, that denies the validity of virtually every research funded by NIH or conducted independently since 1950, that contradicts every publication issued by the U.S. Public Health Service since 1960.

Mr. PATTEN. It was probably not prepared by a doctor.

Mr. STENZLER. The facts cited in my testimony publicly challenge the administration position, the full impact of diabetes and the distortions of facts must be exposed. Not to do this is to question the integrity of the highest and most respected agency for scientific research in the United States, the National Institutes of Health. In defense of the reduced budget, can one in good conscience ignore 25 years of scientific research and several million deaths as well as several million blind? I have been authorized by the Director of the National Institute of Arthritis, Metabolism, and Digestive Diseases to say he agrees with my general thesis. These are recommendations, because diabetes is a systemic disease that is a major contributor to the disciplines of each Institute. I recommend this Appropriation Committee block out of existing National Institute funds $61 million for comprehensive, broad-based, cooperative diabetes research to be performed singularly and collectively by the respective concerned Institutes. The National Eye Institute, $5 million. A subcaption,

"Develop Dogs for Research," $1 million. Retinopathy has never been reproduced in the laboratory, which means anybody who undergoes the treatment is a guinea pig. I would hate to estimate the number who have been made blind while seeking to avoid becoming blind.

The National Institute of Arthritis, Metabolism, and Digestive Diseases is a catchall. In this Institute are found diabetes, kidney disease, endocrinology, and nutrition. All are pertinent to diabetes. All should be subsidized for individual and cooperative research. The sums recommended are: Overt diabetes, $4 million; kidney disease, $7 million; endocrinology, $6 million; nutrition, $3 million—a total of $20 million for the National Institute of Arthritis. The National Institute of Neurological Diseases and Stroke, $10 million. In their testimony before this committee they have never so much as dignified diabetes by name. Yet 50 percent of the diabetics are going to develop neuropathy in 10 to 15 years. The National Heart and Lung Institute, the national heart bill was passed without mentioning the word "diabetes." When you talk to the doctors they say: "But metabolism is in there." Diabetes is a metabolic problem, but metabolism is not diabetes.

The point is that, roughly, 250,000 to 300,000 people die each year from "heart disease," but the underlying cause is diabetes which began 10, or 15, or 20 years prior and which hastened the degeneration of the large arterial system. I recommend $15 million for diabetes/heart research.

The National Institute of Medical Sciences—the genetics of diabetes which are not understood, should be a mandated study. The American Diabetes Association estimates 50 million carriers. In other words, one out of very four Americans is a carrier. We do not understand what is inherited. We do not understand the relationship between gentics and environment. We do know diabetes is increasing 9 percent a year. For the study of genetics it is recommended the Institute earmark $5 million.

Doctors must be taught to wisely educate their patients to understand their disease.

Patient education: It is pathetic how little diabetics know about themselves, their disease, or how to cope with it. Diabetes is a discipline that you accept and understand, and if you do not, the problems are exaggerated.

The second part of this recommendation is: because diabetes is complex and diverse, affecting every part of the body, placing in jeopardy the life potential of children and grandchildren to whom we owe a responsibility, instigating the insidious destruction of all major body systems; because the existing mechanisms within the NIH are unable to cope with a systemic problem of monumental proportions, I recommend the Director of the NIH and/or the Under Secretary of Health for the Department of Health, Education, and Welfare, working within the existing legislative prerogatives granted to the executive branch of Government; they preempt in 30 days a National Diabetes Commission.

This National Diabetes Commission should represent the major threats inherent in the syndrome—eyes, heart, kidneys, endocrinology, nutrition, neurologic, vascular, genetic. There should be two concerned lay people with comprehensive knowledge of the disease and

its problems. Two chairmen should be designated by the President of the United States, one to be drawn from the doctors, the other from lay representatives. The Commission will function as a planning body, working with involved directors of institutes, and design a blueprint for effective cooperative action by the Institutes. Responsibility for coordination will be assumed by the Commission, which will report to the Director and or the Under Secretary of HEW. Such plans should be complete at the end of 6 months or in time for the 1975 budget considerations. Funding for the Commission should be derived from the existing agencies, and the cost should not exceed $150,000.

I offer into the record the 1973 Special Report on Diabetes which was prepared for the Appropriations Committees by the Director of the National Institute of Arthritis, Metabolism and Digestive Diseases.

I offer into the record letters of rebuttal to the 1973 Report on Diabetes from: (1) Thomas Behrendt, M.D., Professor of Opthalmology, Jefferson Medical College, Philadelphia, Pa; (2) Christian R. Klint, M.D., Dr. & P.H., Professor and Director, Division of Clinical Investigation, University of Maryland School of Medicine, Baltimore, Md.; (3) Robert F. Bradley, M.D., Medical Director, Joslin Clinic, Boston, Mass.; (4) Harold G. Scheie, M.D., Professor of Opthalmalogy, University of Pennsylvania School of Medicine; Chairman and Director, Philadelphia, Pa., Scheie Eye Institute, Philadelphia, Pa., Richard H. Schwarz, M.D., Professor of Obstetrics and Gynecology, Director of the Jerrold R. Golding Division of Fetal Medicine, University of Pennsylvania School of Medicine.

Additional rebuttal will be found in 2 chapters from the to be published Commonwealth Committee report: Diabetes: The Disaster Syndrome, Appendix 6–1, Diabetes Mellitus and Degenerative Vascular Disease by Robert F. Bradley, M.D., Appendix 6–2, Kidney Disease in Diabetes by Arnold S. Relman, M.D., Chairman, Department of Medicine, University of Pennsylvania. The administration testifies against itself in the U.S.P.H. statements I offer into the record, "Diabetes Control, U.S.P.H. publication No. 506, revised 1969; Diabetes Source Book, 1969; Diabetes Fact Book, 1962; The Model Reporting Area for Blindness—Proceedings of the 1968 Conference Private Agency rebuttal of the Administration Posture is evident in statements by the National Society for the Prevention of Blindness and the Joslin Clinic. The National Society established a 1300 percent increased—1940 to 1962—"legal blindness" caused by diabetes. The Joslin Report focuses on the limited life expectancy after onset for an average diabetic.

[The material has been received and will be held in the Committee files for future reference.]

TUESDAY, MAY 15, 1973.

GENETIC DISEASE RESEARCH

WITNESS

RUTH Y. BERINI, EXECUTIVE DIRECTOR, NATIONAL GENETICS FOUNDATION, INC.

Mr. PATTEN. Our next witness is Mrs. Ruth Y. Berini, executive director, National Genetics Foundation, Inc.

You may proceed, Mrs. Berini.

Mrs. BERINI. Mr. Chairman, I am pleased to testify before you and the members of your committee on behalf of the budget of the National Institute of General Medical Sciences. As the executive director of the National Genetics Foundation (NGF), I will endeavor to discuss the genetic disease problem from the vantage point of my 20 years' experience in dealing with families afflicted with these tragic disorders.

Genetic diseases are a major public health problem and the most ubiquitous of all human maladies. Scientists estimate that every human being carries from six to 10 defective genes which could be expressed as serious or lethal illness in future children. They conservatively estimate that 15 million Americans suffer from a genetic disorder. One of every three admissions to a children's hospital is for a genetic problem; a recent study showed 40 percent of infant mortality due to genetic illness; 25 percent of all beds in institutions for the handicapped are for those confined with a hereditary defect. Approximately 2,000 genetic diseases have already been identified. Some, such as mongolism, cystic fibrosis, muscular dystrophy, Huntington's chorea, are well known but not recognized by the average individual as being hereditary. Many forms of blindness, deafness, retardation, crippling disorders are passed through the genes from generation to generation. Furthermore, genetic components are also strongly implicated in some of man's most common afflictions such as diabetes, high blood pressure, schizophrenia, heart disease and some forms of cancer.

Since the mid-1950's research in human genetics has surpassed all other investigative areas in monumental scientific advancement. The breakthroughs at the fundamental cellular level, several of which earned our American scientists Nobel prizes, have been applied directly to human disease. Today over 50 genetic disorders can be detected before birth. More than 60 metabolic diseases like PKU are amenable to treatment. We have carrier tests for 60 diseases which can identify the health individual who may be carrying a defective gene that could produce disease in future offspring.

You will see what this means in human terms if I tell you of some of the cases that have come to the NGF for help. One woman from Albuquerque, N. Mex., was 6 weeks' pregnant and because she was 43 years old, was at risk to have a mongoloid child. Early in her pregnancy, a small amount of fluid surrounding the baby was removed and the cells of the unborn child were studied. The physicians were able to tell her that the baby she was carrying was free of this disorder that spells a lifetime of retardation. Prenatal diagnosis can also detect other tragic diseases which either doom a child to early death or cause mental and/or physical retardation. Over 2,000 of these procedures have already been performed in our country in some 50 medical centers. I would like to stress that the purpose of prenatal diagnosis is not fewer children but healthy children.

A dramatic example of treatment for genetic disease is shown in the family where the oldest boy, now 12, was afflicted with PKU, a hereditary metabolic disease that produces profound mental retardation. The second child born in this family, another boy, was tested at birth and found to have the same genetic defect. He was immediately placed on a therapeutic diet which avoids the offending substance that the body cannot metabolize in this disease. Now at eight years of age, he is

bright-eyed, handsome, and a source of joy to a family already marked by tragedy. The PKU breakthrough has been incorporated into our public health system, and in most States newborns are routinely screened for this disorder.

These are some of the striking advances in detection, prevention, and treatment; but for the vast majority of genetic disorders there is no available therapy. In these cases the new discipline of genetic counseling can inform families of the pattern of transmission of a hereditary disease; of the risks of recurrence of the disease in the family; and what the burdens of this recurrence would mean in practical terms of their everyday living. The only families who stopped having children were those who had had some counseling, or those who found out the hard way that they were at risk—by having another affected child.

Genetics is the fastest growing specialty in medicine. With advance already made and new ones at the laboratory level rapidly developing, this discipline holds a realistic promise for prevention of disease. Yet, our average citizen and taxpayer is not even aware of this new field nor the benefits which could accrue to him and his children were programs in medical genetics accelerated. The irony is that clinical advances in medical genetics are not available to those who need them for two important reasons: First, physicians are not taught genetics in 50 percent of our medical schools; and second, our system for the delivery of genetic care is inadequate to meet the needs of the public. Unless there are major changes in these two areas—education and delivery—it is doubtful that maximum use will be made of this important science in programs of good medical care for citizens of our country.

Most families rely on their family physicians as the most accessible source of help and advice. However, the average physician out of medical school more than 10 years has little or no knowledge of medical genetics. Therefore, he may not be familiar with genetic risks nor feel comfortable answering such questions.

We know from the thousands of letters we have received from patients that their physicians' comments such as "one in a million" and "lightning never strikes twice in the same place" are not only erroneous but unsatisfactory to anxious parents—often already burdened with one defective child—and who seek information about future children. Thus, the family with the genetic problem is often given misinformation, denied referral, and must struggle to seek help on its own.

Even today, only 48 of our 101 medical schools have a department of medical genetics. Genetics must become an integral part of our medical education if we are going to bring the fruits of this new science to families suffering with hereditary disease. To insure such training in every medical school, it is critical that funds for postdoctoral training programs in human genetics continue in order to supply the scientific manpower to educate future physicians. Such training programs are being phased out, and we believe herculean efforts must be made to reinstate them.

I would like to discuss my second area of concern—that of research in modern genetic care for our people, and this is directly related to the genetic research centers funded under the program of the National Institute of General Medicine Sciences (NIGMS).

The NIGMS provides major support for eight such centers, the establishment of which has assisted materially in the advancement of medical genetics. But the need is great, and I strongly urge you to consider increased funding to permit the establishment of additional centers in urban areas which can reach large segments of the population. It is apparent from the increase in the President's budget that the contribution of these centers to our citizens' health is recognized by the administration. However, the approximately $5 million allotted in the President's budget is nevertheless insufficient to fully utilize and accelerate the thrust of new research ideas that these centers can deliver. We strongly urge you to recommend a $3 million increase over the President's figure for a total of $8.26 million for the genetic research centers. It is with such support that the benefits of modern genetic medicine can reach the millions of men, women, and children for whom hereditary disease can mean deformity, retardation, chronic illness, death.

Without support, the creative abilities of the scientists at these centers can never be realized, and their clinical programs never brought to fruition. Our society encourages education, achievement, and service to fellow man. When we have gifted men and women ready to devote a lifetime to the alleviation of disease and suffering, the very foundation of our value system is called into question if we do not provide such people with funds to pursue these goals.

The delivery of care is also the concern of the National Genetics Foundation, which in 1970 formed a nationwide network of genetic counseling and treatment centers. This network links 46 of the leading medical institutions throughout the United States and Canada—including seven of the NIGMS centers—into a dynamic, collaborative program that provides what is undoubtedly the greatest competence in genetic disease available in the world today.

Both England and Japan, recognizing the importance of this approach, are setting up similar programs using the NGF network as a model. Canada has a "mini" genetic network linking major hospitals in the Province of Quebec, which utilizes modern computer methods to identify genetic defects and deliver treatment and counseling as rapidly as possible. I think you will agree with me that the network concept is an innovative approach that makes traditional methods for the delivery of genetic care obsolete.

The delivery of care and prevention in genetics is not possible without research at the fundamental level. Because a genetic defect in a human being occurs at the moment the egg and sperm unite to form a new life, advances in our understanding at the cellular level can be rapidly translated for the benefit of the individual suffering from or carrying a genetic disease. There are no shortcuts in disease prevention. I am sure that you are aware that studies directed solely at the treatment of disease have borne little fruit. Investigations at the molecular level are essential before treatment and prevention can be found.

A good example is Tay-Sachs disease, a degenerative neurological disorder which affects primarily Jewish infants and is usually fatal by age 3 or 4. The disease occurs when both parents of a child are carriers of the gene. Today, we have a carrier test so we can identify parents who have the gene, and we have prenatal diagnosis, so a

carrier couple can have a healthy child. These breakthroughs are being applied to the population at risk in mass screening programs throughout the Nation. These advances were made because Dr. John O'Brien of the University of California, San Diego School of Medicine, grew the cells of these sick infants in the laboratory and analyzed them with sophisticated techniques, finally identifying the enzyme defect which produced the disease. Fundamental research is the route of preventive genetic medicine. This is the kind of research that may bring us answers in cystic fibrosis, the most common genetic disorder of the white population with a carrier rate of 1 in 25. With a continuation of basic research, genetics hopes to achieve the cystic fibrosis breakthrough and implement it in widespread screening programs.

Unless the investment is made in genetic research, the taxpayers' dollars will continue to be poured into programs of medical and custodial care for patients with chronic illness of genetic origin.

I would like to call your attention to the cost of genetic disease in just one institution. At a residential center for the retarded serving the greater New York area, the institution's director estimated that 28 percent of his 5,000 patients have retardation due to a genetic cause. These are the patients most likely to be profoundly retarded and requiring the greatest care. The cost of maintaining these patients with genetic retardation in just this one institution is over $8 million in 1 year. This center presents a microcosm of the patient population as a whole and can be multiplied by the 316 such institutions throughout the United States.

Furthermore, it should be noted that as efforts are being made to provide care for the mild and moderately retarded within the community rather than in a residential setting, it is the severely retarded, the genetically damaged, who will increasingly comprise the bulk of the institutionalized population.

Contrast the economics when preventive genetic medicine is involved. In New York City, approximately 10 infants with PKU are identified each year and placed on the dietary regimen which enables them to develop normal intelligence and become productive citizens. In 1972 the cost of screening for PKU in New York City was $1 per infant, and the total expenditure, $125,000. Without this program and the scientific advance it delivers, these 10 New Yorkers would almost certainly spend their lives in an institution for the retarded at a cost of $2½ million, a figure 20 times the cost of prevention. Furthermore, these 10 PKU's with treatment will probably pay out over $¾ million in taxes [1] to the Federal Government during their working years. Yet even such cogent economic arguments pale when we consider the lifetime of sorrow and burden that these families have been spared.

We are all aware of the problem of heart disease in this country, but how many realize that one of the most important risk factors for heart attacks—elevated levels of cholesterol and triglycerides in the blood—can be the result of a genetic abnormality, and furthermore that at least 5 percent of the adult population suffers from this genetic defect which leads to early healt attack. In terms of manpower and economic productivity, the predisposing effect of abnormal genes for

[1] Based on $1,762, average 1971 individual income tax, to be paid from age 21–65.

premature heart disease becomes particularly striking when we consider young men under 45, in the prime of life; this genetic defect accounts for 44 percent of the heart attacks in this age group.

On the basis of the information contained in the report of the National Heart and Lung Institute Task Force in Arteriosclerosis, we estimate the loss in earnings over a lifetime from disability due to this genetic form of heart disease to be $92 million, and loss in earnings due to premature death to be approximately $2 billion.

In this brief period I have endeavored to point up the scope of the problem as well as the enormous economic burden hereditary disease places upon families and on government. As concerned legislators trying to make the most prudent decisions for our citizens, you can understand, I am sure, that it is not possible to measure the emotional trauma and tragic uncertainty facing families with hereditary disease. The stigma and guilt associated with these diseases further complicate efforts to survey genetic problems as our culture unfortunately measures the quality of life in terms of physical perfection and mental well-being.

Perhaps we need to pose the following question: Is government ready to invest in new genetic research leading to treatment and prevention of disease, or does it prefer to spend the taxpayers' dollars required to maintain millions of our citizens while they spend their lives in a state of chronic genetic illness?

I think you will agree that if we examine this question in both fiscal and human terms, there is every justification for investing the taxpayers' dollars in the new medical genetics. Time will show that it would be a major error in judgment if we do not increase the NIGMS funding for genetic research and training. While the layman may not recognize the role of genetics in conquering the killer diseases such as heart disease, cancer and diabetes, those of you charged with the responsibility of decisionmaking for the Nation's health must understand that we cannot advance without the critical scientific contributions in this field.

We are, of course, aware that at this time our country is beset with countless problems, many of which are related to the economy. Nevertheless, we must not permit genetic research so vital to the alleviation of disease and suffering to be given a low priority because of pressures which may be brought to bear for expenditures far less important than the Nation's health. With the scientific manpower in this country capable of bringing medical advances to mankind, I implore you and your committee, Mr. Chairman, to provide the congressional leadership necessary to accomplish these important goals.

Mr. PATTEN. Thank you. You must have been awed at the testimony of the NIH when they told of the leads and hopes they have in the field of genetics. At least they agreed with you that the greatest breakthroughs in the next 10 years in the field of medicine will be in the field of genetics. I suppose you have seen their book on genetics.

Mrs. BERINI. Yes. There is no question this is our real hope to conquer disease and provide treatments for many of the problems which at this time are not in any way understood. We can see through the work of the National Genetics Foundation and through its nationwide network that for the first time people, who in the past were reluctant to come and identify in public as having a genetic disease,

are finally facing these facts, and not necessarily looking to the family doctor but through our efforts going to our network of medical centers.

As a result the National Genetic Foundation is able to stimulate considerable new research. The key to the whole question will be whether or not there will be sufficient funds to support such work and to train some of the very brilliant people who are prepared to give a lifetime to this important field.

Mr. PATTEN. You are wonderful. Thank you ever so much.

Mrs. BERINI. Thank you very, very much for your kindness in hearing us, Mr. Chairman.

Mr. PATTEN. I am glad you have your testimony in the record.

Mrs. BERINI. Thank you so much.

TUESDAY, MAY 15, 1973.

CANCER RESEARCH

WITNESS

DR. A. ARTHUR GOTTLIEB, PROFESSOR OF MICROBIOLOGY AT THE INSTITUTE OF MICROBIOLOGY OF RUTGERS UNIVERSITY

Mr. PATTEN. Last but by no means least, our very good friend Dr. A. Arthur Gottlieb, professor of microbiology at Rutgers University. This committee has heard me say that it is my pleasure to know Dr. Waksman and know of his great work, and if there is ever a setup that has certainly justified itself to mankind, it is the Microbiology Institute at Rutgers.

Doctor, it is a real pleasure to have you come before our committee. I know by your presence here, and getting your remarks on the record, we will have good support on the floor in asking for the funding that you are here to substantiate.

You may proceed, Dr. Gottlieb.

Dr. GOTTLIEB. I am Dr. A. Arthur Gottlieb, professor of microbiology at the Institute of Microbiology of Rutgers University. I am a physician by education, and a biomedical research scientist by profession. My own scientific training was entirely supported by Federal funds, including a research career development award at Harvard. I wish to share my views with you concerning the funding of biomedical research in general, and of basic research in the cancer area, in particular.

I do not come before you to plead for additional funds for cancer research, since I believe that the $500 million provided by the President's budget for the National Cancer Institute (NCI) in fiscal 1974 should be adequate to the task. Nor do I come to plead for instant restoration of federally sponsored training grants, as many of my colleagues have, though I do believe that the total abandonment of these programs is damaging and unwise. I do come to describe my concern about the distribution of available funds in federally sponsored cancer research and to comment on what I consider to be an unwise division of funds especially as this constrains the ability of competent younger scientists, like myself, to contribute to the solution of the cancer problem.

One of the purposes of the National Cancer Act, as I understand it, is to insure that all competent efforts toward the prevention and cure

of cancer be promptly and effectively pursued. My principal concern is that by virtue of the allocations of resources within the budget of the NCI, this goal is being compromised because small laboratories generally based in the universities are receiving less and less of a share of the total NCI budget. Let me be quite explicit: The accompanying table illustrates the dollar amounts of the NCI budget allocated to research grant support in universities for the last few years. These figures indicate that there is an increase in the number of dollars available for research grants sponsored by the NCI. I would suggest to you that this increase is more apparent than real. First, as a proportion of the total NCI budget, the amount of money allocated to research grants is lower than it was in fiscal years 1970 and 1971. Second, the NCI estimates that in fiscal 1974, it will pay only 23 percent of its approved applications, a figure far below the traditional percentage of grants funded by this Institute. Third, my colleagues tell me that it is getting progressively more difficult to acquire research grant support. This suggests to me that the increase in funds for the research grant programs of the NCI is not proportional to the input of research proposals generated by the scientific community which now includes a substantial number of scientists who have been prepared to play a role in solving the cancer problem as a result of the extensive training programs sponsored by the National Institutes of Health over the past decade. Moreover, the funds for the research grant programs of the National Institute of General Medical Sciences, another NIH institute which is appropriately concerned with studies relating to cancer, have sustained an absolute decrease in funds going from $95,231,000 in fiscal year 1973 to $84,279,000 in the proposed fiscal year 1974 budget. This Institute also estimates that it will pay only 20–25 percent of its approved applications in fiscal 1974. In this respect. Federal policy has been quite consistent—a decrease in the proportion of funds available for research grant programs in cancer and related areas, and an absolute increase in the funds available for contractual programs alined to specific targeted goals. Is this undesirable? I believe that it is, and I offer the following reasons for this view:

(1) This emphasis on contractual programs reflects a basic philosophy—that all cancer research can be organized on a centralized basis according to an ordered "battle plan." This kind of attitude is perhaps appropriate to an NASA type mission, in that a definitive goal such as the Moon can be reached according to an understanding of fundamental physical principles which serve as the foundation for the approach to the defined goal. I submit that no such foundation exists at the present time for a target-oriented approach to the cancer problem, because a great deal of fundamental information about cancer cells and, indeed, normal cells is not yet known. This is, I think, the most cogent justification for the support of "basic" research as it applies to the cancer problem. Clearly, the lack of such information makes all of our other efforts toward understanding cancer more difficult. In this context, I believe that the brightest ideas are most likely to emerge from the continued insight of imaginative scientists who are thinking about these problems day and night, and not by systems analysts in Washington or Bethesda.

(2) Since the contractual programs are defined in very specific terms, and are based on certain key assumptions which appear reasonable today, it is all too easy to forget that any or all of today's

assumptions could be wrong, or may only be partially correct. For example, in fiscal 1972, 58.2 percent of contract funds released by the etiology (cause of cancer) programs of the NCI were oriented to the detection of as yet elusive viruses which may cause cancer in man. These studies are based on the observations of dozens of such cancer-producing viruses in animal populations, which populations are generally highly inbred. Is it possible that in the normally outbred human populations, viruses may cause only a small number of tumors? Are we paying enough attention to this real possibility or are we heading straight into the virus detection business with a limited viewpoint, content with the impression that our assumptions are necessarily correct, because we believe them to be so? Do we have enough flexibility to alter the rationale of our approach if later facts justify such a course?

(3) Any scientist will acknowledge that the best planned experimental protocol may lead to nothing, and alternatively, that some of the seemingly most unpromising lines of research may lead to important developments. As an example, my laboratory will shortly make an announcement concerning an observation of considerable significance to the question of tumor growth. It turns out that these particular studies were not planned as part of our protocols 2 years ago when we began this work, but emerged as a series of almost "accidental" insights which we were alert enough to recognize. The results of these experiments, which were clearly of a "basic" nature, has led myself and my colleagues to a new series of studies which offer the strong possibility of developing a technique for the detection of cancer cells far more sensitive than any existing today. I might say that our requests for support of our original studies were declined on three separate occasions by the National Cancer Institute, and owing to the restriction in funds available for research grants in the NCI budget, we have still not acquired NCI support for this work, although we are fortunate to have limited support from private foundations. Were I to solely rely on the judgment of the NCI, I would be unable to continue to work on the cancer problem.

(4) I firmly believe that small laboratories spend their limited resources more efficiently than larger ones. For example, in the course of our work, it became necessary to acquire a certain virus which is produced by Electro-Nucleonics, Inc., under contract to the National Cancer Institute. This firm also sells this material on the open market. We calculated that the amount of virus needed for our purposes would cost $10,000, a sum which our laboratory could not afford. We, therefore, asked the National Cancer Institute for some of this virus and were told that it was available only for high priority programs, but that $600 of this material could be spared on one occasion only. Consequently, we undertook to produce this material ourselves: a postdoctoral fellow of mine (who is supported by a private foundation) spent a very long weekend at this task and produced an amount of this virus (having an open market value of $7,000) at a total cost to my laboratory of $385 (including overhead costs).

5. The emphasis on contracts localizes control of these programs in the hands of a small number of project officers based in Bethesda. There is a danger in concentrating the control of these large sums of money in the hands of a relatively small number of scientists who are in a position to make decisions regarding the expenditure of these funds ac-

cording to their own point of view. Moreover, contractors tend to be relatively large laboratories headed by relatively senior investigators. If a younger investigator manages to acquire contractual support, he finds himself, more often than not, a simple extension of the project officer's own laboratory in Bethesda.

6. With regard to some of the contracts to industry, the NCI is now supporting two projects at the Upjohn Co. for the development of anticancer compounds. These two contracts (NCI–72–3709 and 73–3707) total $851,827. That amount of money could support such work in 20 university laboratories. Moreover, I do not see the justification for providing Federal funds to a pharmaceutical house for the development of potentially profitmaking drugs. Such support should fall within the province of the R. & D. budget of that corporation. It is particularly regrettable that such funds are made available to Upjohn, while laboratories such as my own cannot acquire $1 of Federal support.

What has happened then has been a movement of research support away from its traditional concentration in the universities, to large-scale laboratory operations including the intramural programs of the National Cancer Institute; industrial firms such as Litton Industries, Upjohn, Pfizer; and a few large research institutes which are frequently allied to major "cancer centers." While there is much that is meritorious in these programs, it is important to recognize that the migration of funds to such large centers of research diverts available moneys away from the universities. I believe that this policy will ultimately be self-defeating, since all of these research programs (including those in government and industry) demand trained research scientists; and although a fair number of Ph. D.'s receive advanced postdoctoral training in these settings, they have all acquired their graduate training in universities. None of these governmental and industrial organizations confer advanced degrees in the biological sciences—this remains the province of the universities—and successful training of this kind cannot go forward without adequate research funds to the laboratories in which students learn to become disciplined and competent investigators. In this context, I think we have to do some hard thinking about the number of Ph. D.-level biological scientists that will be required in this country 5, 10, and 20 years hence. In all the talk about training grants, I sense very little concern amongst my colleagues about the fact that if one trains a scientist and no support is available for his research when his training is completed, then neither that individual's interest nor the national interest have been served. The number of people trained should be proportional to the expected national requirement for such scientists, and we should do everything possible to insure that every competent mind that is willing to contribute to the cancer problem will have the opportunity to do so. By concentrating our resources in the contractual programs of the NCI, and limiting these resources to relatively few scientists, we are, in my judgment, heading precisely in the wrong direction.

My principal recommendation to this subcommittee would be that you recognize the problems which I have brought to your attention, and that you act in your appropriation measures concerning the National Cancer Institute to stop this concentration of cancer research funds, through the contract mechanism, in governmental and industrial organizations. Specifically, in regard to the 1974 budget, I would recommend that $75 to $100 million be transferred from contracts to

research grants to be awarded to universities and medical schools within the United States. Second, I would hope that you would place sufficient emphasis on the necessity to provide adequate funds for "basic" research studies of normal and cancer cells, so that the information required for a rational approach to the solution of the cancer problem can be developed. Third, it should be the intention of the Congress that every competent scientist who is willing to contribute his full-time efforts to the solution of the cancer problem should have the opportunity and the required support to do so. The cancer problem is sufficiently complex that it requires the talents and insights of all those in the United States who are equipped to engage in such studies. By passage of the National Cancer Act, the Congress has expressed its basic agreement with this principle. It is the obligation of the Congress to see that its wishes are carried out.

[The tabulation follows:]

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National Cancer Institute

Research Grants to Universities and Other Non - Profit Institutions
(thousands of dollars)

Fiscal Year	Total NCI Budget	Research Grants to Universities	% of Total	Res. Grants to Non-Profit Inst.	% of Total	Total Res. Grants	% of Total Budget
1970	181,345	42,695	23.5	25,569	14.1	68,264	37.6
1971	232,853	54,614	23.5	29,689	12.8	84,303	36.2
1972	382,517	66,782	17.5	46,916	12.3	113,698	29.7
1973 (est.)	432,000	90,000	20.8	55,000	12.7	145,000	33.6
1974 (pres)	500,000	113,000	22.6	68,000	13.6	181,000	36.2

Source: Budget Office National Cancer Institute

Research Contracts of the National Cancer Institute
(thousands of dollars)

Fiscal Year	Research Contracts	Total NCI Budget	% of Total Budget
1970	49,663	181,345	27.4
1971	78,196	232,853	33.6
1972 (est.)	121,978	382,517	31.9
1973 (Pres. budget)	137,587	432,000	31.8

Source: Proceedings of Hearing of the Labor-HEW Subcommittee of the U.S. House Committee on Appropriations, 92nd Congress, 2nd Session, Vol. 4, p. 41.

Mr. PATTEN. Doctor, I believe you have presented us the best brief we have had from any witness so far. You must have some legal training, too.

Dr. GOTTLIEB. No; I honestly say I do not. I have an interest in these problems and the points I make are made not only on my own behalf but on behalf of a number of other younger scientists such as myself around the United States who I know feel very much the way I do about the distribution of resources available to the National Cancer Institute.

Mr. PATTEN. You know we funded the National Cancer Act by $500 million. In the debate the matter you bring before us was thoroughly aired. Great fears were expressed that we may run into the error you are predicting.

Dr. GOTTLIEB. I did only say I was not privy to the proceedings of those debates, but I do believe these points are of considerable concern at the moment and I do believe that the national cancer program as administered at the present time with the heavy emphasis on target oriented contractual research of the type I have described will in the long run be a less effective approach to the solution of the cancer problem than letting some of our brightest minds go ahead and use their best insights to work on these issues.

Mr. PATTEN. You can rest assured you are going to have one advocate. Many Members of Congress are going to hear your point of view and have their attention called to your discussion.

Dr. GOTTLIEB. I am grateful, Mr. Chairman, and if there is any additional discussion I can provide, particularly the recent budget figures for the 1974 budget, which have not been provided to me, I will be happy to provide them to you.

I think this is a point of view that needs airing and that the Members of Congress need to concern themselves with.

Mr. PATTEN. You know the chairman is intensely interested.

Dr. GOTTLIEB. I hope these points will be brought to his attention.

Mr. PATTEN. He is very knowledgeable in this field. But he is not the only one with a keen interest. That $500 million is a tremendous sum of money.

Dr. GOTTLIEB. I would estimate on that point that the amount of money allocated for individual research project garnts in the fiscal 1974 budget will probably be of the order ot $100 million to $110 million out of the total budget of $500 million. I would add a word of caution that in interpreting the figures that the National Cancer Institute will provide to you in terms of this issue of grants versus contracts, it is important to exclude construction grants and training grants from those figures in order to determine accurately how many individual research project grants are funded by NCI. I believe the figure I quoted is an accurate estimate.

Mr. PATTEN. Perhaps I might send you some material that has come across our desks in regard to these contracts that bears on what you said today. It is a pleasure to have you before this committee. Good luck to you in your work.

Dr. GOTTLIEB. Thank you so much.

TUESDAY, MAY 15, 1973.

COMMUNITY MENTAL HEALTH CENTERS

WITNESS

JONAS V. MORRIS, EXECUTIVE DIRECTOR, NATIONAL COUNCIL OF COMMUNITY MENTAL HEALTH CENTERS

Mr. FLOOD. The committee will be in order.

Now we have Mr. Jonas V. Morris.

Mr. MORRIS. I am Jonas V. Morris, executive director of the National Council of Community Mental Health Centers.

I had planned to have with me today Raymond Ramirez, the director of the Mental Health Authority for west central Illinois. Unfortunately, at the last moment he was unable to join us here today. So I am appearing by myself.

I have a prepared statement that I would like to have included in its entirety in the record, Mr. Chairman, if that is agreeable with you. I would like to briefly summarize some of the points in it.

[The statement follows:]

STATEMENT ON FISCAL YEAR 1974 BUDGET FOR COMMUNITY MENTAL HEALTH BY NATIONAL COUNCIL OF COMMUNITY MENTAL HEALTH CENTERS

(By Jonas V. Morris, Executive Director, NCCMHC)

This statement is presented on behalf of the National Council of Community Mental Health Centers, a nonprofit organization established in 1970 and representing 293 agencies concerned with the delivery of community mental health services. 215 of these members are operating comprehensive community mental health programs, and 202 of them receive Federal staffing assistance. Another 78 are agencies aspiring to the comprehensive model or other agencies which do not offer services but are nevertheless deeply involved and committed to the community mental health concept.

We are speaking to you today, then, on behalf of professionals engaged in the delivery of mental health services through community programs. Our primary concern at this time is the uncertain future for the community mental health movement in light of the administration's current position; especially the question of whether the concept will grow and be improved upon, or whether it will stagnate and retrench causing unnecessary suffering and human tragedy.

The community mental health centers program, since its inception in the mid-sixties, has had a significant impact on the improvement of mental health services in the United States. The administration itself calls the program effective and workable, and has endorsed the concept of community care for the mentally ill in the fiscal year 1974 budget documents.

The fact is, that this is one Federal program which has achieved considerable success, proving an extremely worthwhile investment of Federal dollars. At this point we would like to set out for the subcommittee some of the statistics which support our contention that we cannot afford to ignore pressing mental health needs of the Nation by abandoning the Federal commitment to community mental health centers.

For instance:

The resident population of State mental hospitals has been cut in half since 1957—from 570,000 to 275,000 in 1972, in larger measure as a result of the Federal program.

Where a community mental health center has been operating for three years or more fewer than half as many patients (per thousand people in the catchment area) are referred to a State institution than from areas not served by a center.

The costs of care are dramatically lower in community mental health centers than in large State institutions ($4.749 in institutions compared to $380 in centers, per patient care episode), a direct result of the minimal use of inpatient facilities by CMHC's.

The average length of inpatient care provided by a center is kept to a minimum—54 percent of the centers report an average length of stay of under 20 days and 41 percent of under 14 days. (Long-term inpatient care is, of course, undesirable for most mental conditions.)

Community care for the mentally-ill has resulted in better care for the average American and for those who cannot afford the cost of private care, the federally funded community mental health centers program offers the major hope for effective treatment and perhaps the only alternative to institutionalization.

Community care enables the patient to remain in his community and to return more quickly to a fully productive life—potential savings if all persons had access to such care is in the billions of dollars.

The federally funded community mental health centers treated approximately one million people in 1972. As a result of the accent on community care most of these people can expect to return to normal and happy lives with their families, and the vast majority of them can continue to work and live at home while they receive care and attention from the center. Currently, it is estimated that something like $20 billion is lost in productivity each year as a result of mental illness, over $4 billion of which is a direct loss of tax revenue. Yet maintaining the CMHC program need cost the Federal Government no more than $200 million per annum.

The costs of mental illness and emotional problems are very often hidden. While the reduction in State mental institution resident patients and the savings which accrue from this reduction are often cited, what is frequently forgotten is that:

9 million Americans are problem drinkers or alcoholics, one-third of all suicides, one-half of all homicides are alcohol-related, and the number of alcoholics is rising year by year.

35,000 highway deaths per year are related to alcohol abuse.

It has been estimated that almost half of the crime perpetrated in America involves persons under the influence of alcohol.

600,000 Americans are heroin addicts, a very large proportion of whom commit crimes in order to maintain their habits.

Approximately half the calls to which police respond involve marital or family disputes which could be more appropriately handled by a crisis intervention team of a community mental health center, enabling the police to concentrate their resources on more serious crimes.

The costs—in both Federal, State, and local tax dollars—of these problems is enormous. To abandon our efforts to reach the root causes, to leave the federally funded CMHC program half-formulated, is a very unsound fiscal decision.

Can the Federal Government really abandon: The over 20 million of our citizens 65 years of age and older (a group especially vulnerable to mental illness and at this time receiving proportionately less treatment and rehabilitation than any other group); the 10 million children in need of mental health services (particularly while the number of admissions to public mental hospitals of those under 25 is continuing to rise); those suffering from one of the Nation's primary mental health problems—depression (a recent survey indicates that 15 percent of all adults between 18 and 74 suffer significant depressive symptoms during any one year); and 9 million alcoholics, 600,000 drug addicts and millions of persons abusing drugs?

What would be the results for these individuals and for society of leaving such conditions untreated? This is something the National Council cannot estimate, but we do know that continuing the Federal effort to establish community mental health centers across the Nation will reduce the costs of treatment and that early diagnosis can prevent more serious conditions from developing in many cases.

THE PRESIDENT'S FISCAL YEAR 1974 BUDGET REQUEST

The fiscal year 1974 budget contains a request for $518 million for community mental health centers to enable the Federal Government to "buy itself out" of its obligations to existing centers, and we submit, of its responsibility to the communities served by these centers for monitoring and evaluating the services being provided.

The administration has indicated that this large appropriation is necessary in order to ensure that continuation grants for existing centers are awarded in future years if the CMHC act should expire. NCCMHC would like to stress to the subcommittee that this argument has no basis in fact. The current CMHC act contains sufficient authority, without any amendment being made, for the Congress to appropriate continuation grants for existing centers on a yearly basis through fiscal year 1979 (the year in which the newest of the existing CMHC grants will expire) as has been done in the past.

Sec. 224(a) of the CMHC act states:

> "For the fiscal year ending June 30, 1967 and each of the thirteen succeeding years, there are hereby authorized to be appropriated such sums as may be necessary to make grants to such centers which have previously received a grant under this part and are eligible for such a grant for the year for which sums are being appropriated under this sentence."

This section refers to grants for staffing of CMHC's. Similar language is contained in sections 271(d)(2) and 261(b) referring to children's services grants, and alcohol and drug abuse staffing grants.

The President's fiscal year 1974 budget request for community mental health centers breaks down as follows:

Program	Requested for fiscal years 1974–1979	Needed in fiscal year 1974
Continuation grants for staffing	472.0	125.25
Continuation grants for children's services	46.0	8.5
Continuation grants for alcoholism projects	87.0	40.3
Continuation grants for drug abuse projects	382.0	177.3

NCCMHC RECOMMENDATIONS

Continuation grants

NCCMHC strongly urges the committee to appropriate in fiscal year 1974 only that amount needed in fiscal year 1974 for continuation grants (second column in the table above) for several reasons:

If HEW awards all of these funds to communities in fiscal year 1974, the Federal Government will drop its responsibility to monitor and regulate these programs—this is unfair both to the communities concerned and to the taxpayers who support the program.

If HEW does not award these funds before the fiscal year in which they are to be spent, why should they be appropriated at this time?

Appropriating more money than is requested by HEW in fiscal year 1974 unnecessarily inflates the health budget, making it harder for the subcommittee or the Congress to justify increasing health expenditures above the President's request.

New grants

NCCMHC was appalled by the administration's decision to terminate the CMHC program, and by its arguments and justification for doing so. The administration's decision appears unrelated to the need for community mental health programs and is not based upon any scientific evidence. We are very encouraged to note that the Senate has passed overwhelming a bill to renew the act for 1 more year to permit the Congress to decide what should be done about this program. Strong support is also evidenced in the House by the over 140 cosponsors for an identical bill introduced by James Hastings (Republican, N.Y.) which has been reported to the full Interstate and Foreign Commerce Committee by the Subcommittee on Public Health and Environment.

Based on this strong evidence of congressional concern and the likelihood of final enactment, we would like to discuss the funds which we believe are needed in fiscal year 1974 for new grants for community mental health centers, for children's programs and, briefly, for drug abuse and alcoholism programs.

New staffing grants

In the first place, we feel that the Federal Government has a strong moral obligation at least, to:

The 67 agencies with staffing grants approved by HEW prior to December 1972 when the program was cut off, and which have not yet been funded;

The 81 agencies and communities which have received Federal construction dollars on the understanding that staffing grant funds would be available to provide services and which are now unable to operate a program of community mental health services; and

The minimum of 60 agencies and communities in the process of developing and submitting to HEW an application for a grant but which did not receive final approval prior to December 1972 (many of these were submitted to HEW regional offices, and returned to the applicant).

It takes a community years to organize the necessary resources and draw up a staffing grant application. Often the initial application must be returned for reworking as Federal guidelines are complicated and confusing. HEW has provided technical assistance to those whose applications were rejected on technical grounds—yet when these applications were resubmitted applicants were informed that the program had been terminated. It is surprising then that many people feel their government is unresponsive and unaccountable?

Attached to this testimony are documents listing the 67 agencies with approved-unfunded grants, those which have construction grants but are not yet operating a program, and agencies we have been able to identify which were in the process of developing their application.

The list of agencies which have a Federal construction grant also indicates the approximate date of completion of that construction, where this is known. Clearly we should be considering the need for some 15 programs to be initiated (through some funding mechanism) in fiscal year 1974–fiscal year 1975.

Below is a table outlining the NCCMHC recommendations for fiscal year 1974 appropriations (assuming that legislation extending the CMHC act is enacted). We recommend continuation grants for fiscal year 1974 only (as stated above), and include two recommended figures for new grants. The first of these represents the funding necessary to fund outstanding approved-unfunded grants. It does not include any money for those applications which HEW refused to accept in fiscal year 1973, nor for any other pending applications. Our second recommendation is higher, and we would hope the subcommittee would feel it can appropriate this higher amount. Even this figure will not be sufficient, we estimate, for all of the applications which will be submitted in fiscal year 1974 once HEW accepts them. However, it is the maximum amount authorized by the pending Senate bill (S. 1136) to extend the CMHC act, sixty million dollars will permit the funding of 45 new applications as well as the 67 now pending. Also shown are our recommendations for children's services, alcohol and drug abuse project grants.

FISCAL YEAR 1974 APPROPRIATIONS—NCCMHC RECOMMENDATIONS

	Budget request	NCCMHC (1)	NCCMHC (2)
Staffing:			
New		34.9	60.0
Continuation	[1] 124.00	124.0	124.0
Evaluation (1 percent)	1.25	1.6	1.8
Subtotal	125.25	160.5	185.8
Construction	0	0	0
Children:			
New		3.65	21.65
Continuation	[1] 8.42	8.42	8.42
Evalutaion (1 percent)	.08	.12	.3
Subtotal	8.5	12.19	30.37
Alcohol:			
New	0	20.0	40.0
Continuation	[1] 40.3	40.3	40.3
Subtotal	40.3	51.2	60.3
Drugs:			
New	[2] 25.0	20.0	20.0
Continuation	[1] 177.3	177.3	177.3
Subtotal	202.3	197.3	197.3

[1] Requested for fiscal year 1974. The administration is requesting $472,000,000 for staffing grants, $46,000,000 for children's grants, $87,000,000 for alcoholism grants and $382,000,000 for drug abuse grants to be obligated fiscal year 1974–79.

[2] Requested for Special Action Office for Drug Abuse Prevention.

Children's services

One of the most neglected areas in the mental health field has, unfortunately, been the mental health of children—both treatment and rehabilitation for mentally ill and mentally retarded children, and preventive programs through public education, school consultations, and so on. To begin to meet this need and redress this imbalance in services, Congress enacted part F of the CMHC Act, which permits funding of comprehensive specialized children's services in CMHC's and other agencies. To date, however, the Federal Government has funded merely 60 programs under part F of the act, and that as a direct result of congressional action to appropriate funds for this purpose despite the fact that the administration had not requested them.

According to NCCMHC estimates, these 60 grants represent something in the order of 20 percent of the programs needed. At the present time, around 150 CMHC's operate a comprehensive specialized service for children, while 270 operating centers do not have such a component.

As of December 1972, there were 11 children's services grants approved and unfunded, which would require a total of $3.65 million. In addition, to meet the need for such programs, we urge appropriation of an additional $18 million for around 60 other grants which would be submitted in fiscal year 1974 were funds available. NCCMHC expects that in fact many more than 60 grants will be requested in fiscal year 1974, but the funding of 60 children's grants would represent a reasonable and steady growth of children's services in CMHC's.

Alcohol abuse

NIMH estimates that 9 million persons are affected by alcoholism and alcohol abuse—an extremely high proportion of the population. Yet the proposed budget request contains no funds for new alcoholism project grants, although the formula grants program is continued (with no increased funding over fiscal year 1973).

At the end of fiscal year 1973, it is estimated that grants totaling over $40 million will have been approved, but remain unfunded. NCCMHC recommends that a minimum $20 million be appropriated in fiscal year 1974 and urges the subcommittee to make available the other $40 million needed to permit the funding of all projects approved but unfunded.

Drug abuse and drug addiction

While the problem of drug abuse and drug addiction is unquestionably very serious, NCCMHC does not regard drug abuse as the major mental health problem in America today. Yet the President's budget request contains no new funding for any mental health program except drug abuse. Approximately $25 million is requested for the Special Action Office for Drug Abuse Prevention, to be used for drug abuse project grants. In view of the fact that we consider other mental health problems—and particularly the problems of children, elderly persons, schizophrenics, depressives, and alcoholics to be more serious at this time than the drug abuse problem—we recommend that the drug abuse budget be cut by at least $5 million and the funds be used instead for new staffing grants, children's services grants, or alcoholism projects.

Construction

Finally, in view of the very tight budget situation, NCCMHC recommends that no funds be appropriated during fiscal year 1974 for construction of new facilities for community mental health centers. At the present time, there are around 80 communities which have received construction grants, many of which are in the process of building their facility, and which are not yet operational. We strongly urge that the limited Federal dollars be invested in service programs where there will be an immediate and direct increase in availability of care. With the future of Federal funding for CMHC's so uncertain, we should not run the risk of investing Federal dollars in buildings which may eventually stand empty.

Conclusion

The question of continued funding for new starts for community mental health centers is clearly very unsettled at the moment. While this subcommittee has no jurisdiction over the authorizing legislation, we feel it is important to stress the importance of renewal of the CMHC Act and the funding of new grants in fiscal year 1974 by the Federal Government. Alternative sources of funds are simply not available at this time.

The administration has suggested that centers can rely upon national health insurance, medicare and medicaid, private insurance, patient fees, and States and localities.

Yet we have no system of national health insurance, and public third-party payment systems contribute no more than 12 percent to center incomes nationwide as a result of restrictions in medicare and medicaid coverage and restrictive State laws which prevent many centers from being reimbursed for services to medicaid recipients. Since the overwhelming percentage of center patients are indigent, fees are also not a substantial source of funding. This leaves only States and local governments as a potential source of funding; and considering the pressures on these funding sources at this time, and in view of our experience with general revenue sharing funds which indicates a great reluctance on the part of the States and localities to fund mental health programs, we are convinced that the most that can be expected if the Federal program is terminated, is that existing programs will be continued (although some services may have to be cut back). Any substantial number of new starts can only come if the Federal Government continues its obligation in this area.

We have made tremendous strides under the Federal community mental health centers program. Before we return to a system of State and local responsibility (which has failed in the past), we should be very sure that this will not adversely effect the growth of community mental health centers and the long-awaited demise of the large mental institution which has proved ineffective in treating and rehabilitating the mentally ill and mentally retarded.

The administration's justification for ending the program, stated on several occasions and reiterated just last week by John Zapp, Deputy Assistant Secretary for Legislation, is that the program is inequitable. It is "inequitable" because: (1) Some States have received more assistance than others, and some localities have not received any Federal funding while others have received a substantial amount; (2) those served by federally funded centers receive better care than the rest of the Nation.

We believe this is a telling argument for continuation, not destruction, of the program, and for appropriation of funds for new starts in fiscal year 1974 assuming the bill extending the Community Mental Health Center Act (H.R. 5608) is enacted.

In conclusion, I would like to add that the National Council is a member of the Coalition for Health Funding, and that we endorse all of the recommendations made in the Coalition's minimum budget which has been submitted to the subcommittee.

ATTACHMENT 1

Approved-unfunded Federal grants for initiation of new CMHC's

((P) indicates poverty)

Pikes Peak Family Counseling and MHC, Colorado Springs, Colo	$817,658
Southwest Denver MH Services, Denver, Colo	334,454
(P) Leon County MHC, Tallahassee, Fla	500,000
(P) Kalihi-Palama CMHC, Honolulu, Hawaii	309,741
(P) Snake River Comp. CMHC, Boise, Idaho	613,397
Region Ten Comp. MHC, Columbus, Ind	557,362
Regional Mental Health Center, Kokomo, Ind	500,000
Johnson Co. Southwest CMHC, Overland Park, Kans	215,385
(P) Barren River Comp. Care Center, Glasgow, Ky	741,913
Washtenaw County CMHC, Ann Arbor, Mich	511,890
West Central Montana Reg. Comp. MHC, Anaconda, Mont	250,250
North Central Montana Comp. CMHC, Great Falls, Mont	722,076
Las Vegas Mental Health Center, Las Vegas, Nev	894,771
(P) Northern New Hampshire MH System, Littleton, N.H	349,367
(P) Christ Hospital CMHC, Jersey City, N.J	526,794
(P) Monmouth Medical CAAHC, Long Branch, N.J	488,194
Queens Hospital CMHC, Jamaica, Queens, N.Y	1,071,274
Northeast CMHC of Memphis Shelby Cty., Memphis, Tenn	374,796
Murray-Jordan-Toole Mental Hygiene Ctr., Murray, Utah	484,756
(P) Champlain Valley MHC, Burlington, Vt	622,310
(P) Valley Comp. CMHC, Morgantown, W. Va	277,391
(P) Humacao CMHC, Humacao, P.R	569,883

Approved unfunded Federal grants for existing centers—Staffing

((P) indicates poverty)

East Oakland CMHC, Oakland, Calif	$1,088,726
Thalians CMHC of Cedars-Sinai, Los Angeles, Calif	1,492,480
(P) San Jose CMHC, San Jose, Calif	92,816
(P) Emanuel Hospital CMHC, Turlock, Calif	85,684
Jefferson County MHC, Lakewood, Colo	226,062
(P) Southern New Castle MHC, New Castle, Del	267,913
(P) St. Joseph's CMHC, Tampa, Fla	1,406,460
(P) Palm Beach County Comp. CMHC, West Palm Beach, Fla	576,571
Northside Hospital Comp. CMHC, Atlanta, Ga	325,865
MHC of St. Joseph County, South Bend, Ind	265,212
(P) Southern Bluegrass Comp. Care Ctr., Danville, Ky	421,876
(P) Western Kentucky Region I CMHC, Paducah, Ky	741,913
Acadiana MHC, Layafette, La	647,949
Montgomery General Hospital CMHC, Olney, Md	746,193
(P) Erich Lindemann CMHC, Boston, Mass	1,192,626
(P) Philadelphia Psychiatric Center, Philadelphia, Pa	386,992
(P) Mayagnez CMHC, Mayagnez, P.R	399,224
(P) Tufts Mental Health Center, Boston, Mass	331,348
(P) Greater Lynn CMHC Program, Lynn, Mass	1,142,997
(P) South Central Montana Reg. MHC Billings, Mont	126,349
Community Center for Mental Health, Dumont, N.J	572,998
Rutgers CMHC, New Brunswick, N.J	1,993,502
(P) Brookdale Hospital CMHC, Brooklyn, N.Y	1,031,999
Buffalo General Hospital CMHC, Buffalo, N.Y	950,855
(P) Orange County MHC, Goshen, N.Y	880,268
(P) Wilson Greene Mental Health Center, Wilson, N.C	500,000
(P) Carl Albert CMHC, McAlester, Okla	817,853
Holy Spirit Hospital CMHC, Camp Hill, Pa	811,054
Hamot CMHC Erie, Pa	626,904
(P) Meadville City Hospital CMHC, Meadville, Pa	567,587
Albert Einstein CMHC, Philadelphia, Pa	567,587
Austin-Travis County MH MR Center, Austin, Tex	712,963
(P) Bell County MH MR Center, Belton, Tex	786,947
Harris County MH MRC, Houston, Tex	119,983
Southwest Mental Health Center, Columbus, Ohio	625,475

Children's services.—((P) indicates poverty)

Greater Little Rock CMHC, Little Rock, Ark	$146,350
John Hale Health Foundation, San Francisco, Calif	241,040
Wheeler Clinic, Plainville, Conn	642,984
The Counseling Center, Bangor, Maine	438,755
Massachusetts MHC, Boston, Mass	382,683
Columbia Area Mental Health Center, Columbia, S.C	404,025
Dallas County MH/MR Center, Dallas, Tex	785,051
Open Harbor, Inc., Boston, Mass	59,000
(P) Tufts Mental Health Center, Boston, Mass	268,532
(P) Cambridge-Somerville MH/RC, Cambridge, Mass	127,163
Emerson Hospital, Concord, Mass	150,640

Initiation and development.—(All poverty areas)

Alabama Catchment Area M–16C, Mobile, Ala	$45,148
Community MH/MR Center, Lawrenceburg, Ind	49,720
MH Association of North Central Massachusetts, Fitchburg, Mass	50,000
Cape Ann Children and Family Center, Gloucester, Mass	49,956
CMHC Area 43, Hudson County, Newark, N.J	50,000
Riverview Hospital, Red Bank, N.J	48,650
Rio Del Norte Planning Committee, Espanola, N. Mex	49,990
Clinton Co. MH Services, Plattsburgh, N.Y	50,000
Franklin County MH/MR Board, Colubus, Ohio	36,472
Board of Co. Commissioners Multnomah County, Portland, Oreg	47,404

ATTACHMENT 2

AGENCIES RECEIVING CONSTRUCTION GRANTS WHICH ARE NOT YET OPERATIONAL (MAY 1973)

Agency	Status of construction	Federal staffing grant status (if any)
Etowah-Cherokee-Dekalb Counties MHC, Gadsen, Ala	Construction completed	
St. Joseph's Hospital MHC, Phoenix, Ariz	Construction not yet started.	
Los Angeles Psychiatric Service, Los Angeles, Calif	Under construction	
Cedars-Sinai CMHC, Los Angeles, Calif	do	
Herrick-Berkeley CMHC, Berkeley, Calif	Construction not yet started.	
East Valley, MHC, San Jose, Calif	Under construction	
Martin Luther King Jr. General Hospital CMHC, Los Angeles, Calif	Construction not yet started.	
Scenic General CMHC, Modesto, Calif	Under construction	
Greater Bridgeport CMHC, Bridgeport, Conn	Under construction • estimated completion fiscal year 1973.	
Central Connecticut CMHC, Plainville, Conn	do	
University Hospital CMHC, Augusta, Ga	Construction completed	
Dalton Area Comp. CMHC, Dalton, Ga	Under construction estimated completion fiscal year 1974.	
John L. Hutcheson Memorial Tricounty Hospital, Fort Oglethorpe, Ga.	Construction not yet started.	
Queens Hospital MCHC, Honolulu, Hawaii	Under construction	
South Cook County, MH Service, Matteson, Ill	Construction not yet started.	
St. Mary of Nazareth MHC, Chicago, Ill	Under construction	
Illinois River Valley CMHC—St. Margaret's Hospital, Spring Valley, Ill.	Construction not yet started	
MHC of Lasalle County Ottawa, Ill	Under construction	
DeKalb Company MHC, DeKalb, Ill	Construction not yet started.	
Northside CMHC-Northwestern University, Chcago, Ill	do	
MHC of St. Joseph County, Inc., South Bend, Ind	Under construction	Approved-unfunded.
Memorial Hospital of South Bend, South Bend, Ind	do	
Community Hospital of Indianapolis Inc., Indianapolis, Ind	Construction not yet started.	
Polk County MHC, Des Moines, Iowa	Under construction, estimated completion, October 1973.	
Rainbow MHC, Kansas City, Kans	Under construction	
Lake Charles MHC, Lake Charles, La	do	
Tulane University School of Medicine, New Orleans, La	Construction not yet started.	
Acadiana MHC, Lafayette, La	Under construction	Do.
Pendbscot Bay Medical Center, Rockport, Maine	do	
Regional Health and MHC, Cumberland, Md	Construction not yet started.	Application pending.
Holy Cross Hospital, Silver Spring, Md	do	
Takoma Park-Silver Spring MHC, Takoma Park, Md	Under Construction	Do.
Eastern Reg. Health Center Eastern CMHC, Towson, Md	Construction not yet started.	
Newton-Wellesley-Weston CMHC, Newtonville, Mass	Under construction, estimated completion, June 1975.	
Greater Lynn CMHC, Union Hospital, Lynn, Mass	Construction not yet started.	Approved unfunded.
Port Huron Hospital CMHC, Port Huron, Mich	Under construction	
Bethany Lutheran Home for Children, Human Development Center, Duluth, Minn.	do	
Thousand Hills CMHC, Kirksville, Mo	Construction not yet started.	Application pending.
St. Francis CMHC, Cape Girardeau, Mo	Under construction, estimated completion, May 1975.	Do.
Tri-Co. CMHC, North Kansas City, Mo	Under construction, estimated completion, August 1973.	
Region II MHC Northern Montana Hospital, Havre, Mont	Under construction	
Community Guidance Center, Manchester, N.H	Under construction, estimated completion, September 1973.	
Community MHC for Gloucester County, Woodbury, N.J	Under construction	Do.
Jersey Shore CMHC, Neptune, N.J	Under construction, estimated completion, March 1974.	
South Amboy Memorial Hospital CMHC, South Amboy, N.J	Under construction	
Alcoholism Center, Las Vegas, N. Mex	do	
Washington Heights-West Harlem Comp. CMHC, New York, N.Y	Construction not yet started.	
Gaston Co. Comp. MHC, Gastonia, N.C	Under construction	
Neuse Clinic, New Bern, N.C	do	

ATTACHMENT 2—Continued

AGENCIES RECEIVING CONSTRUCTION GRANTS WHICH ARE NOT YET OPERATIONAL (MAY 1973)—Continued

Agency	Status of construction	Federal staffing grant status (if any)
Tri-Co. MHC, Salisbury, N.C.	Under construction	
Johnstown Co. MHC, Smithfield, N.C.	do	
Wilson-Greene MHC, Wilson, N.C.	do	Approved unfunded.
Akron Child Guidance Center and Portage Path CMHC, Akron, Ohio	do	
Marymount Hospital MHC, Cleveland, Ohio	do	Application pending.
Jefferson Co. Comp. MHC, Steubenville, Ohio	do	
Portsmouth MH Clinic, Portsmouth, Ohio	Under construction, estimated completion, fiscal year 1973.	
Southeast Cleveland CMHC, Cleveland, Ohio	Construction not yet started.	Do.
Southeastern Oklahoma CMHC, McAlester, Okla	Under construction	
Venango Co. MHC, Oil City, Pa	Construction not yet started.	
Nazareth Hospital, Philadelphia, Pa	Under construction	
Centerville Clinic MHC, Fredericktown, Pa	do	Do.
Lawrence Co. MHC, New Castle, Pa	Construction not yet started.	
Westmoreland Hospital CMHC, Greensburg, Pa	do	
Franklin-Fulton County MHC, Chambersburg, Pa	do	
Mchlenberg Med. Ctr. CMHC, Bethlehem, Pa	do	
Conemaugh Valley Memorial Hospital, Johnstown, Pa	Under construction	Do.
Divine Providence CMHC, Williamsport, Pa	Under construction, estimated completion, February 1975.	Do.
Episcopal Hospital CMHC, Philadelphia, Pa	Construction not yet started.	Do.
Hamot MHC, Erie, Pa	Under construction	Approved unfunded.
Holy Spirit Hospital CMHC, Camp Hill, Pa	do	Do.
Memor al Hosp. Inc. MHC, Johnson City, Tenn	Under construction, estimated completion, January 1974.	
Dallas Neuropsychiatric Institute, Dallas, Tex	Construction not yet started.	
West End Neighborhood Health Center, Houston, Tex	Under construction	
Davis County MHC, Farmington, Utah	Construction not yet started.	
Fairfax-Falls Church MHC, Falls Church, Va	Under construction	Application pending.
Maryview Hospital, Portsmouth, Va	Under construction, estimated completion, fiscal year 1973.	
Whatcom Family Service Center, Bellingham, Wash	Under construction, estimated completion, April 1974.	
Benton-Franklin MH and Family Counseling, Center Inc., Richland, Wash.	Under construction, estimated completion, fiscal year 1974.	
Northern Panhandle CMHC, Wheeling, W.Va	Under construction	Do.
Fond du Lac County MHC, Fond du Lac, Wis	do	

ATTACHMENT 3

CMHC staffing grant applications pending when approval process cutoff by HEW

Ozark Guidance Center, Box 515, Springdale, Ark.
Tucson East CMHC, 36 North Tucson Blvd., Tucson, Ariz.—$300,000.
San Jose CMHC, 77 No. 15th St., San Jose, Calif.—$85,684.
Westside CMHC, 2201 Sutter St., San Francisco, Calif.—$300,000.
Bayview CMHC, 101 Grove Street, San Francisco, Calif.—$241,040.
Central City CMHC, 4272 So. Broadway, Los Angeles, Calif.—$2,610,750.
Sacramento Co. MH Services (North), 2315 Stockton Blvd., Sacramento Calif.—$238,378.
Resthaven Psych. Hosp. CMHC, 765 W. College Street, Los Angeles, Calif.—$250,021.
East Los Angeles Health Task Force, Los Angeles, Calif.
Sunset, Richmond Oceanview, San Francisco, Calif.—$1,739,879.
Sacramento Co. MH Services (East), Sacramento, Calif.—$179,636.
Peoples Clinic, Santa Ana, Calif.—$199,757.
Comp. Mental Health Services, of East Central Indiana, Inc., Muncie, Ind.
Silver Spring Takoma Park, 7600 Carroll Ave., Takoma, Md.
Regional Mental Health Complex, Post Office Box 43, Starkville, Miss.—$303,399.

Pine Belt Reg. Mental Health and Retardation Complex, Suite 406, Carter Bldg., Post Office Box 161, Hattiesburg, Miss.
St. Francis Hospital CMHC, Gordenville and Mount Auburn Rd., Cape Girardeau, Mo.
Southeast Jackson County, CMHC, Lees Summitt, Mo.
Thousand Hills CMHC, Kirksville, Mo.
Lutheran Mental Health Center, 415 South 25th Ave., Omaha, Nebr. (Mervin Riepe, administrator)
Lincoln-Lancaster MHC, 1107 Lincoln Benefit Life Bldg., Lincoln, Nebr. 68508.
North Platte Psychiatric Clinic, (Great Plains Mental Health Center), 221 South Jeffers St., North Platte, Nebr.
St. Joseph's Hospital CMHC, 2305 South 10th St., Omaha, Nebr. 68108.
Mid-Nebraska CMHC, 916 Baumann Drive, Grand Island, Nebr.
Southern Nevada CMHC, Las Vegas, Nev. 89102
Washoe Co. Center, Nevada.
So. Comp. CMHC, Nevada—$894,771
Community Center for MH Inc., 2 Park Avenue, Dumont, N.J. 07628
Gloucester Co. MHC, Psychiatric Clinic for Gloucester Co., Tatum Street, Woodbury, N.J. 08096
Mercy Hospital of Watertown, 218 Stone Street, Watertown, N.Y. 13601
Marymount Hospital MHC, 12300 McCracken Road, Cleveland, Ohio 44125—$1,563,517
Child & Adult MHC, 1009 Realty Bldg., Youngstown, Ohio 44510—$1,505,699
Southwest CMHC, Columbus, Ohio—$3,038,742
North Central Hamilton Co., Inc., Cincinnati, Ohio—$2,895,210
SE. Cleveland CMHC, Cleveland, Ohio—$9,796,783
Concerned Citizens CMHC, Toledo, Ohio—$3,962,215
SW. Pittsburgh CMHC, 2005 Sarah Street, Pittsburgh, Pa. 15201
Northeast CMHC, Roosevelt Blvd. and Adams Ave., Philadelphia, Pa. 19124
Hall-Mercer CMHC, 8th and Locust Streets, Philadelphia, Pa. 19106
Child Guidance Center, West Philadelphia Consortium, 1700 Bainbridge Street, Philadelphia, Pa. 19146
City-County Clinic, P. O. Box 669, Johnston, Pa. 15907
Divine Providence CMHC, 1100 Grampian Blvd., Williamsport, Pa.
Episcopal Hospital CMHC, Front Street and Lehigh Avenue, Philadelphia, Pa. 19125
Centerville Clinic Inc., RD #1, Fredericktown, Pa. 15133
Central Montgomery MH/MR Center, 1100 Powell Street, Norristown, Pa. 19401
St. Francis General Hospital, 45th Street, Pittsburgh, Pa. 15201
Central Pennsylvania CMH/MRC, Day Care Center, Pennsylvania—$140,780
Cambria Co. CMHC, Johnstown, Pa.
MH/MR Center for Hidalgo Co., P. O. Drawer 1108, 1425 South 9th, Edinsburg, Tex., 78539
Bear River Mental Health Center, County Courthouse, Brigham City, Utah 84302
Windham Co. MH, 67 Main Street, Brattleboro, Vt. 05301
Windsor Co. MH, Hospital Professional Bldg., P.O. Box 6, Springfield, Vt. 05156—$533,115
Fairfax-Falls Church County, 4100 Chain Bridge Road, Fairfax, Va. 22030
MH Service of Roanoke Valley, Carlton Terrace Bldg., suite 500, 920 S. Jefferson Street, Roanoke, Va. 24016
Dept. of MH and Hospital, P.O. 40 Salvada, Va. 23149
Fairfax South City, 4080 Chain Bridge, Fairfax, Va. 22030
N. Panhandle CMHC, 2000 Eoss Street, Wheeling, W. Va. 26003
Allegany Co. Health Dept., Willow Brook Rd., P.O. Box 690, Cumberland, Md. 21502

Mr. MORRIS. I wanted to make sure for the record that the committee understands the predicament that faces the community mental health services today, that is, that the authorizing legislation for the program expires on June 30 and that as yet Congress has not enacted a renewal of that program. However, the existing legislation does authorize funds for continuation grants for centers already in operation for fiscal year 1974.

We will be speaking to that issue as well as to the prospect that Congress will enact a renewal program for the Community Mental

Health Centers Act prior to June 30, thus enabling this committee to include appropriations for new starts of new community health centers in fiscal 1974.

The preliminary pages of my statement, Mr. Chairman, describe briefly where the program has been over the last 10 years, what we have accomplished and some of the problems facing us today.

On the bottom of page 4 I talk about the administration's request for fiscal 1974. It's important for the record to show that the administration has requested continuation funds for the community mental health centers program through the duration of the program under existing authorizations, which means that if the Congress responds to the administration's request for fiscal 1974 for continuation grants, you will be appropriating somewhere in the neighborhood of $635 million in excess of what is needed for this year.

What the administration wants is to have the Congress appropriate all of these dollars so that it can in effect terminate the program as it has recommended be done. It wants to have all of the dollars appropriated now so that it can fulfill its obligations to existing centers.

It's our judgment that if the Congress goes along with this recommendation and does appropriate the additional $635 million that has been requested, it will simply be agreeing with the administration that the program ought to be terminated.

We strongly recommend that this committee only recommend for appropriation in fiscal 1974 those dollars that are needed for continuing the program in fiscal 1974. Those dollars are set out on the bottom of page 5 on the right-hand column, in the column headed "Needed in Fiscal 1974." The left-hand column shows the funds requested for fiscal 1974 through 1979.

If HEW awards all of the funds to communities in fiscal 1974, the Federal Government will drop its responsibility to monitor and regulate these programs. This is unfair, both to the communities concerned and to the taxpayers who support the programs.

If HEW does not award these funds before the fiscal year in which they are to be spent, why should they be appropriated at this time? Appropriating more money than is requested by HEW in 1974 unnecessarily inflates the health budget, making it harder for the subcommittee or the Congress to justify increasing health expenditures above the President's request.

As I mentioned earlier, Mr. Chairman, we do anticipate that the Congress, prior to the completion of the appropriation process for fiscal 1974, will be enacting legislation that will provide new authority for new staffing grants in fiscal 1974, namely: 67 agencies with staffing programs. We speak to that issue today, based upon that anticipation.

There are a number of reasons why funds should be appropriated for new staffing grants in fiscal 1974, namely; 67 agencies with staffing grants approved by HEW prior to December 1972, when the program was cut off, and which have not been funded; 81 agencies and communities which have received Federal construction dollars on the understanding that staffing grant funds would be available to provide services and which are now unable to operate a program of community mental health services; a minimum of 60 agencies and communities in the process of developing and submitting to HEW applications for

grants, but which did not receive final approval prior to December 1972 when HEW cut off considering any more staffing grants.

There are quite a few programs that are in the pipeline. Communities have already put in a good deal of effort into developing these programs.

We do appreciate your support for this program, Mr. Chairman. I would like the record to show that as an addendum to our testimony we have listed the approved but unfunded programs and those that are in the developmental stage. Thank you very much for your consideration.

Mr. FLOOD. Thank you, Mr. Morris.

TUESDAY, MAY 15, 1973.

PHARMACIST'S TRAINING

WITNESSES

STEVEN REESE, LEGISLATIVE CHAIRMAN OF THE STUDENT AMERICAN PHARMACEUTICAL ASSOCIATION
JACK V. NICOLAIS, SAPHA PRESIDENT
DR. WILLIAM F. McGHAN, EXECUTIVE SECRETARY OF SAPHA

Mr. FLOOD. Dr. William McGhan, the executive secretary of the Student American Pharmaceutical Association.

Mr. Reese, will you proceed?

Mr. REESE. Mr. Chairman, I am Steve Reese, a pharmacy student at the University of Oklahoma. I am appearing before you today in my capacity as legislative chairman of the Student American Pharmaceutical Association, the national professional society of pharmacy students. SAPhA is a subdivision of the American Pharmaceutical Association, with over 12,500 student members in 73 schools and colleges of pharmacy throughout the country. Accompanying me today are Mr. Jack V. Nicolais, SAPhA president, and Dr. William F. McGhan, executive secretary of SAPhA.

The pharmacy students of this Nation are concerned deeply with the present health care crisis which deprives the people of our Nation from their right to a healthy life. To help solve this crisis, our organization constantly is seeking funding sources to aid our profession in assuming a much greater role in the delivery of comprehensive pharmaceutical services.

The task force on the pharmacists' clinical role, a group formed by the National Center for Health Service Research and Development, recently observed that pharmacists have the potential to perform several innovative functions.

To fulfill this potential, contemporary pharmaceutical education is preparing pharmacy students to assume a more patient-oriented role, thereby enabling relief of physicians, nurses, and other health practitioners of drug-related tasks that diminish their ability to provide those services for which they are uniquely trained and critically needed.

In an increasing number of institutional and community environments, pharmacists, after consultation with the physician on the disease diagnosis, are actually selecting and monitoring the drug therapy for the patient. Never has the potential of the pharmacist been better

demonstrated than in the treatment of hypertension. In a program conducted in Detroit, Mich., physicians diagnosed hypertensive patients that were followed monthly by their community pharmacists. The pharmacist prescribed the patient's drug therapy, then evaluated and modified this therapy at the monthly visits. Within 6 months the pharmacist had quadrupled the number of patients maintaining normal blood pressure above that number of patients who are normotensive under just a physician's care. In a program at Duquesne University, a cardiologist performs the hypertension diagnosis and the pharmacist prescribes the therapy, in the setting of a hospital ambulatory care facility. Similar programs are being developed in many other disease areas. This is maximum utilization of the physician's diagnostic ability and the pharmacist's expertise in therapeutics.

Pharmacists also take patient drug histories to prevent drug interactions and the development of adverse drug reactions. A recent study of adverse reactions has shown that these iatrogenic adversities result in 30,000 deaths per year, 1.5 million hospital admissions and $1.5 billion in added medical expenses. Medical experts have deemed that 80 percent of the adverse reactions could be prevented, resulting in a savings of over $1 billion annually. Pharmacists may also become involved in drug utilization review and formulary controls to promote rational therapy and further decrease drug costs to the patient. With increasing education in pharmacology, biopharmaceutics, biostatistics and clinical therapeutics, the pharmacist is uniquely trained to monitor the patient's total drug therapy. With the development of a true health care team, the patient will be the one to benefit. Several aspects of the administration's policies concerning student financial assistance and capitation grants to colleges of pharmacy must be considered as to their impact on the health care team.

SAPhA supports the administration's desire to attract health practitioners into areas of low health manpower. Unfortunately, several problems are inherent with the requirement that all students receiving new scholarships commit themselves to work within a Federal health program, or an area of low health manpower.

First, to this date, only 1–2 percent of the health professionals utilized by the National Health Service Corps have been pharmacists. Pharmacy students are eager to serve in these manpower shortage areas upon graduation and we suggest that the Federal Government should take greater advantage of young pharmacists' ability and willingness to do so. We feel it is necessary that pharmacy students not be exempted from the new scholarships due to the Federal program's lack of full utilization of the pharmacist's expertise within its system. If the availability of these scholarships is hindered because pharmacy students cannot be properly incorporated into the HEW health programs as a required stipulation, many worthy students will not be able to complete their pharmacy education.

There is a second problem associated with the proposed scholarship program. Due to the availability of capitation moneys, schools of pharmacy have experienced an increase in student enrollment of 12 percent, the largest single year percentage increase since 1964. The fiscal year 1974 level of request for loans and scholarships is about the same as the request for fiscal year 1973. The increased pharmacy school enrollments have therefore precipitated an actual decrease in

the ability of the schools of pharmacy to maintain the same proportional level of financial assistance to their students. SAPhA feels that the assistance levels must be increased to permit the same proportional amount of financial aid available for each student.

We not only feel that a greater amount of loans and scholarships should be made available to students of pharmacy, but that a distinction should be made between pharmacy students and students in schools of dentistry, osteopathy, and medicine. Students in pharmacy schools, have far less potential for financial reward after graduation than students of medical, osteopathy, and dentistry schools, therefore, increased financial assistance should be preferentially given to these pharmacy students due to their lesser ability to repay student loans after graduation.

The students of SAPhA feel that another critical aspect of the proposed policies of the scholarships and loan forgiveness be considered before it is implemented fully. The financially disadvantaged students who need the scholarships and loans will be forced back into poverty areas from which they have strived to leave. We feel that this may not be an equitable means of supplying manpower to the needy areas.

Although this solution seems to be an interesting attempt to solve the maldistribution problem, many people have criticized this approach as a more modern clandestine form of "indentured servitude." The population hit hardest by this service commitment will be the lower income students of minority background.

Unless the loans and scholarships funding levels are greatly increased, this will have a definite adverse effect upon the recruitment and retention of the socially and financially disadvantaged segments of our society. Approximately 12 percent of the U.S. population is nonwhite, the percentage of nonwhite pharmacists is only 2.6 percent. For blacks to approach parity, the 1972 graduating class would have to had contained 4,800 black pharmacy students, which is almost 100 percent of those graduating from pharmacy schools in that year. At present, however, racial minorities account for only 9 percent of the total students enrolled in pharmacy schools, thus, there is a tremendous need for more adequate financial assistance before minority students can be more adequately recruited and retained.

Mr. Chairman, we appreciate the desire of the President and Congress to operate this country on a sound financial basis, but we strongly believe that any economies that will inhibit the development of the team concept in health care can only be false economics, resulting in eventual financial loss.

We as students have seen the team approach operate in extracurricular projects such as various local community health projects, SAPhA's project SPEED, a team drug education project, and SAPhA's Health Manpower Conferences. These activities have included the student health professionals not in their traditional stereotyped roles, but as manpower resources whose functions are determined by the needs of the community. Students who have participated in the projects, view the present health care team as a farce without substance or structure, but functioning teams have been demonstrated in the student projects and it can be done. Students have shared responsibilities for patient care and patient education. Pharmacy students

participating in community health projects have not only performed drug related services, but they have also functioned in health screening activities to the point of making minor diagnosis.

Patient-oriented pharmacy training programs not only train pharmacists to better understand and utilize drug therapeutics, but they also promote this team concept by fostering interaction between pharmacy, medicine, nursing, and other health-science students. Due to the loss of capitation grants to colleges of pharmacy in fiscal year 1974, these innovative pharmacy programs and the health care service functions they are designed to provide will be severely hampered in their development. Therefore, increased support for these programs must be available through the special project grants of the Bureau of Health Manpower Education. This funding will insure quality patient-oriented programs in the schools of pharmacy.

The students of SAPhA feel there is an additional problem related to the new emphasis given to the capitation grants. The administration has proposed increased funds for capitation grants to be made available only for schools of medicine, osteopathy, and dentistry. This creates the problem of increasing numbers of these MOD health professionals and little support for innovative educational programs in the other health professions. It will therefore be impossible to develop an effective and equitable health team, which promotes a sharing of health care services among the less costly professional disciplines.

Mr. Chairman, we feel that pharmacists are now being trained who have a highly active role in solving the dilemma facing our health care system. Their future ability to promote the creation of a true health care team hinges on the availability of (1) financial aid for retention of quality, highly motivated students; and (2) funds for continued development of clinical pharmacy programs which stress the quality of the program, not just the quantity of students.

Without this continued support, the development of a health care team may be greatly hampered, resulting in continued frustration by the American people in receiving health care. They need and deserve the services that pharmacy can provide with your continued support.

With me today is President Nicolais, who was one of the six Public Health Service pharmacists to serve in Wilkes-Barre, Pa., to provide relief to community pharmacists who were disabled by Hurricane Agnes. He has a report that has been submitted. I would like to have your permission to submit this at a later date for the record.

Mr. FLOOD. Without objection, that will be done. Thank you very much.

Mr. REESE. Thank you, Mr. Chairman.

96-712 O - 73 - 21

TUESDAY, MAY 15, 1973.

DIVISION OF DENTAL HEALTH

WITNESSES

DR. CHARLES A. McCALLUM, JR., DEAN, DENTAL SCHOOL, UNIVERSITY OF ALABAMA, REPRESENTING THE AMERICAN DENTAL ASSOCIATION AND THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS

DR. H. FRED LEE, COUNCIL ON LEGISLATION, AMERICAN DENTAL ASSOCIATION

Mr. FLOOD. Dr. Charles A. McCallum, dean of the dental school, University of Alabama, representing the American Dental Association and the American Association of Dental Schools.

[The statement follows:]

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

My name is Dr. Charles A. McCallum, Jr. I am dean of the University of Alabama, school of dentistry, and am presently serving as a member of the Council on Dental Education of the American Dental Association. I am appearing today on behalf of both the American Association of Dental Schools and the American Dental Association.

Our associations recognize that Congress is engaged in a great debate on the economy and the Federal budget. Competing priorities, combined with expiring legislation and the possibility of executive impoundments contribute to the complexity of your task. For this reason, we have attempted to present a balanced and accurate testimony, noting those programs which will be continued and strengthened in the President's budget as well as those areas targeted for reduction or elimination.

Secretary Weinberger stated before the Senate Committee on Labor and Public Welfare that the time has come to "assess what is working and what is not." The administration has also indicated that federal programs should be continued "only if a legitimate need can be identified." We concur in those observations but believe that such decisions should result from reasoned discussion involving both the legislative and executive branches of government and that programs mandated and supported by Congress should not be allowed to terminate by unilateral administrative action.

In order that we may respond to the challenges that have been raised, the two associations which I represent have conducted an extensive survey on the impact of several major Federal dental health programs. It is our hope that this information will convey an accurate impression of the great progress that has been made to improve the quality, efficiency and accessibility of dental care as well as the unmet needs and future requirements that are still before us.

HEALTH MANPOWER

The passage of the Comprehensive Health Manpower Training Act of 1971 acknowledged the essential link that exists between improved health care delivery and a strong and financial viable system of health manpower education. In essence, this legislation reaffirmed a partnership between the Federal Government and the health professions schools that began with the enactment of the Health Professions Educational Assistance Act in 1963. Through the leadership and support of this committee, these programs of basic operational assistance and progressive incentives will have resulted in a significant increase in the graduating capacity of our Nation's dental schools. The complementary functions of research and service have experienced equal success in responding to the requirements of our growing society.

Capitation grants

This program is perhaps the most significant segment of the Comprehensive Health Manpower Training Act. By its adoption, the health professions schools

are authorized a source of support that is both continuing and stable. Institutions which heretofore labored under a "hand-to-mouth existence" are now provided the opportunity to focus their energies and talent on improved methods of health education and delivery.

Although our associations have expressed a continuing concern over the mandatory enrollment increases required by this program, the dental schools responded to the request of Congress for additional students by expanding the 1972 class by 319 new first-year students; 600 "bonus class" students, 978 expanded function auxiliaries and 141 graduates of accelerated 3-year curriculums have also been supported under this program. It should be noted that the government's rigid interpretation of the waiver provisions contained in the law required a number of dental schools to accept added students in the face of warnings from their national accrediting organization that such increases would jeopardize their continued accreditation.

The capitation grant enrollment increase required in the 1972–73 academic year represents the third such mandatory expansion since the inception of formula grant support in 1966. In that fiscal year, grants were awarded to 70.2 percent of the authorized level. Capitation grants in fiscal year 1972 were funded at approximately 67 percent of the legislative entitlement. Against this background of partial payments, the dental schools have increased their first-year enrollment since 1965 by over 42 percent. We believe the time has come to correct this inequity and appropriate funds equal to that intended in the law.

The 1974 administration budget reflects a categorical increase of $22.5 million for schools of medicine, osteopathy and dentistry. We are heartened by this recognition. Unfortunately such action will be at the expense of optometry, podiatry, pharmacy and veterinary medicine. In the event these professions are once again included in the capitation grant program, as we believe they should, much larger sums than the $152.5 million requested will be necessary. For this reason, we strongly urge Congress to fund this program at a fiscal year 1974 level of $202,680,000.

Construction grants

Since the advent of the construction grant program in 1965, significant progress has been realized in expanding and upgrading dental training facilities. With the combined assistance of Federal and non-Federal funds, a total of 1,379 new first-year dental places have been created. The importance of this effort was underscored in the statement of the President which accompanied the signing of the Comprehensive Health Manpower Training Act: "But legislation is only a first step. These new programs must now be adequately funded and effectively carried out * * *."

Yet, we are faced with a contradiction. No funds were allocated in fiscal year 1973 for construction grants and none are requested in the Administration's budget for 1974. It would not be realistic to suggest that national health care needs require an unlimited supply of dental graduates. Our associations do believe, however, that construction funds for renovation and replacement of existing facilities are badly needed in order to maintain the dental education system at its present level.

In addition, there are still today 20 States without a dental school as contrasted with nine States that do not have medical schools. Traditionally, these States have relied upon the private dental schools of the nation to provide training opportunities for their students. In recent years, however, dramatic changes have occurred which affect these sources. Two private dental schools (St. Louis and Loyola of New Orleans) have closed and one has recently become a state institution (Louisville). Of the remaining 24 private institutions, ten have been forced to seek state assistance in order to remain in operation. This, in turn has resulted in restrictive admissions requirements by these schools which favor instate applicants.

As an example, four of these "private" schools which now receive State support have approximately 70 percent state residents in their first-year class.

The last year in which funds were made available for the construction grant program, fiscal year 1972, a total of $22.8 million was awarded to four schools of dentistry. These grants made it possible to start new schools of dentistry in Texas, New York, and Oklahoma, as well as complete a previously approved dental school expansion in the State of Alabama. When completed, these projects will annually provide 292 new dental graduates. Unfortunately, applications requesting an additional $67 million in construction grant assistance could not be supported because of inadequate Federal funds. A majority of these approved

but unfunded projects are from existing institutions with inadequate teaching space.

Our associations view with alarm the fact that a total of 15 dental schools must rehabilitate their facilities in order to satisfy accreditation requirements. These obsolete and overcrowded facilities not only pose a threat to the quality of instruction, but in some instances, raise serious concern of health and safety. The following comments from the deans of several such schools will illustrate the extent of the problem:

One of the largest dental schools in the country.—"Current facilities include four buildings. The biomedical sciences are taught in (1) a structure which is 82 years old, and (2) an adjoining 73-year-old archaic science building long abandoned by the medical school. Some parts of the complex are of nonfireproof construction and represent fire and health hazards to students and faculty. The buildings are poorly designed, difficult to manage, overcrowded, and badly ventilated. Preclinical technique and clinical sciences are taught in a 48-year-old building, one block removed, and research is located in another structure 50 years old."

A dental school in an old and prestigious university.—"Our accreditation may be in jeopardy * * * the Council on Dental Education recommended that much of our facilities were in desperate need of expansion, renovation, and new equipment * * * there still remain clinics and laboratories which date back to 1928 * * *."

The only dental school in the State—private institution.—"The loss of Federal construction funds for dental schools has had a major impact on our school. We had planned for a large-scale renovation of the old sections of the school, estimated to cost about $2.6 million. The first of three planned phases was completed with special project grant funds. A construction grant application was submitted for the remaining two phases * * * the project was approved but could not be funded because of inadequate appropriations. We were forced to go ahead with the construction, using $400,000 of our capitation funds * * *. The utilization of capitation grant funds for the renovation has delayed the recruitment of faculty we must employ to meet accreditation needs."

A large Eastern dental school.—"Our building was originally a factory converted to educational use following World War II * * *. It will cost us $5 million just to bring the facility up to current building codes. If someone doesn't come up with a feasible method of supporting our renovation and expansion * * * we have no choice but to reduce our class size from 149 to 100."

As this committee is aware, the construction program is authorized to provide grant support for up to 80 percent of the allowable project costs. During the last grant cycle for these applications, many dental schools reduced their requests for construction grant assistance substantially below the level for which they were eligible. This action required an exceptional effort on the part of these institutions to raise the additional matching funds. Without Federal assistance, the passage of time and its accompanying inflation will soon undermine years of planning and expense.

It is for these reasons that we urge this committee to recommend appropriations for fiscal year 1974 at the same level as that of fiscal year 1972—$140,985,000. Our associations also believe that the committee can with propriety suggest some guidelines with respect to distribution of the appropriation among the various disciplines. During most of the life of this law, dental schools received an earmarked 20 percent of the construction appropriation. We believe such a percentage remains justifiable because of dentistry's share of the total backlog and the necessity for establishing schools in those areas of the country that now have none. We would urge this committee to specify that dental school applications will, in fiscal 1974, receive at least 20 percent of the total appropriation for construction.

Conversion/startup assistance

This section of the law authorizes special incentives for (1) Two-year schools of medicine that convert to M.D. degree-granting institutions, and (2) developing schools of medicine, osteopathy, and dentistry that accelerate the acceptance of their entering class. Grants awarded through the startup assistance program in fiscal year 1972 enabled new dental schools in Florida, Illinois, Oklahoma, and Massachusetts to begin instruction in temporary space, pending completion of permanent teaching facilities. One additional institution, State University of New York at Stony Brook, could not be funded because of inadequate appropriations.

Under the provisions of the law, all available funds must first be awarded to

those 2-year medical schools that are converting to M.D.-degree schools before startup assistance grants can be made.

The administration budget in fiscal year 1973 for these two programs totals $6 million. Application requests for conversion grants, however, will require approximately $6.2 million. It will not be possible, therefore, to continue a single startup assistance grant initiated in fiscal year 1972. For developing institutions which have recruited faculty, rented space, and accepted students 1 and 2 years ahead of schedule, such an abrupt phaseout of Federal support could be disastrous.

The amount necessary to continue medical, osteopathy, and dental startup assistance grants in fiscal year 1974 totals $3,015,000.

Conversion grant entitlements will require an additional $3,200,000 for two schools of medicine. The combined programs face commitments amounting to $6,215,000 in fiscal year 1974. New and supplemental grant requests for start-up assistance could add over $1 million to this base. It is apparent, we believe, that at least $7,280,000 of the full $10 million authorization should be appropriated.

Special project grants

With the establishment in 1971 of a separate authority for the relief of institutions in serious financial distress, the special project grant program now provides an effective mechanism to stimulate and support innovation in health manpower education.

In fiscal year 1972, special project grant awards to dental and other health professions schools amounted to $53.9 million. Although these projects have a fiscal year 1974 continuation commitment amounting to $50.2 million, the administration is requesting $34 million, a reduction of 32 percent from fiscal year 1972.

The committee is generally familiar with projects to increase enrollment and shorten the period of training that have been funded under this program. Less publicized but of equal impact are a number of other activities that will be seriously curtailed unless higher levels of support are appropriated. These include:

A number of dental schools have begun to implement new curriculums that permit students to progress at individual rates of learning. This concept not only makes it possible for the gifted student to complete degree requirements in less time then through the conventional curriculum, but of equal importance, provides the flexibility to accommodate students from disadvantaged backgrounds. Traditionally, these students have relied upon special tutoring and other forms of academic reinforcement to maintain an acceptable level of performance. The self-paced curriculum, however, is more responsive to individual needs and capabilities. Through the identification of discrete learning objectives, this approach provides a mechanism for precise, valid, and continuing assessment of student performance in all aspects of the curriculum.

Historically, the dental profession has been concerned with finding new and more effective means for controlling pain in the treatmnent of dental disease, as well as allaying the fears of pain in dental patients prior to treatment. One west coast dental school has taken positive steps to introduce a new pain control program by enlisting the assistance of the school of pharmacy in the establishment of an interdisciplinary training approach. The department of pharmacology of the dental school will be responsible for coordinating the interdisciplinary training program. In turn, senior pharmacy students will allocate a portion of their clinical pharmacology training to the dental school. The program will emphasize the study and use of drugs to control anxiety and pain in dental patients, both preoperatively and postoperatively as well as during dental treatment.

A primary obstacle to providing adequate health care for all segments of our population is the prevailing concentration of practitioners in economically attractive urban and suburban areas. In recognition of this severe problem of distribution, 16 dental schools have initiated grant-supported projects to recruit and train individuals from low-income, minority and rural backgrounds. Special intramural and extramural learning experiences have been designed to prepare and motivate these students for later practices in underserved communities. Parallel studies are also underway to identify those factors and characteristics which influence graduates in their choice of practice location. In turn, this information can be used by dental schools as a "predictor technique" in the recruitment and selection of students for later practice in rural and other shortage areas.

Although these projects represent only a very small sample, we hope you share our enthusiasm for the efforts that are being made through the support of the special project grant program. The fiscal year 1974 authorization in this section is $156 million. An appropriation of only one third that intended in the law would provide sufficient funds to continue existing projects as well as initiate a limited number of new high priority programs. Our associations therefore urge this committee to recommend an appropriation of not less than $53 million for fiscal year 1974.

Student aid

A separate loan fund for health professions students has been maintained since the enactment of the Health Professions Educational Assistance Act in 1963. The importance of this authority was reaffirmed and broadened under the current legislation to include a loan forgiveness provision for those graduates who elect to practice in a designated health shortage area. Several factors have prompted these decisions to provide a statutory base for health professions student assistance.

The vast majority of health students, including all dental students, have already experienced considerable undergraduate education and its attendant costs. Indeed, over 80 percent of the current first-year dental class have completed 4 years of undergraduate training. In many instances, these students and their families have had to borrow money to meet these expenses. The prospect of 4 or more years of dental education presents an entirely new and often discouraging financial burden for potential applicants.

The second major factor is the high cost of a health profession education. In the past decade, tuition costs have been rising at a rate of close to 10 percent a year. Preliminary data for the 1972–73 academic year reflects an average 4-year educational cost to a dental student in excess of $10,000. For private dental schools which rely heavily upon tuition to meet the cost of operation, this amount is even higher. A survey at six of our Nation's largest dental schools reveals a total 4-year cost to the student, exclusive of living expenses, of between $13,000 and $16,770. It must also be remembered that these levels represent only a fraction of the expense that the dental school incurs in training these students. An analysis of estimated dental school expenditures for the current academic year, not including capital improvement, averages $13,442 annually per student.

In recent years, another development has occurred which further underscores the need for expanded programs of student assistance. As a result of a concerted effort on the part of the dental schools to increase the number of minority students, there are at the present time 1,316 minority students enrolled in our dental schools. This number represents an increase of 100 percent during the past 5 years. These individuals as well as other highly committed young men and women from disadvantaged backgrounds are the very students who can least afford the spiraling costs of a health education. Individual ability and dedication should be the benchmark of acceptance in our health education system—not family income. Without the financial assistance authorized by Congress, a career in the health field would rapidly become a possibility only for the affluent in our society.

The administration's fiscal year 1974 budget request continues the health professions loan program at the 1973 level of $36 million. Scholarship support, however, has been reduced by $5.5 million to $10 million. The Department defends this latter action by stating that, "It is inequitable to continue scholarships for certain health professions not available to students in other professions." Beyond this juncture, the picture becomes somewhat cloudy. Although no restrictions have yet been announced, the fiscal year 1974 budget levels are calculated to provide scholarship support only for those students with an existing commitment. It would appear then, that the administration is planning to phase down and out the health professions scholarship program.

To replace this form of Federal assistance a new program of National Health Service Corps Scholarships is to be established. This opportunity will entail a commitment of service to the Government in order to provide a source of health personnel for assignment to designated shortage areas. We believe that several considerations should be noted in evaluating the potential impact on this new direction.

The administration has indicated that it will seek an appropriation of $22.5 million for the National Health Service Corps scholarship program. This amount, when combined with the $10 million requested for health professions

scholarships, represents a significant increase for fiscal year 1974. It should be noted, however, that the appropriations ceiling for National Health Service Corps scholarships in fiscal year 1974 is limited to $3 million. We assume, therefore, that pending the enactment of the necessary legislation increasing this ceiling, it is the intent of the administration to request $32.5 million under the existing health professions educational assistance authority.

RESEARCH

National institute of dental research

This year marks the 25th anniversary of the National Institute of Dental Research. The outstanding contributions made by the Institute, and the International recognition it has achieved, is in large measure the product of its dedicated scientists and administrators, and the support it has received from the Appropriations Committees of Congress.

Although the National Institute of Dental Research is the third oldest of the research institutes, it is still one of the smallest of any of the National Institutes of Health basic research components. The President's fiscal year 1974 budget requests only $38,452,000 for the National Institute of Dental Research. This amount is almost $4 million less than was allocated in 1972 and represents only 3 percent of the total National Institutes of Health research budget. To a large degree, these reductions will directly occur in the area of extramural research grants.

Over the years, the Institute has carefully and painstakingly developed a strong base of dental research. As a result of these advances, NIDR has in recent years been able to redirect many of its efforts from fundamental research and problem definition to applied research. In the area of dental caries, an effective anti-caries sealant has been developed, new approaches to topical uses of fluorides have been introduced and the exploration of the caries-inhibiting effect of enzymes is well underway. Research in periodontal (gum) disease, which affects two-thirds of all middle-aged Americans, has yielded significant information on the interplay of immune responses to bacteria in the destruction of supporting tissue. Unchecked, this disease can lead to the destruction of supporting bones in the jaw as well as the loss of teeth. The past support and understanding of this committee has been invaluable—it is even more important today when the opportunity exists to translate this research into better dental care for all Americans.

Although dental caries and periodontal disease rank as the predominant oral health problems—there are other areas such as cleft lip and palate, and oral cancer which also require our attention. Oral cancer claims over 14,000 victims annually. Of this number, over one-half die; severe facial disfigurement is often the legacy of those fortunate to survive. Cleft lip and/or palate is a congenital malformation which occurs once in every 700 births. It is estimated that 260,000 Americans suffer from this affliction. Because the level of scientific knowledge in these areas is less advanced, an intensive campaign must be launched to explore promising avenues of basic research.

From these investigations will come the cause-effect information that is necessary for prevention, diagnosis, and treatment. In order to continue this virtually important activity, our Associations recommend a fiscal year 1974 appropriations of $45,860,000.

Research training and fellowships

The administration has announced its intentions to phase out the companion programs of research training grants and research fellowships. We are deeply concerned that these ill-judged actions to economize will exact a heavy payment on our future research efforts and resources. It is not possible to gage the precise number of potential research breakthroughs that will be delayed or even lost as a result of this decision. However, some measure of the immediate impact upon the manpower pool for future dental research and training can be gained from the following statistics. In fiscal year 1972, the National Institute of Dental Research awarded $5,270,000 for the support of 85 training grant programs. These funds not only provided student support in the form of stipends and tuition, but also enabled the training institutions to develop and maintain a creative research environment. By fiscal year 1974, training grant support from the NIDR is projected to fall to a level of $4,191,000—the amount necessary for continuing 44 training programs.

Research fellowships awarded by the NIDR in fiscal year 1972 amounted to $1,601,000. This assistance provided training in the health sciences related to dentistry for 96 individuals. Post doctoral support under this program is designed to prepare the new DD.S. or Ph. D. graduate for the demands of independent teaching and research. Special fellowships are also available to permit dental educators who received their professional training 10, 20, or 30 years ago to update their knowledge and skills. It is estimated that only $1,100,000 will be available to NIDR in fiscal year 1974 to continue 62 previously committed fellowships.

The research fellowship and training grant programs were established in recognition of the fact that highly qualified teachers and researchers are an essential component in a balanced system of health education and research. These programs not only provide the skilled investigators necessary to advance the boundaries of dental research, but of equal importance, serve as a primary means of developing critically needed faculty.

This latter aspect is most important to our Associations when the increased enrollment requirements of the health manpower legislation is considered. Simply stated, more health professionals cannot be trained without more teachers. Recent data from our dental schools reflects a need for 617 additional faculty positions. Further demands upon our education system for increased graduates will only compound the problem. We cannot, therefore, agree with the Department of HEW that "a continued Federal push to train researchers may well lead to an oversupply of scientists who will be unable to find appropriate employment." Alternate sources of support for these programs have been offered by the administration and, in our opinion, are totally unrealistic.

For these reasons, we urge this committee to assure these vital programs the support that is necessary. The result will be productive and creative research as well as stronger programs of health manpower education. An amount equal to the 1972 level is recommended.

General research support

The Department's fiscal year 1974 budget proposes crippling reductions for the general research support program. In fiscal year 1972 a total of $55,212,000 was available for this area—the fiscal year 1974 budget has been slashed to only $17 million. Of the four programs included under general research support, only the recently launched (fiscal year 1972) minority schools biomedical support program contains an increase in funds. The combined total for general research support grants (GRS) and biomedical sciences support grants in fiscal year 1974 is $9,500,000—a reduction of $34,798,000 from 1972. Health sciences advancement awards are to be eliminated after fiscal year 1974.

The loss of general research support grants will have the greatest impact on schools of dentistry. In fiscal year 1972, 34 schools were awarded $2,580,273 under this program. By fiscal year 1974 only one dental school will receive GRS grant support.

Traditionally, the National Institutes of Health has provided only limited funds for dental research. This is evidenced by the small amount proposed for the National Institute of Dental Research in fiscal year 1974. GRS grants, therefore, have become an essential element in the efforts of our dental schools to improve the overall quality of research and research training. This flexible program of support has not only made it possible to attract and retain skilled investigators but, as noted above, it has provided a source of funds to sustain dental research when other assistance was unavailable. Recent information from our dental schools indicate that a high percentage of GRS grants are expended for the support of research personnel. With the announced phase out of research training and fellowships, plus the across-the-board reductions in categorical research grants, an alternate source of support for these activities simply does not exist.

Our Associations strongly recommend that this committee, at a minimum, appropriate an amount for general research programs that is equal to the fiscal year 1972 level of $55,212,000.

DIVISION OF DENTAL HEALTH

As in years past, the administration's budget for fiscal year 1974 does not adequately provide for this Division's diverse responsibilities. An additional concern shared by our Associations is the possible effect the Department's plan to decentralize and reorganize its health programs will have on the Division and its

program. For many years now, the Division has been conducting a broad range of coordinated programs which focus upon increasing and improving our national dental manpower resources, seeking better ways to facilitate the delivery of quality dental services at reasonable costs, and decreasing the need for dental services through floridation and other prevention-oriented efforts. These programs are having a positive impact on the capability of the dental profession to deliver quality care to the public and on the public's awareness of the importance of dental health. This success has been due primarily to the fact that the Department has focused responsibility for these programs in a single organizational unit, the Division of Dental Health. The profession's concern is that these programs be continued within such an organizational focus and that they are not further diluted by draining off personnel and funds. To insure that this occurs, we strongly urge the retention of an identifiable budget and a strong central administration for these dental health programs. We are greatly disturbed by reports that this Division may be adversely affected by reorganization plans of the Department. Such organizational realinements today may prove to be irreversable over the next several years. We concur with the Secretary's Advisory Committee that the continuance and strengthening of this Division as a focal point for these programs is essential if HEW is to carry out its dental responsibilities.

This committee is familiar with the programs of the Division to increase the efficiency and productivity of dental practice. Although these efforts represent one of the most promising means of increasing productivity, the fiscal year 1974 budget will at best enable the Division to continue these programs at the current level.

The Department's proposed budget also ignores the need for adequate funds for expanding applied dental research. The HEW Secretary's Advisory Committee on Dental Health in its December 1972 report stated that increasing the productivity of dental manpower and the provision of more care to more people depends in part upon expanding research and recommended to the Secretary that "a major effort should be launched immediately to conduct a coordinated program of research and development related to the organization, financing, delivery, and utilization of dental services, and adequate funds for this purpose should be made available to the Division of Dental Health."

It must be recognized that the Division occupies a singularly important position so far as national and State dental organizations are concerned. It has a significance far beyond the dollar levels it has been accorded. The Division, it is fair to say, is the sole, central HEW agency dealing with many dental public health affairs of importance not just to the profession but to the public. Its broad-based activities deserve far higher visibility and far more generous support.

Increases are needed for continuing education programs for practicing dentists and allied dental personnel, for public education programs on periodontal and other types of oral disease and for the Division's highly important programs dealing with more efficient use of auxiliary personnel.

The Division is, as well, the core Federal agency dealing with fluoridation. One of its key programs in this area—carried out in cooperation with the Robert A. Taft Sanitary Engineering Center and the Environmental Protection Agency—is to develop and present courses in fluoridation surveillance of community water supplies for State and local health and water works personnel. Recent surveys carried out by the Environmental Protection Agency make it quite clear that such programs are badly needed in many parts of the country.

We respectfully recommend to this committee that a line item amount not less than $14,979,000 be appropriated for the Division of Dental Health.

DENTAL CARE FOR CHILDREN

During the appropriations testimony of the National Institute of Dental Research, our Associations noted the well-founded concern of this committee on the provision of dental care for indigent children. Although several federally sponsored programs now exist, they have never received adequate funding. As an example, authority has existed since 1968 under section 510, title V of the Social Security Act to support pilot dental care projects for needy children. These projects would not only provide the very services this committee inquired about, but of equal importance, permit local communities to explore alternate patterns of organizing, financing and delivering such care.

At the time this section was being considered in Congress, the Department of HEW recommended a 1-year funding of $5 million for the programs. Four years later, the total funding for dental projects has amounted to only $4 million. In addition to severely limiting the number of needy children actually receiving dental care, this wholly inadequate support has precluded any meaningful research into promising approaches to the delivery of dental care. In fiscal year 1972, this program received over 140 inquiries for grant assistance. Available funds, however, permitted reduced funding for only 18 previously committed projects.

Because the climate of support for this important program does not appear to have changed, we have concluded that this activity must be transferred to an agency within the Department which has demonstrated greater understanding and sympathy for its purpose. Legislation to this effect has been reintroduced in the new 93d Congress by its original sponsor, Senator Warren G. Magnuson. Entitled the Children's Dental Health Act, this bill can accomplish more for the dental health of our children than any other measure in recent years. A House version is sponsored by Representative Paul G. Rogers and seven of his committee colleagues. Passage of the Children's Dental Health Act, combined with the support of this committee, would increase greatly the availability of preventive dental care for many needy children throughout the country.

Dr. McCallum. Mr. Chairman and members of the committee.

My name is Dr. Charles A. McCallum, Jr. I am dean of the University of Alabama School of Dentistry. I am a past president of the American Assocation of Dental Schools and am presently serving as a member of the Council on Dental Education of the American Dental Association. I am appearing today on behalf of both the American Association of Dental Schools and the American Dental Association.

Our associations recognize that Congress is engaged in a great debate on the economy and the Federal budget. Competing priorities, combined with expiring legislation and the possibility of Executive impoundments, contribute to the complexity of your task. In our detailed statement that we would like to file for the record, we have attempted to present a balanced and accurate testimony—noting those programs which will be continued and strengthened in the President's budget—as well as those areas targeted for reduction or elimination.

I will try to summarize our major recommendations as briefly as possible.

The Division of Dental Health is the only agency in the Department of HEW, except the National Institute of Dental Research, that has identifiable responsibilities in dental health. Although the President's budget provides a slight increase for these activities in fiscal year 1974, we believe this amount to be inadequate to support the diverse responsibilities of the Division. An additional concern shared by our association is the effect the Department's plan to decentralize and recategorize its health activities will have on the Division.

The impact and success of the Division's dental programs have in large measure been the result of placing responsibility in a single organizational unit. The importance of this was underscored in a recent report by a special committee appointed by the Secretary of HEW to advise him on the effectiveness of dental activities in the Department. The committee recommended that the Division and its programs be retained and strengthened. "There is nothing to be gained," the report stated, "from the transfer of any functions out of the Division." Precipitous action to dismantle the Division of Dental Health would not only dilute the effectiveness of its programs, but—of equal importance—preclude a direct review of many dental activities by Congress.

The President's fiscal year 1974 budget requests $12,993,000 for the Division of Dental Health. An increase to $14.9 million, the amount approved by this committee in last year's bill, would provide these vital programs the minimum support that is necessary. Of most importance is the inclusion of the appropriation for the Division as a line item in the committee's bill for fiscal 1974.

Capitation grants—this is the program that provides a stable source of financial support to schools of the health profession and relieves them from the hand-to-mouth existence under which they previously have labored. We have expressed a continuing concern over the mandatory enrollment increases required by this program. The capitation grant enrollment increase in the 1972–73 academic year represents the third such expansion since the inception of formula grant support in 1966. In that year, grants were awarded at 70 percent of the authorized level. Capitation grants in 1972 were funded at approximately 67 percent of the legislative entitlement. Against this background of partial payments, dental schools have increased their first-year enrollment by over 42 percent. We hope the committee will agree that the time has come to correct this inequity and to bring appropriations in line with the commitments that have been made.

Mr. FLOOD. Are you having the same nature of trouble that the medical schools are having on enrollments?

Dr. MCCALLUM. That is right.

Mr. FLOOD. You are having generally the same kind of problem?

Dr. MCCALLUM. Yes.

Mr. FLOOD. If you had bricks and mortar, and you had the hardware and all that kind of thing, would you have a faculty?

Dr. MCCALLUM. In part we do, but there are deficiencies.

Mr. FLOOD. Suppose I gave you 10 buildings. Would you have a faculty?

Dr. MCCALLUM. No.

Mr. FLOOD. You would have buildings and students, but no faculty.

Dr. MCCALLUM. That is because of our training grants cutback. We must have good faculty if we are to provide quality education.

The 1974 administration budget contains a categorical increase of $22.5 million for schools of medicine, osteopathy, and dentistry. We are heartened by this recognition. Unfortunately, such action will be at the expense of schools of optometry, podiatry, pharmacy, and veterinary medicine. In the event these professions are restored to the program, as we believe they should be, larger sums than the $152.5 million requested will be necessary. For this reason, we endorse an appropriation of $202,680,000.

As this committee is aware, great progress has been realized in expanding and upgrading dental teaching facilities since the advent of this program in 1965. This fact is reflected in the 1,379 additional first-year dental places that have been created. It would not be realistic to suggest that our national health care system requires an unlimited supply of dental graduates and new dental schools. Our associations do believe, however, that construction funds for the renovation and replacement of existing facilities are badly needed. We view with concern the fact that several schools must rehabilitate their facilities in order to satisfy accreditation requirements. These obsolete and over-

crowded buildings not only pose a threat to the quality of instruction, but in some instances raise serious concerns for health and safety.

Mr. FLOOD. How many dentists do you need tomorrow morning at 10 o'clock nationwide?

Dr. MCCALLUM. It depends on what part of the country we are talking about. We do have a problem in distribution, just like the other health professions do.

Mr. FLOOD. Just a round, fat figure nationwide, do you have one?

Dr. MCCALLUM. I couldn't give you this specifically, sir.

Mr. FLOOD. If you think of one, put it in the record later on.

Dr. MCCALLUM. I certainly will.

[The information follows:]

There are today approximately 100,000 dentists in the United States engaged in chairside practice, of whom some 94,000 are in private practice. Additionally, there are some 20,000 currently active dental hygienists and approximately 110,000 dental assistants.

There are many factors other than numbers, however, that influence the demand and need for dental manpower. For example, in some locales throughout the United States, there are problems with respect to accessibility of care because dental manpower is not evenly distributed. Similarly, there are problems because public and private support for dental care for the indigent and others in the population are scattered and sometimes are nonexistent. Given these problems and other uncertainties requiring future planning, available indications are that the current actively manifested demands for dental services can be met.

The sufficiency of dental manpower to satisfy public demand, however, depends upon continuing substantial public financial support for our dental educational institutions. If this is not continued, the progress that has been made, as outlined in our record statement, will be reversed, and the future capabilities of our system will undoubtedly suffer.

Our associations share the committee's concern with obtaining more precise methods by which the future and present capabilities of the dental care delivery system can be measured. Because of this concern, the American Dental Association is actively considering a study that will provide more exact, detailed information about existing dental resources, as well as developing measurement devices that will permit more refined projections for the future.

Dr. MCCALLUM. In addition, there are still today 20 States that do not have dental schools. We recognize that it is not practical, in the foreseeable future, to establish a new dental school in each of these States. Nevertheless, provision must be made to provide training opportunties for their students.

No funds were allocated for construction grants in fiscal year 1973, and none are requested in the administration's budget for 1974. We believe this is unwise and that an amount at least equal to the fiscal 1972 level, $140,985,000, should be appropriated.

A separate loan fund for health professions students has been maintained since the enactment of the Health Professions Educational Assistance Act in 1963. The importance of this authority was reaffirmed and broadened under the current legislation.

The administration's fiscal year 1974 budget continues the health professions loan program at the 1973 level of $36 million.

Scholarship support, however, has been reduced by $5.5 million to only $10 million. Although no restrictions have been formally announced, this budget level is calculated to provide scholarships only for those students with an existing commitment. It would appear then that the Department is planning to phase down and out the existing health professions scholarship program.

Mr. FLOOD. How many years does it take to get a degree in dentistry?

Dr. MCCALLUM. Four years.

Mr. FLOOD. In other words, you have to take a bachelor's degree plus your dental degree. You aren't talking about a combination course of 6 years, are you?

Dr. MCCALLUM. Eighty percent of the students who are matriculating in schools of dentistry today have their baccalaureate degree. There are 21 schools that permit the opportunity for students to complete their dental course in 3 calendar years.

Mr. FLOOD. Are you working on a combination course of 6 years for the 2 years?

Mr. MCCALLUM. No. Although some students with less than 4 years of undergraduate work do matriculate at schools.

Mr. FLOOD. A number of the medical schools—some are now doing it this year, and more are going back to it next year—are making it 6 years for a B.A. or B.S. and an M.D. What are you doing about a D.D.S. in 6 years—on the same campus or two campuses?

Dr. MCCALLUM. If I remember correctly, Representative Flood, about 20 percent of those entering dental school have 3 years or less of college. The problem becomes one of competition among those who have exceptional qualifications. Many students who come to us in dental school find it appropriate to get their baccalaureate degree first.

Mr. FLOOD. A baccalaureate degree is not a condition for entering the school then?

Dr. MCCALLUM. No, it is not. The requirement is 2 years, but most of them today are completing their baccalaureate degree prior to matriculating.

To replace this assistance, an expansion of the National Health Service Corps program apparently is contemplated by the administration, but no authorizing legislation has been submitted to Congress. The need to assist deserving students, however, is a continuing one, and we urge this committee to appropriate $19,220,000, an increase of $3,720,000 over the budget for fiscal 1973.

The administration has announced its intention to phase out the companion programs of research training grants and research fellowships. We are deeply concerned that these actions to economize will exact a heavy payment on our future research efforts and resources.

This is what you were asking about. It's from these training grants that we get our future teachers. If we need to expand our schools, we must have qualified instructors. These programs not only provide the skilled investigators necessary to advance the boundaries of dental research but, of equal importance, serve as a primary means of developing critically needed faculty.

This latter aspect is most important to our associations when the increased enrollment requirements of the health manpower legislation are considered. Simply stated, more health professionals cannot be trained without more teachers. Recent data from our dental schools reflects a need for 617 additional faculty positions. Further demands upon our educational system for increased graduates will only compound the problem. We cannot, therefore, agree with the Department of HEW that "a continued Federal push to train researchers may well lead to an oversupply of scientists who will be unable to find appropriate employment." Alternate sources of support for these programs

have been offered by the administration and, in our opinion, are totally unrealistic.

For these reasons, we urge this committee to assure these vital programs the support that is necessary. The results will be productive and creative research, as well as stronger programs of health manpower education. An amount equal to the fiscal year 1972 level for research training grants and fellowships is recommended.

The Department's fiscal year 1974 budget proposes crippling reductions for the general research support program. In fiscal year 1972 a total of $55,212,000 was available for this area—the fiscal year 1972 budget has been slashed to only $17 million. The loss of general research support grants will have the greatest impact on schools of dentistry. In fiscal year 1972, 34 schools were awarded $2,580,273 under this program. By fiscal year 1974 only one dental school will receive grant support.

Our associations strongly recommend that this committee, at a minimum, appropriate an amount for general research programs that is equal to the fiscal year 1972 level of $55,212,000.

During the appropriations testimony of the National Institute of Dental Research, our associations noted the concern of this committee on the provision of dental care for indigent children. Although several federally sponsored programs now exist, they have never received adequate funding. As an example, authority has existed since 1968 under section 510, title V, of the Social Security Act to support pilot dental care projects for needy children. These projects would provide the very services this committee inquired about. A similar situation now exists for dental care authorized under title XIX—medicaid—and the health services development grants of the Public Health Service Act.

We appreciate this opportunity to present our views and we will be pleased to answer any questions.

Mr. Flood. There now exists quite a number of 2-year community colleges nationwide. They are growing by leaps and bounds all over the place and will continue to do so. Do you have any arrangements made with community colleges for 2-year predental work to go straight into dental school?

Dr. McCallum. We have arrangements in some areas for these people in community colleges and technical institutes to come into dental hygiene and some of the auxiliary programs.

Mr. Flood. I don't mean as paramedics. I mean 2-year predental school in a community college and, if properly accredited, the students go straight to dental school and finish in 4 years.

Dr. McCallum. If they have the prerequisite courses, they can.

Mr. Flood. That is being done and can be done?

Dr. McCallum. Yes.

Mr. Flood. To what extent do you pay any attention, or is that in your level, to dental service in rural areas where there are certain counties that have rural medical delivery corps, and so on?

Dr. McCallum. The Division of Dental Health is helping to support students to attempt to identify those individuals who, if selected for dental school, might most likely return. In the past, most people who returned to rural areas were those who come from rural areas. We have had some support to provide fiscal assistance through the

Robert Wood Johnson Foundation to assist us in attempting to better distribute our health manpower programs.

Mr. FLOOD. Thank you.

Dr. MCCALLUM. Thank you, sir. With your permission I would hope we could file a statement on behalf of the American Dental Hygienists' Association.

Mr. FLOOD. Certainly.

[The statement follows:]

RECORD STATEMENT OF THE AMERICAN DENTAL HYGIENISTS' ASSOCIATION

The American Dental Hygienists' Association is pleased to have this opportunity to comment on the fiscal year 1974 budget for the Department of Health, Education, and Welfare.

This year marks the 50th anniversary of the American Dental Hygienists' Association. Since our early beginnings to provide preventive dental health and educational services to children in the public schools of Connecticut we have grown to a present membership of over 20,000. Dental hygienists are licensed in all 50 States and Puerto Rico. As members of the dental health team, dental hygienists not only perform important clinical functions but also serve as primary dental educators for individuals and groups in the area of prevention of oral disease. Clinical dental hygiene procedure include: Removing deposits and stains from teeth, performing clinical examination of teeth and surrounding tissues for diagnosis by the dentist; applying prescribed medicants to teeth for prevention of dental decay; and preparing clinical and laboratory tests for interpretation by the dentist.

Few health topics have been the subject of more intensive discussion in recent years than the question of auxiliary personnel. It is generally recognized that the efficient utilization of auxiliary personnel represents one of the most economical means available for increasing the productivity of dental practice. Health experts, Members of Congress, and others have recognized the need to support training programs for auxiliary personnel actively engaged in health care occupations.

At the present time there are 149 operational dental hygiene programs with a total enrollment in excess of 9,000. An additional 12 developing programs plan to enroll their first students in 1973. The minimum education required for dental hygiene licensure and practice is the completion of 2 academic years of college study in an accredited dental hygiene program. The associate of arts level curriculum prepares the dental hygienist for practice in a clinical setting. A number of 4-year colleges and universities offer curriculums leading to the bachelors and masters degree in dental hygiene. These advanced degree programs not only serve as a primary means for the preparation of educators and administrators, but also provide the skills necessary for the hygienist to undertake research into more effective means of disease prevention and education in dental health.

The American Dental Hygienists' Association recognizes the continuing demand for clinical dental hygiene practitioners and is encouraged by the annual growth in the number of hygiene programs and graduates. The association also recognizes the equal need for dental hygienists who are qualified for participation in public health programs, educational institutions, hospitals, and dental specialty offices.

As with medicine, dentistry, and the other health professions, Federal assistance is a critical factor in the efforts to maintain the supply and improve the quality of training of dental hygienists. The passage of the Allied Health Professions Personnel Training Act in 1966 provided the opportunity for Congress and the Executive to respond to these needs. This comprehensive legislation provided the authority for basic operational assistance, construction grants, curriculum improvement, and student aid. Unfortunately, only limited funds have been allocated for these purposes over the past 7 years. Indeed, no amounts were allocated for basic improvement and construction grants in fiscal year 1973. Final evidence of this lip service approach to allied health support is provided in the administration's fiscal year 1974 budget which completely eliminates support for allied health training programs.

Our association strongly urges this committee to appropriate the funds necessary to meaningfully implement the programs of the allied health professions

legislation. Such action would demonstrate conclusively to the health community the congressional intent to fulfill its commitment expressed by the passage of the law.

Basic improvement grant support was intended to provide the allied health training programs with a continuing and stable source of Federal assistance. These funds have, in the past, been used to underwrite faculty salaries, purchase much needed equipment, and permit the renovation and alteration of inadequate teaching facilities. No grant awards were made under this program in fiscal year 1973 and no funds are requested by the administration for fiscal year 1974. Even when support was available for these grants, the dollar levels failed to keep pace with the growth of allied health programs. In fiscal year 1968, 482 curriculums shared $9,750,000 in basic improvement grants. By fiscal year 1971 the number of programs had increased to 805—however, the amount available for basic improvement grants was reduced to $9,701,000. The combined total to all dental auxiliary education programs in fiscal year 1971 amounted to less than $1.5 million. These unrealistically low amounts in the initial years of the legislation, combined with the decision of the Government not to award any basic improvement grants in 1973 has placed a heavy financial burden on our dental auiliary training programs. In view of this, we believe this committee will endorse our recommendation that an amount of not less than $15 million be appropriated for fiscal year 1974.

Special improvement and special projects grants were authorized to assist the allied health schools to expand their enrollments, improve curriculum and undertake innovative approaches to the training of auxiliary personnel. An amount of $60 million was authorized for these programs in fiscal year 1973. We recommend that at least $30 million be appropriated for fiscal year 1974.

Student aid.—Only limited funds were requested by the administration for scholarships, student loans, traineeships, and the work-study program in fiscal year 1973 and none are requested for fiscal year 1974. The need for student assistance in the health field, we believe, is readily apparent to this committee. It is particularly important if allied health is to remain competitive with other professions in attracting quality students. We would like to point out that the American Dental Hygienists' Association has developed a scholarship program of its own to assist hygiene students who would otherwise be unable to continue their training. The need for Federal programs of assistance, however, remains and we urge this committee to appropriate at least $20 million for these programs.

Construction grants are the essential ingredient in the ability of our allied health schools to both expand enrollment and adapt to the changes underway in auxiliary education. No funds were requested for this program in 1973 and none are requested for fiscal year 1974. Without this critically needed support, the allied health professions will be unable to keep pace with the demand for increased numbers and new levels of auxiliary personnel. A minimum of $30 million is needed to meet the current requirements for new and expanded teaching facilities.

The division of dental health supports a variety of projects that directly impact on allied health. These activities range from preventive dentistry and the promotion of fluoridation to the development of teacher training programs for the dental allied health professions. Of particular importance to our association is the grant supported program of the division to increase the productivity of dentists through the utilization of multiple auxiliaries. Dental hygienists are playing an increasingly important role in the team approach to the delivery of dental care. Other important aspects of the division's activities which relate to allied health include continuing education, public information programs, curricular research, student recruitment and selection and research into the organization, financing, and delivery of dental care. These broad responsibilities require a realistic budget. The association believes that the division fiscal 1974 budget be set at the minimum level of $14,979,000.

Public health traineeships authorized under section 306 of the Public Health Service Act is a primary mechanism for dental hygienists to acquire the advanced training necessary for administrative and teaching responsibilities. No funds are requested by the administration in this area for fiscal year 1974. With parallel reductions in the traineeship program of the Allied Health Act, all sources of support for the advanced training of auxiliary personnel have been eliminated. We feel that it is essential to restore the amounts authorized for these purposes. The Association recommends an appropriation of $18 million for public health traineeships in fiscal year 1974.

TUESDAY, MAY 15, 1973.

MARC PROGRAM

WITNESSES

HON. LOUIS STOKES, A REPRESENTATIVE IN THE CONGRESS FROM THE STATE OF OHIO

DR. LUTHER S. WILLIAMS, ASSISTANT PROFESSOR OF BIOLOGY, DEPARTMENT OF BIOLOGICAL SCIENCES, PURDUE UNIVERSITY

Mr. FLOOD. We have Congressman Stokes. Will you take the chair, Congressman?

You were here and testified yourself yesterday. Now you have a duty, I understand, that you wish to perform.

Mr. STOKES. Thank you, Mr. Chairman. It's a pleasure to be here once again before you and your distinguished committee. It's my pleasure this afternoon, Mr. Chairman, to introduce to this committee at this time Dr. Luther S. Williams.

Dr. Williams was born in rural Alabama. He was educated at Miles College, Atlanta University, and Purdue University. He is now an associate professor of biology at Purdue University. He is one of only nine applicants in the Nation who have earned a Ph. D. in biochemistry. He is thoroughly familiar with the MARC program, about which I testified here yesterday. I am sure, Mr. Chairman, you will find him to be a distinguished young man. I appreciate this opportunity to introduce him to you.

Mr. FLOOD. Very well, Doctor. I don't know who arranged that appearance for you, but you couldn't have done better. Somebody is on your side.

Dr. WILLIAMS. Thank you, sir.

Mr. FLOOD. Dr. Luther S. Williams.

Dr. WILLIAMS. Mr. Chairman, I have prepared a written statement which I submit for the record and I desire to read parts of this statement during the next several minutes.

I am Dr. Luther S. Williams, associate professor of biology, department of biological sciences, Purdue University. First, I express gratitude for this opportunity to appear before this committee on behalf of the minority access research careers programs of the National Institute of General Medical Science, NIH. During the past 4 years, I have observed and experienced, firsthand, the special problems confronted by minority Americans and predominantly minority institutions as regards training in biomedical sciences. As a black American actively engaged in research and training of black graduate students, and having served as a consultant for review of two NIH programs, the minority schools biomedical support programs and minority access research careers programs, I am quite aware of the serious and essentially permanent consequences which would result from termination of training programs for minority Americans. The decision to phase out research training programs of NIH, presumably motivated by manpower and training considerations, would terminate the minority access to research careers—MARC—program of the Institute of General Medical Science. It is, however, evident that the goals of the MARC program include specific scientific and socioeconomic factors

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which are specific to minorities. This is derived from the obvious fact that the problem of training minority personnel has resulted from specific societal barriers related exclusively to minority Americans.

It is my opinion that the training and manpower situation for minority Americans is already a great "American Tragedy." This honest statement begs the question why.

This question is addressed by presentation of the following data.

According to a Ford Foundation study, less than 1 percent of Americans with earned doctoral degrees are black, less than 1 percent of the Ph. D. candidates at the end of the 1967–68 school year were black men and women and the mean time lapse between the B.S. and Ph. D. is about 10 years; with the majority of black American Ph. D. holders earning their B.S. degrees at black colleges and 80 percent of these persons are employed at minority schools.

Mr. FLOOD. Are you the only black Ph. D. around in biomedical sciences?

Dr. WILLIAMS. No. As I will indicate later, there is a total of about 700 minority scientists in natural sciences. Of those, about half are in biomedical science.

Mr. FLOOD. Is that a lot?

Dr. WILLIAMS. That is incredibly small.

Interestingly, of the total number of students, 18 percent of them were foreign nationals, but only 1 percent were minorities. For medical students the situation is equally as bad.

Mr. FLOOD. We have a number of requests for white students who want to go to Howard Medical School. They specifically asked for Howard in this last couple of years.

Dr. WILLIAMS. In summary, this country has—in almost 100 years—produced 7,000 black physicians, which gives a ratio of 1 black doctor of medicine per every 3,377 black citizens as compared to 1 white doctor of medicine for every 750 white citizens. It would appear that the country needs 30,000 black physicians now. Further, in this same period of approximately 100 years, there has been produced a total of 700 minority natural scientists with about one-half of these persons being trained in biomedical sciences. Thus, today, the United States of America with a population of better than 20 million minority citizens has produced 1 minority scientist from a pool of 57,142 citizens; even though, for black Americans, 16 percent of the total relevant population enrolled in college in 1970 and 6.1 percent of black Americans had completed college [1970 U.S. census data]. While these data are underestimations in some areas, they clearly reference the problems of training minority Americans in biomedical sciences. I believe that this problem can be addressed only by: (*a*) recognizing the character and extent of the problem; and (*b*) development of a program specifically mandated to provide the needed training components.

In fact, the MARC programs, by design, would be rather well suited to meet this societal need for minority manpower, if fully implemented. [See MARC program proposal as indicated in Congressional Records, 1972.] I would therefore desire to emphasize the components of this training program—present activities and possible future activities.

(*a*) The crucial element in such a program should be general institutional support to a number of selected minority schools for the

purpose of strengthening the science faculty. I suggest that funds would be made available to each school for equipment, supplies, personnel, student support, and other instructional needs. Why invest these funds in minority schools? The answer is simple: Better than half of the total number of biomedical scientists received their undergraduate training in minority schools. Since there are at least 30 minority colleges with premedical and prebiomedical science programs, I estimate that $2 million would provide support for these 30 undergraduate programs. Thus, this effort would give a pool of well-trained minority graduates for competitive entrance into professional and graduate schools.

Mr. FLOOD. Who is going to select them—you?

Dr. WILLIAMS. I would suggest that a committee of members of the participating minority schools, with the aid of educators from other universities, form a committee to select the schools; that applications be submitted; and that grants be awarded as a function of competition.

(*b*) Second, three of the Nation's minority institutions offer Ph. D.'s and several others offer M.S. degree programs. It is suggested that training programs be established to support M.S. and Ph. D. programs in minority colleges such as Howard, Tuskegee, Atlanta University, and Meharry for minority students who plan to subsequently enter post-M.S. or post-Ph. D. training elsewhere. Funding on the order of $200,000 each for 10 such programs is recommended.

(*c*) Third, the MARC fellowships to faculty members in minority schools and the visiting distinguishing scientists fellowship—which are already in existence at NIGMS—should continue and be expanded. The presented estimated obligations for fiscal years 1973 and 1974 are $300,000 and $900,000, respectively. At a minimum this program should be continued and—to be more effective—should be increased twofold.

(*d*) Given the undergraduate training program for basic and fundamental training in biology, chemistry, physics, and math, the enhancement of minority school faculty via the MARC fellowship program and M.S. training programs at about 10 minority schools, the products of this training sequence could readily enter any of the Nation's medical and graduate schools. However, it is obvious that, at this level, the phaseout of regular training mechanisms will compromise these efforts unless some of the training support is retained or an alternative support mechanism be provided for minority graduate students for Ph. D. and postdoctoral training, specifically mandated as such by appropriate congressional language.

(*e*) To further enhance the scientific development of minority biomedical scientists after graduate schools, the support mechanism for postdoctoral study as trainees or fellows, along with the Research Career Development Award programs, would be vital. It is noteworthy, that, while these training mechanisms have existed for many years, we are only beginning to see minority participation in a meaningful way.

I am convinced that these funds and efforts would be of tremendous help in addressing the needs of minorities in medical sciences. At precisely the time we are stressing minority participation in the mainstream of education and research, it seems unwise and paradoxical to terminate the very programs which would allow movement into the mainstream. How can we get more minority scientists and physicians unless we train more, and how can we train more without a meaningful

training facility? The demand for the few trained minorities is exceedingly high; and it appears to me that the country needs perhaps a hundredfold increase in the minority manpower pool, rather than a decrease.

In conclusion, Mr. Chairman, I wish to express my gratitude for the opportunity to present these views.

[The statement follows:]

Mr. Chairman, I have prepared a written statement which I submit for the record and I desire to read parts of this statement during the next several minutes.

I am Dr. Luther S. Williams, associate professor of biology, Department of Biological Sciences, Purdue University. First, I express gratitude for this opportunity to appear before this committee on behalf of the minority access to research careers programs of the National Institute of General Medical Science. NIH. During the past 4 years, I have observed and experienced, first hand, the special problems confronted by minority Americans and predominantly minority institutions as regards to training in the biomedical sciences. As a black American actively engaged in research and training of black graduate students, and as a consultant for review of two NIH programs, the minority schools biomedical support program and minority access to research careers program, I am quite aware of the serious and essentially permanent consequences which would result from termination of training programs for minority Americans. The decision to phase out NIH research training programs, presumably motivated by manpower and training considerations, would terminate the minority access to research careers (MARC) program of the Institute of General Medical Science. It is, however, evident that the goals of the MARC program include particular scientific and socioeconomic factors which are specific to minorities. This is derived from the obvious fact that the problem of training minority personnel has resulted from specific societal barriers as related exclusively to minority Americans.

It is my opinion that the training and manpower situation for minority Americans is already a great American tragedy. This honest statement begs the question why.

This question is addressed by presentation of the following data.

(*a*) In 1970, 3,071 science departments of 227 universities enrolled a total of 188,800 full- and part-time graduate students, with 18 percent of the total in life sciences. Of the total, 82 percent are U.S. citizens and 18 percent are foreign nationals, while only 1 percent are minority Americans. The Federal Government provides support for 34 percent of the total number of students.[1] In contrast, all the institutions in this country have only produced a meager 650 to 700 minority scientists in 94 years.[2] For natural scientists, the production rate for nonminorities is 2,000 per year as compared to 6.9 per year for minorities.[2] (Presently the production rate is 50 minority Ph.D's per 13,000 Ph.D's in life sciences.)

(*b*) According to a Ford Foundation study, less than 1 percent of Americans with earned doctoral degrees are black, less than 1 percent of the Ph.D. candidates at the end of the 1967–68 school year were black men and women and the mean time lapse between the B.S. and Ph.D. for a black student averages 10 years; with the majority of black American Ph.D. holders earning their B.S. degrees at black colleges. Of the black Ph.D's, 80 percent are employed at minority schools.[3]

(*c*) In medical schools, from a total enrollment of 41,193,000 for 1972–73, only 4.7 percent are black Americans, 0.08 percent are American Indians, 0.57 percent are Mexican Americans, 1.48 percent are American Orientals and 0.18 percent are Puerto Rican (mainland) for a total of 7.05 percent minority enrollment.[4] Interestingly, from 1938–39 to 1969–70, the number of black students in medical schools only increased from 1.64 to 2.75 percent.[4]

(*d*) Further, while there has been a significant investment of funds in Federal fellowships and training programs, minority participation (for all years) has been no greater than about 5 percent for fellowships and 9 percent for training grants.

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[1] Graduate Student Support and Manpower Resources in Graduate Science Education. 1970. Surveys of Science Resources Series, NSF.

[2] Negroes in Science, Natural Science Doctorates, James M. Jay.

[3] A Survey of Black American Doctorates. James W. Bryant. Special Projects in Education, the Ford Foundation, Office of Reports.

[4] Journal of Med. Ed. 47 (1972) and 48 (1973).

In summary, this country has (in almost 100 years) produced 7,000 black physicians which gives a ratio of one black M.D. per every 3,377 black citizens as compared to one white M.D. for every 750 white citizens. It would appear that the country needs 30,000 black physicians now. Further, in this same period of approximately 100 years, there has been produced a total of 700 minority natural scientists with about one-half of these persons being trained in biomedical sciences. Thus, today, the United States of America with a population of better than 20 million minority citizens has on the average trained one minority scientist from a pool of 28,571 citizens and one minority biomedical scientist from a pool of 57,142 citizens; even though for black Americans, 16 percent of the total relevant population enrolled in college in 1970 and 6.1 percent of black Americans had completed college (1970 U.S. Census data). While these data are underestimations in some areas, they clearly reference the problems of training minority Americans in the biomedical sciences. I believe that this problem can be addressed only by (a) recognition of the character and extent of the problem and (b) development of a program specifically mandated to provide the needed training components.

In fact, the MARC program, by design, would be rather well suited to meet this societal need for minority manpower, if fully implemented. A full description of the MARC program is provided in the Congressional Records for the past fiscal year. I would therefore desire to emphasize the components of this training program (present activities and possible future activities).

(*a*) The crucial element in such a program should be general institutional support to a number of selected minority schools for the purpose of strengthening the science faculty. I recommend that funds be made available to each school for equipment, supplies, personnel, student support and other instructional needs. Why invest these funds in minority schools? The answer is simple. It is there that the talent lies. Better than half of the total number of biomedical scientists received their undergraduate training in minority schools. Since there are at least 30 minority colleges with premedical and prebiomedical science programs, I estimate that $2 million per year would provide support for these 30 undergraduate programs. Thus, this effort could provide a pool of well-trained minority graduates for competitive entrance into professional and graduate schools.

(*b*) Second, three of the Nation's minority institutions offer Ph.D's and several others offer M.S. degree programs. It is suggested that training programs be established to support M.S. and Ph.D. programs in minority colleges such as Howard, Tuskegee, Atlanta University and Meharry for minority students who plan to subsequently enter post-M.S. or Ph.D. training elsewhere. Funding on the order of $200,000 each for 10 such programs is recommended.

(*c*) Third, the MARC fellowships to faculty members in minority schools and the visting distinguishing scientists fellowship (which are already in existence at NIGMS) should continue and be expanded. The presented estimated obligations for fiscal 1973 and 1974 are $300,000 and $900,000, respectively. At a minimum this program should be continued and to be more effective, should be increased twofold.

(*d*) Given the undergraduate training program for basic and fundamental training in biology, chemistry, physics and math, the enhancement of minority school faculty via the MARC fellowship program and M. S. training programs at about 10 minority schools, the products of these training sequences could readily enter any of the Nation's medical and graduate schools. At this level, however, it is obvious that the phaseout of "regular" training mechanisms will compromise these efforts unless some of the training support is retained or an alternative support mechanism is provided for minority graduate students in Ph. D. and postdoctoral training, and is specifically mandated as such by appropriate congressional language. It should be emphasized that while white students can afford loans, minority students would find this very difficult and would not likely be assigned research assistantships.

(*e*) To further enhance the scientific development of minority biomedical scientists after graduate schools, a mechanism to support postdoctoral study, along with a research career development award type program would be of the utmost importance. It is noteworthy, that while the above mentioned training mechanisms have existed for many years, we are only beginning to see minority participation in a meaningful way.

I am convinced that these funds and efforts would be of tremendous help in addressing the need for minorities in medical sciences. At precisely the time we are stressing minority participation in the mainstream of education and research,

it seems unwise and paradoxical to terminate the very programs which would allow movement into the mainstream. How can we get more minority scientists and physicians unless we support their training, and how can we train more without a meaningful training facility? The demand for the few trained minority scientists is exceedingly high; and it appears to me, that the country needs perhaps a hundredfold increase in the minority manpower pool, rather than a decrease.

In conclusion, Mr. Chairman, I wish to express my gratitude for the opportunity to present these views (which were prepared in consultation with Drs. Jonas Richmond, University of California, Berkeley, Franklin Hamilton, UT-Oak Ridge Graduate School of Biomedical Sciences, Percy Russell, University of California (San Diego), Dr. J. Schooler, Duke University, A. Atencio, University of New Mexico and L. Frederick, Atlanta University, Ga.).

Curriculum Vitae—Luther S. Williams, Ph. D.

Born: August 19, 1940, Sawyerville, Ala.

Education: Miles College, 1961, B.A., Atlanta University, 1963, M.S., Purdue University, 1968, Ph. D., State University of New York at Stony Brook, 1968–69, American Cancer Society Postdoctoral Fellow.

Career: Postdoctoral Fellow, State University of New York at Stony Brook, 1968–69; assistant professor, Atlanta University, 1969–70; assistant professor, Purdue University, 1970–73. Associate professor, Purdue University, 1973. USPHS career development awardee, Purdue University, 1971–75.

Member: Microbiology training committee, NIGMS, USPHS, 1971–present; placement committee, American Society of Microbiology, 1973–76; National Academy of Sciences committee on the impact of NIH training, 1972–74; advisory committee for minority student programs, Biology Division, Oak Ridge National Laboratory 1970 to present; ad hoc review committee for MARC programs, NIGMS, USPHS, 1972 to present; ad hoc consultant to the minority schools biomedical support programs, DRR, USPHS, 1971 to present; member of the American Society of Biological Chemistry committee on minority participation in science, 1972 to present.

Societies; American Society of Microbiology, American Chemical Society (Biological Chemistry), and American Society of Genetics.

Mr. FLOOD. Thank you very much.

Dr. WILLIAMS. Thank you, Mr. Chairman.

TUESDAY, MAY 15, 1973.

BASIC RESEARCH SUPPORT GRANTS

WITNESS

DR. GERALD WEISSMANN, PROFESSOR OF MEDICINE, NEW YORK UNIVERSITY MEDICAL CENTER, REPRESENTING THE AMERICAN SOCIETY FOR CELL BIOLOGY

Mr. FLOOD. Now we have Dr. Gerald Weissmann, professor of medicine, New York University Medical Center. He is also representing the American Society for Cell Biology. Doctor?

Dr. WEISSMANN. Mr. Chairman, members of the subcommittee, ladies and gentlemen. My name is Gerald Weissmann and I am professor of medicine at New York University. I am here on behalf of the American Society for Cell Biology to request support for research in the basic medical sciences through the National Institutes of Health—support given in large measure through the National Institute of General Medical Science.

Cell biologists are scientists who combine the techniques of looking with those of measuring: they study the insides and outsides of cells by means of electron microscopy, cell fractionation, and ultrafine biochemistry. They have as their subjects lowly links in the living chain, such as the amoeba, and higher ornaments such as the brain

cells of man. In the past decade, thanks chiefly to direct support by you, our representatives, we have discovered more about cells than was considered possible by the greatest optimists of science fiction: we have learned, for example, that the chemical substance which causes separate cells of the lowly slime mold to come together and fuse is the same one which can reverse the transformation, by cancer viruses, of normal into malignant human cells.

But it is not as a cell biologist that I come before you; it is in my role as a physician of Bellevue Hospital charged with care of the urban sick. In the last few years, it has become impossible to make ward rounds at Bellevue Hospital without being increasingly certain that the most important, relevant—if we can still use that word—and lifesaving research is basic research. By basic research, I mean science done for its own sake by scientists not hired for contract, not directed from afar, but by scientists driven simply by the desire to know. Thus, when last week, at Bellevue, we worried over the strange electrocardiogram of a recently admitted executive with a heart attack, the discussion of treatment centered on the effects of ions on small, submicroscopic channels within the heart muscle cells, the structure and functions of which have just been appreciated thanks to delicate studies of cell physiology and electron microscopy. Or, when we were confronted by a young black house painter with sickle cell anemia, it was knowledge of membrane biochemistry—just achieved after extensive exploration of the frozen surfaces of vastly magnified red cells—that permitted modern therapy to proceed.

But let me be specific and tell you three short stories of how basic, unprogramed, research done in and around my own institution has helped us in clinical situations. These can, no doubt, be duplicated in many other medical centers involved in basic research and patient care.

In the late 1950's a Berkeley microbiologist—funded by a project grant—discovered that bacteria which formed carotenoid pigments were protected from ultraviolet irradiation whereas colorless bacteria were killed by sunlight. Carotenoids are the stuff that makes carrots orange. One of our students, Michelene Mathews—whose part-time research was funded by the general research support program—reading these experiments 5 years later, encountered an unfortunate patient with a disease, the major symptom of which was an exquisite sensitivity to sunlight that resulted in fevers, blisters, and disfigurement.

Mr. Flood. Is that the opposite of chlorophyll in plants? Is it the same idea?

Dr. Weissmann. It serves somewhat the same function. It absorbs ultraviolet irradiation.

After working with red cells from this patient in the test tube and guided both by cell biologists and clinicians, such as Leonard Harber, our student—now a respected scientist in her own right—reasoned that if carotenoid pigment protected bacteria against ultraviolet light, then perhaps they would protect the cells of people as well. Today, thanks to work on lowly bacteria, over ten thousand people with the disease called erythropoetic protoporphyria can live symptom-free lives if only they take carotene by mouth.

Another example. During the late 1950's, building on the work of Rockefeller Institute scientists, H. Sherwood Lawrence of New York

University—funded by a project grant—launched basic studies of the two separate major systems of immunity: the cellular and humoral. One is the function of blood cells, the other the function of plasma or serum. It had been known for some time that serum immunity could be transferred to a nonimmune recipient; Lawrence, however, discovered that cell immunity could also be transferred in the human. This type of immunity is the one that is most important in our efforts to cope with fungi, tubercle and leprosy bacilli, or tumor cells. He and his students—funded by NIH training grants—then extracted material called "transfer factor" which could transfer the immune message to the nonimmune. Today, several hundreds of people with genetic or acquired incapacity to generate their own transfer factors are being successfully treated with this material for a variety of diseases ranging from boils to leprosy.

Mr. FLOOD. Cells reproducing bisexually. Why does a diseased cell reproduce in such chain-lightening fashion as distinguished from a normal cell? Is it because it is abnormal?

Dr. WEISSMANN. In part.

Mr. FLOOD. I guess that is the question, isn't it?

Dr. WEISSMANN. There is data to bear on why it does so. It does so for different reasons with different kinds of tumors.

A final example. Also in the late 1950's, Dr. Lewis Thomas, then at New York University and now president of the Sloan-Kettering Institute for Cancer Research—aided by a project grant—injected rabbits with the meat-tenderizer enzyme, papain, and made their normally erect ears floppy and droopy like those of a spaniel. Although zoologically fascinating and quite picturesque, this experiment was regarded no more that a stunt until similarities were noted between this insult to a structure made of cartilage and that produced in experimental animals given large amounts of vitamin A—studied by a group in Cambridge headed by Dame Honor Fell.

Mr. FLOOD. What is vitamin A as distinguished from vitamin B or vitamin D?

Dr. WEISSMANN. Vitamin A is soluble in fat. It also comes from carrots and tomatoes. It is one of the few vitamins the injestion of which in excess causes disease.

Damage to cartilage was produced by a meat tenderizer—an enzyme—and by a vitamin. Well, millions of Americans suffer similar cartilage damage each year due to arthritis. Dr. Thomas and his students—aided, as I was, by training grants and NIH fellowships—then combined with the British group to figure out that the cartilage-destroying enzymes of humans are packaged in submicroscopic packets called lysosomes by their discoverer, Christian de Duve, who accidentally found these little structures while working on diabetes.

Mr. FLOOD. Why not hypoglycemia? Why that? Why not both of them?

Dr. WEISSMANN. He was working on the enzymes involved in regulating blood sugar. So by definition this is an elucidated mechanism of hypoglycemia as well.

Excess vitamin A broke these tiny containers to liberate their harmful, digestive ferments and cause arthritis-like damage to cartilage. Eventually, these observations led to an explanation of how the miracle drug cortisone works: it renders these packets resistant to disruption—or stabilized. Today, over 16 pharmaceutical concerns are busy trying to discover new drugs which will stabilize lysosomes; but, more importantly, these experiments on the cells of rabbits have provided us with the modern explanation of how joints are injured in arthritis.

Why have I gone into these stories? I think the message is clear:

Breakthroughs in clinical medicine come most often as a result of years of painstaking nonclinical work. All first-rate research that passes peer review must therefore be considered relevant, or disease-oriented, whether so labeled or not. Massive, directed programs or extensive contract hierarchies will never substitute for the splendid stimulus of curiosity. Henry James asked: "What is science but the absence of prejudice in the presence of money?"

On behalf of the ASCB, I request the aid of your committee in presenting money to the unprejudiced for the ultimate aim of healing the sick. We request:

(1) Restitution of training grants and fellowships at least to the recommended—but not the funded—level of 1972. We support H.R. 5640, the National Health Research Fellowship and Traineeship Act of 1973.

(2) A rise in allotment for the NIGMS at least to the level of 1972.

(3) Maintenance of the peer-review system within the NIH to maintain the integrity of science and to prevent the possible encroachment, via administration pressure, by venal or political considerations of research funding.

(4) A reversal of the present trend toward abolition of individual, investigator-initiated project grants in favor of contracts, and finally:

Redirection of some funds allotted for the national crusades against specific diseases such as cancer, heart disease, et cetera, toward the generous support of basic research.

For unless we train the promising, support the proven, and reward the excellence of those in basic research, progress cannot ultimately be made in the care of the sick.

Thank you for listening to me, Mr. Chairman.

Mr. FLOOD. They use the phrase "the perfect system," which has been a very bad phrase around town for the last several months, just now for the people who are "realining priorities." That is really bad.

The perfect system is a very snooty thing. The perfect system is no longer. It is a bad thing. I am not saying this. They are.

Dr. WEISSMANN. I think most of the active scientists who are doing work with their own hands or in their own laboratories would prefer to be judged by a democratic group of peers rather than by an administrator at the NIH who stopped doing work 10 years ago.

Mr. FLOOD. I didn't think anybody could say it better than I did, but you did. Thank you very much.

Mr. PATTEN. It's a pleasure to have you before our committee, Dr. Weissmann.

TUESDAY, MAY 15, 1973.

SCHOOL ASSISTANCE

WITNESSES

HON. LOUIS STOKES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO
HON. CHARLES A. VANIK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO
DR. PAUL BRIGGS, SUPERINTENDENT OF SCHOOLS, CLEVELAND, OHIO, AND EXECUTIVE COMMITTEE MEMBER OF THE COUNCIL OF GREAT CITY SCHOOLS

Mr. FLOOD. Now we have Dr. Paul Briggs.

First of all, we will have him introduced by some of our colleagues.

Congressman Minshall of Ohio had another hearing, and could not remain. He was here. He sits alongside of me on another subcommittee, I being vice chairman of the Defense Appropriations Subcommittee, where he is now the ranking minority member of the committee. He came here to speak on your behalf. I assured him we knew you well.

Also, Congressman Stokes. We recognize Congressman Stokes in connection with your appearance, Dr. Briggs.

STATEMENT OF REPRESENTATIVE LOUIS STOKES FROM OHIO

Mr. STOKES. Thank you, Mr. Chairman. Just briefly I would like to say that all the area Congressmen are here today, including Mr. Vanik, because of the high esteem in which we hold this distinguished educator.

Dr. Briggs is one of America's most distinguished educators and we are very proud he hails from Cleveland where he heads up one of the largest school systems in the country. He has testified on many occasions before the Education and Labor Committee of the House and it has been the beneficiary of his national reputation in the field of education. I commend him today to this distinguished subcommittee and to you, Mr. Chairman.

Mr. FLOOD. Thank you very much, Congressman.

We also have the high privilege and great honor of having Congressman Vanik of the great State of Ohio present. Congressman Vanik is on the second most important committee in the House, the Ways and Means Committee. They raise the money and we spend it. We have the best part of the assignment.

STATEMENT OF REPRESENTATIVE CHARLES A. VANIK OF OHIO

Mr. VANIK. In order to conserve the time of the committee, I join in the statement made by my distinguished colleague, Congressman Stokes. I have only 5,000 residents in the city of Cleveland in my new district but we look upon Dr. Briggs as our leader. He has set educational policy and the tone of educational policy for the entire community. We are very proudly impressed by what he has achieved in Cleveland. I think it is one of the best administered school districts in the entire country.

I want to join in what Congressman Stokes said about his great qualifications to offer some real innovative ideas and suggestions to your committee.

Mr. FLOOD. I congratulate Cleveland on having the three of you, and Dr. Briggs, thank you.

STATEMENT OF DR. PAUL BRIGGS

Dr. BRIGGS. Thank you. I want to thank both of the Congressmen for making this gracious introduction. It is a pleasure to be here with your committee, Congressman Flood. I will be very brief. The testimony I have covers more than 10 minutes so I will summarize.

Mr. FLOOD. You want it submitted for the record?

Dr. BRIGGS. Yes, sir.

[The statement of Dr. Briggs follows:]

STATEMENT OF PAUL W. BRIGGS, SUPERINTENDENT OF SCHOOLS, CLEVELAND, OHIO

Mr. Chairman, members of the subcommittee, it is an honor and a pleasure to be here today to discuss the impact of Federal assistance on the Cleveland Public School over the years and the level of assistance needed by our school system to maintain our high level of service to our students.

Cleveland is the largest city in Ohio. The school district is the largest in the State, enrolling 7 percent of all Ohio schoolchildren. However, our district has almost one-third of the children from welfare families in the State.

In 1969, 15 percent of Cleveland schoolchildren were recipients of public assistance. This year the percent more than doubled to 35 percent, and now we have 60,000 school-age children in Cleveland who are members of families receiving public assistance.

Fifty-seven percent of our students are black. We enroll less than 1 percent American Indian, less than 1 percent oriental, and 2 percent Spanish-surname. Forty percent of our students are designated as "all others," using categories prescribed by HEW.

The unemployment rate in Cleveland is 11.8 percent. The percentage of unemployed whites is 6.9 percent while the nonwhite figure is 18.2 percent. The nonwhite rates is even higher in the inner city. The nonwhite unemployment figure for Cleveland is the highest in the Nation.

It is the poor and unemployed to whom we urban educators must address ourselves. The poor and unemployed in the inner city need supportive services and programs designed to overcome the effect of poverty. Through education we upgrade people socially and economically.

Critical to our efforts in overcoming racial isolation and poverty is financial assistance from the Federal Government. At a time when we enroll more and more poor pupils and we see an increasing unemployment figure for the inner city, we find a steady decline in the amount of tax revenue available to us. This decrease is attributable to a lowering of taxable values in Cleveland, although the voters have increased their taxes 137 percent since 1964.

At the same time our tax revenue is decreasing, we find a steady increase in the cost of doing business in Cleveland. The cost of providing service to students in Cleveland is higher than it is elsewhere in the State. Our cost per pupil is $1,047 while the State average is $795. For example, it costs us more to operate our schoolbuses; our costs are $1.20 per mile while the State average is 47 cents per mile. We pay our custodians $6.75 an hour; Cincinnati pays $4.20, and Lima $3.73.

A second factor in our cost of doing business is the increase in the cost of living. In March it was announced that the cost of living was the highest in 22 years.

Very simply, we will continue to need more money to maintain today's level of service to Cleveland's needy children.

Through the years we have been very fortunate in having a comfortable relationship with officials of the Federal Government and with members of the Committee on Education and Labor of the House of Representatives.

With the help of the Federal Government we have been able to mount many and varied programs in Cleveland.

The largest portion of our Federal allocation is funds from title I of the Elementary and Secondary Education Act of 1965. I am probably one of the few superintendents of a major urban school system who can discuss the entire evolution of programs made possible by ESEA. I was superintendent in Cleveland before the ESEA became law and I have watched it develop through the years.

This year we have in operation 12 title I projects serving more than 14,000 pupils. Our projects are fully described in the brochure entitled "Focusing on Changing Needs," accompanying this statement.

Our programs emphasize improving basic skills of those children who most need help. They help prepare younger children for school experiences. Other programs are designed to prevent deficiencies in basic subject areas. Emphasis also is placed upon individualizing and customizing instruction for those students with deficiencies.

[Chart 1] An area of special concern is early childhood education. In 1964 our school system offered no prekindergarten classes; today 1,700 4-year-olds are enrolled. In 1964 we had no reading specialists in our schools; this year we have 109. We find similar growth in service for all of our title I projects. Generally, we show gains for title I participants of at least 1 year's growth for each year of participation in a program. This is accepted as normal nationally.

CHART 1.—IMPACT OF FEDERAL FUNDS, CLEVELAND PUBLIC SCHOOLS, 1964-73

	1964	1973
Prekindergarten pupils	0	1,700
Elementary libraries	0	135
Reading specialists	0	109
Vocational education classes	52	409
Pupils eating breakfast	0	[1] 25,000
Pupils in Federal lunch program	1,900	40,000
Job placement for inner-city high school graduates (percent)	25	97
Adults enrolled in adult basic education	0	3,510

[1] Daily.

Title II of ESEA has been instrumental in our efforts in Cleveland to see that every one of our 185 schools has an up-to-date library facility with quality materials. In 1964 none of our elementary schools had a library; today each of our schools—elementary and secondary—has a library. Title II funds allow us to continually update the material in these facilities.

In a large metropolitan area such as Cleveland, technical-vocational education is a critical need. In 1964, our system offered 52 classes in vocational education. Presently, in two exclusively vocational high schools, in two manpower training facilities and in all 15 comprehensive high schools, we offer 409 vocational classes.

In 1964, 10 percent of our students were vocationally trained; last year 45 percent of our students were trained in vocational classes.

Another area of continuing and increasing importance to the Cleveland Public Schools is our manpower program. Our two primary manpower facilities are the Manpower Training Center and the Woodland Job Center.

The federally funded (MDTA) Manpower Training Center offers a job training program for disadvantaged, unemployed, and underemployed men and women in a five-county area. The center also offers training programs for the handicapped and for individuals incarcerated at the Cleveland workhouse.

In addition to training programs, the Manpower Training Center provides such supportive services as counseling, guidance, basic education, general education development (GED) program, nutrition, and job placement. Priority for enrollment is given to Vietnam veterans and to the disadvantaged.

More than 9,000 adults have been served since the center opened in 1965. Since then, more than 75 percent of the participants have been placed in jobs.

Housed in a factory donated to the school system by the General Electric Co., the Woodland Job Center offers training and actual production of products to the out-of-school youth who wishes assembly line type employment.

In the facility are several assembly lines managed by Cleveland industries where enrollees actually work. Also available are supportive services such as those offered at the Manpower Training Center.

Ninety-six percent of Woodland Job Center participants desiring work are placed in jobs upon completion of their work at the center.

Available at the Woodland Job Center is the vocational work-study program, through which participants may work part time in a field relating to their work and study at the center.

Designed to encourage the 18- to 21-year-old dropout to return to school to obtain job preparation and his high school diploma, the 12-year-old program has a job placement average of 65 percent. Since many work-study students receive their high school diplomas, some graduates enroll in college and other continuing education programs.

The Cleveland public schools offer vocational programs to handicapped students, including the educably mentally retarded and the deaf and crippled, in such areas as baking, shoe repair and power sewing. These projects serve 265 handicapped students.

Over the past 6 years the Cleveland Public Schools' job development program has placed in jobs an average of 95 percent of those inner-city high school graduates desiring work. In spite of the difficult economic times this past summer, 97 percent of the graduates of inner-city high schools were placed in jobs.

[Chart 2] The Cleveland Public Schools have been very effective in manpower endeavors. Our cumulative job placement record speaks for itself.

The Cleveland Public Schools' Schools Neighborhood Youth Corps (SNYC) has been cited as one of the Nation's finest. We have administered the program, funded by the U.S. Department of Labor, since 1965.

[Chart 3] During the first year of the program we served nearly 800 needy youngsters; last year 12,457 disadvantaged young people participated in the program.

Special emphasis in our SNYC program is on educational priorities.

In 1965, the program was strictly a job program; last year, one-third of the participants spent part of their time in academic work. Some of these were high school students enrolled in college programs.

Our in-school program includes pupils from private, parochial, and suburban public schools.

Despite our successes with the program through the years, a dispute arose last summer regarding its sponsorship. The Department of Labor considered a transfer of the sponsorship of SNYC to city hall. After considerable discussion among representatives of the city, the board of education, and city council, a compromise agreement was reached whereby funds for the program would pass through city hall to the school board. The board of education had full fiscal and management responsibility for the program. I must say to you that without Council's help, the compromise would have been impossible.

We would prefer a direct contract with the Department of Labor for SNYC. If a direct contract is impossible, then we would accept an agreement similar in nature to the 1972 compromise. We will not operate an SNYC program unless we have full and complete responsibility—both fiscal and management.

Education of the handicapped is particularly important to us in Cleveland. We have a new school for the deaf. We have a special school for the physically handicapped and special classes for the blind and partially sighted are offered throughout the system.

In our school for the deaf we have a Realia Library which is a collection of miniature objects used in helping the deaf child develop language concepts. We received funding for this library from the Federal Government through the Education of the Handicapped Act, part B.

A look at the 13,000 students enrolled in adult education programs last year demonstrates our success in upgrading the education of people who, for one reason or another, did not complete high school, or who lack skills necessary for worthwhile employment. More than 700 passed the general education development test (GED), 521 graduated from high school and 255 enrolled in vocational or other job training.

We offer adult classes at our adult day high school, one of the few facilities of its type in the country, and in 57 locations throughout the city.

Our supplementary educational center, originally funded by ESEA, title III funds, daily brings students from throughout the metropolitan Cleveland area together to share experiences and activities which are beyond the scope of the individual schools. The center today is operated with Cleveland Public School funds.

Let me digress at this point to comment on educational revenue sharing. To date, revenue sharing dollars have not found their way into the Cleveland Public Schools. I realize that this subcommittee does not directly determine the de-

livery system for Federal dollars; but, as Members of Congress, you can. I ask you to seriously weigh the consequences of any congressional commitment to revenue sharing for education.

[Chart 4] Our total Federal allocation this year is $19.2 million. These funds are used to finance many programs and services for our students—from the very young through the elderly. I have outlined some of our programs to you in detail. I have omitted detailed descriptions of many others of equal importance and impact, including nutrition, follow through and right to read.

Any cutbacks in any of these programs would have profound negative effects. At a time when our school system faces serious financial problems, aid from the Federal Government is crucial in helping us reach those who need supplementary services.

[Chart 5] At a time when our educational dollar will not buy as much as it did last year and the year before, aid from the Federal government is critical. Last year, with a title I allocation of $8.6 million, we served 15,440 children. This year's allocation of $8.7 million serves only 14,485 children.

[Chart 6] At a time when Federal funding enables us to hire 4,096 community people in jobs in our schools, aid from Washington is critical. These people live in high poverty areas. If they lose their jobs through lack of funds, the community is directly affected.

At a time when ESEA title I funds have encouraged the State of Ohio to enact legislation providing similar compensatory funds—to the point where this year's State allocation exceeds the Federal—maintenance of these Federal funds is critical.

In spite of these additional funds, we still are unable to provide all pupils in all grades in all areas of need with important special instructional services.

Therefore, I urge this subcommittee to seriously consider the impact of any cutbacks in educational funding from the Federal Government.

As a superintendent, I have to be pragmatic. I have to be for the things that work best for our children. In Cleveland, existing Federal programs have been most effective in delivering the kinds of categorical money that cannot be dissipated and cannot be used elsewhere.

Education is the cure to urban ills. Without financial assistance from the Federal Government, education in America is in serious trouble.

CHART 2

JOB PLACEMENT

CLEVELAND PUBLIC SCHOOL PROGRAMS

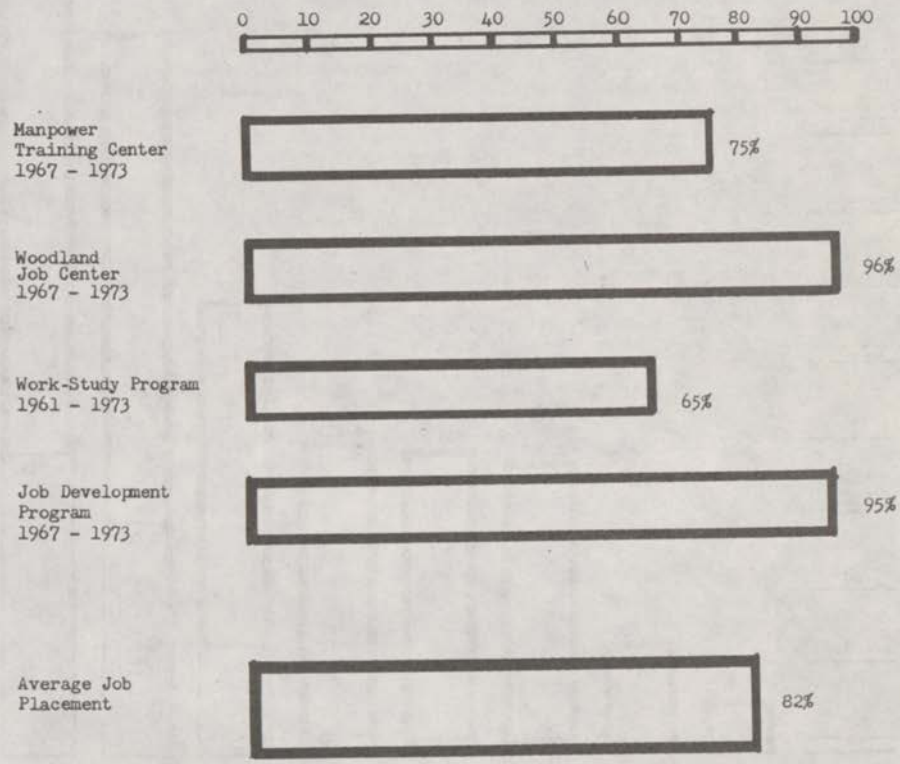
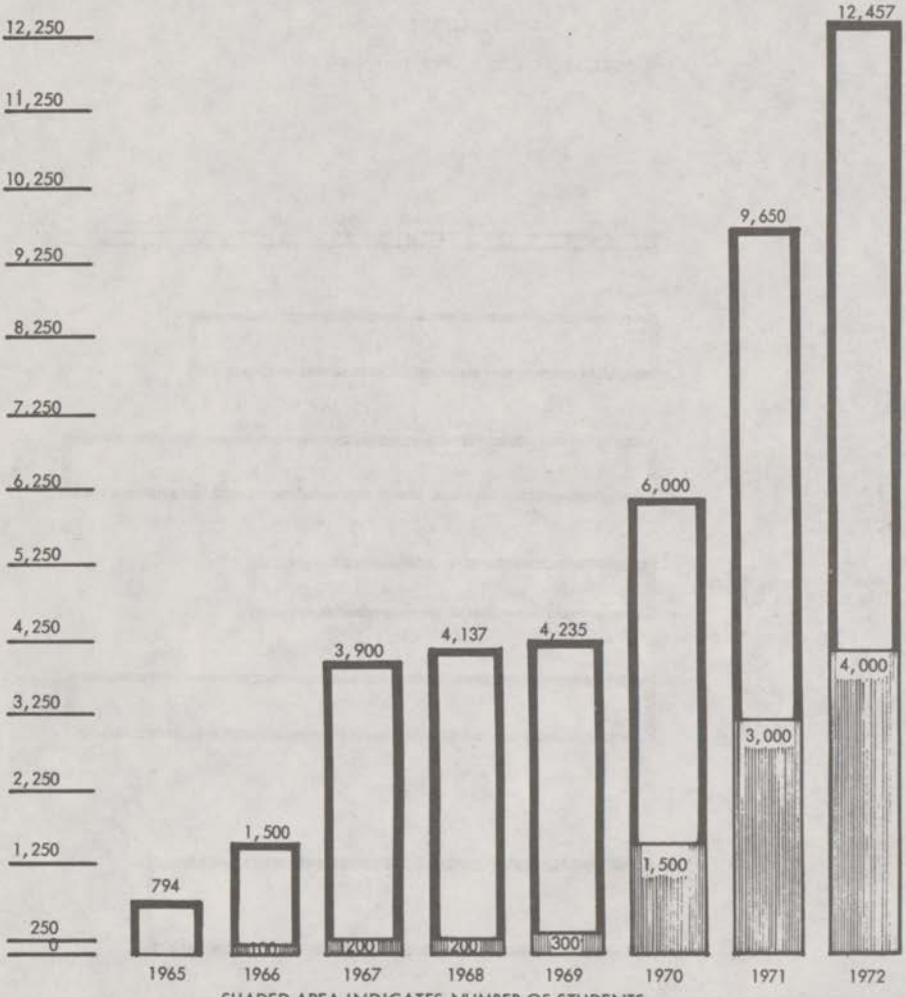


CHART 3

SCHOOLS NEIGHBORHOOD YOUTH CORPS

DIVISION OF TIME BETWEEN SCHOOL AND WORK ASSIGNMENTS



SHADED AREA INDICATES NUMBER OF STUDENTS
SPENDING PART OF THEIR SUMMER ASSIGNMENT IN ACADEMIC WORK

CHART 4

ALLOCATIONS FOR FEDERALLY-FUNDED PROGRAMS

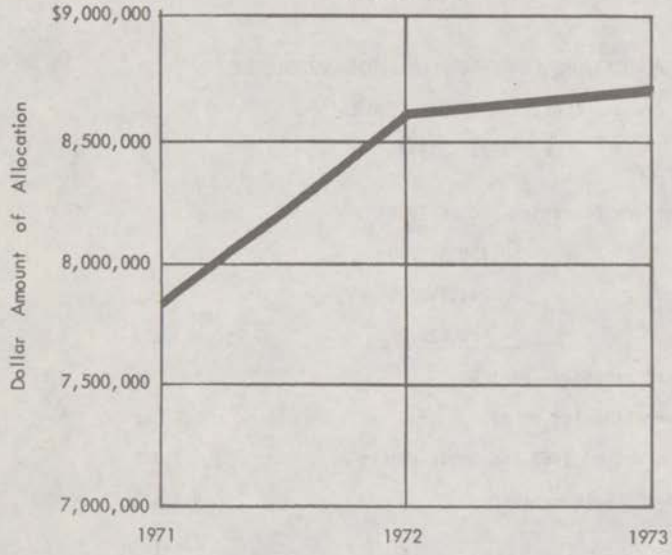
CLEVELAND PUBLIC SCHOOLS

1972 - 1973

Elementary and Secondary Education Act of 1965:		
Title I	$8,739,622.00	
Title II	244,190.00	
Title III	79,825.00	$9,063,677
Education of the Handicapped -- Part B		133,282
National Defense Education Act of 1958		145,942
Vocational Education Act of 1963 and Smith-Hughes Act		2,217,768
Education Professions Development Act		516,428
Adult Education Act		532,106
Public Law 81-874		150,000
National School Lunch Act		3,800,000
Child Nutrition Act		195,000
Follow Through		273,830
Right to Read		100,000
Corporation for Public Broadcasting		25,000
Schools Neighborhood Youth Corps		675,070
Emergency Employment Act		647,600
Manpower Training and Development Act		733,000
	TOTAL	$19,208,703

CHART 5

ESEA TITLE I ALLOCATION
By Fiscal Year



NUMBERS OF PUPILS SERVED
In Year-Long Programs

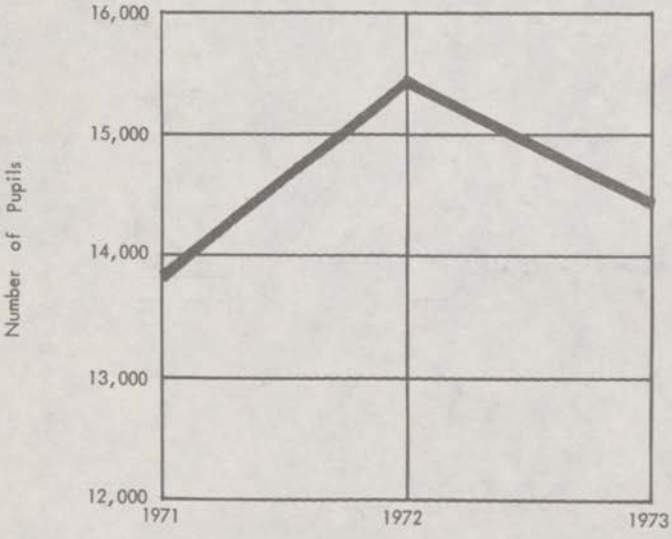


CHART 6.—*Paraprofessionals employed with Federal funds, Cleveland public schools, 1972–73*

Teachers' aides	290
Career opportunity aides	78
Breakfast aides	277
Lunch aides	504
Tutors	750
SNYC students	1,615
Student assistants	582
Total	4,096
Volunteer	3,783

[Statement of Dr. Jack Hornback follows:]

TESTIMONY OF DR. JACK HORNBACK, EXECUTIVE VICE PRESIDENT, THE COUNCIL OF THE GREAT CITY SCHOOLS

The Council of the Great City Schools is a membership organization composed of 23 of the largest school systems in the United States. The council members are responsible for the education of nearly 5 million youngsters. Our cities' populations total nearly 40 million persons.

Over the past several years our members have been concerned about the uncertainty and level of funding of the elementary and secondary education programs and about some of the procedures which the executive branch has used to meet situations where there have been unresolved differences on adequate levels of expenditures and spending priorities between the Congress and the President.

TIMING OF APPROPRIATIONS

On the first point we realize that the chairman of the Appropriations Committee, a year ago last February, stated on the House floor that he fully intended to have a separate appropriations bill for education. He recognized the problem. This committee recognizes the problem. If school districts do not have an idea of their Federal entitlements by June, program planning becomes chaotic; program budgeting becomes impossible and program operation becomes ineffective. Last year, the education amendments of 1972 were hanging in the balance as was the emergency school aid legislation and so the subcommittee was under severe constraints to report out a separate bill. But this year there still is ample time. We urge the committee to reestablish the practice of separating the OE budget from the rest of the HEW budget in order to meet the special needs of school grantees. It is especially important this year to have such a separate bill because of the funding dilemma created by the uncertainties of the fiscal year 1973 education budget caused by the administration's pocket veto of the second appropriations bill and interpretation of the continuing resolution.

LEVEL OF FUNDING

In spite of the Congress' attempts to clarify the levels of funding for elementary and secondary education under the continuing resolution Public Law 92–334, the Office of Education has followed its own interpretations and thus there have been considerable management problems for the city schools in 1972–73. In March, the San Diego Unified School District had to make a 33 percent reduction in its program for educationally disadvantaged youngsters for the balance of the year because the State Department of Education in California felt that the Congress had approved a spending level of $1.810 billion for title I ESEA. The OE allotments figured out at a rate for a $1.585 billion expenditure. In Pittsburgh, evaluation of the title I program was postponed and the program was operated at 80 percent of the 1972 level. In Los Angeles, the superintendent has had to make drastic cuts in title I summer programs, which will discontinue educational services for children with the greatest needs, and averted laying off some 200 teachers and teacher aides by putting them on the regular school budget. It is possible that still further retrenchments will have to be made based upon final fourth quarter payments.

Whereas the Congress indicated specifically that the rate of expenditure should be the Senate or House passed bill whichever was lower, the administra-

tion has insisted that the resolution means the Senate, House, or budget estimate level whichever is lower. Further the administration seems to think that it can revise its estimates without any congressional approval and thereby lower the rate of expenditure at executive will. The excellent colloqy between Chairman Mahon and Chairman Perkins firmly established the intent of the Appropriations Committee and the Congress on funding of education programs.

The council heartily approves of the levels of expenditures the Congress and the Appropriations Committee established in fiscal year 1973 under the continuing resolution and urges the committee to consider those figures as the minimum for Appropriations in fiscal year 1974.

EXECUTIVE ABUSES

If our analysis is correct it may be that the administration has gotten much of the unrestricted budget cutting authority requested in title II of H.R. 16810 of the Public Debt Ceiling Act (and certainly has exercised more power than it would have had, in H.R. 16417, the second vetoed HEW-Labor Appropriations Bill) without congressional approval. The administration's position that the rates established in the continuing resolution are just spending ceilings could have allowed the OMB to zero fund elementary and secondary education programs. It is no wonder that a few weeks ago in a column in the Washington Post, former Deputy Secretary of the Treasury, Charles Walker, indicated that the administration's budget cutting achievements far exceeded what the budget people had believed would be possible to achieve. What Mr. Walker failed to indicate was that this was made possible by totally disregarding the will of the Congress.

The prospects for 1974 look dimmer. Now that the President's budget estimates for the schools no longer cite the authority of the Elementary and Secondary Education Act of 1969, the Executive may not be as generous as it has proved to be this past year. The Congress must see to it that the Executive is not to be allowed to disembowel the Federal programs for the children in the cities and elsewhere because of another misinterpretation in a continuing resolution and an apparently unreasonable attitude toward pending legislation. If the need for such a resolution arises again, the language in that measure needs to be as explicit as possible.

In summary of these points the council urges the subcommittee to:

1. Report out a separate OE appropriation bill.
2. Establish an appropriation level at a minimum of the level of the vetoed bill (H.R. 15417) and
3. Rework the language on any continuing resolution authority and committee reports so that the intent of the Congress is explicit and so that Executive will not be able to use its pending proposed legislation as a basis for not funding authorized programs.

FURTHER RECOMMENDATIONS, TITLE I—ESEA

For title I of the Elementary and Secondary Education Act, the committee should consider a level of expenditure that would allow our districts to extend coverage to at least 65 percent of the children eligible for compensatory services and at the same time meet the higher costs for getting those goods and services. Approximately 40 percent of our children eligible are receiving services this year. Costs have risen by 8 percent. Thus a 33 percent increase over the fiscal year 1972 appropriation level of 1.598 billion to a level of 2.125 billion would be required. In addition, the committee should restore the cuts made in fiscal year 1973 in local education agency programs from the fiscal year 1972 level. This amounts to some $51,379,000 and brings our total recommendation for title I to 2.176 billion.

The city schools are capable of absorbing these increases first of all because they will be used to restore services that were eliminated in fiscal year 1973. Another factor lending itself to this ability to expand the title I program operation is that the city schools are currently serving the most severely deprived schools based upon either test or economic data. Expansion would bring services to schools with less severe problems and with the experience of the previous programs would require less tooling up for program operation.

A third condition lending itself to the feasibility of program expansion is that the city schools are currently concentrating their efforts at the elementary

school level. Expansion would allow the districts to continue services for these children in the middle or upper grades.

PUBLIC HOUSING

In addition to title I, the council is strongly convinced that the funding of the public housing section of 874 should be started. This committee has in the past recognized its responsibility to offset the impact of Federal, military, and governmental activities in local school districts. The impact of Federal public housing is as severe. The location and availability of these types of dwellings in the rural areas and urban centers has tended to keep and attract those with the lowest income. It has increased the tax burden of the ordinary citizen and large corporations. It has diminished the tax base for local school district revenues. An appropriation of $100 million would bring Federal resources to the communities with the greatest needs and with the least ability to raise revenues because of the lack of valuable taxable resources or the over burden on those resources.

Two tables are atached in which our research staff has estimated the distribution of a $100 million public housing appropriation by congressional districts (as established in June 1971) and by major cities.

CONCLUSION

This Appropriations Subcommittee has done a largely unheralded job in supporting the Federal Government's commitment to elementary and secondary education. It must not be forgotten that the committee has increased its efforts in the title I program from $1.2 billion in fiscal year 1966 to $1.8 billion in fiscal year 1973—a 50-percent increase. The committee has a sound record of support for increases in expenditures for vocational education, for the impacted areas program, for the handicapped, and for books and library services. Hopefully this year the education community and the committee will work together to pass an appropriations bill for education that meets the reasonable needs of the schools and at the same time keeps within the constraints of the Federal fiscal budget.

ESTIMATED GRANTS TO SCHOOL DISTRICTS BASED ON $100 MILLION APPROPRIATION UNDER PUBLIC LAW 81–874 FOR CHILDREN IN PUBLIC HOUSING

(Congressional districts as of June 30, 1971)

State and Congressional District 3/	Number of Children 1/	Estimated Grant 2/
Alabama -		
1	5789	$356,023
2	6438	395,637
3	6217	382,346
4	3868	237,882
5	5012	308,238
6	7914	486,711
7	6503	399,935
8	5860	360,390
Alaska -		
	1229	543,611
Arizona -		
1	2323	162,997
2	1275	89,463
3	2180	152,963
Arkansas -		
1	3892	$239,358
2	3834	235,791
3	3114	191,511
4	2357	144,956
California -		
1	2236	164,719
2	645	47,515
3	4245	312,715
4	2441	179,820
5	8587	632,576
6	1760	129,653
7	3171	233,597
8	2566	189,029
9	1633	120,298
11	731	53,850
12	1463	107,774
13	2973	219,011
14	4727	614,889
15	3832	282,291
16	3873	285,311
*17	4263	314,041
18	1603	$ 118,088
*21	4194	308,958
*22	582	42,887
*26	781	57,534
*29	1557	114,699
*30	2939	216,506
32	926	68,215
33	1470	108,290
35	10	737
38	2103	154,921
999 4/	5884	433,455
Colorado -		
1	5004	420,336
2	60	5,040
3	1177	98,868
4	355	29,820
Connecticut -		
1	4668	476,914
2	1216	124,235
3	4282	437,478
4	5829	595,530
5	2072	211,689
6	1495	152,739
Delaware -	2852	197,358
Dist. of Col.	15,163	1,000,758
Florida -		
1	2639	162,299
2	1690	103,935
3	2799	172,139
4	2291	140,897

State and Congressional District	Number of Children	Estimated Grant
Florida -		
5	4558	$ 280,317
6	7125	438,188
7	3028	186,222
8	2370	145,755
9	2999	177,772
10	684	42,066
11	6621	407,192
12	1716	105,534
999	55	3,383
Georgia -		
1	5504	338,496
2	4619	284,068
3	4589	282,224
4	4675	287,513
5	13,922	856,203
6	5251	322,937
7	4295	264,143
8	4503	276,935
9	3115	191,573
10	6282	386,343
Hawaii -	6026	381,647
Idaho -		
1	753	51,706
2	382	26,231
Illinois -		
1	15,929	1,515,910
2	3223	306,722
3	3531	336,034
4	883	84,032
5	1752	166,732
6	722	68,710
7	13,059	1,242,782
8	1351	128,570
9	6482	616,870
10	165	15,703
12	793	75,467
13	121	11,819
14	1429	135,993
15	1915	182,244
16	2882	274,270
17	2128	202,515
18	3340	317,857

State Congressional District	Number of Children	Estimated Grant
Illinois -		
19	3182	$ 302,820
20	3258	310,053
21	5222	496,960
22	1637	155,788
23	2417	230,018
24	5703	542,736
999	5321	506,382
Indiana -		
1	3715	255,097
2	363	24,926
3	2001	137,402
4	555	38,110
5	260	17,853
6	403	27,673
7	1024	70,315
8	2053	140,973
9	1678	115,223
10	972	66,744
11	3446	236,625
Iowa -		
1	536	45,024
2	270	22,680
3	182	15,288
4	403	33,852
5	641	53,844
6	239	20,077
7	471	39,564
Kansas -		
1	792	57,420
2	1429	107,228
3	1548	112,230
4	1303	94,468
5	790	57,275
Kentucky -		
1	4057	249,506
2	2124	130,626
3	7107	437,081
4	2132	131,118
5	2233	137,330
6	5083	312,605
7	1321	81,242

State and Congressional District	Number of Children	Estimated Grant
Louisiana -		
1	9775	$ 601,163
2	8039	494,399
3	2609	160,454
4	1916	117,834
5	1518	93,357
6	2452	141,798
7	3546	218,079
8	2136	131,364
Maine -		
1	1014	84,162
2	1227	101,841
Maryland -		
1	2213	175,934
3	6852	544,734
4	2889	229,676
5	1153	91,664
6	1880	149,453
7	4133	328,574
8	1021	81,170
999	608	48,336
Massachusetts -		
1	1730	188,858
2	1580	172,483
3	1260	137,550
4	2461	268,659
5	2990	326,408
6	1139	124,341
7	1755	191,588
8	5242	572,252
9	13,380	1,460,650
10	3264	356,320
11	1739	189,841
12	1960	213,967
999	1656	180,780
Michigan -		
1	595	45,418
2	985	75,188
3	715	54,578
4	1448	110,531
5	504	38,472
6	1305	99,615

State and Congressional District	Number of Children	Estimated Grant
Michigan -		
7	1161	$ 88,623
8	1843	140,682
9	935	71,372
10	944	72,058
11	2012	153,583
12	554	59,769
13	5914	451,435
14	2366	138,927
15	1443	87,249
16	1148	87,631
17	3011	229,836
19	1231	93,966
Minnesota -		
1	664	45,340
2	1053	71,955
3	3462	236,591
4	5472	373,920
5	5028	343,580
6	1638	111,930
7	1833	125,255
8	2462	168,233
999	78	5,330
Mississippi -		
1	1851	113,833
2	1544	94,956
3	1297	79,766
4	1645	101,168
5	4519	277,919
Missouri -		
1	8540	584,990
2	195	13,354
3	2545	174,333
4	1009	69,117
5	3241	222,009
6	766	52,471
7	845	57,883
8	1203	82,406
9	575	39,388
10	2504	171,191
999	551	37,744

State and Congressional District	Number of Children	Estimated Grant
Montana -		
1	922	$ 75,911
2	865	71,222
Nebraska -		
1	2967	285,327
2	4970	477,948
3	2888	277,729
Nevada -		
1	3059	199,848
New Hampshire -		
1	3186	307,516
2	862	83,183
New Jersey -		
1	2991	319,040
2	3284	343,893
3	2808	299,520
4	3778	402,989
5	421	44,928
6	482	51,413
7	1151	122,773
8	3871	412,907
9	1053	112,320
10	8722	930,346
11	9810	1,046,400
12	322	34,347
13	7714	822,493
14	5936	633,173
15	2360	251,733
999	1378	146,987
New Mexico -		
1	2608	160,392
2	1894	116,481
New York -		
2	52	5,997
3	203	23,413
4	369	42,558
5	800	92,267
7	1864	$ 214,981
8	567	65,394
9	4094	472,141
10	3938	454,149
11	9565	1,103,163
12	9161	1,056,569
13	1373	158,507
14	7357	845,141
16	6240	719,687
17	347	40,021
18	18,086	2,085,919
19	10,344	1,193,008
20	6631	764,775
21	7405	854,043
22	8499	980,218
24	6404	735,261
25	3028	349,229
26	963	111,066
27	257	29,641
28	630	72,660
29	3671	423,389
30	1067	123,061
31	1534	176,921
32	932	107,491
33	865	99,763
34	2873	351,353
35	599	69,085
36	902	104,031
37	329	37,945
38	342	39,444
39	268	20,909
40	1737	200,334
41	5581	643,675
999	1212	139,784
North Carolina -		
1	3238	199,134
2	1911	117,527
3	1993	122,570
4	4386	269,772
5	4025	244,204
6	4254	261,621
7	2837	174,476
8	2235	137,455
9	4141	254,672
10	1511	92,927
11	2062	126,813

State and Congressional District	Number of Children	Estimated Grant
North Dakota -		
1	1327	$ 109,478
2	835	68,888
Ohio -		
1	889	66,823
2	7788	585,398
3	3996	300,366
5	1004	75,467
6	1503	112,976
7	633	47,581
8	852	64,042
9	2308	173,485
10	421	31,645
11	293	22,091
12	3570	268,345
13	2317	174,161
14	3506	263,534
15	3730	280,372
16	659	49,535
18	1413	106,211
19	3253	244,517
20	12,620	948,603
21	1450	108,992
24	693	52,091
Oklahoma -		
1	2904	194,568
2	788	52,796
3	2919	195,573
4	1210	81,070
5	3279	219,693
6	681	45,627
Oregon -		
1	1299	137,694
2	512	54,272
3	3918	415,308
4	1788	189,528
999	620	65,720
Pennsylvania -		
1	6026	476,054
2	6819	546,601
3	10,642	840,718
4	1414	$ 111,706
5	2035	100,765
6	2872	226,888
7	746	58,934
8	286	22,594
9	2740	216,460
10	2815	222,385
11	1170	92,430
12	1500	118,500
13	510	40,290
14	8661	684,219
15	3427	270,733
16	876	69,204
17	3138	247,902
18	439	34,681
19	520	41,080
20	7420	586,180
21	1115	88,085
22	2175	171,825
23	464	36,656
24	2779	219,541
25	3640	287,560
26	2605	205,795
27	1912	151,048
999	1542	121,818
Rhode Island -		
1	6495	623,520
2	4863	466,848
South Carolina -		
1	2695	165,743
2	2196	101,721
3	1262	77,613
4	3306	203,319
5	1785	109,778
6	525	32,288
South Dakota -		
1		37,840
2		122,960
Tennessee -		
1	2837	174,476

State and Congressional District	Number of Children	Estimated Grant
Tennessee -		
2	5571	$ 342,617
3	4715	289,973
4	3849	236,714
5	7873	484,190
6	4195	257,993
7	2376	146,124
8	2703	166,235
9	6551	402,887
Texas -		
1	2774	175,224
2	7937	122,354
3	5639	356,194
4	2245	141,809
5	3744	236,496
6	1144	72,263
7	2610	164,865
8	273	17,245
9	3401	214,830
10	2397	157,727
11	2778	175,477
12	1656	104,604
13	2131	134,608
14	2321	146,610
15	3588	226,642
16	2766	174,719
17	2781	179,000
18	491	31,015
19	995	62,851
20	8068	509,629
21	497	31,361
22	1136	71,757
23	2573	162,528
Utah -		
1	194	11,913
Vermont -	407	33,442
Virginia -		
1	3318	262,122
2	7315	577,885
3	5079	401,241
4	753	59,487
5	650	51,350
6	1625	128,375
Virginia -		
7	300	$ 23,700
9	625	49,375
10	1586	125,294
Washington -		
1	1352	89,232
2	1759	116,094
3	913	60,258
4	859	56,694
6	3297	217,602
7	10,739	708,774
999	650	42,900
West Virginia -		
1	1901	116,912
2	618	38,007
3	1503	92,435
4	1047	64,391
5	492	30,258
Wisconsin -		
1	122	10,573
2	936	81,120
3	867	74,620
4	234	15,600
5	4993	432,727
6	406	38,653
7	1143	99,060
8	852	73,840
10	1685	146,033
999	342	29,640
Wyoming -	333	29,859
Puerto Rico -	53,431	4,648,497
Virgin Islands	1898	165,126
Guam -	325	21,558
U. S. TOTAL 5/		$98,269,521

1/ Number of school age children based on Office of Education estimate of school age children per public housing unit i.e. 1.3 per unit.

2/ Estimated grants calculated adding 20% to 1970 State "B" rate.

3/ Congressional Districts having no completed units are ommitted.

4/ 999 Units undistributed by Congressional Districts.

5/ Difference in U. S. Total and appropriation caused by the fact that rates for cities, such as New York and Chicago, are somewhat larger than rate of average school district.

RESEARCH DIVISION

ESTIMATED GRANTS FOR PUBLIC HOUSING BASED ON $100 MILLION APPROPRIATION

City	Projected number of children	Estimated grant
Akron, Ohio	4,208	$355,080
Albany, N.Y.	2,528	327,694
Albuquerque, N.Mex.	2,040	71,843
Allentown, Pa.	1,431	126,556
Atlanta, Ga.	19,600	1,353,779
Austin, Tex.	1,755	124,394
Baltimore, Md.	18,490	1,651,703
Baton Rouge, La.	1,196	82,620
Beaumont, Tex.	845	59,894
Berkeley, Calif.	1,430	126,126
Birmingham, Ala.	8,869	612,733
Boston, Mass.	26,159	3,207,829
Bridgeport, Conn.	3,783	434,099
Buffalo, N.Y.	6,354	923,520
Cambridge, Mass.	1,884	230,988
Camden, N.J.	2,825	338,141
Charlotte, N.C.	4,781	330,299
Chattanooga, Tenn.	4,005	276,686
Chicago, Ill.	54,864	5,863,853
Cincinnati, Ohio	9,698	818,317
Cleveland, Ohio	16,575	1,398,598
Columbus, Ga.	2,655	183,353
Columbus, Ohio	8,653	730,140
Corpus Christi, Tex.	2,309	163,648
Dallas, Tex.	9,590	679,746
Dayton, Ohio	4,869	410,840
Dearborn, Mich.	433	36,623
Denver, Colo.	5,909	557,117
Des Moines, Iowa	650	61,276
Detroit, Mich.	13,134	1,111,128
Duluth, Minn.	1,459	111,918
Elizabeth, N.J.	2,051	245,553
El Paso, Tex.	6,960	493,239
Erie, Pa.	1,997	176,557
Evansville, Ind.	1,535	118,495
Flint, Mich.	1,781	150,673
Fort Wayne, Ind.	555	42,843
Fort Worth, Tex.	1,396	98,963
Fresno, Calif.	2,386	197,519
Gary, Ind.	3,224	248,828
Grand Rapids, Mich.	426	36,073
Greensboro, N.C.	3,041	210,052
Hammond, Ind.	779	60,100
Hartford, Conn.	4,018	461,100
Honolulu, Hawaii	4,841	344,209
Houston, Tex.	3,970	281,408
Indianapolis, Ind.	4,688	361,804
Jackson, Miss.	390	26,941
Jacksonville, Fla.	4,560	314,987
Jersey City, N.J.	5,205	623,062
Kansas City, Kans.	1,782	111,668
Kansas City, Mo.	3,507	269,894
Knoxville, Tenn.	4,830	333,622
Lansing, Mich.	1,097	92,623
Lincoln, Nebr.	1,755	189,540
Little Rock, Ark.	1,840	127,073
Long Beach, Calif.	910	75,348
Los Angeles, Calif.	14,243	1,179,304
Louisville, Ky.	7,592	524,455
Lubbock, Tex.	476	33,725
Madison, Wis.	699	68,143
Memphis, Tenn.	9,084	$625,036
Miami, Fla.	11,049	763,134
Milwaukee, Wis.	5,842	569,206
Minneapolis, Minn.	10,187	781,633
Mobile, Ala.	5,251	362,718
Montgomery, Ala.	3,593	248,218
Nashville, Tenn.	8,382	579,056
New Bedford, Mass.	3,453	423,417
New Haven, Conn.	2,467	283,134
New Orleans, La.	18,534	1,280,336
New York, N.Y.	106,690	14,215,837
Newark, N.J.	18,116	2,168,425
Newport News, Va.	2,213	181,168
Niagara Falls, N.Y.	1,013	131,246
Norfolk, Va.	4,836	395,972
Oakland, Calif.	6,080	503,432
Oklahoma City Okla.	4,290	324,324
Omaha, Nebr.	4,645	501,650
Pasadena, Calif.	325	26,910
Paterson, N.J.	3,085	369,263
Peoria, Ill.	5,355	573,310
Philadelpha, Pa.	29,173	2,579,503
Phoenix, Ariz.	2,085	164,210
Pittsburgh, Pa.	14,689	1,298,775
Portland, Oreg.	5,075	606,385
Portsmouth, Va.	2,479	202,981
Providence, R.I.	4,516	486,756
Richmond, Va.	5,312	434,930
Rochester, N.Y.	2,570	233,085
Rockford, Ill.	2,188	233,843
Sacramento, Calif.	3,010	265,438
St. Louis, Mo.	12,613	970,540
St. Paul, Minn.	6,000	460,441
St. Petersburg, Fla.	1,232	85,122
San Antonio, Tex.	8,878	621,251
San Diego, Calif.	1,300	107,640
San Francisco, Calif.	10,793	893,627
San Jose, Calif.	1,937	170,843
Savannah, Ga.	3,666	253,211
Scranton, Pa.	1,820	160,927
Seattle, Wash.	8,588	635,755
Shreveport, La.	761	52,535
South Bend, Ind.	1,268	97,864
Springfield, Mass.	1,511	185,245
Syracuse, N.Y.	3,012	390,368
Tacoma, Wash.	2,152	159,276
Tampa, Fla.	6,026	416,181
Toledo, Ohio	3,868	326,340
Topeka, Kans.	697	56,754
Trenton, N.J.	2,638	315,733
Tucson, Ariz.	1,010	79,545
Tulsa, Okla.	2,981	225,364
Utica, N.Y.	602	78,006
Washington, D.C.	15,652	1,394,593
Waterbury, Conn.	1,086	124,561
Wichita, Kans.	1,344	109,485
Wichita Falls, Tex.	104	7,362
Winston Salem, N.C.	4,326	298,868
Worcester, Mass.	2,394	293,650
Yonkers, N.Y.	2,674	346,563
Youngstown, Ohio	1,382	116,605

Dr. BRIGGS. Might I say that Cleveland is the largest city in the State of Ohio. Ours is the largest school district in the State.

We enroll about 7 percent of the total students in the State but we have one-third of all the welfare children in the State of Ohio in the Cleveland system. This welfare pattern has been growing.

While we have 175,000 school-age children in Cleveland, approximately 60,000 today come from welfare families. Therefore, we have a great interest in the poor, and a great interest in the children of the poor. Having so many children in our schools from the poor, we

look at the unemployment problems in the city and find the unemployment rate is 11.8 percent. Of this, 6.9 percent are white, while the nonwhite is 18.2 percent. The inner city, nonwhite unemployment rate is even higher. We have the highest unemployment rate in the United States.

Mr. FLOOD. What is the percentage?

Dr. BRIGGS. It runs better than 20 percent; 22 to 24 percent in the inner city.

Mr. FLOOD. Right now?

Dr. BRIGGS. Yes, right now.

This is the highest in America.

[Additional information submitted follows:]

[From the Plain Dealer, Tuesday, June 6, 1972]

FIRST—A SAD PLACE

The U.S. Labor Department has supplied Cleveland with a distinction it doesn't want: first place in unemployment among the Nation's 20 largest cities.

The information is an annual manpower report done by the Department. The city (not including suburbs) had an average jobless rate of 11.8 percent in 1971. The rate among nonwhites was 18.2 percent. Among whites it was 6.9 percent, indicating a dangerous gap between employment of whites and blacks.

Even if the overall rate for both whites and blacks were 6.9 percent, it would exceed the national average and would threaten the economy of the entire metropolitan area.

People who are out of work can't buy much except essential goods and services. In the city of Cleveland 2 of every 17 wage earners were unemployed in 1971, on the average. Money they might have spent for cars, applicances, new clothes, entertainment and convenience food items was withheld from Greater Cleveland's economy, further reducing jobs.

The Labor Department statistics confirm and expand figures made public several months ago by city hall. They underscore once again the dire necessity of keeping jobs here and of making new jobs accessible to people in the inner city—accessible not only physically but also by training.

CITY'S JOBLESSNESS WORST AMONG 20 LARGEST CITIES

(By Robert Daniels)

For the second straight year, total employment and unemployment among nonwhites in Cleveland were highest among the Nation's 20 largest cities in 1971.

The annual "Manpower Report of the President," compiled by the U.S. Labor Department, showed total unemployment here to be 11.8 percent—exactly twice the national average—and unemployment among nonwhites to be 18.2 percent, more than three times the national average.

The national average for 1971 was 5.9 percent.

Total unemployment in the central city here topped San Francisco-Oakland, 10.9 percent, and Los Angeles-Long Beach, 10.3 percent.

Unemployment among nonwhites in Detroit was 14.2 percent, second highest in the country, and 14 percent in Los Angeles-Long Beach, which ranked third.

A significant statistic is that unemployment among whites in Cleveland's central city was 6.9 percent last year, fourth highest in the Nation, reflecting a wide gap in unemployment between whites and nonwhites.

The 284-page report also detailed unemployment for the 20 largest standard metropolitan statistical areas (SMSA) in the United States, among which Greater Cleveland ranked fourth highest with 7.1 percent.

But many experts on unemployment here consider SMSA figures for Greater Cleveland to be unrealistic because they include besides Cuyahoga County, statistics for the less industrialized Geauga, Lake, and Medina Counties.

Still, unemployment among nonwhites in the Cleveland SMSA—16.1 percent—was highest in the Nation, while unemployment among whites ranked 10th, again showing a gap between white and nonwhite unemployment.

"I am shocked by these statistics because I'm concerned about people," said Ernest Cooper, director of the Urban League of Cleveland. "It is especially shocking when you translate these figures into human beings and realize the misery they represent.

"I am pleased that these figures show a truer picture of what unemployment really is in the city of Cleveland and hope it jars our business community into the realization that we have a lot to do to alleviate the full-scale depression we now experience.

"The need for money to satisfy the needs of so many families in Cleveland has not been borne out by statistics published here previously," he continued.

"Coupled with the low levels of welfare benefits many people now receive, these figures show just how severe things are for the black people in our community.

"The report shows many of the things we have felt were true, but had not been reflected in official figures because of the methods of reporting," Cooper said.

Figures in the Labor Department report underscored those in a Plain Dealer article last January 24 which indicated unemployment rates in the Cleveland area might be the highest in the Nation.

The article was based on figures compiled by the city's Department of Human Resources and Economic Development which placed total and nonwhite unemployment in the central city for the first half of 1971 at 11.4 percent and more than 19 percent, respectively.

In its magazine, Clevelander, the Greater Cleveland Growth Association reported on May 1:

"Metropolitan Cleveland continues to maintain an unemployment rate well below the national average. The central city, at the same time, has an unemployment rate double the national figure."

A spokesman for the association said its figures were based upon the efforts of more than two dozen analysts who revised their report nine times.

Mr. FLOOD. I thought I had trouble years ago when I had 19.7 percent unemployment in my district. I cried about that for 10 years because of the mines. You have trouble?

Dr. BRIGGS. Yes. Therefore, as superintendent of a city school system that has this kind of a problem before it, I must confess that I join other urban educators in addressing most of our attention to unemployment in the inner city and to supportive services for the children of the poor. While experience on increasing number of children from the poor, we have had a decreasing revenue available to us from tax sources in the city of Cleveland. In the last 4 years the tax valuation of our city has slipped by $200 million. While that has happened the people of the city have stepped forward and voted to increase their taxes for schools by 137 percent. No other city has seen this kind of success.

Mr. FLOOD. A lot of places are voting bond issues down altogether in the last few years.

Dr. BRIGGS. Our city has not. Our city has supported us. I am completing my ninth year as superintendent of Cleveland. Of the large cities in the United States my tenure is the longest of any. The people of Cleveland are supporting education. They are passing our bond issues. If I stay 1 more year in Cleveland we will have spent $200 million on new buildings alone. We are going in the direction of quality education.

Mr. FLOOD. You are not building Taj Mahals?

Dr. BRIGGS. No, sir. We are building the most economical schools in the world. We are replacing some of the terrible prisonlike, ghetto schools we had. While this is happening, the cost of education is going up in our city as well as in other cities. Our costs are considerably higher than elsewhere. I do not know how we would have survived in Cleveland had it not been for the kind of relationship we had with the Federal Government. I will go quickly through a series of

charts identifying the kind of assistance we had from the Federal Government.

If we summarize major Federal programs you find in prekindergarten in 1964 we had no children, today we have 1,700 enrolled. This is prior to kindergarten. We did not have a single library open in any of our elementary schools in 1964, we opened, in 1 year, 135—1 in each elementary school. We could not have done that without special aid from the Federal Government.

Reading specialists: we did not have 1 for the children of Cleveland, today we have 109. Every one of them are on payrolls from money from the Federal Government. As far as vocational education is concerned, we had 52 classes training people for jobs in 1964.

Mr. FLOOD. Are you taking females in that?

Dr. BRIGGS. Yes. A black girl was hired this week as a lathe operator by Warner and Swasey. We have now 409 vocational units. Pupils eating breakfast: with many poor children coming to school without breakfast, 25,000 children now eat breakfast in our schools. This has probably done as much to improve reading as any other one thing. Federal lunch program: we only had 1,900 who were eligible in 1964. Today 40,000 children in Cleveland had a free lunch in the Cleveland Public Schools. We are the only school system mandated by a Federal court order to feed all children of the poor. We are not yet doing it.

We are in violation of the order. We do not have the funds. The Court did not mandate that the Federal Government provide us with the funds. We are running at the rate of approximately $1 million a year. We are dipping into local funds for the program.

Job placement in the inner city: We were only placing 25 percent of our high school graduates in 1964. In the last 6 years, we have placed an average of 95 percent of those graduating from the inner city high schools, wanting work. We have our own job placement program. In basic education for adults, we have 3,510 adults in reading and writing programs.

Mr. PATTEN. Are you satisfied with that?

Dr. BRIGGS. No, I am never satisfied. We have not gone far enough. It has been very, very helpful. I certainly do not want the cut. We need much more. Looking at placement of people in a manpower training program—we are very concerned about this program because it is one of the first cutbacks we see coming from the Federal Government—in our Manpower Training Center, where we trained over 6,000 adults, we had a 75-percent placement record.

Woodland Job Center, where we train out-of-school youth who dropped out and where we have about eight different industrial firms working with us, we give educational booster shots and put pupils on the payroll immediately as they come in and get started on a work-train program. We are placing 96 percent of these graduates.

In our work-study programs for in-school youth who are dropout prone, we are placing 65 percent; [N.B. Many work-study students go on to college and other training, thereby lowering the job placement average] then again, the 95-percent placement average of those from the inner city high schools. Our placement program has an 82-percent average for these four programs. We have a strong feeling that if unemployment is our problem, if poverty is our problem, the public schools have a responsibility to do something about job training and

job placement. These programs all have been Federal, and they are working.

We are very much concerned with what happens in the summer in our city. Mr. Vanik knows about this because it was not too long ago that his district included the area in the city of Cleveland I am talking about, and it was through his efforts we got some of our early money, and today Congressman Stokes represents that district, and only the day before yesterday he was back taking a very close look at a very desperate area of our city.

We have had a very successful program over a period of years of taking high school youth in the summer and giving them employment and also educational additives. In 1965, our Federal moneys allowed us to hire nearly 800; and in 1966, 1,500; and so on up to 9,600; and last year we had 12,457. It was only yesterday that we learned that the Federal cutback was such that we would have to cut back two-thirds. We could not train more than 4,000 disadvantaged youth for employment this summer.

I do not know what your concerns or interests are in revenue sharing. I know you are more interested in the funding of programs, but I have to say one thing to you, as I would say to all Congressmen regarding revenue sharing. The Cleveland Public Schools have not yet seen 1 cent of revenue sharing money. We have seen cutbacks of money in categorical aid to education, and we hear that revenue sharing is supposed to give us local priorities and allow us to find this money and to use it as we see fit.

Mr. FLOOD. Do you see any funds from special revenue sharing?

Dr. BRIGGS. We have had nothing yet. When I read the Better Schools Act and see the total amount of money involved in that and see the lowest priorities, sections C & D, which are education for the disadvantaged and vocational education, I see nothing but at least a 25- to 50-percent cut in the Cleveland programs. Here we have a rapid recap of the funds for the Cleveland schools. You have title I, II, and III funds, $9 million; education of the handicapped, $133,000. I will not go through the list. Child Nutrition Act, $195,000 estimate.

Mr. FLOOD. You are going to put these charts in the record.

Dr. BRIGGS. Yes, this is part of the testimony.

In closing, as the superintendent of Cleveland public schools, I have to be pragmatic and be for the things that work and help children. Our relationship with the Federal Government has been a comfortable and good one. We have liked the categorical aids that have been presented over the years. We feel comfortable with it. Education is not the only cure for urban ills, but we are not going to get very far in helping urban society and children without better education in our cities. I simply urge today that the financial assistance from the Federal Government has been very helpful, and I would like to see an increase rather than a decrease in these funds.

I want to thank you for the privilege of being here today and testifying.

Mr. FLOOD. Thank you very much.

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TUESDAY, MAY 15, 1973.

COMPREHENSIVE HEALTH PLANNING

WITNESS

THOMAS SAXTON, MEMBER OF BOARD OF DIRECTORS OF AMERICAN ASSOCIATION FOR COMPREHENSIVE HEALTH PLANNING

Mr. FLOOD. Now we have the American Association for Comprehensive Health Planning.

The spokesman will be Mr. Thomas Saxton who is a member of the Board of Directors of the American Association for Comprehensive Health Planning.

Not only is he a distinguished administrator and very well known in the association, but he has the rare distinction of coming from the city of Wilkes-Barre, it is just a coincidence that I come from the city of Wilkes-Barre. I don't know that there is any connection.

Mr. SAXTON. I am Tom Saxton. I am administrator of the Wilkes-Barre General Hospital.

Mr. Chairman, I would like to thank you and your committee for this opportunity to address the committee.

Mr. Chairman, and members of the subcommittee, I am Thomas P. Saxton, administrator of the Wilkes-Barre General Hospital, and, like the majority of our American Association for Comprehensive Health Planning, am a volunteer in the health planning effort, serving on the Health and Hospital Planning Council of Northeastern Pennsylvania. I am accompanied by William McC. Hiscock, director of the Baltimore, Md., health planning agency and by Lawrence Newell, executive director of our association, which is headquartered in Alexandria, Va.

Mr. Chairman, the American Association for Comprehensive Health Planning appreciates very much the opportunity to again appear before your distinguished committee and share with you our views on the comprehensive health planning budget.

The association represents the interests of about 200 areawide health planning agencies—all of whom have local investment, most of whom have some Federal investment—56 State and Territorial health planning agencies, universities preparing manpower for health planning, and individual supporters of the effort. We estimate that to enable and direct the agencies to do their work, between 150,000 and 200,000 men and women serve as volunteers on health planning councils and committees.

Since we last appeared before you, we are more than a year older and experienced in the aggressive, tension-ridden, consumer-provider-governmental day-to-day partnership struggle to arrive at decisions to shape and influence improved and economical health services for the people in our communities.

To illustrate, during the year just passed, the tasks and accomplishments of some of our member organizations include:

The development of regional and statewide emergency medical systems: linking professional and volunteer ambulance and rescue personnel—both air and ground—general and specialist physicians,

small community and large teaching hospitals, and the public and the paying agencies.

Extending coalitions of health professionals and institutions to provide services in rural deficit areas and in city areas without health care coverage.

Sponsorship of, or creating an environment for, joint ventures among health care institutions and organizations; sharing clinical as well as administrative services.

Encouraging, and taking the lead in passage of State certification of need or conformance statutes: to govern health capital investment by community need determination and to reduce duplication. In several areas moratoria on adding new beds are in effect, with community capital priorities being put on ambulatory and emergency care alternatives and long-term care.

Development and use of environmental health criteria in land-use management for solid waste treatment and disposal; and for industrial siting.

Initiation and adoption of strategies for solving areawide housing problems.

Inventorying and convening the host of competing and conflicting environmental organizations in our planning areas to begin an organized community approach to deal with environmental concerns.

As an association, we have been pleased to add our grassroots experience to the Social Security Administration in developing guides and procedures for implementing what could be called a national certificate of need law, passed by the Congress last year in the social security amendments. That relationship has been mutually beneficial to both parties. (The Governors of the great majority of States have designated State CHP agencies to carry out this new responsibility.) Also, among our priority association activities has been improving the performance of our member agencies. A program has been developed, on a "bootstrap" basis and tested, for self-evaluation and identification of those areas in which agencies need help. We are pleased that this program's merit has been demonstrated, and that a generous grant from the Robert Wood Johnson Foundation will assist it in coming to fruition.

Nonetheless, Mr. Chairman, we are acutely aware of our shortcomings, and the weaknesses in the comprehensive health planning network, or system.

In our agencies, it is time for greater specificity in terms of our focus and our performance. This is one of the reasons we have, as an association, launched an agency improvement program. Our plans need to be clearer and more focused. As our communities move more and more into containing costs, or governing facility growth and location, our criteria for review must have clarity and must be responsible and equitable. Moving from where we were 5 years ago to where we must be now, requires assessment, monitoring, and technical assistance at all levels.

There should also be a stronger national framework, rather than the present fragmented approach. Currently national health policy derives from a myriad of legislative and administrative initiatives, which only by chance, or reflective academic study, can be arranged one against the other. In our communities, however, these initiatives

meet, frequently in conflict, and embroil us. As an association we urgently recommend the establishment of a comprehensive health planning process and vehicle at the national level, whose product can be recognized as "national health policy."

Frankly, Mr. Chairman, we are recommending for your consideration about the same funding level as we did last year, and for the same reasons; $52 million in health planning grants. If, as is variously reported, the national health care expenditure is running at $85 billion, our recommendation is modest; six one-hundredths of 1 percent. On a capitation basis it represents about 25 cents a head, for Federal investment in area and State health planning and in health planning manpower production.

We recommend an increase to $12 million, a 20-percent increase over the President's fiscal year 1974 budget.

We believe these additional funds are particularly necessary in terms of the new responsibilities being placed on and assumed by comprehensive health planning in the areas of cost containment and certification of need. Not only does this require a substantive increase in State agency staff; but it puts a further demand on the State agency for technical assistance and specialized expertise in behalf of areawide agencies, which it would be duplicative and over costly for the areawides to provide for themselves.

We recommend an increase in this item to the level we recommended last year, $35.3 million; or a 49 percent increase over the President's budget.

This recommendation is proposed in order to strengthen the vitality of areawide planning now underway by making possible the authorized 75 percent Federal share, which has not been realized. Indeed, now it is running just slightly over 50 percent. That increase will strengthen those agencies now demonstrating impact to produce an even greater impact on the course of health services. That amount would also permit proper funding of those agencies which are now in the anomalous position of being "annointed but unfunded." That is, approved by the State health planning agency, in some cases even approved by HEW, but not drawing the approved levels of Federal funding.

As we discussed last year, many of our agencies are not able to meet the expectations of their volunteers or the community because of staff shortages. These staff shortages stem often from inability to secure matching local support. This is true in rural communities and in the Nation's central cities. We believe the Congress was quite right in setting the 75-percent limitation. We wish the limit were approached.

We note that the budget does not contain an appropriation request for this function; and that the administration proposes its legislative repeal. However, we recommend a funding level of $4.7 million under 314(c), which is the same level as in the original fiscal year 1973 budget.

Our reasons are simple. We need talent produced to do the job: Graduate training and continuing education for those engaged in health planning as staff and as volunteers. And we need this talent not only in our planning agencies; but in the institutions and organizations which provide and pay for the health services in our communities. What we are saying is that to achieve the mandate and meet

other responsibilities, we need an ongoing flow of trained health planning manpower.

Lastly, Mr. Chairman, we recommend that the budget provide for strengthened communications and technical assistance capacity in the regional offices of HEW. This is essential if we are to build an effective comprehensive health planning network.

Mr. Chairman, these are our recommendations to you. With the recommended funding levels we can plan comprehensively, which includes seeing that our plans are implemented, as well as responsibly meeting the challenge of cost containment and focused systems design.

[The following information was supplied for the record:]

[From AACHP Update, Alexandria, Va., April 1973]

AACHP Health Planning Agency Improvement Program Funded by Robert Wood Johnson Foundation

On March 22, 1973, the board of trustees of The Robert Wood Johnson Foundation voted to fund the AACHP health planning agency improvement program for a 2-year period. The health planning agency improvement program is a technical assistance program for State and areawide health planning agencies.

In his letter of notification to AACHP, Dr. David E. Rogers, president of The Johnson Foundation, stated the following reasons for this decision:

"The widely dispersed and pluralistic nature of the American health care enterprise underscores the need for mechanisms to foster concerted planning and action aimed at making better use of scarce talent, funds, and other resources.

"Although the State and regional comprehensive health planning agencies have significant potential for meeting this need, they will not be able to realize this contribution without adequately trained staff. The technical assistance program of the American Association for Comprehensive Health Planning should go far toward responding to the training requirements of these institutions and expanding the supply of experienced professionals in the new and difficult field of comprehensive health planning."

This technical assistance program will be closely coordinated with Federal and other efforts to strengthen comprehensive health planning agencies. It will be made available to health planning agencies to assist them in responding to the ever-increasing responsibilities set forth in such Federal initiatives as Public Law 92-603 as well as meeting the needs of the people they serve.

Mr. Saxton. I would like to thank you, Chairman Flood, for allowing me to testify before your committee, and I would like to stress, in closing, the responsibilities that have been placed on comprehensive health planning by Congress. I would certainly like to ask that Congress vote to support comprehensive planning to the full 75 percent of funding authorized in the law. Very few of our agencies are receiving more than 50 percent. As a matter of fact, throughout the country they are only receiving about 52 percent of Federal funding, requiring the local areas to raise the balance. Many agencies have found this difficult in view of the newness of the agencies themselves, coupled with the lack of financial support provided by the Federal Government.

Mr. Flood. Thank you very much.

Mr. Saxton. Thank you, Congressman Flood.

TUESDAY, MAY 15, 1973.

ALCOHOLISM AND DRUG ABUSE

WITNESSES

WILLIAM J. McCORD, EXECUTIVE DIRECTOR, SOUTH CAROLINA COMMISSION ON ALCOHOLISM, AND PRESIDENT, ADPA
AUGUSTUS H. HEWLETT, EXECUTIVE DIRECTOR, ADPA

Mr. FLOOD. Now we have Mr. William J. McCord, president, Alcohol and Drug Problems Association of North America.

Mr. McCORD. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee: As president of the Alcohol and Drug Problems Association of North America (ADPA), it is my privilege to represent 182 agencies involved in alcoholism and drug abuse programing, including the public supported alcoholism and/or drug abuse authorities at the State level throughout the Nation. Additionally, many individuals having a professional interest in the field of alcoholism and/or drug abuse are members of ADPA. The association, therefore, represents both public and professional interests in this field.

The administration's budget request for fiscal 1974 in the area of drug abuse reflects an understanding for the need to continue the Federal leadership and special emphasis on this major health and social problem. This we applaud. Although we could offer justification for more Federal dollars than have been requested for Federal assistance in drug abuse, we understand the realities of the Federal budget. We are, for this reason, pleased to see the request of $448 million for drug abuse treatment, education and research programs exclusive of funds requested for law enforcement.

Of this amount, however, only $15 million has been requested for formula grants to the States. The State formula grant mechanism has proven highly successful for drug abuse programing just as it has for alcoholism.

Drug abuse is an acute problem throughout the Nation—in small communities and rural States just as it is in metropolitan centers and large States. The current budgetary priorities of the administration, however, clearly work to the advantage of the larger States where major universities and large State and municipal drug abuse programs have developed highly sophisticated research and treatment techniques. A more equitable distribution of Federal funds is needed in order to provide Federal assistance to the smaller States and communities. This can be accomplished through formula grants. We, therefore, strongly urge that Congress appropriate a minimum of $80 million in formula grants to the States for drug abuse.

We wish the administration's budget request reflected the same understanding for needs in the area of alcohol abuse and alcoholism. It does not. They have requested a mere $86 million for the National Institute on Alcohol Abuse and Alcoholism for fiscal 1974, less than one-fifth of the amount requested for drug abuse efforts. We urge you to consider increases in the budget for this massive problem.

You heard testimony from our sister organization, the National Council on Alcoholism, on May 10, 1973. NCA is the national voluntary organization in the field of alcoholism. Together, our organizations represent the full spectrum of interest in the field of alcohol abuse and alcoholism. We agree with NCA's testimony concerning the monetary needs of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) for fiscal 1974.

The total of $154,421 million recommended by ADPA and NCA is almost $20 million less than was included in the 1973 appropriations act vetoed by the President. Clearly this amount is inadequate, but it will at least permit a bare bones maintenance of the Federal effort begun just 2 years ago.

For fiscal 1972, the first year that funds were appropriated for Public Law 91–616, less than $90 million were made available to begin operations. It was then recognized by Congress, the administration, and those working in the field of alcoholism that this modest amount was needed to begin activity. Although ADPA testified in favor of considerably more funds at the time we understood the problems of a new Federal agency implementing, in less than 12 months, the provisions of such a comprehensive law. That was before the Congress and this administration gave full endorsement to the Uniform Alcoholism and Intoxication Treatment Act, drafted by the National Conference of Commissioners on Uniform State Laws. The major provision of the uniform law is to decriminalize public intoxication—to transfer the problems of acute alcoholism from the jail cell to the more appropriate health care system. ADPA has vigorously promoted the uniform law which has now been enacted, in some form, or is under serious consideration, in all States. The cost of implementing the decriminalization provisions in some States runs from 4 to 5 times the amount of funds now available. In all States the cost of such a needed change is far more than is currently available from all sources of funds.

Since the initial appropriations—fiscal year 1972—each State has developed plans approved by NIAAA for implementing comprehensive statewide programs called for by Public Law 91–616. Yet the administration's budget request includes only $30 million in block grant formula money to the States—the same amount initially appropriated in fiscal year 1972. To do the job adequately, $100 million should be available for State formula grants. Eighty million dollars is authorized by the act. We are, however, recognizing the realities of budget limitations, requesting that Congress appropriate $50 million for this purpose in fiscal year 1974.

One of the major problems in alcoholism programing is the lack of uniformity in administration, treatment, education, and research from State to State and region to region. The formula grant program for the past 2 years has proven to be the most effective instrument to improve the standards for such uniformity. The States have reacted most favorably to the Federal Government's request that they enact the uniform law. The most appropriate mechanism to provide the needed financial assistance for this purpose is the State formula grant program. There is a dire need to provide a minimum of $50 million for this purpose in fiscal year 1974. This is $10 million less than was included in last year's vetoed appropriations act.

As of the end of March 1973 there have been a total of 457 project grants awarded by NIAAA amounting to approximately $38,500,000. Approved and unfunded project grants amount to approximately $40 million. No project grants have been approved since June 1972. Thus, many sound and needed project grants have gone unfunded over the past year. These grants are one of the Hughes Act's two basic mechanisms for funding comprehensive alcoholism programs. They are designed to aid States, communities, public and private institutions, and individuals in the field of alcoholism.

Although in existence only 2 years, many beneficial results have accrued from these grants. The demonstration projects generated by these grants have developed vitally needed professional interest in the field of alcoholism as well as sound techniques for alcoholism treatment, education, and research. Yet, because of the newness of these grants, the individuals and institutions involved are not yet able to compete for public funding with other, longer established health and human need agencies that have had years of experience in their fields. It is, theerfore, considered essential by ADPA that a minimum of $80 million be appropriated for alcoholism project grants in fiscal year 1974. We believe that such projects show great promise in meeting the problems of alcoholism at the State and local levels and that they should be given the opportunity to bring the field of alcoholism into deserved and needed parity with other areas of health needs.

We appreciate the opportunity of sharing our views with you.

Mr. FLOOD. There is no problem in your mind that there is a problem with alcohol and drugs?

Mr. MCCORD. That is the No. 1 problem.

Mr. FLOOD. For the record, would you make a list of the better known soft drugs and the same number of hard drugs?

Mr. MCCORD. Perhaps the most outstanding are the amphetamines, the diet pills——

Mr. FLOOD. Soft drugs first and then hard drugs. You don't have to do it now.

For the record give us several of the leading or most difficult problems with soft drugs and the same number with hard drugs.

Mr. MCCORD. Yes; we can submit that for the record.

[The information follows:]

In general the "hard drugs" are considered by the professional community as being the opiates, or their derivitives, and synthetic narcotics. Other drugs of abuse are generally referred to as "soft drugs." However, when taken intravenously some in the latter category seem to have effects comparable to the opiates in terms of addicting effects, either physiologically or psychologically.

Enclosed is information giving examples of different drugs and their effects.

A GUIDE TO SOME DRUGS WHICH ARE SUBJECT TO ABUSE[1]

ILLICIT (PROHIBITED) DRUGS (MANUFACTURE AND DISTRIBUTION PROHIBITED EXCEPT FOR APPROVED RESEARCH PURPOSES)

	Slang names	What they are	How taken	Primary effect	How to spot abuser	Dangers
Hallucinogens	LSD, Acid	LSD–25 is a lysergic acid derivative. Mescaline is a chemical taken from peyote cactus. Psilocybin is synthesized from Mexican mushrooms.	In tablet, capsule, ampul (hypodermic) form or in saturated sugar cubes.	All produce hallucinations, exhilaration, or depression, and can lead to serious mental changes, psychotic manifestations, suicidal or homicidal tendencies.	Abusers may undergo complete personality changes, "see" smells, "hear" colors. They may try to fly or brush imaginary insects from their bodies, etc. Behavior is irrational. Marked depersonalization.	Very small quantities of LSD may cause hallucinations lasting for days or repetitive psychotoxic episodes, which may recur months after injection. Permanence of mental derangement is still a moot question. Damage to chromosomes, and hence potentially to offspring, has been demonstrated.
Heroin	Snow, Stuff, H, junk, and others.	Heroin is diacetylmorphine, an alkaloid derived from morphine; it does not occur in opium. A white, off-white, or brown crystalline powder, it has long been the drug of choice among opiate addicts. Its possession is illegal.	May be taken by any route, usually by intravenous injection.	Like morphine in all respects, faster and shorter acting.	Morphinelike	Like morphine; dependence usually develops more rapidly. Dependence liability is high.
Marijuana (Cannabis).	Joint, Sticks, Reefers, Weed, Grass, Pot, Muggles, Mooters, Indian hay, Locoweed, Mu, Gigglesmoke, Griffo, Mohasky, Mary Jane.	Marijuana is the dried flowering or fruiting top of the plant Cannabis Sativa L., commonly called Indian Hemp. Usually looks like fine, green tobacco. Its possession is illegal. Hashish is a preparation of cannabis, taken orally in many forms.	Marijuana smoked in pipes or cigarettes. Hashish is infrequently made into candy, sniffed in powder form, mixed with honey for drinking or with butter to spread on bread.	A feeling of great perceptiveness and pleasure can accompany even small doses. Erratic behavior, loss of memory, distortion of time and spatial perceptions, and hilarity without apparent cause occur. Marked unpredictability of effect.	Abusers may feel exhilarated or relaxed, stare off into space; be hilarious without apparent cause; have exaggerated sense of ability.	Because of the vivid visions and exhilaration which result from use of marijuana, abusers may lose all restraint and act in a manner dangerous to themselves and/or others. Accident prone because of time and space sense disturbance. Dependence (psychic but not physical) leads to anti-social behavior and could be forerunner of use of other drugs.

A GUIDE TO SOME DRUGS WHICH ARE SUBJECT TO ABUSE[1]—Continued

LEGITIMATE (PERMISSIVE) DRUGS (ESSENTIAL TO THE PRACTICE OF MEDICINE; LEGITIMATE MANUFACTURE AND DISTRIBUTION ARE CONFINED TO ETHICAL DRUG CHANNELS)

	Slang names	What they are	How taken	Primary effect	How to spot abuser	Dangers
Amphetamine	Bennies, Copilots, Footballs, Hearts, Pep pills.	Amphetamines are stimulants, prescribed by physicians chiefly to reduce appetite and to relieve minor cases of mental depression. Often used to promote wakefulness and/or increase energy.	Orally as a tablet or capsule. Abusers may resort to intravenous injection.	Normal doses produce wakefulness, increased alertness and a feeling of increased initiative. Intravenous doses produce cocaine-like psychotoxic effects.	An almost abnormal cheerfulness and unusual increase in activity, jumpiness and irritability; hallucinations and paranoid tendenceis after intravenous use.	Amphetamines can cause high blood pressure, abnormal heart rhythms and even heart attacks. Teen-agers often take them to increase their "nerve." As a result, they may behave dangerously. Excess or prolonged usage can cause hallucinations, loss of weight, wakefulness, jumpiness and dangerous aggressiveness. Tolerance to large doses is acquired by abusers; psychic dependence develops by physical dependence does not; and there is no characteristic withdrawal syndrome.
Barbiturates	Red birds, Yellow jackets, Blue heavens, Goof balls.	Barbiturates are sedatives, prescribed to induce sleep or, in smaller doses, to provide a calming effect. All are legally restricted to prescription use only. Dependence producing, both psychic and physical, with variable tolerance. Signs of physical dependence appear with doses well above therapeutic level.	Orally as a tablet or capsule. Sometimes intravenously by drug abusers.	Small amounts make the user relaxed, sociable, good-humored. Heavy doses make him sluggish, gloomy, sometimes quarrelsome. His speech is thick and he staggers. Sedation and incoordination progressive with dose, and at least additive with alcohol and/or other sedatives and tranquilizers.	The appearance of drunkenness with no odor of alcohol characterizes heavy dose. Sedation with variable ataxia.	Sedation, coma and death from respiratory failure. Inattentiveness may cause unintentional repetitious administration to a toxic level. Many deaths each year from intentional and unintentional overdose. Potentiation with alcohol particularly hazardous. The drug is addictive, causing physical as well as psychic dependency, and withdrawal phenomena are characteristically different from withdrawal of opiates.
Cocaine	The Leaf, Snow, Speedballs (when mixed with heroin).	Extracted from the leaves of the coca bush. It is a white, odorless, fluffy powder that looks like crystalline snow.	A surface active anesthetic; by abusers, taken orally or, most commonly, intravenously alone, combined with or alternating with heroin. The coca leaves are chewed with lime, producing the effects of the contained cocaine.	Oral use is said to relieve hunger and fatigue, and produce some degree of exhilaration. Intravenous use produces marked psychotoxic effects, hallucinations with paranoid tendencies. Repetitive doses lead to maniacal excitation, muscular twitching, convulsive movements.	Dilated pupils, hyperactive, exhilarated paranoic.	Convulsions and death may occur from overdose. Paranoic activity. Very strong psychic but no physical dependence and no tolerance.

Codeine	Schoolboy	A component of opium and a derivative of morphine, in most respects a tenth or less as effective as morphine, dose-wise.	Usually taken orally, in tablets, for pain; or in a liquid preparation, of variable alcohol content, for cough. Can be injected.	Analgesic and cough suppressant with very little sedation or exhilarant (euphoric) action. Dependence can be produced or partially supported, but large doses are required and risk is minor.	Unless taken intravenously, very little evidence of general effect. Large doses are morphine-like.	Occasionally taken (liquid preparations) for kicks, but large amount required. Contribution of the alcohol content to the effect may be significant. Degree and risk of abuse very minor. Occasionally resorted to by opiate-dependent persons to tide them over with inadequate result.
Methamphetamine	Speed, Crystal	Stimulant, closely related to amphetamine and ephedrine.	Orally, as tablets or in an elixir, or intravenously.	Effects resemble amphetamine but are more marked and toxicity greater.	Extreme restlessness and irritability; violence and paranoid reaction possible.	Excessive psychotoxic effects, sometimes with fatal outcome.
Morphine	M, Dreamer, and many others.	The principal active component of opium. Morphine sulphate: white crystalline powder, light porous cubes, or small white tablets.	May be taken by any route; its abusive use is mostly by intravenous injection.	Generally sedative and analgesic (rarely excitatory). The initial reaction is unpleasant to most people, but calming supersedes and, depending on dose, may progress to coma and death from respiratory failure.	Constricted pupils. Calm, inattentive, "on the nod," with slow pulse and respiration.	Man is very sensitive to the respiratory depressant effect until tolerance develops. Psychic and physical dependence and tolerance develop readily, with a characteristic withdrawal syndrome.

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Mr. FLOOD. How will you convince the public that alcoholism is a drug?

Mr. MCCORD. It is a drug and belongs in the same chemical family as ether and chloroform as an anesthetic.

Mr. FLOOD. I mean in convincing the public that it is a drug.

If you walk into the average bar and tell those guys this is a drug, they will think you are out of your mind. What will you do about that?

Mr. MCCORD. We have some things going for us.

The President's Commission on marihuana and other drugs, says the major drug of abuse is alcohol. We in this field have said this for 10 years. Nobody heard or cared. All of a sudden the word got across. We said that we like to sit around with a martini in one hand and a cigarette in the other and lecture our children on the dangers of drugs. We are making considerable headway, particularly since we appeared before you last year, particularly in the Commission on Marihuana.

Last year when we came before you appealing for funds things looked very good.

Mr. FLOOD. Thank you.

TUESDAY, MAY 15, 1973.

HIGHER EDUCATION

WITNESSES

JOHN W. OSWALD, PRESIDENT, PENNSYLVANIA STATE UNIVERSITY, REPRESENTING THE AMERICAN COUNCIL ON EDUCATION
JACK MORSE, DIRECTOR OF GOVERNMENTAL RELATIONS

Mr. FLOOD. We now have President John W. Oswald, Penn State University, representing the American Council on Education.

I might say there was a time, because of its Agricultural School, when Penn State was referred to by the larger universities as a cow college. Not long ago I was at a dinner in Philadelphia with Dr. Oswald, and I said to him, "How many students do you have in the Cow College now?" He said, "About 40,000." So you have grown quite a good deal.

Mr. OSWALD. Yes; I have with me Jack Morse, who is the director of governmental relations for American Council and Mr. Richard Tombaugh, who is the director of the National Association of Student Financial Aid Administrators and is also with George Washington University in the District.

Mr. Chairman and members of the subcommittee, I am John W. Oswald, president of Pennsylvania State University and chairman of the board of directors of the American Council on Education. I am grateful indeed for this opportunity to present the views of higher education as they are expressed by the associations listed on the cover sheet.

We have an extensive statement which I shall not read but which, with your permission, we should like inserted in the record. In it we have provided our best judgment of what reasonable expenditures would be if the postsecondary education programs enacted in the Education Amendments of 1972 are to be funded adequately. Stated briefly, we see the need for appropriations of roughly $3.6 billion against authorizations of $5.6 billion for the broad spectrum of pro-

grams provided in the amendments. We believe we can provide a strong case for funding each of them at the level we suggest, and we conceive it to be our duty to provide you with this estimate.

Nevertheless, we must place these figures in the context of the President's budget for higher education, which is $1.75 billion, and in the larger context of a national budget of $269 billion.

My comments today will represent those related to the programs of the Office of Education. Our groups will be back at another time to talk about the equally crucial matters of the support for health, education, and research matters.

We believe that if it is our responsibility to analyze the financial implications of last year's legislation, we must also be willing to give you some sense of our own view of priorities, for we realize that you are working under strong fiscal constraints. Our priorities fall into three broad categories: Student aid, institutional aid, and support for programs with broad national, as opposed to State and local, significance.

The President's budget calls for the outright elimination of two long-established student aid programs—supplementary opportunity grants and national direct student loans—and a reduction of a third one, work-study. We vigorously oppose this proposal. These programs have served hundreds of thousands of needy students—the very students they were designed to serve. For example, a study commissioned by the Office of Education shows that in 1970, 43 percent of the opportunity grants were awarded to families with incomes under $4,000, another 34 percent to families in the $4,000 to $6,000 bracket, and 99 percent to families with incomes under $10,000. Direct loans and work-study awards have similarly been targeted to need. The particular merit of these programs is that awards can be tailored to the needs of individual students depending on their individual circumstances. We urge that Congress continue to appropriate $210 million for SEOG, $270 million for work-study, and $293 million for NDSL.

Provided funds for the three well-established programs are available so that student needs can be treated individually, we believe the basic opportunity grants offer a major step forward in the delivery of student aid, and we strongly support funding for them. Through a centralized and computerized system of determining parental contributions, students and parents will be able to determine roughly what their entitlements from this program will be. Like any new program, there are certain to be flaws at the outset. We can already identify actual cases where students whom any reasonable person would see as exceptionally needy would be ineligible for a BOG. But as long as institutions have funds at their disposal, such inequities can be remedied. Moreover, the statutory requirement that a BOG may be no larger than 50 percent of the cost of attending an institution makes availability of institutionally awarded funds essential. The fiscal year 1973 appropriation of $122.1 million will launch the program this fall. This will provide an opportunity to see how the program works, straighten out deficiencies in need analysis and the delivery system, and provide better data on the number of students who will be eligible for awards. We believe that an appropriation of $600 million for use in the 1974–75 academic year would be a reasonable expansion of this program.

We would also urge that a start be made on funding the so-called State student incentive program (subpart 3, part D, student assistance, Public Law 92-318). This is the program which would encourage States through 50 percent Federal matching to launch or expand State scholarship programs. We believe many States would be encouraged through this incentive to share even more broadly than they now do the responsibility of providing assistance to needy students. We believe that a $25 million Federal appropriation would prime the pump for action during the coming fiscal year.

Last year the Congress, with the support of the administration, determined that while assistance to students is of first concern in Federal priorities for higher education, assistance to the institutions they attend is of a directly related importance. In truth the two are inseparable. Aid to students has no meaning if college buildings, laboratory equipment, and teaching staffs disintegrate through lack of adequate financial nourishment. Despite its support for this provision the administration is not seeking funding. The financial problems of our institutions are well documented; the problems increase as we add more needy students to our rolls. We recommend that at least $182 million be appropriated to fund this program. If this were done, actually only $100 million could be expended or even obligated because of the statutory formula. That part of the formula which provides payments on the basis of enrolled BOG recipients could not be brought into play until appropriations for BOG equal at least 50 percent of authorizations, which obviously is not the case next year.

In his budget the President has called for the elimination of 11 higher education programs that have operated successfully for many years. If institutional aid of the sort I have just discussed can be provided, elimination of some of them would not be catastrophic. But we believe that the national interest requires continuation of others.

1. As the one USOE program addressed to the complex educational and social needs of communities throughout the Nation, we urge an appropriation of $15 million for title I—communities services—of the Higher Education Act of 1965.

2. In view of our woeful and demonstrable shortage of experts in rare foreign languages and remote foreign cultures, clearly a national concern, we urge an appropriation of $15 million for title VI of the National Defense Education Act.

3. While there is some evidence that in certain fields there is an adequate number of persons educated to the Ph. D. level, it is clear that among minorities and women a shortage exists. We would urge an appropriation of $5 million for new fellowships above the administration's request for $5.8 million with the recommendation that special attention be given to the needs of minorities and women.

4. The committee will hear testimony on the continued need for new academic facilities. The need is, we believe, real. But the highest priority in this area, it seems to us, is to provide construction funds for the rehabilitation and renovation of existing facilities so that, if we cannot make progress in providing additional plant, we can at least halt the decay of existing plant. We urge an appropriation of $40 million for this purpose.

I have suggested $200 million additional in student aid, $100 million net on aid to the institutions, and these other four programs, title I

community services, the fellowship program at the graduate level, the program of title VI for the language centers, and $40 million for the purpose of renovation.

Mr. Chairman, you will hear other witnesses' testimony on behalf of other programs of major importance to higher education.

The committee may well find their arguments persuasive and may wish to provide funding. What we have tried to do here is to give you a sense of our own priorities, knowing full well that they are subject to challenge.

Because of our limited time, we have not had an opportunity to discuss appropriations for health education and research. We shall, in time assigned to us later, present our views in this area.

Thank you for allowing us this time. We shall be happy to answer questions.

[The information follows:]

Higher Education Programs
(Budget Authority in Thousands)

	1974 Budget Request	Our Priority Proposals
1. Student assistance:		
(a) Grants and work-study:		
Basic opportunity grants	$959,000	$600,000
Supplementary opportunity grants	-	210,000
Work Study	250,000	270,000
Subtotal	1,209,000	1,080,000
(b) Cooperative education	10,750	10,750
(c) Subsidized insured loans:		
Interest on insured loans	310,000	310,000
Subtotal	320,750	320,750
(d) Direct loans:		
Federal capital contributions	-	286,000
Loans to institutions	-	2,000
Teacher cancellations	5,000	5,000
Subtotal	5,000	293,000
2. Special programs for the disadvantaged:		
(a) Talent Search	6,000	6,000
(b) Special services in college	26,000	26,000
(c) Upward Bound	38,331	38,331
Subtotal	70,331	70,331
3. Institutional Assistance:		
(a) Strengthening developing institutions	99,992	99,992
(b) Construction:		
Subsidized loans	31,425	31,425
Grants	-	40,000
(c) Language training and area studies	1,360	15,300
(d) University community services	-	15,000
(e) Aid to land-grant colleges:		
Annual appropriation	-	[redacted]
Permanent appropriation	2,700	2,700
(f) State postsecondary education commissions	3,000	3,000
Subtotal	138,477	217,417
4. College personnel development:		
(a) College teacher fellowships	5,806	10,806
(b) Fellowships for disadvantaged	1,250	1,250
Subtotal	7,056	12,056
5. Institutional Aid ($182,000,000 gross)	-	100,000 (net)
6. State Scholarship Matching Funds	-	25,000
Total	$1,750,614	$2,128,554

Mr. FLOOD. Thank you, Dr. Oswald.

Mr. PATTEN. Did you omit the national defense loans?

Mr. OSWALD. No, the national defense student loan was a part of the program.

Mr. PATTEN. I thought you referred to three. I thought there were four.

Mr. OSWALD. I referred to four additional programs beyond student aid and beyond institutional aid, Mr. Patten.

Mr. PATTEN. I mean under the scholarships. In other words, you still favor the National Defense Act?

Mr. OSWALD. Yes, sir, that it high priority.

Mr. FLOOD. Thank you very much.

Mr. OSWALD. I would like to present the full statement of the American Council on Education for the record.

Mr. FLOOD. That will be inserted in the record.

[The statement follows:]

STATEMENT OF THE AMERICAN COUNCIL ON EDUCATION, TOGETHER WITH THE AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES, THE AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES, THE ASSOCIATION OF AMERICAN COLLEGES, THE ASSOCIATION OF AMERICAN UNIVERSITIES, THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND GRANT COLLEGES, AND THE NATIONAL COUNCIL OF INDEPENDENT COLLEGES AND UNIVERSITIES

This statement presents to the Appropriations Subcommittee for Labor and Health, Education, and Welfare the views of the American Council on Education and a number of its member associations as indicated on the cover sheet. It is based on an analysis of those provisions of the Education Amendments of 1972 that pertain to higher education.

In some instances, notably those provisions that establish the basic opportunity grant program for students and its counterpart program of aid to institutions, we can only estimate authorization figures. We believe that the total annual authorization is roughly $5.7 billion. This would be the sum required if the intent of the Congress, as expressed in the legislation, is to be fulfilled. If one takes the position that in some cases great advances can be made through partial funding, we believe that an appropriation of $3.7 billion would meet most of the objectives Congress had in mind. It is within this framework that our views are presented.

STUDENT AID

Federal student aid programs are designed to lower the most persistent barrier to higher education for low- and moderate-income youth: lack of money. Since the landmark Higher Education Act of 1965, expenditures for these programs have encouraged and enabled many qualified needy students to pursue education beyond high school, and have stimulated colleges to recruit and educate such students in unprecedented numbers.

Yet it is increasingly clear that funding levels fall short of actual requirements. In the period since 1965, the need for Federal student assistance has mounted dramatically. Appropriations have not kept pace with: (1) Steadily rising college enrollments, (2) the costs of attending college, which have increased faster than the general rate of inflation in the economy, (3) the rising aspirations of lower income youth for higher education, (4) the commitments of colleges to broaden educational opportunity by enrolling disadvantaged students, and (5) weaknesses in the economy, which have drastically reduced summer and part-time work opportunities for students and, in general, made financing a college education more difficult for families at nearly all income levels. This shortage of funds has been made still more acute by the new legislation that extends aid for the first time to part-time students and students in proprietary schools.

BASIC OPPORTUNITY GRANTS

Of greatest significance in the alterations made in the various programs of student aid is the new basic opportunity grants program. The legislation states that every postsecondary student in the country is entitled to $1,400 minus the amount his parents can be expected to provide. Since there are many unknowns that can be resolved only after the plan has been in operation for some time, we can only estimate roughly the amount required to fund this new program. Some estimates have run as high as $2 billion; the lowest is the $959 million provided to this committee by Secretary Weinberger on March 7. We support an appropriation at that level, for if it proves to be inadequate to meet entitlements, there is a formula in the act that provides a method of reducing awards proportional to a student's other financial resources.

The need for funds for the three traditional and long-established programs—supplemental opportunity grants, work-study, and direct student loans—may in the long run be affected by the new basic opportunity grants and the slowly forming Student Loan Marketing Association. We will begin to get some experience with these during the coming academic year. But certainly in the fiscal year 1974 appropriation, it is essential that we maintain the institutionally based programs at current levels. This is so not only because there are many bugs still to be worked out in both new approaches, but also because the size of a BOG can equal no more than half of a student's expenses. There must be an assurance of funds in the form of additional grants, or work, or loans, or a combination of these to bridge the gap.

THE SUPPLEMENTARY OPPORTUNITY GRANTS PROGRAM

Until now, this program has been the only Federal grant program for qualified high school graduates of "exceptional need." The funds are administered by student aid officers who are in a position to judge, case by case, the exceptional need of each individual student. We believe they have performed their task conscientiously and well. In a study of the EOG program commissioned by the Office of Education, Nathalie Friedman of the Columbia University Bureau of Applied Social Research reported in May 1971, "The major conclusion of this study is that the EOG program is achieving its primary objective of enabling students of exceptional financial need to obtain an education beyond high school. EOG's are being targeted to the low-income/minority student. Institutions are engaged in efforts to recruit disadvantaged students, are waiving the usual admissions criteria, and providing supportive services to overcome the academic handicaps with which many such students enter."

A table in this study shows the parental income level of all students in higher education, as indicated in research by the American Council on Education and the parental income level of parents of opportunity grant recipients.

Selected background characteristics	EOG freshmen	ACE sample
Parental income	(3,319)	(270,000)
Percent:		
Under $4,000	42.4	5.5
$4,000 to $5,999	33.7	9.0
$5,000 to $7,999	17.6	13.4
$8,000 to $9,999	5.4	16.6
$10,000 to $14,999	.9	28.7
$15,000 or more	.1	26.7

The basic weakness of the opportunity grant has always been that the funds appropriated were never sufficient to meet the needs of eligible students. We believe now that if the amount we have suggested for basic opportunity grants is appropriated, an appropriation of $230 million for supplemental grants would provide the necessary flexibility to meet the needs of students in the greatest financial difficulty.

COLLEGE WORK-STUDY

Work-study enables students to help finance their education through part-time employment. Work-study appropriations have gradually increased each year, but because of escalating college costs and higher wage levels, the fund increases have not resulted in significant increases in the number of students who can

participate in the program. For the next year, even with an appropriation of $270.2 million, the total available funds are only 55 percent of the amount of colleges' and universities' approved requests for the Federal contribution to Work-study, leaving an estimated 400,000 eligible students unassisted. We urge appropriation of the full amount authorized—a total of $390 million.

THE NATIONAL DIRECT STUDENT LOAN PROGRAM

This program is the largest and best funded of the three programs. Yet NDSL appropriations have consistently fallen short of authorized funding levels and student requirements. Since many low and moderate income students experience continuing difficulty in borrowing from private lending agencies, inadequate funding of the NDSL program denies to needy students their principal opportunity for obtaining loans. Approved institutional requests for these direct loans total $577 million for the academic year 1973–74. We urge, therefore, that $400 million, the amount authorized, be appropriated.

WORK-STUDY FOR COMMUNITY SERVICE

This program is primarily designed for veterans, who will be able to increase their resources by working in such fields as health care, public safety, crime prevention, and community improvement. It promises both to encourage more veterans to go on with their education and to offer a new way of attacking some of the Nation's most pressing social problems—an exciting possibility that fully merits our request of $25 million.

STATE STUDENT INCENTIVE GRANTS

Public Law 92–318 authorizes a new program that encourages States to initiate or expand State scholarship programs based on need and would provide Federal funding on a matching basis. Such Federal-State partnerships have proved remarkably successful in many higher education programs since the National Defense Education Act of 1958. We propose that $50 million be appropriated for this purpose.

INSTITUTIONAL AID: COST-OF-EDUCATION SUPPORT

Last year the Congress, with the ultimate support of the administration, determined that student aid was umbilically related to the adequacy of the buildings, libraries, laboratories, and staff that constitute the student's effective learning environment—in short, the colleges and universities themselves. In consequence, cost-of-education provisions were included in the Education Amendments Act of 1972. Inexplicably, the administration, despite its endorsement of the notion of institutional needs in title IV of the Higher Education Act as amended last year, is not seeking funding for this essential purpose—a purpose, to repeat, directly related to the long-range viability of Federal student-aid programs.

We deem this particularly serious at this time because in spite of heroic cost-cutting efforts of the past 2 years, most of our institutions of higher education find themselves at this moment in time in critical financial difficulty. Inflation, which slowed perceptibly in its rate of increase from 1970 to 1972—and thereby helped hard-pressed college administrators to recover some stability in their financial situation—has now renewed its upward spiral with almost hurricane force. The U.S. Office of Education has estimated that American higher education in order to balance short-range budgets, presently suffers from close to $5 billion in deferred maintenance. Tuition increases threaten to price many colleges out of the market for middle income students; and those increases have jumped another 7 percent in 1973. These realities point to the erosion of basic facilities and programs you and we endorse. Not only do our colleges need cost-of-education allowances tied to basic opportunity grants in order to handle the special counseling and pedagogic problems of needy students; our colleges need a formula for a cost-of-education overhead support for those essential educational services and facilities which present student aid formulas do not come close to sustaining. The calculated gap between maximum student aid awards and the true cost of educating the student in question is over 50 percent—and this apart from the special costs of serving the particular needs of disadvantaged students.

We suggest that $640 million be appropriated to fund those two parts of educational overhead that are based on the distribution of institutionally-adminis-

tered student aid funds and on a headcount of graduate students. This $640 million would be used by our college and university administrators in a flexible, discretionary way in order to cover the most urgent continuing operational and capital renovation needs of their particular institutions.

VETERANS' COST OF INSTRUCTION

This program should be viewed as a complement to the work-study program described above. Its purpose is to encourage all institutions to recruit more veterans into postsecondary education. Since funds would be made available only to institutions that increased their veteran enrollment by at least 10 percent, and since part of the funds would be used to provide special counseling and remedial work for those veterans requiring it, it is impossible to state precisely the amount authorized or needed. Our best estimate is, however, that $120 million could usefully be used.

HIGHER EDUCATION FACILITIES

Title I of the Higher Education Facilities Act (title VII, part A, of the Education Amendments of 1972) authorizes grants for construction in junior and community colleges and senior institutions at a level of $300 million. This is an unrealistic figure, as is documented in information supplied to this committee by the administration, in which it is estimated that even with "new technology and better utilization—approximately $2.4 billion in academic facilities construction should be undertaken annually between 1972 and 1977." Yet the administration proposes to terminate the program entirely—even that part that provides low interest loans.

We urge the committee to rectify, to the extent possible, this omission and ask that $200 million be provided for title I. Even though such a figure falls far short of need, the mechanism established in each State will assure that funds will be to the most urgently needed projects in that State in order of priorities established by the State commissions. Most important of all, in many instances economies can be effected by using some of the funds for rehabilitation, alteration, conversion, or improvement of existing structures, as provided by the law. Again, the State commissions are best able to make these determinations.

COMMUNITY SERVICES

When Congress enacted title I of the Higher Education Act of 1965, it intended to apply the resources of colleges and universities to community problems, just as they had successfully been applied for years for rural problems through the Cooperative Extension Service. The title I program has never been permitted to accomplish what it could, because it has never received a realistic level of support. Although $60 million is authorized for the program in the current fiscal year, its appropriation amounts to but $15 million.

It is estimated that prior to the enactment of title I, only about 200 institutions of higher education offered meaningful continuing education and community service programs. By 1971, 563 institutions were offering such programs and services, either separately or in a variety of consortia and off-campus community service centers.

Although the administration has proclaimed the necessity for increased attention to the very problems addressed by title I, it requested no funds for this program in fiscal year 1974. In effect, this represents a decision to terminate existing programs of community oriented continuing education supported by title I. And it calls for an immediately halt to further developmental efforts in these community services. Of special note is the impact on larger States. Although the proposed 1973 cut in appropriations was 40 percent, the population ratio formula would have forced reductions up to 72 percent in State allotments. (California, 72 percent; New York, 70 percent; and Pennsylvania, 63 percent.)

We propose a $20 million appropriation so as to permit the program to realize its potential by doubling the number of participating institutions. This sum would enable the resources of higher education to be used by citizens of all ages from all educational backgrounds to learn together. If we are serious about meeting the continuing educational needs of our citizens, increased Federal support is imperative.

LIBRARY ASSISTANCE

No funding is recommended in the administration's fiscal year 1974 budget for library programs under title II of the Higher Education Act. The resources of our academic libraries undergird the entire spectrum of the teaching-learning process. We urge the committee to restore this program, which has proved so useful to institutions and the students they serve. Funding the basic grant program alone would require about $12.5 million, but in addition to the basic grants, many campus libraries straining to meet the diverse demands placed on them by changing curricula and open enrollments are in desperate need of the supplemental and special purpose grants authorized under title II. The fiscal year 1974 authorization is $85 million, with 70 percent earmarked for part A—college library resources—and 30 percent for part B—library training and research. This could readily and effectively be expended. However, considering the budget constraints, we urge that at least $30 million be appropriated to carry on these highly important programs. Under the formula, this would provide $21 million for college library resources. It is essential that our academic libraries be financially assisted if they in turn are to be relied upon to support the entire range of studies from the undergraduate to doctoral level courses currently offered by the institutions of higher education.

DEVELOPING INSTITUTIONS

We enthusiastically support the administration's request for $99,992,000 to fund title III of the Higher Education Act. It has proved to be an invaluable instrument for strengthening colleges and junior colleges that have, in some cases for more than a century, served the needs of large numbers of minority and disadvantaged students. This they have done despite totally inadequate resources. To strengthen them is to strengthen the entire system of higher education and, more important, the role their graduates can play in the future development of this Nation.

GRADUATE FELLOWSHIPS

As is true of many areas in higher education, the course for the future of Federal support of graduate students will be strongly affected by the new higher education legislation. The basic authority for support of graduate students has been changed to provide direct support toward the full range of the future needs of society, contrasted with the narrower focus of previous legislation on the training of teachers.

However, under existing law there is one glaring deficiency which can be met by more adequate appropriations. That is, opportunities for minorities and for women to enter and complete graduate work should be expanded. Under the $5.8 million proposed in the President's budget for graduate fellowships, only those who have already received support can be financed. No new fellowships may be awarded.

We urge that the committee provide adequate funds to finance 1,000 new fellowships. These would cost $6 million, and would set the total appropriation for this item at $11.8 million.

COLLEGE PERSONNEL DEVELOPMENT

There is a clear need for the training program authorized under the Education Professions Development Act, part E, both for upgrading the qualifications of existing faculty and other college personnel and to train new personnel, particularly at the community college level, in less than Ph. D. programs. We urge an appropriation of $13 million for these purposes.

LANGUAGE AND AREA STUDIES PROGRAM

Since title VI of the National Defense Education Act was passed in 1958, this country has slowly begun to overcome our previous deficiencies and ignorance in rare foreign languages and non-Western cultures, but if the events of the last decade tell us anything, it is that we have a long way to go. To maintain our progress in these fields is a clear national concern and a clear Federal responsibility. Yet the administration proposes to end the program on the grounds that there is no further need for it, and that, in any case, Federal funding constitutes only 10 percent of the total cost of the program. We disagree.

It is true that the multiplier effect of Government funds has been substantial: only about 10 percent of the direct costs have come from NDEA funds, which means that 90 percent comes from the universities' and colleges' own resources. In fact, at each developmental stage the Federal Government has insisted as a condition for NDEA Center support upon the institution's providing more than 50 percent matching funds. The negative multiplier effect of the withdrawal of NDEA title VI will be equally real. As Federal funds contract, university funds will not expand to fill in the vacuum; rather their own support will contract as well. One reason for this is that Federal money was increasingly used by the universities not to pay faculty, but for aspects which, while essential to language and area studies programs, universities would not and will not be able to support out of their own resources; for example, the building of extensive library collections, support of students through a longer training period, maintenance of small enrollment classes in scarce languages. In these essential program aspects, NDEA title VI moneys provide much more than 10 percent of the support. For instance, such external funding provided on the average 24 percent of the costs of library acquisitions; 36 percent of faculty research—as high as 60 percent in Southeast Asia studies and 44 percent in Middle East studies—and 22 percent of the costs of program administration in NDEA centers.

Even more dependent and not included in the 10 percent of direct costs are student fellowships; fully half of fellowship support for students comes from these external sources. Hence, while the 10 percent figure shows the multiplier effect of the Federal investment, because this support is concentrated in those aspects universities find it most difficult to pay for out of general revenues, the impact of the withdrawal of NDEA title VI funds will be much greater than the 10 percent figure would indicate.

We ask an appropriation of $25 million for 1974.

UNDERGRADUATE TEACHING EQUIPMENT

What we have said about facilities can be said equally about part F—previously title VI of the Higher Education Act—which provides funds for institutions to make use of the new technologies to which the administration refers. It is really complementary to the Facilities Act. No funds are provided for title VI in the budget. Yet this is a program that enables institutions that cannot hope, at least at present, to build new facilities to modernize and revitalize facilities that are growing obsolete. A recent survey by the magazine College and University Business indicates that a number of institutions, particularly small private 4-year colleges, hope to increase their expenditures for teaching equipment as the least expensive and most efficient way of improving the quality of their teaching. We would hope that the committee might fund this program at least at the $20 million level.

LAW SCHOOL CLINICAL EXPERIENCE

Title XI of the Higher Education Act of 1965, as amended in 1968, authorizes the Commissioner of Education to enter into contracts with accredited law schools to pay not more than 90 percent of the cost of establishing or expanding programs of clinical experience for law students.

If the $7,500,000 authorized under title XI could be appropriated for fiscal year 1974, it would be a major benefit to legal education and a significant contribution to the training of those who will soon play a large part in the administration of justice in the Nation.

The simplest definition of clinical legal education is any program which takes students out of the classroom and into the presence of "clients" in the outside world. A typical example is letting students work on actual live cases—civil or criminal—under the supervision of a licensed lawyer. Usually this takes place in a legal office, a public defender agency, a prosecutor's office, or a legal clinic operated by a law school. In a time when the need for legal services is recognized as more widespread and urgent than ever in our turbulent society, clinical training can help to develop lawyers better equipped for the current demands than those who have graduated from the law schools in the past.

In August of 1969 the Chief Justice of the United States delivered an address at the American Bar Association meeting in Dallas in which he stated, among other things, that "The recent development of law teaching through 'clinics' is one of the great new steps in legal education since Langdell's 'case method.' * * * This is one of the encouraging signs that there is much ferment

in legal education. * * * " What seems to have inspired the Chief Justice is that this program offers great potential for giving to the law schools of this country the support necessary so that they may carry out programs of experimentation and innovation. It is with this goal in mind that we again urge this committee to fund this potentially valuable program.

BANKHEAD-JONES (LAND-GRANT) FUNDS

For over 80 years now, the Federal Government has provided grants for the support of the instructional function at land-grant colleges and universities. The object of this support, as stated in the Second Morrill Act of 1890, was to "place the system of colleges for the benefit of agriculture and the mechanic arts * * * upon a basis of assured support * * * so long as we are a Nation." For the fourth straight year, the administration has proposed to eliminate funds under this program, terming it "obsolete."

Nothing could be farther from the truth. This is exactly the kind of Federal aid that should be expanded and extended to all institutions of higher education.

The presidents of the land-grant institutions consistently report that, dollar for dollar, these funds are by far the most valuable and useful funds they receive from any Federal source. Failure to restore these funds could signal the demise of a historic relationship with the Federal Government that has helped countless thousands of young people secure higher education and increase their contribution to our Nation and society.

These resident instruction funds have been the cement that holds together the land-grant colleges and universities as a unique national system of State universities, unmatched in the world either for their philosophy or their contributions to the welfare of those they serve. To dissolve this bond would involve consequences so serious that any such proposal deserves long and careful consideration, the type of consideration that cannot be given through the legislation-by-appropriation process.

Until such a study is made, the tangible bond that binds these colleges and universities together in the national service and that serves as the best "living" model of sound and effective Federal support for higher education in this country must not be eliminated, or even reduced.

GRADUATE PROGRAMS

Virtually all USOE graduate programs have now been consolidated into one title. Our statement has already covered what were once called national defense fellowships. We especially wish to commend to the committee two new fellowship programs targeted directly on areas of critical need. First, there are the public service fellowships, for which we suggest an appropriation that would provide 200 such fellowships to start the program. Second, there are fellowships for needy students interested in mineral and fuel resources and conservation, and for students from disadvantaged backgrounds. Each of these programs authorizes 500 fellowships. In this instance, because of the large pool of potential applicants, we suggest an appropriation of $2 million which would make it possible to award 330 fellowships.

COMMUNITY COLLEGES AND OCCUPATIONAL EDUCATION

In P.L. 92-318 we find a renewed and vigorous statement by the Congress of the need to broaden the diversity and scope of postsecondary education, with special emphasis on nonbaccalaureate and career education. In many States planning is just getting underway to achieve this end, and it is for this reason that we urge appropriation of the full $15.7 million authorized to support such planning. In other States plans are already well developed and ready to be put into action if parts A and B of title X are funded. It is our conviction that the $50 million for each part could be employed immediately to excellent advantage.

NATIONAL INSTITUTES OF EDUCATION

The Education Amendments of 1972 provide an exciting new possibility for a forward thrust in improving the quality of educational research, long underfunded in relation to the size and importance of the educational enterprise and long buried in the substructure of the administrative branch of the Government. With a 3-year authorization of $550 million for the Institute, we support an

appropriation of $162 million for fiscal year 1974, as requested by the administration.

ETHNIC STUDIES AND CONSUMER EDUCATION

These are new programs authorized under the Education Amendments, and it will take time to establish them and put them into operation. While authorizations would provide $15 million and $20 million respectively, we propose appropriations of $10 million for each to furnish startup money.

TUESDAY, MAY 15, 1973.

OCCUPATIONAL THERAPY EDUCATION AND TRAINING

WITNESS

LEO C. FANNING, EXECUTIVE DIRECTOR, THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION, INC.

Mr. FLOOD. Now we have Mr. Leo C. Fanning, executive director, American Occupational Therapy Association.

Mr. FANNING. Thank you, Mr. Chairman.

We are located in Rockville, relocating recently from New York City. We are most interested in talking to you about allied health training and particularly funding curtailment.

I have a prepared statement which has been presented to the committee, and rather than reading it I have three or four pertinent points to share with you. I will limit my oral commentary very substantially.

Mr. FLOOD. The statement will appear in the record in full at this point.

[The statement follows:]

STATEMENT OF THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION, INC., ON APPROPRIATIONS FOR THE FISCAL YEAR ENDING JUNE 30, 1974

Mr. Chairman, we are most appreciative of this opportunity to testify on fiscal year 1974 appropriations for the Department of Health, Education, and Welfare. I am Leo C. Fanning, executive director of the American Occupational Therapy Association, a professional association representing more than 14,000 registered occupational therapists (OTR) and certified occupational therapy assistants (COTA). Today I wish to speak on behalf of the 42 collegiate programs and the 37 junior and community college programs in occupational therapy education and training.

Many of these school programs face the loss of a substantial part of their next year's operating budget due to the administration's decision to phase out the allied health training program. This decision will cripple about half of our schools and, if fully implemented, will force some developing programs out of existence before their opening day.

We are also deeply concerned, Mr. Chairman, with the level of appropriations recommended in the President's budget for fiscal year 1974 for several other programs of HEW, such as the programs for vocational rehabilitation, community mental health centers, developmental disabilities, and education for handicapped children. However, other associations of which we are a member will devote their primary attention to these programs. Therefore, we wish to endorse the minimum budget for health programs as recommended by the Coalition for Health Funding and direct our remarks only to the allied health training program.

As you know, Mr. Chairman, the administration justified elimination of the allied health training program by saying that "the growth in . . . (this) field in recent years has occurred largely without the impetus of Federal funding support." State, local, and private spending have been greater than Federal spending and should be relied upon in the future, the administration suggests.

Quite properly, Mr. Chairman, Federal funds have not represented the lion's share of total nationwide expenditures for allied health training, including occupational therapy education, but they have been the essential "seed money" for expanding established programs and inaugurating new ones.

Since the passage of this legislation in 1966, 35 new educational programs in occupational therapy have been initiated at either the 2-year or 4-year level. Several programs scheduled to open in the fall of 1973 have counted on Federal "seed money," for as much as 100 percent, in some instances, of their first year's operating budget and initial expenditures for equipment.

The State of Hawaii is a case in point. Under a 1971 project grant to Kapiolani Community College, a part of the University of Hawaii, five allied health training programs are being initiated, including an occupational therapy assistant program scheduled to open in the fall of 1973. The plan calls for each training program to receive Federal funding for the first 2 years; then, except for the salary of one faculty member, the program is transferred to State funds.

The assistant project director, an occupational therapist, writes, "Hawaii is geographically in an isolated situation and without an occupational therapy assistant training program. We do not have enough personnel to meet the needs of the treatment programs. There is one COTA in the State * * * Federal funding is imperative to get needed programs started."

This is only one example, Mr. Chairman, of the vital role played by the allied health training program. The experience of many other schools could be used to document this statement by an occupational therapy educator. "Federal financial support has been a key factor in increasing enrollment." In 1973, approximately 900 occupational therapists and 600 occupational therapy assistants will graduate from approved educational programs. These numbers are almost double the number of graduates in 1966 when this legislation was adopted.

Nor are national needs for allied health manpower decreasing, as I am sure the members of this subcommittee recognize. One recently enacted amendment to the Social Security Act (under Public Law 92-603) will bring an estimated 1.5 million disability beneficiaries into the Medicare program beginning July 1 of this year. It is estimated that these disabled workers use about seven times as much hospital care as does the nondisabled population. Occupational therapists provide essential services in the care and treatment of these handicapped individuals.

Since the role of the occupational therapist in providing health services is not well-known, may I say a few words about this. Occupational therapy is not a lifesaving service. It is, however, a health service dedicated to taking those lives saved by others and helping to reestablish both the will and the physical and mental means of making them more satisfying to the individual, acceptable to the family, and productive for the community. Our work is with the physically handicapped, the developmentally disabled, the learning disabled, the mentally retarded, the mentally ill, the blind, the deaf, the aged and other population groups with temporary or permanently disabling conditions who need help in overcoming their handicap in order to achieve their maximum potential.

The most recent studies available (1969), Bureau of Health Manpower Education, have documented an 11 percent vacancy rate for occupational therapists in the Nation's hospitals. This is only one of the many health and educational settings where occupational therapists are employed. Rehabilitation facilities, sheltered workshops, skilled nursing homes, home care programs, schools for handicapped children, community mental health centers, prisons, and other institutions employ occupational therapists.

The relatively high rate of attrition in our profession requires continual replacements. At the technical level of occupational therapy assistants, the average career length is probably between 3 and 4 years. For the registered occupational therapist, this is a higher figure. Since the majority of occupational therapists are women, the typical career begins, is interrupted by marriage and the demands of a family, and may or may not be resumed.

I should like to refer briefly to our acute need for educators in occupational therapy. Although the need is endemic among most of the allied health professions, it has become crucial in occupational therapy. Practically every curriculum at the community college, baccalaureate and graduate levels has at least one unfilled faculty position. Four established schools have been unsuccessful in prolonged attempts to recruit curriculum directors for their basic professional degree programs. Nine developing programs have been unable to become operational due to an inability to secure qualified curriculum directors. Still other colleges have been forced to appoint less-qualified personnel on a provisional basis in order to keep existing programs operating. As experienced educators reach retirement age in the years immediately ahead, the current shortage of teachers is expected to become even more critical.

In an attempt to cope with this problem the American Occupational Therapy Association recently submitted applications to the Bureau of Health Manpower Education for the establishment of 2 graduate traineeship programs to enable 20 therapists per year to pursue courses of study leading to either the masters or doctorate degree. Our applications were approved but unfunded.

To produce these trained educators and researchers is both time-consuming and expensive, yet without these personnel we cannot maintain high-quality training programs for both the occupational therapist and the less-highly trained certified assistant. This is a national problem, Mr. Chairman, requiring Federal legislation and Federal funds.

For several reasons it is doubtful that either State, local, or private funds will be able to pick up the Federal share of financing allied health education. Higher education for occupational therapy personnel, as in the case of other allied health professions, is not uniformly distributed on a State-by-State basis. In any school there are many out-of-State or out-of-area students. Some States make no contribution to training occupational therapists. Other States have several programs, some of which are State schools, some private.

Pennsylvania, for example, has four occupational therapy training programs which are eligible for assistance under the Allied Health Training Act. Two neighboring States, New Jersey and West Virginia, have no occupational therapy curriculums. Two of Pennsylvania's schools are 4-year collegiate programs in private universities, Temple and the University of Pennsylvania. These programs will not receive State funds, yet the University of Pennsylvania anticipates that as much as one-half of their 1973–74 faculty will be cut if Federal funds are eliminated.

It is also unlikely that private sources and tuition increases can compensate adequately for the anticipated loss of Federal contributions. In many private universities, tuition and fees now amount to $3,000 or more. Further tuition increases are bound to diminish enrollment and to produce an extremely one-sided economic mix of students.

This brings me to the problems of the traineeship grants which have been available to a very limited degree for graduate level students under the allied health program. Traineeships from the Rehabilitation Services Administration have been awarded to some undergraduates majoring in occupational therapy; but these too will be "phased out" if Congress adopts the President's budget recommendations.

One curriculum director succinctly states the argument for assistance to students at both undergraduate and graduate levels: "Loss of financial support to students, in particular those from minority groups and the disadvantaged, will make it impossible for them to meet rapidly increasing costs of tuition, fees, and living expenses."

It has been suggested by the budget document that government loans coupled with the "high earnings levels of health professionals" will attract students who can later repay these loans. It is doubtful that occupational therapists were used as the model for this suggestion. The average beginning salary of an occupational therapist who graduates from a 4-year collegiate program followed by 9 months of clinical affiliation ranges from $8,500 to $9,500. Since the majority of students in the allied health fields come from lower- or middle-income families, this comment from an educator at Loma Linda University is more appropos, "The traineeships have provided encouragement to those students who desperately need direct financial assistance as well as available loans."

To determine the potential impact the proposed phase out of Federal financial support will have on occupational therapy training programs, the AOTA requested statistics and descriptive information from our curriculum directors in all parts of the country. To date we have had replies from about one-half of our schools. For the 23 collegiate programs from which we have received specific data, five will be relatively unaffected; 18 will suffer an average loss of more than one-third of their operating budgets affecting more than 3,000 occupational therapy students. At the 2-year college level, we have specific data from 15 programs of which five anticipate losing, on the average, more than one-half of their projected operating funds affecting approximately 300 students. Universities or community colleges in 14 different states, the District of Columbia, and Puerto Rico have indicated that they expect a substantial loss of funds according to this sample of one-half of the occupational therapy educational programs.

Mr. Chairman, we wish to recommend the appropriation of funds for the allied health training program at the fiscal 1972 level, $30.6 million, plus an allowance

of 6 percent per year to compensate for inflation, or an appropriation for fiscal 1974 of $34.4 million. We trust that the committee report will emphasize the need for continuation of Federal support for training allied health manpower.

For educational programs, committed to meet the Nation's needs for well-trained allied health professionals, the capriciousness of the proposed terminations is most unfortunate for institutions, facility and students, but more especially for those who will be deprived of health services. The long-range effect upon the Nation's supply of qualified manpower to provide health care must be determined by you. Mr. Chairman, and your colleagues. We are most appreciative of your consideration.

Mr. FANNING. First you are aware of the health manpower needs across the country so I won't dwell on that, except to share with you very briefly some figures.

The health manpower demand for occupational therapists by 1975 is 54,000. There are currently 12,000 registered occupational therapists, the 4-year product, and approximately 2,000 occupational therapy assistants. Further there are 11 percent vacancies of existing positions in hospitals alone. Hospitals are only one of many institutional facilities employing occupational therapists. Then a startling statistic that seems incredible but nevertheless has been published; 185 percent increase for occupational therapists by 1985. These are very substantial manpower increases.

Therefore, we are concerned, knowing the need for occupational therapist services, with the possibility of having some of the programs discontinued, or the level of some of the existing programs decreased. There are 42 collegiate programs and 37 junior and community college programs. We are concerned with the possibility that either some of them will be discontinued or the numbers of students in particular institutions will have to be reduced because of decreased Federal support.

We are pleased to say that for the most part funding does come from State and local arrangements for these institutions. However, it is the seed money and the assistance derived from Federal funding that has contributed very significantly to the establishment of new programs and their maintenance to a degree.

We are particularly concerned about the on-going, in-service training that we feel is so essential. That is one point I wanted to cover with you. The next is that we do not regard this as a program limited to the States. We feel that there is some Federal responsibility here. We, as the professional association, are responsible for certifying occupational therapists throughout the country, and also for accrediting institutions from which they are graduated. So we think particularly of States where the burden is great, and Pennsylvania happens to be an example that we can use as a case very quickly. There are four occupational therapy training programs in your State. They are eligible for assistance under the Allied Health Training Act.

There are three neighboring States, New Jersey, West Virginia, and Delaware, which have no occupational therapy curriculum. Two of the Pennsylvania schools are 4-year programs, Temple and the University of Pennsylvania. These programs will not receive State funds, yet the University of Pennsylvania anticipates that as much as one-half of their faculty may be cut if Federal funds are eliminated. It is also unlikely that private sources and tuition increases can compensate adequately for the anticipated loss of Federal contributions.

In many private universities tuition and fees now amount to more than $3,000. Further tuition increases are bound to diminish enrollment and produce an extremely one-sided economic mix of students. We are very concerned about this because we have worked very industriously to open up the gates to underpriviledged students and to get a good homogeneous mix.

This brings me to the problems of traineeship grants which have been available to a limited degree under the allied health program. Traineeships from the Rehabilitation Services Administration have been awarded to some undergraduates, but these too, as you know, will be phased out if Congress adopts the President's budget recommendations.

One curriculum, just to draw out a case situation resulting from a survey we made recently of all of our schools, states the argument for assistance to students at both the graduate and undergraduate levels. "Loss of financial support to students, in particular those from minority groups and the disadavantaged, will make it impossible for them to meet rapidly increasing costs of tuition, fees, and living expenses."

For educational programs committed to meet the Nation's needs for well-trained allied health professionals—and I might say here that our organization is the oldest among these, having been around since 1917—the capriciousness of the proposed terminations is most unfortunate for institutions, faculty, and students, but more especially for those who will be deprived of health services. The long-range effect on the Nation's supply of qualified manpower to provide health care must be determined by you and your colleagues, Mr. Chairman. We are most appreciative of your consideration.

Mr. FLOOD. Thank you very much.

CONSUMER HOMEMAKING EDUCATION

WITNESSES

DR. MARGERY EAST, PRESIDENT, AMERICAN HOME ECONOMICS ASSOCIATION

MRS. RUTH STOVALL, VICE PRESIDENT, HOME ECONOMICS DIVISION, AMERICAN VOCATIONAL ASSOCIATION

Mr. FLOOD. Dr. Margery East, president, American Home Economics Association.

Dr. EAST. Thank you, Mr. Chairman. It is nice to see you again.

Mr. FLOOD. Glad you are aboard.

Dr. EAST. Mr. Chairman, and members of the committee, I am Marjorie East, head of the Department of Home Economics Education at The Pennsylvania State University. I am here today as president of the American Home Economics Association, a national organization of 50,000 members, more than one-half of whom are teachers of home economics.

We are here to request that you appropriate in full the funds authorized for consumer homemaking education (part F, the Vocational Education Amendments of 1968). During the current fiscal year, the total amount appropriated for this purpose is $25,625,000. We urge you to appropriate the $50 million authorized for fiscal year

1974. We believe the record of accomplishment in home economics education justifies our request.

Financial support for home economics from Federal sources helps to emphasize the national importance of education designed to improve family life. The Federal funds, when matched by generous State and local contributions, have helped to provide home economics education for almost 3,000,000 youth and adults during fiscal year 1971.

Instruction in home economics is aimed at improving people's lives in all those deceptively simple activities which, when things go well, seem merely to support the even tenor of our ways. Home economics teaches how to get nutritious meals on the table, how to manage time so that working mothers have time to mother as well as to work, how to understand the normal characteristics of growing children and their need for steady loving discipline, how to plan financially for 10-year goals as well as for daily needs, how to find a real bargain at a discount store.

It's such simple skills that keep life going well for most people most of the time. In those families where such skills are not practiced, we find sons in jail, fathers dead before their time of heart disease, young mothers with few or no healthy teeth, and with listless, dull children. Such families have dates in a bankruptcy court, or wait for the welfare check, or drift to unemployment offices.

Schools could do more to prevent these problems if they had more money available. While almost every girl takes home economics in junior high school, only about half of them take any of these courses in high school. And very few boys are ever enrolled.

Here I want to make a special plea for the boys. They need home economics, and many of them want it very much. Some of these young men will become the harsh, but weak and undependable fathers whose sons fill the jails. Some will be the husbands who are led by their gullibility to the bankruptcy courts. We don't have to construct a "chamber of horrors" to get the idea. In 1971, only 200,000 boys were enrolled in home economics courses learning family living and "bachelor survival"—learning to keep their permanent press wardrobe in great shape, learning to shop for credit and come out with the best terms in town, learning to conquer the supermarket and triumphantly put a gourmet meal on the table, and learning how to buy a good used sports car.

Child development courses are also popular with boys. Here they watch and teach nursery school children while they study principles of child development. They may learn about the child's copying of adult models and watch a boy play at being a father, or learn about typical negative reactions of 3-year-olds and test several methods of treating a youngster in a tantrum. These are the boys who will enjoy fatherhood and be good at it.

Some schools, especially where the middle-school idea is catching on, have home economics classes required of all boys and girls. But not nearly enough schools can afford to stretch their limited resources to buy enough teacher time to take all the children into home economics classes. So they go the traditional way, reinforcing the stereotyped idea that only girls need to know how to select low cholesterol meals, or to understand possible problems in mixed marriages.

In 1971, there were some 21 million students enrolled in grades 7–12 of our public schools. In that same year, 2,300,000 students were enrolled in federally reimbursed programs of home economics, approximately 11 percent of all students. Over the years this percentage has remained all too constant. Home economics enrollment has increased dramatically (35.6 percent in the last 3 years) although the proportion of all students reached by home economics has grown by only 4 percent over the last two decades. It seems very clear that if we are to reach all students through home economics programs, we must dramatically increase the financial resources that are necessary for this task.

Attached to my statement are the figures indicating the amount of Federal funds granted to each State in fiscal year 1972 from the appropriations made by Congress to fund consumer homemaking programs. The amounts range from a low of $34,000 in Alaska to a high of $2,000,000 in California. You can readily see, Mr. Chairman, that these funds do not support all of the activities in home economics that are conducted in the States. I do want to emphasize, however, the very critical needs in home economics that are met by use of these funds—needs that do not address themselves specifically to teacher salaries or the traditional classrooms that one usually thinks of in terms of education. State department of education have used Federal home economics funds to provide teacher education support in colleges and universities; in-service education to bring teachers up-to-date in their various specialities; supervision from the State level to help classroom teachers develop new programs; research and development as well as production of instructional materials. Outstanding work has been done in developing teaching materials in consumer education, child development, nutrition, and family living.

Federal funds have also supported State personnel who serve as leaders for the program of Future Homemakers of America. This leadership is critical in terms of promoting youth involvement through an extension of the home economics instructional program. An example of the kinds of activities that engage Future Homemakers can be found in the publication also attached to this statement.

We believe, Mr. Chairman, that the concept of social cost is relevant here. As chairman of this particular subcommittee, you perhaps know better than most the difficulty of anticipating consequences and outcomes of programs in health, education, and welfare. For one reason, we do not yet have the sophistication to predict accurately what worse ills the society might develop should any one practice be discontinued, or what benefits will surely accrue should any one practice be intensified. But all of us are forced to make some assumptions. Certainly it is possible to estimate the cruel cost to our society of assassins and other criminals. Experts seem quite sure that such mental illness and emotional instability are in large part caused by poor rearing in unhappy families.

I am sure that this subcommittee is aware of the reports of the experts who, in looking at educational data, are telling us that no amount of extra money spent on schools will make much difference in how the children perform; at the same time, there is some rather convincing evidence pointing to the home and family as the point of intervention for improving the "educational conditioning" which ultimately determines educational performance.

It is also possible for us to estimate the cost to us all of the workdays lost, the lowered personal expectations, the listlessness and apathy, that result from poor nutrition, to say nothing of the suspected link between poor nutrition and heart disease and cancer. Even if it is hard to predict accurately the good to come from every hope, we do believe an ounce of prevention is worth a pound of cure. The dollars spent on helping people to make the most of their lives may save us a lot of money in the long run.

In closing, we urge you, Mr. Chairman and members of the committee, to support an appropriation of $50 million for consumer homemaking education which is the full amount authorized by the Vocational Education Amendments of 1968.

[The following additional information was submitted:]

Estimated expenditures, by State, consumer homemaking Education (Public Law 90-576—pt. F)[1]

	1972 estimate		1972 estimate
Alabama	$561,104	Nevada	45,119
Alaska	34,270	New Hampshire	88,934
Arizona	243,157	New Jersey	723,357
Arkansas	303,387	New Mexico	164,679
California	2,008,458	New York	1,683,411
Colorado	281,751	North Carolina	838,896
Connecticut	282,457	North Dakota	100,282
Delaware	57,339	Ohio	1,308,564
Florida	798,627	Oklahoma	377,241
Georgia	728,244	Oregon	268,975
Hawaii	105,487	Pennsylvania	1,417,949
Idaho	116,152	Rhode Island	104,137
Illinois	1,089,642	South Carolina	460,044
Indiana	634,849	South Dakota	101,319
Iowa	367,032	Tennessee	606,923
Kansas	310,317	Texas	1,646,084
Kentucky	508,796	Utah	164,039
Louisiana	592,207	Vermont	59,154
Maine	141,264	Virginia	688,239
Maryland	430,750	Washington	414,691
Massachusetts	552,576	West Virginia	285,522
Michigan	1,022,046	Wisconsin	531,667
Minnesota	476,494	Wyoming	46,797
Mississippi	387,394	District of Columbia	67,463
Missouri	590,088		
Montana	103,728	Total	25,625,000
Nebraska	185,878		

[1] Information supplied by the Department of Health, Education, and Welfare, U.S. Office of Education, May 1973.

Dr. EAST. Ruth Stovall has a lot of specific information about a lot of specific programs and the way they work. There are a lot of things that home economics does but there are some social ills we can cope with, too.

Mr. FLOOD. Very well, you may proceed.

STATEMENT OF RUTH STOVALL

Mrs. STOVALL. Mr. Chairman and committee members, thank you for the opportunity to appear before you and to submit a statement in support of increased funding for consumer and homemaking education, which is authorized under part F of the Vocational Education Amendments of 1969—Public Law 90-576.

I am Ruth Stovall from Montgomery, Ala., and I am here as vice president of the Home Economics Division of the American Vocational Association. In this capacity, I am speaking for 40,000 home economics teachers and more than 3 million students enrolled in vocational home economics in the 50 States as well as the countless number of youth who have been enrolled and are now homemakers in their own right—many of whom are carrying the dual role of homemaker and wage earner.

For myself and for those I represent, I want to express to you individually deep appreciation for the financial support you have given the consumer-homemaking program. Last year you included in the appropriations bill the amount of $38 million of the $50 million authorized. We know the sad story of the veto of this bill and of the bill which followed, which also included $48 million for part F consumer homemaking. Under the continuing resolution, the important program of consumer homemaking is currently funded at only $25,625,000. Your record as an appropriations committee shows that you recognize the identified need for a much larger amount than this.

Our request to you is for your continued support this year of increased funding for consumer and homemaking education. While we hope you can fund this program at the authorization level of $50 million, we are aware of budget constraints and, therefore, request that this committee vote for $40 million as the very minimum. With increased costs for program operation, this amount is needed to maintain the status quo with some expansion.

Today's society and public demand reflect the need for more education for family life as living becomes more complex.

Long ago, Plato said, "What is honored in a country will be cultivated there." In America, because we value the home, we strive as a nation to strengthen, protect, and dignify it. A happy family life is a part of the great American dream. It is human to want it. It is traditional to want it to last.

The family continues to be the basic unit in society; and it is recognized that how people live together in families and what they are taught to live by influence the goals, motivations, and behavior of people.

Because the American home is valued as the basic unit of society, home economics, which was identified in 1917 in the Smith-Hughes law as a field of study to provide education for home and family living, is a valued part of the school curriculum. Although elective in most schools, home economics has grown to be one of the most popular programs offered through the secondary schools and one of the largest programs of vocational education at the secondary level.

At the banquet of the Alabama Home Economics Association, the vice president of academic affairs at the University of Alabama gave the invocation. In his prayer he concluded with this statement: "In the Holy Scriptures is written, 'Therefore take no thought, saying, what shall we eat or what shall we drink, or wherewithal shall we be clothed, for the Heavenly Father knoweth ye have need of all these things,' and we thank Thee, Lord, that Thou has sent home economists to provide them for us." This academic vice president was using Scriptural phrasing to compliment home economics for its role in serving human needs.

Today, the improvement of the quality of human life is a central theme of government and programs in many agencies are directed toward the goal of improving the level of living of all people in the Nation. President Nixon has stated that there can be no nobler cause than one to improve the quality of life.

Through the Vocational Education Amendments of 1968, Part F Consumer Homemaking, Congress built on the commitment of the Smith-Hughes and George Barden laws, and gave vocational home economics the important mission of helping to improve home environments and the quality of personal and family life, including giving greater consideration to the economic, social and cultural conditions and needs, and consumer education.

Part F also included the preparation of youth and adults for the role of homemaker or to contribute to their employability in the dual role of homemaker and wage earner, the role of most women and men in today's society.

Historically and currently, vocational home economic education has been and is predominantly parenthood and family life education, with the added dimension of education for employment.

Enrollment of youth and adults in consumer and homemaking education has increased 35.6 percent since 1969. The enrollment figures are as follows: Fiscal year 1969, 2,334,302; fiscal year 1970, 2,419,216; fiscal year 1971, 2,932,382; fiscal year 1972, 3,164,292.

The enrollment figures in fiscal year 1972 by levels are as follows: Secondary, 2,316,284; postsecondary, 30,723; adult, 668,335.

Home economics education is—

Concerned with the development of the individual, the home that nurtures him and with the development of life skills for living and earning.

Designed to help individuals improve home environments and the quality of personal and family life and includes instruction in consumer education, food and nutrition, child development, clothing, housing, family relationships and management of resources with emphasis on home and financial management, selection, use and care of goods and services and other consumer responsibilities.

Structured to help prepare youth and adults for the dual role of homemaker and wage earner.

Offered in rural, urban, and intercity areas for boys and girls, men and women, and provides planned help in meeting the special needs of the disadvantaged and handicapped.

The only educational program at the secondary level that provides instruction in all areas of family living.

The program that sponsors Future Homemakers of America (HERO–FHA)—the national youth organization for home economics students in consumer and homemaking and home economics related occupations in public and private secondary schools, and which is the largest youth group sponsored through the secondary schools.

Preparation for life and work, including the self-development and the development of parental skills and work skills.

A program people need and want because it is related to the actualities of human life, serves human needs, and helps improve the quality of life.

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A program with built-in flexibility of purpose, scope, and sequence to permit adjustments as necessary to meet needs of individuals and families in a changing society.

Because home economics education is concerned both with the development of the individual and the home that nurtures him, the curriculum is broadgaged. Basic knowledge is drawn from the biological sciences, social sciences, and the arts. This knowledge, coupled with the findings of home economics research, is applied to the development of the individual and the family.

Although home economics is not the only professional field concerned with family living, it is the only field concerned with all aspects of family life. It is concerned both with the tangibles and intangibles of family living. Its instructional objectives include the cognitive, the affective, and the psychomotor domains. In other words, it is concerned with people and things together. The home economics curriculum is thus concerned with family life in its broadest sense—the universality of families and their functions—and is at the same time concerned with the application of learning in its most personal sense, focusing on the development of the students and their families in relation to the actualities of their living. The curriculum includes instruction in several major areas.

The area of human development and the family includes the concept of the family as a setting for the development of human beings, the meaning and principles of human development, including basic human needs, the components of personality and personality development, and the development of a parental sense as these relate to human development throughout the life cycle with special emphasis on prenatal and postnatal care, the care and guidance of children—including infant care, development, and uniqueness of self and interpersonal relationships in the family, community and the world of work.

Through the other areas of instruction, the principles of human development are applied to areas of human needs, including child care and guidance, nutrition and food preparation, consumer education, clothing and textiles, family housing, family economics and home management, art in individual and family life, and career development.

Home economics instruction begins in the classroom but does not stay there. It extends into the homes and lives of the students through planned experiences in the homes and communities. Child development centers operated under the direction of the home economics teachers, and child development centers in the school community, are used for students to work directly with young students as a part of their education for parenthood and/or employment in child development occupations.

Home economics instruction is extended beyond the classroom through planned experiences in the care and guidance of infants and/or children in the home; marketing; planning for the family food to meet the needs of individual family members; home improvements; meeting the psychological, social, and physical needs of the aged in the home and community; and career exploration and preparation through work experiences.

Through these experiences, the curriculum content becomes meaningful as the students experience what they are learning, a key factor

in the retention of learning as well as the improvement of life today as we learn to "live and earn."

Throughout the United States, the curriculum in consumer and homemaking programs are deliberately designed to go straight to the "here and now" to offer maximum effective help to each young person in his personal being and in the identification and achievement of his life's goals.

Because the curriculum is concerned with the things that are basic in society—people, families, homes, and human service careers—the curriculum content is "people centered" with the constant search for educational approaches that will help each individual to develop his maximum potential.

Future Homemakers of America was founded June 11, 1945, as an incorporated, nonprofit national organization for home economics students in secondary schools through grade 12, both public and private. It was the outgrowth of various State and local high school home economics clubs which were known by different names and had no unified program.

Visualizing what could be accomplished, if all clubs combined efforts in working together on improved home and family living on a national scale, members of the American Home Economics Association and the Home Economics Education Staff of the U.S. Office of Education, took the lead in forming the national organization.

Kentucky was the first State association to affiliate with the national organization. By the end of the first year, there were 42 affiliated State FHA associations, and a national membership of 92,516 in 2,487 local chapters.

At the end of the second year, membership had almost doubled. Future Homemakers of America now has more than half-a-million members, with affiliated associations in all 50 States, the District of Columbia, and Puerto Rico; and affiliated chapters in the Virgin Islands and American schools overseas.

As an integral part of home economics education, with the overall objective to help individuals improve personal, family, and community living, the organization serves as a bridge between the vocational home economics programs and the practicalities of family/community life. Chapter projects and activities expand home economics learning experiences and provide a channel for practical application which contributes to more effective teaching and learning in consumer/homemaking, family life education, and home economics-related occupations classes (HERO).

The eight sides of the official emblem represent the eight purposes of the organization, which focus upon the satisfactions of homemaking, home and family life, democracy in home and community life, international good will, creative leadership, group recreation, and home economics careers and occupations, forming the philosophic base for the National, State, and chapter programs of work.

Membership in Future Homemakers of America is voluntary, with any student who is taking or has taken home economics or a home economics-related occupations subject in middle school, junior, or senior high school is eligible to join. Chapter, State, and National dues are kept at a minimum.

National headquarters are located in Washington, D.C. The national adviser serves as executive secretary for the organization and supervisor of the national headquarters staff. Chartered State associations make up the national organization, and the head State supervisor of home economics education gives general guidance to the program in her State. She or a member of her staff serves as State FHA adviser and is the channel of operation between national headquarters and local chapters.

Chapters in the secondary schools where home economics instruction is offered make up the State associations. Chapter advisers are home economics teachers in the local schools.

Each State association and each local chapter has its own youth officers who are elected annually.

The national officers, elected annually by the membership, compose the National Executive Council. These officers are charged with the responsibility of conducting the necessary businesses of the organization, including planning for National FHA Week, as well as planning and presiding over the national meeting. A national advisory board gives guidance and counsel to the national officers and the national headquarters staff.

One week in the early spring of each year is designated National FHA Week. Chapters across the country hold special observances and carry out activities and projects related to the theme for the week selected by the national officers.

The annual national meeting is attended by delegates selected on a State membership quota basis. Locations of national meetings are rotated among the four FHA regions. Every fifth year, the national meeting takes the form of a national convention and is held in a central U.S. location to accommodate a larger delegation.

The designing, production, and distribution of official publications to give guidance and assistance to State associations and local chapters, as well as individual members, are an important function of the national headquarters staff. The official magazine of Future Homemakers of America is Teen Times, published four times during the school year, plus an adult leadership issue which comes out in August.

Early Nightengale on CBS Radio said, "The national divorce average is 1 divorce for every 4 marriages; for teenage marriages, the ratio is 1 to 3; but for home economics majors, the divorce is only 1 in over 300 marriages."

A Gallup poll reported that 7 out of 10 young people—70 percent—feel the great deficiency of their high school education was too little emphasis on family living.

The April 1973 issue of Better Homes and Gardens included a report of a survey made of its readers. By a whopping 85 to 15 percent, the Better Homes and Gardens respondents said no to the direct question: "Do you think there is too much emphasis on homemaking in a girl's education?"

Earl S. Schaefer of the University of North Carolina, who conducted a child-centered "early intervention project" in the Washington area, said, "The objectives of enrolling children in school at 5, 4, or 3 years of age and of enrolling infants in developmental day care might appear less urgent if we began to develop the alternative of strengthening and supporting family care and education of children."

In the May 1973 issue of Phi Delta Kappan, a random sample of 1,020 Phi Delta Kappans answered an opinionnaire on education. In response to item 23—"For noncollege-bound students, the high school curriculum and instruction should be altered drastically with emphasis on employment upon graduation, citizenship, and possible marriage and family life"—87 percent agreed, 9 percent disagreed, and 4 percent were neutral.

In the April 1973 issue of Forecast—Co-ed magazine, M. Arthur Neiman, publisher, wrote a special report on the "New Lifestyles and the New Home Economics" in which he said:

> For the objective of our educational programs has always been to educate young people to achieve the goals they sought. Accordingly, in this century, the thrust of our schooling has been toward business and careers, or toward science and the new technology. But now a different kind of emphasis is required. For our immense scale of affluence, resulting from this partnership of education and democracy, is now being questioned by many of our young people. They are apprehensive about the unfortunate consequences of our technological achievements, the dreadful pollution of our majestic environment, the steady deterioration of urban living, the overcrowding, the noise, and the excessive commercialization. They are questioning the validity of an education leading toward a life style which so many of them do not intend to follow. But there is one social goal the vast majority do not question—that is the goal of attaining a satisfactory style of family living. Our social scientists now find our brightest children seem more interested in family and personal pursuits than in economic advancement.

Using vocational funds from part F consumer and homemaking education, Pennsylvania established a "Family Life Stabilization Program" for the Wyoming Valley Area when his area was inundated by the flood in the storm called "Agnes." This area surrounds Wilkes-Barre, Pa. The project employed 10 home economics teachers who worked as a coordinating unit to help stabilize the families who were uprooted from their homes. The home economics teachers made contact with Federal, State and civic agencies in helping the families to become reestablished. They worked with them when they moved into trailers provided by HUD to help them learn to maintain the trailers, to develop pride in the new temporary home, and to care for their children in the new family setting.

They worked on safety, sanitation and on the purchasing of goods and services. They organized instructional help to protect the families from consumer fraud which is often prevalant during these times of disaster. They helped families with nutrition and food problems and taught families how to use the small stoves available and to cook outdoors. They also worked with families in altering clothing provided through different groups. Portable sewing machines were provided through part F funds for families to use in the alterations work.

OHIO—FAMILY LIFE PROGRAMS INITIATED IN PUBLIC HOUSING DEVELOPMENTS IN MAJOR CITIES

A family life program was initiated in major cities and in two experimental rural areas in Ohio. These programs were designed to offer instruction within the public housing developments in the disadvantaged areas in order to assist families with the improvement of child care, nutrition, money management and home management. Ten family life programs, serving 50,553 people in fiscal year 1972 indicate the broad thrust of this family life effort.

NEW MEXICO—PREVENTS SCHOOL DROPOUTS THROUGH A SPECIAL CONSUMER AND HOMEMAKING PROGRAM AT ALBUQUERQUE

A special program for 50 boys and girls, 12 to 18 years of age, who cannot function in a regular school program, has been offered for 2 years in Albuquerque, N. Mex. One consumer homemaking teacher and one teacher aide work with these students full time offering a less structured program than a regular school program. The students are not pressured, do little written work and reading, but contract to complete short units on areas such as career exploration, crafts for the home, care of themselves and their clothes, food buying and preparation. Much emphasis is given to improving human relationships, acceptance of self and others, and helping each other to gain feelings of self-worth. After the first year 15 students returned to the regular school program and are doing well. Most of them will be ready to return to regular school after this year. The cost analysis shows that part F funds provided $120 for in-service education for the home economics teacher and aide. (The local district pays the salaries.) This investment is expected to make the difference of $353,700 in earnings of the 15 students who were prevented from becoming dropouts, in addition to the contributions made to the students, their present families and future homes on which a price tag cannot be hung.

WASHINGTON—65 FAMILIES MOVE OFF WELFARE AS THE RESULT OF A CONSUMER AND HOMEMAKING PROGRAM FOR PARENTS

During the 1971–72 school year, 140 welfare mothers enrolled in a parent cooperative program under the auspices of the Everett Community College, Everett, Wash. The program provided a preschool experience for the mothers. Over 50 percent of the mothers were single parents. The program for the mothers included parent education, consumer education, home management, and personal development. From 3 to 4 months after completing the year's program 65 to 140 were partially or completely off welfare and were working full or part time. Those working part time were laso enrolled in vocational training classes. The children of these welfare mothers profited even more. They gained positive self-concepts, feelings of worth and help in getting a job, and managing home and money. The following analysis was made: Federal dollars provided, $8,623; 65 mothers off or moving off welfare; $3,000 average cost of welfare parents per family; $195,000 estimate of savings to Government for 1 year; $3,900,000 estimated savings to Government for 20 years.

GEORGIA—POSTSECONDARY PROGRAMS IN CONSUMER AND HOMEMAKING EDUCATION IMPROVE THE STUDENTS' CHANCES FOR SUCCESS IN CAREERS, MARRIAGE, AND SOCIETY

In the post-secondary vocational technical schools in Georgia all students regardless of career objective are given the opportunity to learn to manage their money, home and family.

Bob Cordle, personnel director at Barwick Industries, Walker County, Ga., states, "The knowledge gained and experience provided in consumer education and family life skills classes improve each student's changes of having a successful career, marriage, and place in society." Mr. Cordle based this statement on his findings that em-

ployees in his industry who have consumer and homemaking skills are more productive employees and can concentrate on their jobs rather than on the unsolved problems at home.

Approximately 5,088 students were involved in the post-secondary consumer and family life skills programs in 18 post-secondary vocational technical schools with 23 teachers in 1972. An additional 12,541 adults also were enrolled in this program on a part-time basis. If funds were available, all of the post-secondary vocational technical schools (250) would make the program available to all their students regardless of career objective. All funds for the program except for 10 percent paid by local schools come from Public Law 90–576, part F Consumer and homemaking education.

CALIFORNIA—PARENT-CHILD EDUCATION PROVIDED IN BERKELEY HIGH SCHOOL FOR PARENTS IN SCHOOL

The Berkeley High School Parent-Child Education Center is located directly across the street from the high school. Facilities include an infant area, toddler area, and office-conference space. High school student-parents bring their infants and toddlers at 8:30 in the morning and take them home after school. The infants and toddlers receive healthful, loving care on a continuous basis, and there is a two-way involvement which stimulates emotional and mental growth. Educational environment of infants and toddlers is a vital part of the projects.

The high school parents are enrolled in regular classes leading toward graduation and are required to take two class periods in the project. One period is a theory class where infant and child development, nutrition, management, family planning, etc., are taught. The second requirement is a laboratory period where the student works with the infants and toddlers. The atmosphere and facilities are planned so that the high school student feels accepted and comfortable. They refer to the center as their home away from home.

A parent with a child in the project is required to take a job training class such as typing, filing, or prenursing, so that she will have a salable skill upon graduation.

Project classes are a part of the home economics department. This educational program is open to all high school boys and girls.

The home economics staff includes two instructional aids and a teacher-director. One of the great successes of this project is hiring high school graduates who have had children in the project on a nursery training aide basis. This year there are three graduates in this training program. Additional coverage is furnished by community volunteers. Four volunteers come each day from 8:30 in the morning until 2:30 in the afternoon. The same four come each Monday, Tuesday, Wednesday, etc. This provides continuity and stability. Among the volunteers, are one pediatrician, three registered nurses, two nursery school teachers and a social service worker.

The health of both mother and child is an important aspect of the project. Closely coordinated with the Berkeley Health Department, the Berkeley Maternity and Infant Care project, social welfare, and Berkeley's Early Childhood Education program.

Probably the greatest contributions are the parenting skills developed by the students, and the love, acceptance and feeling of worth the children receive on a daily basis as they grow and develop.

ALABAMA—IN ALABAMA, INSTRUCTION WAS MODIFIED AND EXTENDED TO MEET THE NEEDS OF THE DISADVANTAGED STUDENTS

In the economically depressed areas of Alabama, the consumer and homemaking instruction was modified and extended to meet the special needs of the disadvantaged students in keeping with the disadvantaging conditions, including cultural enrichment, social development, individual instruction, health services, remedial reading, speech therapy, and personal counseling.

Special attention was directed toward helping each student to develop a positive self-image through achieving success and recognition. Home visitation was employed as a means of understanding the student in relation to his socio-economic and cultural setting. Special help was provided after school in addition to the individual instruction and guidance provided during the school day. All home economics teachers kept a record of program accomplishments and evidences of changes in students. For example, Mrs. Ella Bonham, Pine Hill Consolidated School in Wilcox County, reported 216 visits to 76 students and 32 visits to adult homemakers. She identified the following changes observed in students during the year: More interest in their families and in younger children in the family, development of a feeling of worth, improvement in communicative skills of reading, writing, and speaking, improvements in personal appearance and grooming, better grades, more involvement in FHA and other school activities, increased employment of students after school, on Saturdays and during the summer, improved use of money, more confidence, and better eating habits.

Other home economics teachers reported examples of accomplishments such as, the student who taught her mother how to write a check; another student saved her mother $5 in 1 week by reading grocery labels and comparing prices marked on the products; students made choices based on information when shopping for groceries with the use of food stamps and/or money; students planned before buying; students used more often and more naturally the terms "good morning," "thank you," "please," "excuse me," and "let me help you"; students showed marked improvement in sanitary practices; and the home environments were made cleaner and more livable.

Home economics teachers worked with low-income families in understanding the procedures in securing housing loans and in selecting homes which would meet the needs of their families. Disadvantaged adults were taught to use the sewing machine instead of sewing by hand. Classes were conducted on use of credit and planning for security through insurance and savings. Nutrition was taught in all home economics classes in the secondary schools and in special classes for adults. One teacher reported an open-house "teach-in" on "What you should know about nutrition." The use of foods at home, plentiful foods and food commodities was demonstrated and practiced. Career education was taught in all classes and at all levels, with the goal of every student "an informed consumer."

The statewide conference for all vocational home economics teachers provided inservice education on meeting human needs through home economics with a focus on meeting the individual and family needs of the disadvantaged, handicapped and elderly.

MINNESOTA—"A CONSUMER-HOMEMAKING PROGRAM FOR MIGRANTS"

The consumer and homemaking program for Mexican-American migrants of the Minnesota Red River Valley of the North has been in operation for 2 years in Moorhead and 1 year in the other outlying areas. The programs covered an area 300 miles long and 30 miles wide from Hallock on the north to Appleton on the south. Programs were set up with the cooperation of the local migrant schools, the vocational division of the Minnesota Department of Education, and the Moorhead Area Technical Institute.

The migrants were notified of the programs by teacher and teacher aide visits, field counselor, church services, schools, flyers, posters and radio. The migrants' response to the program was affected by the weather and the time of day. Migrant schoolteachers found that the 1 p.m. children's rest time was good for teacher aide classes. However, in contrast, the migrant worker in the field was busy long hours and found weekends and rainy weather best for the program sessions.

The programs were housed in migrant schools, opportunity centers, churches and grocery stores and functioned at times of fiestas, weekends and rainy weather using demonstrators, individual help, informal classes and displays. The radio seems to be an excellent way to reach migrants using minute-long consumer information spots during the Spanish Hour sponsored by many local stations. Some classes are held at the same time and place as adult basic classes; however, it is difficult to get attendance at night classes during good weather. Children as well as adults attend classes held in a church gymnasium after Sunday afternoon mass.

There are few migrant camps in our area, but where these are there is an excellent natural grouping for teams to reach the men and women with informal classes and the children with entertainment at their camp.

It is highly desirable that cooperative assistance involving the migrant health doctor and nurse be provided the migrants to answer questions and provide service for their health and nutrition-related problems.

General topics covered in the migrant consumer education program were grocery purchasing and food stamps, food storage, sanitation, nutrition, care of the sick child, children's diseases, personal grooming, clothing labels, finances, and family planning. Guest speakers were successfully used in specialized areas such as family planning and children's diseases. Flyers depicting consumer education subjects were distributed in both English and Spanish at classes.

The migrant program was sponsored by the Moorhead Area Technical Institute and reimbursed through the home economics unit, vocational division, Minnesota Department of Education. Local migrant schools acted as the governing body by hiring the teacher and teacher aide and making facilities available. A supervisor from the Moorhead Area Technical Institute contacted migrant school directors

and teachers to aid in developing the programs, continued to give encouragement and ideas, and planned a day for teachers to share ideas and better understand the migrants' needs.

The migrant adult consumer homemaking program is an important means of helping Mexican-American migrants meet their needs and problems in a changing consumer world. The migrant program is only as vast and valuable as a staff is dedicated to make it.

The cost of additional programs of consumer and homemaking education to meet the national need and demand vastly exceeds the amount of funds authorized under Public Law 90–576—part F, much less the amount presently appropriated. The priority need for full funding for this part of the act is to enable States to meet the increasing need for home economics education for males and females at secondary, postsecondary, and adult levels in the rural, urban, and inner city areas.

Additional Federal funding is also needed to maintain the existing programs in view of increased operational costs.

The cutback in professional personnel in home economics education on the National and State levels has resulted in limited services to State staffs. These services previously rendered and which are no longer available are sorely missed. Although these services are not funded under part F consumer and homemaking education, they may be provided under the provisions of Public Law 90–576.

A request is hereby made through this testimony for congressional action to restore and strengthen home economics professional services to States from the Office of Education on the national and regional levels. In this time of national need to strengthen homes and families and to improve the quality of life in America, additional professional leadership is seen as a priority goal.

Mr. FLOOD. Thank you.

Mrs. STOVALL. Thank you, Mr. Chairman.

TUESDAY, MAY 15, 1973.

UNIVERSITY AFFILIATED FACILITIES FOR THE MENTALLY RETARDED

WITNESS

DR. MARGARET GIANNINI, REPRESENTING THE ASSOCIATION OF UNIVERSITY AFFILIATED FACILITIES

Mr. FLOOD. Now we have Dr. Margaret Giannini of the Association of University Affiliated Facilities.

Dr. Giannini?

Dr. GIANNINI. Mr. Chairman, members of the subcommittee, I am Margaret J. Giannini, M.D., director of the university affiliated facility located at Valhalla, N.Y., known as the Mental Retardation Institute. The institute is an extension of the New York Medical College clinic for the mentally retarded in New York City—one of the original university affiliated facilities authorized by Public Law 88–164.

On behalf of Robert G. Jordan, M.D., president of the Association of University Affiliated Facilities, may I express our appreciation to the subcommittee for this opportunity to comment on the administra-

tion's proposed fiscal year 1974 budget for Health, Education, and Welfare expenditures relating to the university affiliated facilities program.

The mentally retarded citizens in our society are more visible today than in the past—a fact attested to by a recent conference in Columbus, Ohio, on the mentally retarded citizen and the law. In remarks prepared for the conference, President Nixon reminded us once again that "until recently, lamentably little attention has been given to the legal rights of our retarded citizens," and that the problem of mental retardation affects "some 10 percent of our population when the families of the retarded are included. . . ."

The scant attention paid the legal rights of our retarded citizens in past years is significant, for its illustrates our tendency to "solve" problems by overlooking them. The mentally retarded and developmentally disabled will not disappear by placing those citizens in institutions and forgetting them, or by neglecting their extreme and very special needs—very special medical needs.

The President's Panel on Mental Retardation appointed by President Kennedy in 1962, recommended steps to bring about recognition to this long-neglected segment of our population. A significant aspect of the recommendations of the President's Panel related to the need for exemplary facilities affiliated with university programs for the training of professionals to work with the problems of the mentally retarded and developmentally disabled. As conceived, the facilities would provide comprehensive diagnosis, care and treatment of retarded children, and provide training of needed professional personnel in an interdisciplinary setting with the special needs of the mentally retarded as a focus for the training.

The mission prescribed for the university affiliated centers is indeed a difficult one. In a sense, the UAF concept represent a revolutionary approach to the problem of mental retardation. Inherent in the university affiliated facility concept is the idea that the mentally retarded and developmentally disabled are entitled to care and treatment of a special sort—treatment that takes into account their very special needs.

At the present time, there are some 35 university-affiliated facilities in operation, and several others in preliminary stages of operation.

As I have commented before, this committee several times in the past and wish to remind you again, there is a very serious financial commitment on the part of the Federal Government in the construction of these facilities which is well in excess of $41 million and the commitment of the private sector doubles this amount. If I might cite my own facility, originally the building was to cost $4 million, the Federal commitment being $3 million and our commitment $1 million. The final cost of that very same building, because of escalation of labor and prices was $8.5 million, which the university undertook, realizing the seriousness and the importance of this kind of program.

The responsibility of these centers is not solely that of training professionals in a unique way to work with the retarded. Their responsibilities to the community and to those families directly affected by the problem of mental retardation are significant. The university affiliated facilities have a large role in the implementation of the goal of deinstitutionalization—insuring that our retarded citizens are not unnecessarily institutionalized. In short, they have broad responsibili-

ties to deal with problems our society has just started to recognize as appropriate for serious public concern.

Several university affiliated facilities have recently played a large part in the Willowbrook expose in terms of expertise and in providing services. They participated together in concert with Willowbrook in order to contribute to needed dialogue and solutions.

As the members of this subcommittee well know, the costs of health related activities has soared in recent years. This has increased the burden placed upon the university affiliated facilities, for the greatest increases in costs have occurred during a time this program has been becoming established.

We do not appear before this committee requesting additional funds for construction of centers—although there is a clear need for additional facilities. We do believe, however, that the commitment represented by the centers established thus far deserves adequate support. If the goals inherent in the UAF concept are to be something more than official rhetoric, the centers must be given the chance to fulfill them.

Such a chance appeared in 1970 with the passage of the Developmental Disabilities Services and Facilities Construction Act. In part, this legislation—which was an extension and revision of the orginal authorization legislation for the university affiliated facilities program—dealt with a serious problem for ongoing UAF programs—that of providing administrative support necessary to the functioning of a university affiliated center.

The promise of support for the UAF's found in the authorization levels provided in the Developmental Disabilities Act has not been matched by performance. A total of $52 million for 3 fiscal years was authorized by Congress under title II of the act: a total of $4,207,500 has been awarded to 33 institutions pursuant to the authority contained in the act. In short, the gap between authorizations and appropriations is much greater than it should be if the intent of Congress in passing the Developmental Disabilities Act is not to be overlooked. We recognize that authorization levels are seldom matched by actual appropriations; but the disparity here is severe, and the effectiveness of the university affiliated centers is in large part a function of the level of funding of title II of this Act.

Last year, the Appropriations Committees increased the level of funding of title II from the budget request of $4.25 million to $9.5 million. Unfortunately, that prospective increase was not realized because the appropriations bill was vetoed by the President. Undoubtedly, the omnibus Labor-HEW appropriations bill affords many opportunities for confrontation between the executive and legislative branches on the question of who controls spending. Support for the university affiliated centers was caught in such a confrontation last year, and while the increase for title II of DDSA over the budget request probably went unnoticed in the debate, the absence of agreement between Congress and the President left the title II funding at the low figure of $4.25 million. It should be pointed out that the one-time release of funds in the amount of $4,207,500 occurred on the last day of fiscal year 1972. Thus, while the funds were appropriated pursuant to fiscal year 1972 authorization, actual disbursement in practical terms was during fiscal year 1973. The university affiliated facil-

ities are receiving support pursuant to the Developmental Disabilities Act that is (1) far below the authorization levels (which for fiscal year 1973 is $20 million for example); and (2) 1 year late in terms of the timespan for which the appropriation should be utilized.

While the assistance provided by the Developmental Disabilities Act, currently proposed for extension by the administration and the Congress, is of great importance to the university affiliated facilities, the concomitant responsibilities placed upon the centers by passage of the legislation has increased their financial burdens. It is most appropriate that university affiliated facilities work with the State mental retardation coordinators, superintendents of State institutions, as well as with the National Advisory Council and the several State planning and advisory councils created by title I of the Developmental Disabiliteis Act. The expanded commitment embodied in the Developmental Disabilities Act is consistent with the UAF concept, and the centers welcome the responsibility to participate in this common effort to cause a more humane attitude in this country toward our mentally retarded and developmentally disabled citizens. We simply want the financial resources necessary to carry out these responsibilities.

One year ago I appeared before this subcommittee and pointed out that the then-existing minimal operational budgets for the university affiliated centers totaled at least three times more than the $4.25 million fiscal year 1972 allocation. During the past year, costs have risen, and the centers have been called upon to demonstrate their relevance to States' and regional needs—a role the university affiliated facilities have encouraged for themselves and one which is most appropriate. To adequately carry out these responsibilities, the university affiliated facilities must have the financial support necessary to operate. This year's budget request for title II is the same as last, and it is less adequate this year than last.

The most important source of funding for the university affiliated centers is the Maternal and Child Health Service. The authority for this support is section 511 of the Social Security Act. Twenty university affiliated facilities receive support from Maternal and Child Health Service, and centers in Nebraska, Iowa and Kentucky would receive support if funding were made available to MCHS. Other centers—established or in the process of becoming established—need this vital support if they are to carry out the mission they are charged with.

The purpose of the MCHS training grants to the 20 facilities receiving support is to make possible the implementation of the concept of training professionals in an interdisciplinary setting to deal with the problem of mental retardation. Those centers funded by MCHS and others eligible but not funded offer a complete range of services for mentally retarded and multiply handicapped children. The MCHS funded facilities are charged with turning out professionals who do not only have clinical competency in their own discipline, but who, as a result of their training, have an appreciation of the roles and contributions of an array of other disciplines and can fit their own skills and functions into such a coordinated group approach.

Maternal and Child Health Service support is vital to the university affiliated facilities program, and the association believes the fiscal year 1974 budget request should both provide for cost of living in-

creases and support for UAF's presently receiving no support from MCHS. The proposed budget does not do either.

The 20 facilities funded by MCHS have been told to submit budgets this year identical to last's in terms of dollar amounts. This is an understandable directive in view of the budget request for fiscal year 1974 of $14,382,000—the same as the fiscal year 1973 appropriation—but a reduction of support in effect, as everyone familiar with the State of the value of our currency is aware. We ask this subcommittee to revise the budget request for MCHS support for university affiliated facilities and to give this concept the chance it deserves to demonstrate its worth.

President Kennedy's Panel on Mental Retardation set forth a number of goals worthy of a compassionate society over 10 years ago. Basic to the Panel's deliberations was the idea that our mentally retarded and multiply handicapped deserve an opportunity to live—not as outcasts to be hidden from our view and our thoughts, but rather as the rest of us would want to live were we in their place.

Speaking in Baltimore last week at a dinner honoring Dr. Robert Cooke, a man instrumental both in the creation of the university affiliated facilities concept and the John F. Kennedy Institute for Rehabilitation of the Mentally and Physically Handicapped Child, Senator Edward Kennedy remarked that the university affiliated facilities have "helped bring university health centers out of their ivory towers and into the communities they must serve."

The Association of University Affiliated Facilities accepts the responsibility of serving the community and improving the lives of the mentally retarded and developmentally disabled citizens in this Nation, and asks this subcommittee to contruct a budget which will reflect a serious commitment to the goals implied by this responsibility.

We ask the subcommittee to increase the level of funding for maternal and child health services, and to restore the level of funding for title II of the Developmental Disabilities Act agreed to by the Appropriations Committees of the Senate and the House last year but vetoed by the President.

The appropriation for title II at that time was $9.5 million. But, as I indicated, because of the President's veto, it reverted to the former year's figure of $4.25 million. This is clearly inadequate. The university affiliated facilities must have greater funding for core support in order to function. This is a very crucial consideration which I would like you to pursue, since this core support is not available from any other source.

[The following additional information was submitted:]

For purposes of clarification, institutions receiving support from the Maternal and Child Health Service, the Division of Developmental Disabilities within the Social Rehabilitation Service, and the Bureau of Education for the Handicapped have been listed by State, locality and source of funding.

The attached listing is not meant to be a definitive list of university affiliated facilities.

UNIVERSITY AFFILIATED FACILITIES BY HEW FUNDING SOURCES

State and name and location of facility	Sources of HEW support		
	Maternal and Child Health Service	Social Rehabilitation Service	Bureau of Education for the Handicapped (Office of Education)
ALABAMA			
University of Alabama:			
Birmingham	X	X	X
Tuscaloosa		X	
CALIFORNIA			
University of California:			
Los Angeles	X	X	X
Irvine		X	
University of Southern California: Los Angeles	X	X	X
COLORADO			
University of Colorado: Denver	X	X	X
DISTRICT OF COLUMBIA			
Georgetown University: Washington, D.C	X	X	X
FLORIDA			
University of Miami: Coral Gables	X	X	X
GEORGIA			
University of Georgia:			
Athens		X	X
Atlanta		X	
INDIANA			
University of Indiana:			
Bloomington		X	X
Indianapolis	X	X	
IOWA			
University of Iowa: Iowa City		X	
KANSAS			
University of Kansas:			
Lawrence		X	X
Kansas City	X	X	
Parsons		X	
KENTUCKY			
University of Kentucky: Lexington		X	
LOUISIANA			
Louisiana State University: New Orleans		X	
MARYLAND			
Johns Hopkins University: Baltimore	X	X	X
MASSACHUSETTS			
Children's Hospital: Boston	X	X	X
Fernald State School: Waltham	X	X	
MICHIGAN			
University of Michigan: Ann Arbor	X	X	X
MISSOURI			
St. Louis University: St. Louis		X	
University of Missouri: Columbia		X	
NEBRASKA			
University of Nebraska: Omaha		X	
NEW JERSEY			
Newark State College: Newark		X	

UNIVERSITY AFFILIATED FACILITIES BY HEW FUNDING SOURCES—Continued

State and name and location of facility	Sources of HEW support		
	Maternal and Child Health Service	Social Rehabilitation Service	Bureau of Education for the Handicapped (Office of Education)
NEW YORK			
New York Medical College:			
New York City		×	
Valhalla	×	×	
Yeshiva University: Bronx		×	
NORTH CAROLINA			
University of North Carolina: Chapel Hill	×	×	×
OHIO			
University of Cincinnati: Cincinnati	×	×	×
Ohio State University: Columbus	×	×	×
OREGON			
University of Oregon:			
Portland	×	×	
Eugene		×	
PENNSYLVANIA			
Temple University: St. Christopher's Hospital, Philadelphia		×	
SOUTH DAKOTA			
University of South Dakota: Vermillion		×	
TENNESSEE			
University of Tennessee: Memphis	×	×	×
UTAH			
Utah State University: Logan		×	×
WASHINGTON			
University of Washington: Seattle	×	×	
WISCONSIN			
University of Wisconsin: Madison	×	×	×

Mr. FLOOD. Thank you very much.

Dr. GIANNINI. Thank you, Mr. Chairman.

TUESDAY, MAY 15, 1973.

EDUCATION ASSISTANCE PROGRAM

WITNESSES

MRS. BARBARA REIMERS, PRESIDENT, NATIONAL SCHOOL BOARDS ASSOCIATION

AUGUST W. STEINHILBER, DIRECTOR, FEDERAL AND CONGRESSIONAL RELATIONS, NATIONAL SCHOOL BOARDS ASSOCIATION

Mr. FLOOD. Next we have Mrs. Barbara Reimers, president of the National School Board Association. Mrs. Reimers is accompanied by August Steinhilber.

We will insert Mr. Reimer's and Mr. Steinhilber's biographical sketches into the record at this point.

[The sketches follow:]

Full name: *Reimers, Barbara Drisler (Mrs. Frederick)*
Residence: *258 Pine Orchard Road, Branford, Conn. 06405*
Home phone: *203–488–5145*
Business phone: *203–488–7276*
**During legislative session: 203–566–5976 566–5406*

Years, when applicable—school board affiliation:
Member of local board of education for *18 (1957–75)* years.
President of a local board for *6* years.
Full name of local board: *Branford Board of Education.*
Phone: *203–488–7276.*
Address: *33 Laurel Street, Branford, Conn.*
Superintendent: *Dr. Ernest E. Weeks.*
Offices held in State School Boards Association—when: *Connecticut Association of Boards of Education, Inc., secretary, 2 years; vice president, 2 years; president, 1965–66; legislative chairman, 1967–68; executive committee, 1959–73; program chairman, 1970.*
Offices held in regional school boards association—when: *1967–68, chairman, northeast region.*
Offices held in NSBA—when: *State delegate for 3 years to the National School Boards Association, Inc.; legislative committee, NSBA, 1967–68; constitution and by-laws committee, 2 years, chairman, 1969–71; second vice president, 1971–72; first vice president, 1972–73; president, 1973–74.*
Employment record: (major positions held, firm, location) *Education research, Connecticut General Assembly, Hartford, Conn.; school board arbitrator, Connecticut; chief clerk, education committee, Connecticut General Assembly.*
Education: (school, location, degree)
High school: *Bronxville, N.Y.*
Undergraduate: *Vassar College, Poughkeepsie, N.Y., A.B., 1939.*
Graduate: *La Salle Extension University, Chicago, LLB., 1968.*
Personal:
Husband—name: *Frederick A. Reimers.*
Occupation or other activities: *Vice president and sales manager, Textile finishing plant.*
Children—names; current location; comment:
Terry R. Byrnes (female) First National City Bank, New York City.
Jean R. Edwards (female) assistant to Congressman, Washington, D.C.
Clare E. Reimers (female) University of Virginia.
Civic, church, political affiliations, past and present—honors:
Episcopal Church.
Republican Party.
Board of Education.
School building committee.
Professional organizations other than NSBA, offices held—honors:
**See attached sheet (p. 4).*
Hobbies, special interests, travel, et cetera:
Tennis, golf, swimming, reading, needlework, classical music.
Military rank; specialty; theater:
N.A.
Supplemental information:
Professional organizations other than NSBA, offices held—honors:
Memberships:
Past:
Consultant to exploratory committee on the assessment of education, USOE.
USOE Committee for Evaluation of the Connecticut State Department of Education.
Board of directors, Day Prospect Hill School, 1963–68.
Vice president board of directors, Day Prospect Hill School, 1965–68.
Connecticut Association Ind. Schools, committee on substandard schools, 1967.
Trustee, The Country School, Madison, Conn., 1962–64.
Advisory committee, Workshop Without Walls WGBH, Boston, TV, 1967–68.

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Supplemental information—Continued
Professional organizations other than NSBA, offices held—honors—Con.
Memberships—Continued
Past—Continued
Advisory Committee Connecticut State Plan for "Reading in the Seventies."
Technical Advisory Committee, White House Conference on Children and Youth.
Present:
The National Committee for the Support of the Public Schools, Washington, D.C.
Council for basic education.
Human relations council—education committee.
League of Women Voters.
Republican Party.
Episcopal Church, Branford, Conn.
Pine Orchard Yacht and Country Club.
Advisory committee, task force on governance and financing of education, Ohio University.
Master plan resource group, Connecticut Commission for Higher Education.

AUGUST W. STEINHILBER

Academic degrees: BA, Western Reserve University; JD, Georgetown University.

Organizational membership: Ohio Bar; District of Columbia Bar; U.S. Supreme Court Bar; National Organization on Legal Problems of Education (past member of executive committee); American Association of School Administrators; and Federal Bar Association.

Present position: Director of Federal and Congressional Relations, National School Boards Association, 1120 Connecticut Avenue NW., Washington, D.C. 20036.

Previous position: Deputy Assistant Commissioner for Legislation, U.S. Office of Education.

Member: National Advisory Committee—American Arbitration Association's Public Employment Relations Research Institute.

Author of the following:

A Publications.—Assistant Editor: Journal of Law and Education; Washington Fastreport—a fortnightly newsletter; State Laws on Compulsory Attendance; Transportation and Textbooks for Parochial School Children; and Dual Enrollmen in Public and Non-Public Schools.

B. Congressional Testimony—House Committee on Education and Labor; Labor Relations in the Public Sector; Equal Educational Opportunities Act; and Education Revenue Sharing.

House Subcommittee on Labor and Health, Education and Welfare; Education Appropriations.

Senate Subcommittee on Education: Equal Educational Opportunities Act.

Joint House-Senate Committee on Congressional Operations: Authorizations—Appropriations Process.

C. Articles: De facto segregation; teacher loyalty oaths before the courts; where is the wall of separation between church and State; and religion in public schools.

Lectured on law and education at institutes or conferences: Miami University of Ohio; Syracuse University; University of Indiana; University of Pittsburgh; Bureau of National Affairs/Federal Bar Association Institute on Labor Relations in the Government services, and others.

Mrs. REIMERS. I admire endurance.

Mr. FLOOD. It's very interesting testimony.

You may read your statement, Mrs. Reimers.

Mrs. REIMERS. Mr. Chairman, members of the subcommittee, my name is Mrs. Barbara D. Reimers, and I am president of the National School Boards Association. I am accompanied by August W. Stein-

hilber, director of Federal and congressional relations for the association.

The National School Boards Association is the only major education organization representing school board members—who are in some areas called school trustees. Throughout the Nation, approximately 84,000 of these individuals are association members. These people, in turn, are responsible for the education of more than 95 percent of all the Nation's public school children.

Currently marking its 34th year of service, NSBA is a federation of State school boards associations, with direct local school board affiliates, constituted to strengthen local lay control of education and to work for the improvement of education. Most of these school board members, like yourselves, are elected public officials. Accordingly, they are politically accountable to their constituents for both educational policy and fiscal management. As lay unsalaried individuals, school board members are in a rather unique position of being able to judge legislative programs, including the adequate funding level of programs, purely from the standpoint of public education, without consideration to their personal professional interest.

Association policy is determined at the NSBA annual convention at which representatives from every geographic region of the Nation translate policies and resolutions into ongoing programs.

For years now NSBA has championed adequate funding levels for the Federal program. Our convention just 1 month ago was not an exception. Indeed, resolutions to expand the Federal assistance program, as well as to rectify the current Federal funding crisis, dominated the convention agenda.

Mr. Chairman, in our testimony today, we wish to briefly highlight six issues which the Nation's school boards regard of utmost concern with respect to the fiscal year 1974 budget. Four of the issues are related to the funding levels for title I, impact aid, emergency school aid program, and the National Institute of Education, respectively. The fifth pertains to the desirability of an early education appropriations as a separate item from the Department of Labor/HEW appropriations. And, the sixth questions the administration's plan for implementing the fiscal year 1974 budget on a decentralized regional basis.

Mr. Flood. We tried that once a couple of years ago and it was vetoed, although we overrode that veto. We ran into legislation since then and haven't been able to do it. Theoretically we are in agreement. We tried that for the very reasons you state.

Mrs. Reimers. Title I of the Elementary and Secondary Education Act, the program for educationally disadvantaged children, has long enjoyed the highest praise as a Federal expenditure which is justifiable in purpose and results. Therefore, rather than recounting the innumerable success stories of this program, I would like to move directly into the question of the appropriate funding level.

In searching for this level, two points may serve as a starting off point. First, the conferees of the respective House and Senate appropriations committees for fiscal year 1973 reported a recommendation of $1.810 billion for this program—an amount which was agreed to by both Chambers. Second, those more conservative Members who have supported the administration's interpretation of the continuing resolu-

tion under which title I is currently being funded have done so on the grounds that continuing resolutions are intended for "holding ongoing activities in place." Taking these two factors together, it should be noted that the dollar amount of $1.8 billion both restates Congress intent for the program in fiscal year 1973, and, by virtue of the implementation of 1970 census data, would at least hold each State's "ongoing activities in place" for fiscal year 1974. However, in making the interpolation from dollar amount to the services which can actually be bought, we find that the increased cost of education over the past year requires that, in order to maintain Congress' intended fiscal year 1973 funding level, the $1.810 billion base would have to be adjusted to $2 billion.

Accordingly, we urge that the level of title I services at least be maintained by an appropriation of $2 billion for this very worthy program.

Unlike other Federal aid to education programs, impact aid is not primarily intended to fund a specific educational need. Rather, it is a program of general aid to compensate school districts for the cost which the Federal business places upon them. Specifically, these costs consist of any combination of the following factors: the burden of educating federally connected children, lost revenues which federally used land takes off the local tax roles, and income and sales tax revenues which are lost under the Soldiers' and Sailors' Relief Act and in commissary privileges.

As in the case of title I, the factual—not the philosophical—basis on which payments are made has changed since the program was implemented 23 years ago. As a result, a situation has arisen whereby a few wealthy districts are receiving relatively large payments for the children of fully taxed, high-salary civilians who work on Federal installations located in neighboring school districts. At the same time, dozens of poor districts are receiving relatively small payments for high concentrations of children whose parents are in the military and/or because of the location of a large Federal installation within the district. In such cases, the Federal business poses a real and a heavy burden on local resources to educate both the federally connected and the local children. Given the philosophical soundness of the program and the need of dozens of poor districts for these funds—as evidenced by recent school closings in several federally impacted districts, the high payments to the few districts in question should be rectified by a change in the formula, rather than a cut in funding to all districts. And, with the extension of the impact aid program calendared for consideration this year, we would expect and urge that a formula revision be enacted.

For fiscal year 1974, which would be subject to the existing formula, a level of funding is urged at a rate of entitlement equal to: (1) 100 percent for category "3a" children residing in districts wherein the federally connected children constitute 25 percent or more of the student enrollment, (2) 90 percent for other category "3a" children, and (3) 75 percent for category "3b" children. In addition to supporting these impact aid categories, Mr. Chairman, we urge your support for a $50 million funding level for the public housing category "3c."

While the National School Boards Association strongly supports Federal assistance to school districts facing large costs in the implementation of desegregation plans, we find that the emergency school aid program as it is currently operated is not supportable as a priority funding item.

This legislation contains no less than six program categories with which school boards must concern themselves. In addition, notwithstanding the administration position favoring an easing of Federal program administration, the regulations thereunder encompass 40 pages in the Federal Register plus a maze of guidelines and application forms. As a result, it is not surprising that one big city school board advised us that it took their Federal specialist 3 weeks just to understand the program. Another district advised us that its overhead cost in developing an application would exceed the amount of funds which it needed. In short, because the program is so complicated and contains such voluminous reporting procedures, the school board risk capital for the program is prohibitively high.

In a suburban district like mine, the local board of education turned down the grant entitlement because it was too complicated to go after.

Moreover, the program as presently structured must fall on its merits. Although not required by statute, the regulatory provisions upon which applications are ranked against each other are heavily skewed in favor of the large districts. We believe that applications of equal merit should be treated on an equal basis. The regulations as currently structured suggest that the adversities of segregation do vary with district size. To our knowledge that assertion has yet to be proven. In addition, grants are awarded as much as for the achievement of a narrowly defined concept of pupil assignment as for the real end product—a quality equal educational opportunity. For example, the city of St. Paul has implemented a plan wherein students in highly segregated schools can voluntarily attend a project school, which in addition to being integrated, is heavily endowed with innovative learning techniques. One school, which is 97-percent minority attended, has an 85-percent volunteer rate for the project school. However, because the students were not formally reassigned to the project school, but bused there from their segregated school, the St. Paul application was turned down.

But more importantly, the regulations also foreclose the St. Paul theory that, given limited resources, it is better to expose all students who seek an integrated experience to that opportunity for one day a week, rather than to expose a smaller number of pupils to that experience for 5 days a week. Without belaboring the example, we believe that the regulations are too narrowly designed for a national program of this kind.

I did sit in on an advisory committee which helped to form these regulations. We protested them all the way through their development—but were unsuccessful.

Accordingly, until the format of the emergency school aid program is changed, NSBA cannot support its continuation as a priority program. In this regard, pending such change, we would support transferring the amount of the line item request for this program to ESEA title I.

Although the National Institute of Education is still undergoing structural development, NSBA has specific concerns that should be brought to the attention of the subcommittee. First, we ask the subcommittee to consider whether sufficient funds are being committed for the advisory participation of the education community in NIE's research projects. Unless NIE proceeds with the support and perspectives of such field practitioners as school board members, teachers, and administrators, the application of its innovative theories may be severely limited. Similarly, consideration should be given to whether sufficient funding is being made available for the dissemination of the Institute's work. Finally, if the work for NIE is going to be translated into action programs, consideration should be given to the amount of support which is being made for the development of programs which will implement its recommendations.

Mr. Chairman, we urge the subcommittee to follow its fiscal year 1971 precedent by giving early consideration to the education segment of the fiscal year 1974 Labor/HEW appropriations. We base this request on general principles of local budget accountability, as well as on the special importance which timing bears to this particular budgetary year.

For many local school boards and State agencies, early funding is vital since budgets for the next school year have to be committed before July. For the most part, State law does not provide flexibility to extend the budgetary deadline—particularly if the budget must be approved by a special election. Hence, if by July 1, school boards do not know how much Federal assistance they can expect to receive, there is a strong incentive to design Federal programs in such a way that they can be plugged in or out of the normal school operation, rather than in the way which may best suit the education needs of the district. Where programs are committed and the district overspends due to a disappointingly low Federal allotment, programs might have to be terminated early or deficits incurred—of which the latter is a violation of law in some States.

Oddly enough, in our State a school board member can be personally fined for such a violation.

The point is, late appropriations unnecessarily hamper school boards in effectively planning for the expenditure of their Federal grants.

Furthermore, because of the unique situation which exists this year wherein the administration's budget request, apparently premised on a "take it or take nothing" stance with respect to the Better Schools Act, does not include funding levels for ESEA titles I, II, III, and V, or for the Education of the Handicapped Act, the Vocational Education Act, title III of the National Defense Education Act, and the Adult Education Act, local boards are reticent to even make conservative estimates for the Federal portion of their budgets. This has led not only to an accentuation of the problem which normally accompanies late funding, but has resulted in thousands of persons being notified that they must be prepared for the termination of their employment.

Mr. Chairman, while this subcommittee is not responsible for the making of this situation, we strongly urge its members to seek an early appropriations, through a separate education division bill, in order to correct a situation which is distressing both for education planning,

as well as for the personal lives of thousands of persons in the profession.

Parenthetically I must add that this "take it or leave it" approach of the administration worries us if we should be forced into another continuing resolution for fiscal year 1974. If the appropriations bill has not passed either house by the time the continuing resolution is acted upon, and the language of that resolution is not changed from its usual wording, we would find ourselves in the situation of being funded at the President's budget level or last year's funding level, whichever is lower. As I indicated earlier, the budget level for most elementary and secondary education programs is zero.

One program which the administration has embarked upon, without legislative mandate, is the decentralization of the major Office of Education grant programs. To accomplish this end, functions normally performed by the Office of the Commissioner would be transferred to the 10 regions. NSBA opposes regionalization for several reasons. First, by inserting a new administrative layer, the door is being opened to increased Federal redtape. In this regard, the administration's intent notwithstanding, history suggests that increased bureaucracy means more Federal regulation—not less. Although we understand that the regional offices will have considerable authority, it is difficult to believe that there would not be a force in Washington, D.C., coordinating program operations and policy. Therefore, regionalization will also result in local school boards being removed from the final decisionmaker. Accordingly, the chief regulatory architect will have to rely on secondhand information from the field in the crafting of his programs. As a corollary, efforts to present to the Commissioner those matters which should have been brought to his attention in the first place, would appear to result in unnecessary delay and cost.

In addition to its portending increased redtape, isolation of the Commissioner, and delay, NSBA opposes regionalization because it also helps to insulate the administration from the pressures of congressional oversight.

Mr. Chairman, until the administration comes foreward with a detailed plan which receives proper congressional approval, and hopefully with the concurrence of the education community, we would urge this subcommittee to include language of limitation on the HEW "Salary and expense account" in order to prohibit the implementation of its regionalization plan.

In sum we are asking the subcommittee to recommend that (1) $2 billion be appropriated to maintain ESEA title I services, (2) impact aid be funded as follows: "high A's," other "A's" and "B's" at 100 percent, 90 percent, and 75 percent of entitlement, respectively, (3) adequate funds be made available for the participation of the education community in NIE programs, (4) funds from the desegregation program be transferred to title I until the administrative problems with the former are corrected, (5) separate and timely funding of education programs, and (6) words of limitation be placed on HEW's "Salary and expense account" to proscribe the administration from implementing a yet to be authorized or satisfactorily substantiated regionalization plan.

Mr. Chairman, this concludes the presentation of our formal statement. I wish to thank you and the members of the subcommittee for

this opportunity to present the views of the National School Boards Association.

Mr. FLOOD. Thank you very much.

Mr. PATTEN. Have you any figures on how much money education received of the $5 billion or more that was distributed in revenue sharing in 1972?

Mr. STEINHILBER. No, Mr. Patten. First of all, we found out under general revenue sharing that fiscally independent school districts are precluded from receiving any funds under that program. It only goes to general Government agencies. In most places in the United States, with the exception of some districts in the South and some in New England, school districts are fiscally independent, which means that their budget is separate from that of the city, township or county. Therefore, they are precluded, by the way the Ways and Means Committee put that bill together, from receiving any dollars.

There are also categories in the law but education is not one of the specified categories which can receive Federal support. General revenue sharing has given us very little, if any, help. We found some peripheral money in recreation funds, but very peripheral.

Mr. PATTEN. You have answered the question.

Mrs. REIMERS. I would like to speak to a State like Connecticut, where I live, where we had dependent school boards. We also got nothing out of revenue sharing except fewer cuts. In other words, because the revenue sharing has assisted the general municipal budget, our budget has taken less of a beating this year. That is the only benefit we have gotten out of it.

Mr. FLOOD. Thank you very much.

Mrs. REIMERS. Thank you, Mr. Chairman.

WEDNESDAY, May 16, 1973.

ARTHRITIS

WITNESSES

HON. WILLIAM V. ROTH, JR., U.S. SENATOR FROM THE STATE OF DELAWARE

ROSALIND RUSSELL, REPRESENTING THE ARTHRITIS FOUNDATION

Mr. FLOOD. The committee will come to order.

We now have the presentation to be made by public witnesses.

We have with us a former colleague in the House and now the distinguished Senator from the great State of Delaware, Mr. Roth. He will present the witness.

Senator ROTH. Thank you, Mr. Chairman. I have this fortunate duty as a member of the National Board of the Arthritis Foundation. I feel a little bit like the unknown that is introducing the known. I don't think our witness today needs any introduction to this group. I should point out, I think, to Miss Russell, that the chairman of this committee is also a famous dramatist, and I might say undoubtedly the finest speaker in the House or Senate.

Mr. FLOOD. I wrote that for him. He is a very fast study.

Senator ROTH. But it is true. I don't think there is much I can say that you don't already know about Rosalind Russell. She is a famous star. We have all watched and loved her from a distance. I was surprised to see she had made over 50 films. Perhaps it is not as well known, however, how many other areas of life she has contributed to, such as charity and community affairs in general.

She has been interested in hospitals, Sister Kenney Foundation, and Senator Boggs related how she came and entertained in the desert in World War II. I won't take your time except to point out that her interest in arthritis goes back to before 1955 when she first received an award for her volunteer work with the Arthritis Foundation. In 1971 she received the Floyd B. Odlum Award from the New York Chapter of the Arthritis Foundation. It is a great pleasure to introduce Miss Rosalind Russell.

Mr. FLOOD. I might say you are quite right. The committee and especially myself are well acquainted with Miss Russell for some time, I am happy to say. We also know not only is she a star in the theater and movies and films but also in the work being done by your organization down through the years.

We also know that nobody knows better than she about arthritis. It is not secondhand. That is a great tribute to her as well.

I could go on like Tennyson's Brook and talk about her, but out of an abundance of caution and prejudice, I don't think I better.

All right, darling, you are on.

Miss RUSSELL. Thank you, Congressman, all of you here, I want to thank you very much deep from somewhere in here for inviting me today. I don't come as a wife, mother and actress but as a victim of rheumatoid arthritis. It struck me about 3½ years ago. I dwell on this only to try to impress on you that I had perhaps the most serious case in the early stages that Dr. Richard H. Freyberg said he had ever seen.

I can never be normal again. Also I had severe anemia, which can be dangerous at any age, and particularly at mine.

By the way, I had no indication of this other than slight pains in my hands, which show some arthritic damage. I went immediately through Floyd Odlum's advice, to the great Richard Freyberg who now lectures on arthritis and rheumatic diseases throughout the world. It was a year later that he told me I was the worst case he had ever seen in the early stages. I believe my improvement was honestly through medical care, but I will admit to a bit of hard work on my part. I could not ambulate for 4 months, and I could not brush my teeth or comb my hair, or take care of myself in any way. I had to have nursing care. Finally, I did pull out of it once I got enough energy to defeat the anemia and fight to get rid of the disease, or, I should say, to improve my condition. Of course, I will never be rid of it in my lifetime. I am here to ask that you give special attention to this disease whch I feel has been dreadfully neglected.

It appears to me, throughout my association with it, which has been limited really up until the time of the onslaught of my own case, that it is just accepted that at a certain time in life we who edge over the western slopes are stricken with this disease in one form of another. As you know, there are many forms of this disease. It has always been

the person up in the attic that worries me, with the shawl over her shoulders, or the individual who is sent to her personal physician who prescribes just aspirin, and says, "That is all we can do for you." It seems to me with this great country and the compassion that we have for each other that we are world-famous for, that we can do something about these poor peope. It does take funds, however.

You people deal with them constantly. It must be shattering and a bore to you to hear of another need. But this is one that I do not think has been addressed really with sufficient effort and intelligence. You have 20 million known arthritics in this country. The allocation of Federal research money is less than a dollar apiece for these people. As a working woman myself, I was withheld from earning any sum of money for a long time. Perhaps some of you saw me the night before last, where I was rather nicely paid——

Mr. FLOOD. And dressed.

Miss RUSSELL. Thank you. And the Federal Government will receive a bit of that. But as far as a wage earner is concerned, I certainly was curtailed for the last 3½ years.

I think of the millions that could work if they did have the medical attention I had—and I must say the love and devotion and prayers that pulled me through to be in a position again to earn a living. This is highly possible, if we devote some effort to it, and, of course, some money.

Really, I could talk about it a long time, but I would much prefer if you gentlemen who deal with these things and have great knowledge of them would ask me some questions and perhaps I will be able to answer.

Thank you very much.

Mr. FLOOD. Thank you very much. I think you speak much louder than words. It is hard to imagine this Appropriations Committee being impressed, but I believe they have been impressed.

Miss RUSSELL. Thank you.

Mr. FLOOD. You do very well.

While all of the scientists come here and tell us about this, they do it in a professional way. We have been listening to them for some time and we will again—also, the team from NIH. Yet it is difficult for me to imagine that they could have come forward better with just what they have in mind than to bring you.

Mr. Michel.

Mr. MICHEL. Thank you, Mr. Chairman. I just want to thank Miss Russell for appearing here and to make one quick observation. And that would be that I find that when there is a cooperative effort between the private sector and government we can get so many more things done, and there are some private fund raising efforts in this particular field, in which you already have been very active and effective, and that in turn stimulates more from the Federal Government.

I would simply say quickly just to encourage you to continue doing what you have been doing in that regard, because it can't help but have a pyramiding type effect. If nothing else, to bring pressure on Government itself to do more.

Miss RUSSELL. If I may respond a little to that. I am so certain that is totally accurate. As you indicated here, I was associated about 5 years with Sister Kenney. She was helped enormously by the press.

For what motive, I would not question the press. But the thrust of her work was incentive as far as doing something about poliomyletis and the condition of President Roosevelt at that time was also helpful. What I am so anxious to do is to have attention given to this disease, and that it not just be accepted as a condition that is inevitable in all of us.

Maybe there are a few here that might have a pain or ache. It is only until recently that there has been any awareness of this problem due mainly to the struggles of the Arthritis Foundation. I do not say that it has been completely bereft of attention, but there is a need for more funds. I did not prepare a speech, obviously, but they are very much in need of $19 million to be allocated to the National Institute of Arthritis, Metabolism and Digestive Diseases. In one area alone, there are 30 different drugs that they want to work on. I am the victim myself of cortisone. I take a derivative of it called Kenacort. It is a very worrisome thing. It is a steroid. I was also on gold salts. The side effects of both of these drugs are known to be very dangerous.

I have tried and succeeded in getting down from 8 milligrams to 5½ per day during which time I experienced severe discomfort. It is a very slow process and must be watched, and not by a family doctor but by a trained rheumatologist. We have 20 million arthritis victims and only 2,200 doctors in the whole United States who are specially trained to treat this disease.

I receive hundreds of letters a week. I answer them on a postcard. I have had to go to that. I do them in longhand. I am really a very quick girl. There is something about a typewritten reply that would not look right. "All I can say is that I cannot advise you medically and I cannot tell you to take steroids. I am not denigrating your family physician but please go to a rheumatologist, a trained man. Certainly gold salts can help. But they did discontinue them in my case because albumin showed up in the urine as well as a certain amount of blood. Taking Kenacort worries me constantly. It scares me. Cosmetically it doesn't touch me at all because that would be stupid, and childish, and totally unintelligent and yet it is slightly offensive at times. It hurts a little bit. The one thing that worries me about it is that it will have a serious side effect upon me. I am sure they can beat those things. I know I am talking a lot and I will finish.

I went to England where they have a marvelous facility. It is called the Mathilda and Terence Kennedy Institute of Rheumatology. It is associated with the West London Hospital in Hammersmith which itself established the first special department in a general hospital for the treatment of patients with rheumatic disease. They do research on this disease. I did a benefit for them and we raised 50,000 pounds with the help of my good husband over there for a film I had in mind.

Mr. FLOOD. You mean he is good, too?

Miss RUSSELL. He is the very best. There are researchers from all over the world, from India and Iron Curtain countries and so on. They remove the infected joint—I didn't ask if it was from a cadaver or live person—and they keep it alive at the same temperature that it was removed from the body. Then they look through and you see the live cells and the blood cells and the ones afflicted and the dead cells. I don't think we have a facility like that in this country that is that far advanced. They said, "What do you do in the United States?" For you

see we didn't have a representative there from the medical profession, which was a shame. They said that they had had some visitors from the United States. All the machinery was made in Germany, I noticed. It was very interesting.

Mr. FLOOD. Mr. Shriver.

Mr. SHRIVER. Thank you, Mr. Chairman. I have nothing other than to thank you for your appearance, Miss Russell.

Mr. FLOOD. Mr. Casey

Mr. CASEY. Thank you, Mr. Chairman. I am really impressed with the testimony of Miss Russell. I share your concern. I am on the Houston, Tex., board.

Miss RUSSELL. Good.

Mr. CASEY. I usually refuse to accept nomination to these boards because of my position on this committee, but I, like you, feel that this needs a lot of participation by all segments of our society. If I can help generate local interest, that is good.

Mr. FLOOD. He has been here for 20 years and I didn't know that. See what good you have done—I didn't know that.

Mr. Conte.

Mr. CONTE. I want to join with you and others of our colleagues in thanking Miss Russell for her powerful and dramatic presentation. I agree with you it is a lot better and more potent than 30 other witnesses.

Mr. FLOOD. I couldn't have done better myself. That is praise from Caesar.

Mr. CONTE. She certainly is a beautiful person.

Miss RUSSELL. Thank you.

Mr. FLOOD. Mr. Patten.

Mr. PATTEN. It is nice to have you before the committee. If we can get some attention for arthritis a lot of people will be made very happy. There is no question. We see them in the field. We have all degrees of arthritis and I hope somebody comes up with some right answers.

Miss RUSSELL. Thank you.

Mr. FLOOD. Mr. Robinson.

Mr. ROBINSON. I would also welcome you before our committee and say I do not think anybody in the world could have made the impression on the committee that you have made this afternoon.

Miss RUSSELL. Thank you very much, sir.

Mr. ROBINSON. By the way, my secretary for many, many years has had this thing and in the last several years has been off quite a good deal. I know what a horrible thing it is, the pain and agony and the effort to get in there. Thank you.

Miss RUSSELL. Thank you, gentlemen, very very much. I know I have overstayed my time and I appreciate it.

(The statement follows:)

STATEMENT OF MISS ROSALIND RUSSELL, REPRESENTING THE ARTHRITIS FOUNDATION

Prepared statement on behalf of the activities of the National Institute of Arthritis, Metabolism and Digestive Diseases by Miss Rosalind Russell, voting member of the Southern California Chapter of the Arthritis Foundation; and member of the Board of Trustees of the Sister Kenny Foundation, Women's Guild of Cedars-Sinai Hospital, Los Angeles, St. Johns Hospital, Santa Monica, Calif., and National Council on the Arts.

Miss Russell is presenting the Arthritis Foundation's position relative to the fiscal year 1974 budgetary needs of the arthritis program of the National Institute of Arthritis, Metabolism and Digestive Diseases. As a seasoned volunteer worker of over 20 years with the Southern California and New York Chapters of the Arthritis Foundation, as well as unfortunately a victim of arthritis herself, which threatened at one point to terminate her star studded career. Miss Russell is intimately acquainted with the problems associated with this disease, and with the research effort mounted in large part since 1950 with the assistance of the National Arthritis Institute.

Mr. Chairman and members of the committee, it has been very difficult these past few months for those of us who have had long associations with medical programs for the disabled to see many of these programs put to the knife in the name of "national economy." Any time any of us undergoes an operation, it leaves scars, but the scars left by the deep thrusts of the budgeteers into the heart of medical research, training and patient care, will leave scars uglier than most, for these scars will mar millions of lives, especially those of the young and the elderly, for years to come.

We have heard explanation after explanation for these cuts in the Federal grants to our medical schools and to hospitals, but none will ease the pain of the 250,000 children with juvenile rheumatoid arthritis which threatens them with blindness, crippling, deformity, and even death. And no explanation will be of aid and comfort to the more severely stricken of the one out of every two women over 65 years of age who suffer daily not from the so-called minor aches of arthritis, which is all the information many of us ever receive from television and radio about this disease, but often from partial to total disability with accompanying excruciating pain.

Why, Mr. Chairman, must there be so many crippled children in this very wealthy nation?

And why must there be only token recognition of the financial plight in which so many of our citizens, especially the elderly, find themselves when seeking adequate medical care for a chronic disease such as arthritis?

Cannot we afford to be more generous with our great abundance? Or, even more importantly, can we afford to be so niggardly in what we euphemistically call our pursuit of medical excellence, a pursuit which is now in serious danger of being brought to a slow crawl.

It is estimable indeed that we can afford to provide such huge amounts of Government research funds to two diseases which threaten to extinguish our lives before we are ready to depart, but what of the hundred of other diseases which threaten if not our lives then certainly the joy of living? Do not they deserve attention too, or must they await their day on center stage like an understudy, standing in the wings watching the show go on? But these diseases are not new arrivals like understudies. They have been with us for generations upon generations, and their burden is becoming increasingly harsh and frustrating for those who are afflicted, for the families of the afflicted, for those who try to care the best they can for the patients with chronic diseases, and for those of us who try to help the hospitals and the physicians in whatever way we can to somehow ease this unwieldy and unyielding burden.

As you know, Mr. Chairman, the Arthritis Foundation was instrumental in the establishment of what is now known as the National Institute of Arthritis, Metabolism and Digestive Diseases in 1950. We had great hopes for this institute, and some of them have been realized. However, the current portion of the Arthritis Institute's budget which is allocated to research in the rheumatic diseases is less than 10 percent, about $14 million. We do not only deem this inadequate, we feel it to be insulting to the Nation's over 20 million arthritis victims. Although tithing of one's church is regarded as a demonstration of one's faith, the tithing of arthritis by the Arthritis Institute is a repudiation of the dedication which brought this institute into being. We are no longer willing, Mr. Chairman, to merely be part of the crowd fighting for elbow room in this institute.

The market principle by which the Arthritis Institute allocates its money has to be abolished if arthritis research is to receive the kind of impetus it needs. In other words, the institute can no longer be allowed to determine how much should go to one disease area or the other merely upon the basis of the number of grant applications it receives. The popularity of a field of research has little to do with its importance. The fact that arthritis research is "unpopular" is widely accepted. It is a very difficult, frustrating research area which until now

has held out little promise of major returns for the investment of one's life work. Yet, it has continued to attract a number of highly principled men and women who view the terrible suffering caused by this disease as intolerable. These dedicated physician-teacher researchers believe strongly in the motto: "If you are not part of the solution, then you are part of the problem." I hope that we can count on all the members of this esteemed committee as being part of the solution.

The Arthritis Foundation has just completed an evaluation of research in the rheumatic diseases in an attempt to chart the future directions which this research should take. The report speaks for the first time in the history of rheumatic disease research of "a breakthrough being imminent" in rheumatoid arthritis and systemic lupus erythematosus, two of the major killers of the arthritic diseases. This report has already been presented to this committee by Dr. Ivan Duff, who last week testified before this committee on behalf of The Citizen's Budget of The National Institute of Arthritis, Metabolism and Digestive Diseases.

Implementation of the recommendations of this important research document will require major inputs of Federal support. We sincerely hope this will be forthcoming. The reasons for this support should now be abundantly clear.

ARTHRITIS IS A MAJOR NATIONAL HEALTH PROBLEM

Seven years ago in 1966, the Secretary of Health, Education, and Welfare directed that a series of cost-benefit studies be conducted of several proposed disease control programs. One of the diseases chosen for study was arthritis because it was considered then, as it is today, a major national health problem.

It was suggested that a national arthritis control program be initiated through a series of 45 federally subsidized arthritis clinical research centers and 1,125 arthritis clinics, availing clinicians of the advances being made at that moment by researchers in order to optimize patient care and thereby ameliorate the potential for crippling of this dread disease. The program would have cost $225 million. The savings which would have been produced by this program in terms of increased working years and productivity of hundreds of thousands of arthritis victims was estimated at over $11 billion, a return of more than $40 for every $1 invested in the program. Any businessman, including the most hardheaded of all, would have supported such a program, yet nothing was done. Well, not quite nothing. One pilot arthritis control program was funded in 1969 for 1 year at $500,000 and then abandoned.

Fortunately, the private sector has not been as slow to see the benefits in arthritis centers which combine research, training, and patient care, and has set about to establish some 50 such centers of which 38 are now being funded, albeit at a very minimal level, by the Arthritis Foundation.

These centers, most of which are housed within university-affiliated hospital complexes, cannot survive merely on private philanthropy. There is a critical need at this juncture of arthritis research for the Federal Government to step up its limited commitment to arthritis and thereby improve the potential for better management of the arthritic condition.

Why? Because * * *.

THE ECONOMIC COST OF ARTHRITIS IS INCREASING AT A RATE OF $1 BILLION PER YEAR

At the time of the HEW cost-benefit study of an arthritis control program (1966), there were reported to be 12,668,000 Americans afflicted by arthritis.[1] This contrasts sharply with the current estimate of 20,230,000 Americans[2] with this potentially crippling disease (see chart No. 1).

Not only are there more Americans today with arthritis, but the economic costs of this disease are literally soaring upward. The 1966 cost-benefit analysis of arthritis by HEW, which was based largely on 1963 and 1964 data, calculated the annual cost of arthritis to the Nation at $3.6 billion. A recent study has indicated that by 1969 the economic cost of arthritis had risen to nearly $9 billion per year, or an average annual increase of $1 billion a year. (See chart No. 2.)

For example, the 1963–64 public health survey showed 3,300,000 Americans to be partially to totally disabled because of arthritis. Despite an increase of nearly 60 percent in the number of Americans reported to be suffering from arthritis

[1] Based upon a 1961–63 public health interview study.
[2] Provisional unpublished results of the 1969–70 public health interview.

between 1963 and 1969, the number of Americans disabled by this disease rose only 5 percent to 3,464,000. However, the number of those so severely disabled that they were completely unable to carry on their usual activity rose sharply from 700,000 to 932,000, a 33-percent increase in 6 years. This resulted in a correspondingly significant increase in loss of wages from $1.5 billion a year in 1963 to $3 billion in 1969. (See chart No. 3.) Many of these disabled are compensated by social security disability insurance or by aid to the permanently and totally disabled, the cost of which has risen from $132 million in 1964 to $448 million in 1970.

Thus, while advances in drug therapy have apparently contributed to much improved management of the arthritis patient with moderate disability, such as those with gout for which there now exist drugs which when properly administered can bring this once excruciatingly painful debilitating disease under nearly complete control, the severely afflicated arthritis patient is still a major medical problem.

Do we then throw up our hands and say, "Well, only a million. What can you expect with a disease like arthritis when no one even knows what causes it."

Or do we say, "A million completely incapacitated Americans and another 2½ million partially incapacitated is 3½ million too many people unable to enjoy the quality of life to which all of us aspire. We cannot rest easy untli there are no Amercians crippled by arthritis."

What then do we do?

IMPROVE AND EXPAND CLINICAL TESTING OF ANTIARTHRITIC DRUGS

According to the National Disease and Therapeutic Index Review,[3] physicians prescribed "antiarthritic agents" more than 20 million times in 1970—prescriptions, remember, not dosages. As to the latter, the Food and Drug Administration recently estimated that over 300 million dosages of antigout drugs were prescribed by physicians in 1971.[4]

In other words, antiarthritic drugs are being widely used by physicians in private practice; that is, dispensed through physicians' offices rather than hospitals. According to the FDA, nonhospital usage of prescription antiarthritis has risen by 21 percent between 1966–71 and will increase at an even greater rate during the 1970's.

Yet, despite these figures, the number of arthritis patients who are being effectively managed by the medical community represents only a fraction of those who are not. According to the 1969 national health interview survey, slightly more than 1 in 5 of those afflicted by arthritis—about 4.5 million—are under a physician's care. And, although about 50 percent of the remaining 15,730,000 arthritics believe their condition not to be severe enough to warrant a physician's attention—an oft misconceived notion because of the ability of this disease to suddenly flare up into a major attack with serious complications, 3,375,000 arthritis victims, almost as many as those reportedly to be under a physician's care, said they did not believe anything could be done for their condition.

Even though it is unfortunately true that there are relatively few drugs at present which are regarded as being effective in managing an arthritis condition, especially a severe case, notable progress is being made toward bringing new more effective drugs into use. Much of this work in clinical trials of potential antiarthritic drugs is being done by the Cooperating Clinics Committee of The Arthritis Foundation. Now in its 15th year, the cooperating clinics, a group of 16 National Arthritis Clinical Research Centers financed in part by The Arthritis Foundation, has performed a number of important drug trials including two major investigations of antimalarials, a double-blind study of aspirin in 440 rheumatoid arthritis patients, and trials of indomethecin, gold salts, and, most recently, a series of clinical trials of the immunosuppressive drug, cyclophosphamide.

Now the cooperating clinics wish to turn their attention to the innumerable possibilities latent in new nonsteroidal, anti-inflammatory compounds of which over 30 have been developed over the past 2 years. The clinical testing of these drugs is very difficult because of the high degree of variability of rheumatoid arthritis, and because of the sophistication necessary in statistical design and

[3] Vol. 2, No. 2, December 1971, Ambler, Pa.
[4] June 1972, FDA-sponsored meeting of editors of leading medical journals.

measurement of disease activity required if one is to determine whether or not these compounds are actually effective. The Arthritis Foundation estimates that it will be necessary to initiate as many as 200 to 300 small drug trials over the next few years, if these compounds are to be adequately tested. Unless major support is made available for this important effort, an immense opportunity to relieve the pain and suffering of millions of Americans will have been lost. I appeal, therefore, to this committee to insure that adequate Federal funds will be available in fiscal 1974 for arthritis drug research.

THE USE OF PHYSICAL THERAPY AND CORRECTIVE SURGERY IN REHABILITATION

Perhaps the most significant and certainly most exciting form of arthritis rehabilitation today is corrective surgery—techniques capable of providing total hip replacement, new knees and finger joints for the severely disabled arthritic. Elbows and shoulders may be next.

Although studies of arthritis rehabilitation programs in Canada have revealed that up to 72 percent of disabled rheumatoid arthritics can be returned to their jobs after a 90 day intensive in-patient rehabilitation program with subsequent out-patient follow-up to maintain a self-care regimen, there have been no similar studies of the effectiveness of rehabilitation therapy or the lack of effectiveness, for arthritis patients in the United States. One, however, is currently being proposed by The Arthritis Foundation. We would hope to enlist the cooperation of the Rehabilitation Services Administration, with whom the Foundation has had a working agreement since 1968, in this evaluation study.

But improved drug therapy, physical therapy and wider use of corrective surgery will not be possible unless we have the trained manpower to teach these therapeutic techniques and to implement them.

MEDICAL MANPOWER IN THE RHEUMATIC DISEASES

The Arthritis Foundation has just completed a survey of professional manpower in rheumatology, the purpose of which was to find out (1) what the 2,200 members of the American Rheumatism Association were doing; (2) how they were trained; (3) how prospective rheumatologists were being trained; (4) the extent of training opportunities for allied health personnel who want to work with arthritis patients; (5) how arthritis patients are cared for and by whom; (6) who are the arthritis patients, that is, number of males and females by ages and income categories; and (7) what the economic cost of arthritis is as compared to what is being spent on research, training of medcial personnel and patient care.

Each of the members of this committee has received a copy of this study so I will not attempt to detail its findings. I will only say that we all sincerely hope that you will find it useful in your budget deliberations in regard to the budget for fiscal year 1974.

The most important fact brought out in the study is the need for continuing the support of the specialty training of those physicians who wish to become rheumatologists and join the faculties of our medical schools to teach other physicians more about the rheumatic diseases. This is desperately needed.

The Arthritis Foundation's manpower study showed that less than one-third of the nonrheumatologist physicians who treat an estimated 7 million arthritis patients have had any formal training in the rheumatic diseases. What about the other two-thirds?

How can we expect the so-called primary care physician who we regard as a major key to the improvement of health care to be able to competently diagnose and treat patients with a potentially crippling disease if we do not educate him in the vagaries of this very complicated field of diseases. And how do we intend to educate him if there are no qualified teachers.

I am reminded of a situation several years ago when a team of educators were sent overseas to survey the quality of education for the children of Foreign Service officers at schools set up by out diplomatic missions. The teachers for these schools were recruited from among the wives of the men assigned to these posts. If they happened to have had teacher training, it was regarded as a plus rather than a prerequisite. Often the schools could not find a full complement of teachers and certain grades had to be doubled up. All in all it was a very dismal picture. The survey team was firmly dedicated to seeing the situation remedied, but they were perplexed as to how they should communicate their great dissatisfaction to people to whom education of children was not of primary concern. They finally came up with this introductory sentence to their report. "It is recom-

mended that all overseas schools serving the children of Foreign Service officers and other Embassy personnel be staffed according to the prerequisites for schools of similar grades in the best educational systems of the United States. Then, the husbands of these teachers can be used to staff the Embassy, to negotiate theaties, and to report on critical political and economic developments." The message got through.

My message today, Mr. Chairman, is that we must first meet our obligations to our children, to our grandchildren, and all others that may come after us by ridding the world of such diseases as arthritis that cripples 3.5 million Americans. Then, after we have accomplished that task, we can concern ourselves with whether we have enough highways, enough ships, enough planes, enough power. What good is having enough, if there are those among us who cannot enjoy it.

What a bountiful harvest we could reap if we would only sow those seeds of wisdom we have among us, plant these curious minds in fertile soil, nourish them, and then watch them blossom and produce.

But what a terrible waste it would be if we chose instead to block the paths of scientific growth of our young for fear that they may become overproductive and a burden upon our limited ability to receive the riches they wish to bestow upon us. Are we to be fearful of too much intellectual energy? Or are we to be mindful of it, to try to direct it, to channel it to accomplish those purposes which will be of benefit to us all.

The decision is yours, Mr. Chairman, and this committee's, but I am most grateful that you have allowed a representative of those who have seen the great suffering imposed upon children by our ignorance of diseases contribute to the making of this decision.

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THE ARTHRITIS FOUNDATION'S PROPOSED FISCAL YEAR 1974 BUDGET FOR ARTHRITIS PROGRAMS OF THE PROGRAM OF THE NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES (NIAMDD)

Year	Research grants	Research training grants	Fellowships	Collaborative programs	Biometry, epidemiology, and field studies	Intramural research	Total
1973 spending level	$10,586,000	$1,128,000	$414,000	$40,000	$75,000	$1,924,000	$14,167,000
1974:							
President's budget	$10,164,000	$917,000	$318,000	$40,000	$80,000	$1,996,000	$13,545,000
Change				0	+$5,000	+$72,000	−$622,000
Percent change					+6.7	+3.7	−4.4
1974:							
Budget as proposed by the Arthritis Foundation	$14,086,000	$2,190,000	$550,000	$51,000	$175,000	$2,020,000	$19,072,000
Change	[1] +$3,500,000	+1,062,000	+$136,000	+$11,000	+$100,000	$96,000	+$4,905,000
Percent change	+33.1	+94.1	+32.9	+27.5	+133.3	+5	+34.6

[1] Of which $500,000 is to be specially earmarked for controlled drug trials by the cooperating clinics program of the Arthritis Foundation.

Note: Total budget request for the National Institute of Arthritis, Metabolism, and Digestive Diseases; $182,195,000 (coalition for health funding's recommended minimum budget for NIAMDD).

CHART NO. 1

ESTIMATES OF ARTHRITIS BY AGE AND SEX—U.S. PUBLIC HEALTH INTERVIEW SURVEY: 1969–70

Age	Total	Male	Female
All ages	20, 230, 000	7, 188, 000	13, 042, 000
Under 17	75, 000	36, 000	39, 000
17 to 24	374, 000	128, 000	246, 000
25 to 44	2, 941, 000	1, 048, 000	1, 893, 000
45 to 64	9, 184, 000	3, 362, 000	5, 822, 000
65 to 74	4, 536, 000	1, 636, 000	2, 900, 000
75 and over	3, 120, 000	978, 000	2, 142, 000

CHART NO. 1A

ARTHRITIS PREVALENCE RATES PER 1,000 CIVILIAN NONINSTITUTIONAL POPULATION BY FAMILY INCOME AND AGE—1969

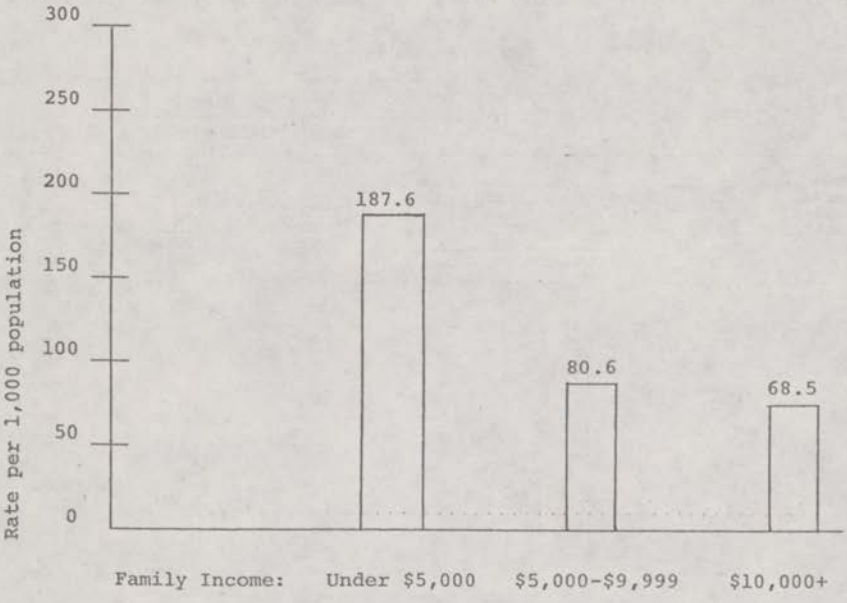
[Rate per 1,000 population]

Age	Income		
	Under $5,000	$5,000 to $9,999	$10,000 plus
0 to 25	7.5	5.4	2.9
25 to 44	90.1	60.5	58.6
45 to 54	254.5	178.2	157.9
55 to 64	369.6	276.2	227.8
65 to 74	426.0	369.0	308.2
75 plus	478.3	393.0	376.5

CHART #1b

1969 ARTHRITIS PREVALENCY RATES PER 1,000 CIVILIAN

NON-INSTITUTIONAL POPULATION BY FAMILY INCOME



The annual cost of arthritis

(1) Wages lost due to inability to be employed through disability	$2,981,166,750
(2) Wages lost due to activity limitations	530,867,808
(3) Homemakers services lost	974,051,130
(4) Loss to Federal, State, and local governments of income taxes	772,647,000
(5) Disability insurance payments	316,000,000
(6) Aid to the permanently and totally disabled	132,000,000
(7) Hospitalization (255,000 cases)	854,000,000
(8) Physicians office visits (32.9 million)	493,500,000
(9) Amount spent on quackery products (estimated)	408,000,000
(10) Amount spent on nonprescription drugs (estimated)	500,000,000
(11) Amount spent on prescription drugs (estimated)	600,000,000
(12) Earnings loss due to premature death	194,000,000
(13) Other than physician services	50,000,000
(14) VA compensation and disability	394,430,000
(15) Federal and private programs for arthritis	26,000,000
Total	9,176,662,818

CHART NO. 3

ESTIMATED LOST WAGES FOR THOSE UNABLE TO CARRY OUT USUAL ACTIVITY BECAUSE OF DISABILITY DUE TO ARTHRITIS (HEALTH INTERVIEW STATISTICS 1969–70)

Ages	Unable to carry on usual activity	Estimated to be working if not disabled [1]	Expected wages per person	Total estimated lost wages
Both sexes:				
All ages	932,000	371,147		
17 to 44	36,000	28,044		$242,089,729
45 to 64	281,000	220,210		2,048,792,910
65 plus	615,000	122,993		690,275,111
Total				2,981,166,750
Males:				
All ages	580,000	295,070		
17 to 44	24,000	22,092	$9,425.77	208,232,564
45 to 64	197,000	175,330	10,241.51	1,797,307,830
65 plus	359,000	97,648	5,926.80	578,740,166
Total				2,584,280,560
Females:				
All ages	352,000	76,077		
17 to 44	12,000	5,952	5,689.88	33,866,165
45 to 64	85,000	44,880	5,603.52	251,485,080
65 plus	255,000	25,245	4,418.16	111,534,945
Total				396,886,190

[1] Participation rates—See "Employment and Unemployment in 1969, Special Labor Force Report 116, U.S. Department of Labor, Bureau of Labor Statistics."

CHART NO. 3A

WORKDAYS LOST DUE TO DISABILITY CAUSED BY ARTHRITIS 1969–70 NATIONAL HEALTH INTERVIEW SURVEY

Age	Prevalence	Persons with activity limitation due to arthritis	Workdays lost	Earnings lost
All ages	20,230,000	3,464,000	14,898,000	$530,867,808.29
17 to 44	3,390,000	346,000	2,786,000	98,575,493.90
45 plus	16,841,000	3,118,000	12,112,000	432,292,304.39
45 to 64	9,184,000	1,355,000	10,341,000	391,320,633.84
65 plus	7,657,000	1,763,000	1,771,000	40,971,670.55

CHART 3B

ESTIMATED LOSS OF SERVICES OF HOMEMAKERS UNABLE TO CARRY OUT USUAL ACTIVITIES DUE TO ARTHRITIS, 1969

	Females unable to carry out usual activities due to arthritis (1969)	Not in labor force	Estimated to be homemakers [1]
Total	352,000	275,923	258,369
Age 17 to 44	12,000	6,048	5,310
45 to 64	85,000	40,120	39,157
65 plus	255,000	229,755	213,902
Estimated cost of homemaker services per homemaker			$3,770
Total homemaker loss			—974,051,130

[1] "Employment Status of Noninstitutional Population," special labor force report, U.S. Department of Labor.

Mr. FLOOD. I would like to point out that former Senator Boggs is here. We have known him for quite some time, and his work in this connection. Thank you, Senator.

WEDNESDAY, MAY 16, 1973.

COOPERATIVE EDUCATION

WITNESSES

HON. SAM M. GIBBONS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA
DR. REMBERT STOKES, PRESIDENT, WILBERFORCE UNIVERSITY
DR. DEWEY BARICH, PRESIDENT, DETROIT INSTITUTE OF TECHNOLOGY
GEORGE PROBST

Mr. FLOOD. Now we have Dr. Rembert Stokes, president, Wilberforce University; Dr. Dewey Barich, president, Detroit Institute of Technology; and Mr. George Probst.

Before that, we have the pleasure of having with us one of our old friends and colleagues, Hon. Sam M. Gibbons, of the Seventh District of the great State of Florida.

Having been raised in St. Augustine, I am not a "Damn Yankee." I am just a plain Yankee. So we are glad to have you here.

Mr. GIBBONS. Thank you, Mr. Chairman, and members of the committee. I came to introduce these gentlemen and let them make the statement in force. I have a prepared statement I would like to put in the record.

Mr. FLOOD. We will do that, of course.

[The statement follows:]

Mr. Chairman, and members of the committee, I am pleased to again appear before you in behalf of funds for the cooperative education program. As you know, the House has already passed your supplemental appropriation bill which contains funds for cooperative education in the amount of $10,750,000. A like amount is requested in the budget for fiscal 1974 and it is that amount that I endorse and urge you to appropriate.

As you know, these amounts are used by colleges and universities to establish courses of study which alternate periods of full-time study and full-time employment. It is my personal acquaintance with the effectiveness of cooperative education programs in helping students and institutions of higher education that leads me to urge that these funds be appropriated.

As you are aware, cooperative education programs make it possible for students to alternate full-time educationally related jobs with full-time academic work. These jobs are arranged for by professional coordinators on the staff of the institution of higher education. They provide valuable relevant work experience and are of very great importance in enabling the student to become a mature adult and provide for an earned income that makes it possible for students to meet most of the costs of their higher education.

My own personal knowledge of cooperative education is based on acquaintance with its success at the University of South Florida and is based also on studies of the subject. I am convinced that expenditures on cooperative education, although extremely modest, can give a bigger reward for each dollar spent than any other dollars Congress proposes to expend for higher education.

I am sure that you all feel that the costs of higher education are so staggering that we are all obligated to look for and encourage those innovations in higher education that improve educational efficiency and lift the quality of our higher education. Cooperative education is a tested and successful innovation that accomplishes these goals. With our limited funds, Congress should choose to support the program adequately.

It is a pleasure to introduce to you two outstanding educators who are familiar with the cooperative education program and can attest to its value. They are: Dr. Rembert E. Stokes, president of Wilberforce University, Wilberforce, Ohio; and Dr. Dewey Barich, president of the Detroit Institute of Technology.

Mr. GIBBONS. May I first say thank you for putting $10,750,000 in the supplemental appropriation that just passed last week.

I guess that is what I have been coming for for many years, Mr. Chairman, to ask you to do and I am so appreciative of it. I urge that a like amount be appropriated for fiscal year 1974. A few years ago when Congressman Quie and I were on Mrs. Green's Education and Labor Subcommittee we thought a program should be developed to make higher education more relevant to today's needs.

We found that such a program was cooperative education. It had been tried by universities and proven to be successful. We thought it should be expanded and should have Federal sponsorship. It was authorized by Public Law 90–575, and extended by Public Law 92–318. As you know, cooperative education makes it possible for students to alternate full-time educationally related jobs with full-time academic work. These programs have been very successful where they have been tried. They provide relevant work experience and provide for an earned income that helps students meet their college expenses. As a father and parent I have had some practical experience with cooperative education. I happen to have by accident my own son Cliff in the room today. He went through cooperative education at the University of South Florida. I know that many students would like to take advantage of the cooperative education program. Many parents have asked me how their son can get into this program. I think it should be expanded and the opportunities to participate in it made available to more students.

Without belaboring the point any more let me introduce the two gentlemen who are here to tell you about it first hand. Our first speaker, Mr. Chairman, is Dr. Rembert Stokes, president, of Wilberforce University of Wilberforce, Ohio. It is a black institution. It is one of the Nation's finest institutions. A number of years ago Dr. Stokes converted his university to the cooperative program, seeing its advantages. He is a leader among educators and certainly the kind of leader we need at this table today.

Dr. Stokes.

Mr. FLOOD. You may proceed, Doctor.

STATEMENT OF DR. REMBERT STOKES

Dr. STOKES. Mr. Chairman and members of the committee, I want to thank the Congress and this committee for the support that Wilberforce University has received for cooperative education programs over the past several years.

We are a small college of 1,300 students, all of whom must do three 4-month periods in the co-op within the 4 years or 4 years plus one trimester.

We see students from 33 States and some 14 foreign countries. I would like to go on record to say what a great tool to higher education for these students the cooperative higher education has become. Many of them come from restricted environments, rural and urban, North and South. Through the process of cooperative education they are able to gain more rapid maturation as individuals. They are able through the exposure to many careers to establish career goals that are more meaningful to them. They gain a tremendous sense of responsibility as they are required to face employers, punch the time clock, to fulfill their work commitments. All in all it just helps them to become more useful individuals to the corporations, institutions, agencies and other areas where they do this cooperative education requirement. They then become far more valuable to their employers because they are not coming into a job situation without some job experience. Many of them are being employed on a higher level of entry than they could have been if they simply plowed through the 4 years without these experiences.

I would say, too, that there are many, many job opportunities for educated minority students. I know the protest we made for more and more job opportunities. Our mission at Wilberforce is to prepare students to fulfill these jobs that are presently available.

We go into the industries and talk to the employers about job opportunities, we make co-op opportunities available, and it has indeed been a magnificent process of growth for these nearly 3,000 students now who come to the cooperative education at Wilberforce I hope this will be made available to many other minority students as well as other students across the country.

Mr. FLOOD. I hope you get your hope.

Dr. STOKES. Thank you, sir.

[The statement follows:]

STATEMENT BY ROBERT E. STOKES, PRESIDENT, WILBERFORCE UNIVERSITY

Chairman Flood and members of the subcommittee I appear before you to present testimony in support of the $10,750,000 appropriation for fiscal 1974 to fund title IV–D of the Higher Education Act—a program entitled cooperative education.

I believe I have information that is unique concerning the start-up and operation of a cooperative education program in that at Wilberforce we have operated such a program for the past 9 years. Our experiences are particularly unique in that in 1967 the program became mandatory—in order to qualify for graduation each of our students must satisfactorily complete three 4-month trimesters of guided work experience. Wilberforce became only the third institution of higher education to make this total commitment (Antioch College and the General Motors Institute made similar commitments at earlier dates). The recency of our effort and the fact that Wilberforce is concerned with a student body that is predominantly minority, low-income and underprepared should make our experience especially pertinent to your considerations here.

I will briefly describe 9 years with cooperative education from three different aspects: first, the effect on the viability of a single institution; second, the effect on the educational process; and, third, the needs of other similar institutions who might choose to follow our path.

Wilberforce is today a relatively viable institution within the spectrum of the Nation's higher education institutions as a whole; in 1963 it was on the brink of closing its doors.

Enrollment in the fall of 1964 numbered 415; in the fall of 1972 it numbered 1,273—an increase of 300 percent.

Full 12-month utilization of campus facilities provides us with increasing economies of operation.

Benefactors, both capital and programmatic, find us sufficiently attractive to make it possible for us to consider an entirely new concept of operation, including a $25 million new campus, one-third of which is now complete.

Three new concepts have been tested in 9 years of linking cooperative education to the traditional process:

Stretching concept.—Average youth, even those underprepared for higher education, can be stretched to full professional competencies through the regular alternation of human and physical environment characteristic of cooperative education at Wilberforce. (This is especially true when the job location is other than the student's home, as frequently a necessity—especially when the student is from the rural South.)

Self-Discipline concept.—Cooperative education brings the goal of higher education into such a clear perspective that students and staff self-discipline for their respective roles. The totally committed cooperative education institution is a better community, and less authoritative discipline is required.

Liberal arts for maximum carcer flexibility concept.—Especially for the underprepared student, the abstractions of a liberal arts education provide a necessary "theoretical tree" upon which to hang experiential specifics. This evolving "tree of knowledge" accelerates the student's competency for identifying clusters of "career options" in a world of rapidly changing career possibilities.

Nine years of cooperative education and memories of the frequent crises which such a fundamental change surely must create suggests that others who would follow our path must keep these two things in mind:

It takes broad and unswerving commitment (perhaps it was easier for us because in 1963 it was a matter of desperation).

It requires a "critical mass" of extra financial help—without sizable grants ($30,000 to $50,000) per year we could not have sustained the transition.

Mr. GIBBONS. Mr. Chairman, the request this year is within the President's budget of $10,750,000 for the coming fiscal year. Our next witness is Dr. Dewey Barich, Dr. Barich is the former chief of education of the Ford Motor Co. He is at present and has been for some time president of the Detroit Institute of Technology.

STATEMENT OF DEWEY BARICH

Mr. BARICH. Mr. Chairman, I have a statement that I would like to leave with you.

Mr. FLOOD. It will be inserted in the record.

[The statement follows:]

STATEMENT BY DR. DEWEY BARICH, PRESIDENT, DETROIT INSTITUTE OF TECHNOLOGY

Mr. Chairman, I wish first to express my appreciation for the opportunity and privilege of appearing before this distinguished committee and of presenting testimony in support of the recommendation that $10,750,000 be appropriated to fund the cooperative education program, part of the Higher Education Act of 1972 for fiscal year 1974.

The members of this committee understand, I am sure, the important usefulness of this cooperative education program. Your action in recommending that the House appropriate $10,750,000 for this program in fiscal 1973 is one that I strongly commend; and I congratulate you for extending this support. The amount you have recommended will support 250 projects in colleges, universi-

ties, and community colleges involving nearly 300,000 students, as compared with 85 projects and 30,000 students in 1972.

Congress has wisely set in motion an expansion and a strengthening of cooperative education that is having, and can be expected to have increasingly, a widespread and permanent effect on higher education. To be genuinely effective, as Dr. Ralph W. Tyler, chairman of the National Commission for Cooperative Education, observes, "Education must use work and other arenas of life as a laboratory in which young people find real problems and difficulties that require learning, and in which they can use and sharpen what they are learning. There is no intention of substituting learning on the job for the deeper insights and the knowledge and skills that scholars have developed. The teacher, the books, other materials of the school, and the intellectual resources of the community are to be employed by the student as he works on the problems of his job and carries through projects on which he is engaged."

Perhaps it would be useful for us to define cooperative education briefly: Cooperative education is that form of higher education which alternates classroom study and theory with related educational work experience. In other words, cooperative education weds the subject matter and theory with practical work experience.

In 1972, over 300 colleges, universities, and community colleges offered cooperative education programs, compared to only 60 in 1962. The number of students enrolled in cooperative education programs has increased from 30,000 in 1962 to 135,000 in 1972. The earnings of these students in their full-time jobs, in their alternate work periods away from the classroom, exceeded $297 million. Out of this total, the students pay at least 10 percent in taxes to the Federal and State governments—a fact which I am certain is of unusual interest to Members of Congress.

With the level of Federal support now recommended for cooperative education, the National Commission for Cooperative Education expects the number of higher education institutions offering programs to exceed 800 and the number of students to exceed 500,000 by the end of this decade.

The Carnegie Commission report of January 1971, on "Less Time, More Options," recommended "that opportunities be expanded for students to alternate employment and study," and declared that "programs at American colleges that combine work experience and formal study are increasing in number and should be encouraged." Also, the Newman "Report on Higher Education" of the U.S. Office of Education stated in March 1971, that "cooperative education programs should be greatly expanded."

The growth of cooperative education programs at the Detroit Institute of Technology and at other institutions is understandable when one looks at the many advantages to students, educational institutions, and employers. The Detroit Institute of Technology is an accredited coeducational institution of higher education located in downtown Detroit since 1891 and serving 1,000 students from highly diversified backgrounds. In our cooperative education program students obtain experiences which promote educational as well as personal growth and which enable them to explore different career possibilities. Cooperative education also makes higher education financially feasible for many students, because of earnings from their work assignments. It may well represent the best way for students from educationally and economically disadvantaged backgrounds to enter and succeed in college. Cooperative education can provide some relief to the student since he will be engaged in gainful employment during a portion of his college career. He can actually make and save enough during his off-campus term to underwrite to a considerable degree his tuition and other costs when he returns to the campus.

Since the present director of cooperative education was appointed by Detroit Institute of Technology in September 1971, the number of student and employer participants has more than doubled and has reached an all-time high during a period of adverse employment conditions. My institution is located in the midst of the most difficult part of the Detroit urban area—downtown Detroit which is deteriorating—and is working to meet the needs of educationally and financially disadvantaged students.

Cooperative education holds a great appeal to educational institutions, particularly private colleges and universities. It allows them more efficient plant utilization because a portion of the student body is always away from the college on work assignments. Cooperative education also answers many of the legitimate complaints of students. The depersonalization of the individual in our huge

educational complex and the question of the relevancy of the subject matter are two such common complaints. A student returning to campus after a work experience in a scientific laboratory, as a teacher, in a municipal planning agency, at a space exploration project, or at a city newspaper is apt to view the "establishment" differently. When he returns, he will talk of relevance, not in some vague discontented fashion, but his comments will have substance nad constructive thought behind them, enriched by his work experience. Further, the communciation between this student and his school and between the institution and industry will result in changes in all parts of this cooperative team better to meet each other's needs.

Educational leaders are taking a fresh look at the problems of education. They realize that part of the calamity of modern times is that the pace of change in the society is so rapid that there is less and less likelihood that educators alone, separate from the world of work, can help provide the necessary relevant experiences. Thus, cooperative education programs help reduce those artificial academic barriers that separate the adult world from the student and the academic community.

I believe that Members of the House can well regard this cooperative education program as one of great importance, because it has within it the possibility of achieving impressive benefits at a very modest cost. Congressman Albert Quie (Republican) has stated that he does not know of any Federal program in higher edudcation that provides as great a return per dollar expended·

Over a period of 5 to 7 years, this cooperative education program, if adequately funded at a rate of $10 to $15 million a year, could enable more than 400 additional institutions of higher learning to move vigorously into programs of cooperative education. This would provide opportunity for an additional 350,000 students to become part of this educationally valuable program.

I respectfully urge that you approve the funding of the cooperative educaton programs in the full amount of $10,750,000 for fiscal 1974.

Thank you.

Mr. BARICH. Gentlemen of the committee, I decided to share a couple of personal experiences related to cooperative education. I want to talk of an experience I had yesterday with a group of co-op students at the Detroit Institute of Technology. We have an annual luncheon for those co-op students that can get together and yesterday we had the privilege of sharing our luncheon session with the chairman of our board of trustees who is a former vice president for engineering at General Motors, who retired and has been serving us ably as the chairman of the board. He is also a product of the early days of the co-op movement.

I think you would be interested in the fact that the people at the Detroit Instituteof Technology—25 to 30 percent of our students are black, about 90 percent of them working part time or full time or are on cooperative education—yesterday I simply cannot get out of my mind a lady who sat across from me who is the mother of seven children who is a co-op student at the Detroit Institute of Technology, who will be a forewoman or foreperson or fore something at the Chrysler Corp. this summer. This is the first time that a female has been appointed to such a post through the cooperative education program of our institution.

I could sit here this afternoon and share with you one experience after another that illustrates the importance of what you men in the Congress have done by providing the funds that have seeded and expanded the cooperative education program in this country.

For example, in our institution the average earnings of our co-op students are $800 a month. That is the average. Some go over $1,000. When you consider that 10 percent of their earnings, roughly, go back into the tax coffers of our country, the money that you are appropriating and have appropriated and hopefully will appropriate for the

next fiscal year, I believe is the finest kind of investment you can make, to encourage young people, young adults and older people to help themselves as they move ahead in making their contribution to this great Nation of ours, plagued with all of our problems. I still think we have to recognize there is not a better system, and if we can generate the kind of feeling of self-support and working with others to help themselves, I believe this is the right way. So I am grateful for the opportunity to appear here. This is the second time, sir. Hopefully you can see in your wisdom to continue to support this fine movement. I am confident that your investment will be a sound one. Thank you.

Mr. FLOOD. Thank you very much.

WEDNESDAY, MAY 16, 1973.

ORTHOPEDIC RESEARCH

WITNESSES

DR. WALTER A. HOYT, PRESIDENT, AMERICAN ACADEMY OF ORTHOPEDIC SURGEONS

DR. WILLIAM F. ENNEKING, MEMBER, ADVISORY COMMITTEE ON RESEARCH, THE AMERICAN ACADEMY OF ORTHOPEDIC SURGEONS

Mr. FLOOD. The presentation will be made by Dr. Walter A. Hoyt, the president of the American Academy of Orthopedic Surgeons, accompanied by Dr. William F. Enneking and Dr. William F. Donaldson.

Dr. Hoyt, you may proceed.

Dr. HOYT. Thank you, Mr. Chairman.

I think it is appropriate that we have the opportunity to present our testimony in tandem with Miss Russell because our specialty, as you know, deals with this and I shall allude to this in a moment.

Mr. FLOOD. You could not have arranged that better yourself.

Dr. HOYT. No; I don't think so. I wish to present a full statement for the record of this committee, and then I have a short statement which I should like to present to you.

Mr. FLOOD. Very well, the statement will be inserted in the record at this point and you may proceed.

[The statement follows:]

TESTIMONY CONCERNING SUPPORT OF ORTHOPAEDIC RESEARCH AND EDUCATION BY THE NIH, NIAMDD ON BEHALF OF THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS, WALTER A. HOYT, M.D., WILLIAM F. ENNEKING, M.D., AND WILLIAM F. DONALDSON, M.D.

Mr. Chairman: I am Walter A. Hoyt, president of the American Academy of Orthopaedic Surgeons, an academy of over 6,000 members whose professional life is devoted to the delivery of care to those afflicted with diseases and injuries of the musculoskeletal system. With me is William F. Enneking, professor of orthopaedic surgery at the University of Florida and prominent leader in the research efforts of orthopaedics, and William F. Donaldson, second vice president of the American Academy of Orthopaedic Surgeons and clinical professor of orthopaedic surgery at the University of Pittsburgh.

As the result of the recent and impending cutback in the support of medical research, the orthopaedic community has taken a hard look at the "State of Art" of orthopaedics with relation to the health of the Nation. Working in concert with the Nation's principle agency charged with health care—the Depart-

ment of HEW; and, in particular, the National Institute of Arthritis, Metabolism, and Digestive Diseases, we have reevaluated our position. The American Academy of Orthopaedic Surgeons has compiled, as a portion of its report entitled "Health Care as Related to the Musculoskeletal System," documentation of the research needs in the musculoskeletal area. The report is submitted to you as background for this presentation.

Productive research requires manpower, training facilities, and funds. Primarily, as a direct result of training grants support from NIH during the past decade, orthopaedics has been able to significantly close the gap in manpower and training. Adequate facilities to house our hard-earned research teams are present. Funding to support this urgently needed area of research is at such a low ebb that this past investment and commitment is being dissipated at an alarming rate at the very time when major advancements are within our researchers' and, therefore, the public's grasp.

Again in concert with the NIAMDD, a priority listing in research in orthopaedics has been established. To achieve these goals requires the support of the NIH. The four top priorities are:

(1) Arthritis,
(2) Joint Substitution,
(3) Fracture Healing, and
(4) Connective Tissue Patho-Physiology.

1. ARTHRITIS

The previous testimony by the Arthritis Foundation has pointed out to you the scope of the problem and the necessary steps to be taken. It has shown the important part that orthopaedics must play in this effort. We concur with it and support it.

2. JOINT SUBSTITUTION

About 17 million Americans have joint problems severe enough to require medical attention. Damaged joints are the second largest cause for chronic disability in our country. Approximately half of these diseased joints are the result of the ravages of arthritis (with a cost of 1.7 billion dollars in lost wages and $1 billion in medical care). Others develop as late sequelae of childhood joint disorders. Some are due to unexplained wear and tear degeneration of a joint. Many arise from injuries which may occur on the highway, on the job, on the playing field, or in the home. These latter patients are usually afflicted when either they are preparing for or are in their most productive time of life. Other patients have destroyed joints as the result of infection.

Attempts have been made for the past 100 years to replace parts of damaged joints by surgical means. As new materials were developed that seemed to be compatible within the human body, they were inserted as bearing surfaces. Some limited success occurred, but these were unpredictable and of limited use. Other surgeon-scientists attempted to replace damaged joints with cadaveric or animal joint parts. More recently, markedly improved results have been achieved by replacing the entire bearing surfaces of joints with either metal-to-metal or metal-to-plastic surfaces. Fixation of these new surfaces to bone has been possible by the use of the now FDA-approved plastic, methyl methacrylate polymers. Successful total hip joint replacements have been performed for only the past 10 years although the preliminary research work necessary to develop them has been going on for the last 25 years. Total knee joint replacement has been in use since only the late 1960's. Although the early investigative work was performed in this country, it was left to our colleagues in Great Britian and Canada to bring them to clinical usefulness. Thousands of patients with damaged joints have been salvaged by joint replacement, but many problems remain unsolved. At present, approximately 40,000 joint replacements are being performed each year and this number will rise as improved designs and techniques are made available.

Among the major problems to be solved are those dealing with materials. How long will they last? Will the wear products eventually create serious adverse reactions? Will the materials used for fixation eventually loosen? Are not better materials, for this purpose, likely to come from space age technology?

There are problems associated with the design. What are the best engineering configurations to permit normal functions? What can be done for joints such as the finger, the elbow, the shoulder and the back? The prostheses currently used are restricted to the elderly or the severely handicapped patient because we do not have the answers to these pressing problems. Can designs be developed that

would permit the laboring man to return to his job with an artificial knee or hip joint? Can joints be made that will permit skilled motions required of the hand? Can joints be developed which could be put in children with their expectancy for a long life and have them hold up for the use they would be put to?

A workshop on "Fundamental Studies for Internal Structural Prosthesis" considered these problems in 1972. Held under the auspices of the American Academy of Orthopedic Surgeons and the National Academy of Sciences, the areas of need were identified and priorities were established. The detailed report of this conference is submitted with this presentation as supplemental background material for you. In brief, it points out that investigation into the loads and motions of the major weight-bearing joints is of prime importance. The requirements for expected service life of a prosthesis should be studied. Better methods of scientific evaluation of the function of the devices within the patient are needed. Material testing of bone is of prime importance since the artificial joint must relate to its bony support of the body. High priority is attached to a study of the mechanical properties of the metals and polymers. The determination of the fatigability of the materials used; the formulation of standards for materials as is already being performed by the American Society for Testing of Materials; the study of wear and lubrication in removed prosthesis; the design of experimental methods of simulating the body environment; the development of a nondestructive bone quality evaluation test method; and the discovery of improved fixation materials are all important facets in the search for improved and new joint replacements. Support should be given to a group of regionally located and centrally coordinated laboratories whose function would be to receive failed implants for analysis, to perform materials research, to develop scientific methods for analysing the problems of the disabled and to apply this knowledge to the development of better joint replacements.

The NIH should be provided with the resources necessary to accomplish this goal. It is our opinion that the input of $10 million a year for 5 years would have a major impact on this problem, and more than justify the monetary outlay through the increased productivity of those now made disabled by damaged joints.

3. FRACTURE HEALING

In 1971 in the United States there were 114,000 deaths and 10,800,000 disabling injuries due to accidents on the road, at home, and at work. Of these disabling injuries, 400,000 resulted in some degree of permanent disability. Total cost for these injuries including medical expenses, wages lost, claim settlement costs, property damage, etc., amounted to $27.7 billion. Automobile accidents alone accounted for 2 million disabling injuries and 55,000 deaths. In addition, in 1971 there were 17 million significant injuries associated with sports and recreational activities. It has been estimated that 8 million of these sports injuries occurred in circumstances in which equipment was used. Much of this equipment was poorly designed or defective. Many of the injuries due to road, home or work accidents and most of those associated with sports and recreation involved the musculoskeletal system. There are over 2 million fractures in the United States each year at an annual cost of $554 million. Delayed and nonunion fractures alone cost $30 million annually. Obviously, it is a high priority to reduce the number of injuries due to accidents, sports, and recreation activities, but at the same time we must try to hasten the healing process of broken bones and injured soft tissue. Prevention of accidents and injuries is a many-faceted problem requiring the cooperative effort of Government, the automobile industry, manufacturers of sports equipment, granting agencies and the medical sciences. The needed research that pertains to the National Institutes of Health in this area includes studies of human tolerance for injury, fundamental studies of body mechanics as related to trauma, studies related to equipment design, data collection of mechanism of injuries, causes of death and reasons for equipment failure. Highest priority should be given to the studies of human tolerance for impact. Until it is known in precise, quantifiable terms the energy that the musculoskeletal system can absorb through various injury mechanisms, it will remain extremely difficult to design equipment and vehicles that provide a high degree of safety.

Accelerating the healing process of musculoskeletal tissue has been sought for many years, but to little avail. Over the past few years, the biochemical events surrounding fracture healing has been delineated and attempts are now in progress to selectively alter the rate at which union occurs. For the most

part, these studies utilized chemical techniques but, recently, high excitement has surrounded several studies which have indicated that the rate of healing can be significantly altered by passage of an electrical field or current through the fracture ends. These clinical studies are the fruit over over 15 years of basic study of piezoelectricity and its relation to bone remodeling and growth.

NIH support during the next 5 years should include fundamental studies of the cellular biology of the repair of bone, cartilage, tendons, and nerves; the biophysics of fracture healing; the prevention of undesirable scars with drugs; and the amelioration of nerve healing by scar prevention with proline analogs and other drugs. High priority should be given to those multidiscipline studies investigating the biophysicis of fracture healing. Several laboratories now engaged in this research face early extinction because of lack of funding. If fracture healing time could be cut in half in the human, the annual dollar expense due to fractures in the United States would also be reduced, perhaps by as much as $250 million.

4. CONNECTIVE TISSUE PATHOPHYSIOLOGY

This area of basic research is the bulwark of knowledge upon which the applied research in arthritis, joint replacement and fracture healing is based. One cannot exist without the other. A number of important areas in the field of connective tissue pathophysiology are currently under investigation by orthopedic and allied specialty research teams. This research effort hit its stride a decade ago, and has been gaining momentum principally on the basis of funding and sympathetic support by the National Institute of Arthritis, Metabolic, and Digestive Diseases. In some of these areas, major breakthroughs have occurred and now require support for further study and for clinical application.

In others, research has progressed to a point where important advances may result over the next few years if support is continued. In still others, major problems unexplored to date, have now been rendered accessible to investigation by reason of recent advances in biochemical technology.

The current status of orthopedic research is best displayed by a series of examples in the various areas of our major research involvement. These include:

I. Degeneration of joints.—In recent years, the structural, biochemical and metabolic characteristics of normal and degenerating joint surfaces have been clearly defined and orthopedic investigators are now further pursuing this problem along three promising avenues:

1. The identification of enzymes and substrates in normal and degenerating cartilage;
2. Definition of control mechanisms of polysaccharide and collagen synthesis; and
3. An analysis of behavior of cartilage cells in tissue culture.

The likelihood of significant breakthroughs in these areas is quite high if funding support for the investigators are continued and increased.

II. Bone physiology.—Over the past years, scientists in a number of centers have clearly elucidated the collagen-hydroxyapatite relationship and established several import concepts regarding nucleation and the mechanism of calcification. Recent studies have centered around determination of the sequence of amino acids in collagen, the biological mechanism of mineralization, the controlling mechanisms of bone-cell activity and the factors which influence bone remodeling. Research in these areas is likely to lead to a firm understanding of the mechanism of healing of fractures, normal and abnormal develpoment of bone, and the aboration in metabolism which results in skeletal deformities.

III. Growth abnormalitics.—In the last decade, the growth plate has been explored by new techniques and new concepts of functions have evolved. These data are now being translated into an assessment of certain birth disorders and an evaluation of injuries to various areas of the growth plate. It can be anticipated that such investigation will result in mechanisms by which normal and abnormal length of bone growth can be favorably influenced to modify dwarfism and other growth disorders of the skeleton.

IV. Osteoporosis.—Osteoporosis is a major predisposing cause of fractures in the elderly. Over 10 million Americans suffer from some consequences of osteoporosis. Until recent years, little was known regarding the etiology or management of this important social and economic cause of bone pathology. Recent improvement in methods of study of bone metabolism at a molecular level have indicated some important possible causative factors and avenues of treatment. Currently, investigation into the mechanisms of action and clinical

use of such agents as calcitonin, diphosphonates, growth hormone, L-Dopa and high phosphate diet, are being studied in a number of research centers. Preliminary results suggest that new approaches to treatment may be imminent.

V. Bone Cancer.—The dismal prognosis of most malignant neoplasms of bone has been little altered by basic investigation or even by the application of radiologic or chemotherapeutic measures used in the treatment of other neoplasms. Recent experimental work has demonstrated that some of the lesions will respond favorably to a variety of newer antimetabolites and advanced techniques in radiation therapy. Recently it has been demonstrated that the course of osteosarcoma may be materially influenced by the transfer of hyperimmune lymphocytes from a challenged donor. Continued work in this area is essential in an effort to improve upon the salvage rates for these highly malignant tumors.

In addition to these specific problems, there are many additional unsolved entities in orthopedics that require investigation and need research support.

In addition to the necessary funding for the high priority areas listed previously, the NIH should have made available to it sufficient resources to expedite both the research and its translation into health care. These resources would permit the NIH to:

1. Establish a musculoskeletal study section within the NIH;
2. Establish an intramural musculoskeletal section at Bethesda; and
3. Reinstate the training grant program in orthopedics or some other comparable program to provide the necessary support for young and emerging researchers in this vital area of health care.

The orthopedic community of these United States is presenting to you solid, well documented, realistic goals to be achieved in the coming years. We have a distinguished record of service to the research effort. The unique Orthopaedic Research and Education Foundation is the creation of and supported by private donations from orthopedic surgeons to an annual budget of $135,000. In addition, some of our research areas are supported by the private sector. Your thoughtful consideration is warranted in behalf of the health of our citizens and the degree of your support will determine the extent to which these goals are realized.

I thank you for the privilege of representing the orthopedic surgeons of this country to you and for your courteous attention.

Mr. Chairman and members of the subcommittee: I am Dr. Walter A. Hoyt, Jr., of Akron, Ohio, president of the American Academy of Orthopaedic Surgeons, an academy of over 6,000 members whose professional life is devoted to the delivery of care to those afflicted with diseases and injuries of the musculoskeletal system.

With me is Dr. William F. Enneking of Gainesville, Fla., member of the advisory committee on research of the academy, a professor of orthopedic surgery at the University of Florida, and a prominent leader in the research efforts of orthopedic surgery. Also with me is Dr. William F. Donaldson of Pittsburgh, Pa., the second vice-president of the American Academy of Orthopaedic Surgeons and clinical professor of orthopedic surgery at the University of Pittsburgh.

As background information to our presentation, we are submitting a document entitled "Health Care as Related to the Musculo-Skeletal System" and "The Status Report of Research in Orthopaedics." Both of these documents have been prepared by the American Academy of of Orthopaedic Surgeons. In addition, we are submitting the report of the workshop on "Fundamental Studies for Internal Structural Prosthesis." This workshop was jointly sponsored by the American Academy of Orthopaedic Surgeons and the National Academy of Sciences in 1972.

Working in concert with the National Institute of Arthritis, Metabolic and Digestive Diseases, four high priority research areas in orthopedics have been identified. To achieve these goals, support of the National Institutes of Health is needed.

Our own Orthopaedic Research and Education Foundation, with its annual income of $135,000 has supported many preliminary studies by young and unestablished researchers. In addition, we have had and continue to seek, support from the private sector. Neither of these sources is sufficient to meet the research needs. It is for this reason that we are here to urge that you provide the National Institutes of Health, through the National Institute of Arthritis, Metabolism and Digestive Diseases, with sufficient resources to make it possible to help us achieve our identified goals to improve the delivery of health care of the musculoskeletal system.

Our four top research priorities are: (1) Arthritis, (2) artificial joint replacement, (3) fracture healing, and (4) connective tissue pathophysiology.

In testimony before you on May 10, 1973, the Arthritis Foundation identified the research needs in the field of arthritis. As expressed in this report, the partnership role between the orthopedist and rheumatologist is clear.

In order to conserve your time, we concur with and support their statements.

About 17 million Americans have joint problems severe enough to require medical attention. Damaged joints are the second largest cause for chronic disability in our country. How do these damaged joints develop? Approximately half are the result of the ravages of arthritis—with a cost of $1.7 billion in lost wages and $1 billion in medical care. The other half develop as a late sequela of childhood joint disorders, infection, unexplained degeneration of joints, of injuries which occur on the highway, the job, the playing field, or the home. Many of these patients are afflicted at the prime of a successful goal- and job-oriented life.

What are joint replacements? Successful artificial hip replacements have been performed for only 10 years, although the preliminary research has been done for the last 25 years—It is estimated that during 1972 there were approximately 40,000 artificial hip joint replacements. New knee joints have been in use only since the late 1960's. Although thousands of cripples have been salvaged by joint replacement, many problems remain unsolved.

How long will they last? Will the wear product eventually create servious adverse reaction? Will the materials used for fixation eventually loosen? Are better materials for this purpose likely to come from space-age technology? What the the best engineering configurations to permit normal function? What can be done for joints such as the finger, shoulder, elbow, and back? The prostheses used now are restricted to the elderely or the severely handicapped patient. Can designs be made that permit the laboring man to return to his job with an artificial knee or hip? Can joints be made that will permit skilled motion of the hands? Can joints be made which may be put in children with the expectation of life-long service?

To further this critical field requires support for a group of regionally located and centrally coordinated laboratories whose function is to receive and analyze failed implants, perform materials research, develop scientific methods for analyzing the problems of the disabled and apply this knowledge to the development of better joint replacements. Goals: It is believed that the input of $10 million a year for

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5 years by the National Institute of Health and the National Institute of Arthritis, Metabolism and Digestive Diseases would have a major impact and more than justify the monetary outlay, through increased productivity of those now made partially or completely dependent by crippled joints.

In 1971 in the United States there were 10,800,000 disabling injuries due to accidents on the road, at home and at work. In addition, there were 17 million injuries which occurred as a result of sports and recreation activities. Over 2 million fractures occur each year.

We as orthopedists are concerned not only with the treatment of these injuries, but also with their prevention. One of the most recent and exciting research efforts which needs support, is the attempt to accelerate the healing time of a fracture by passage of an electrical current across the fracture site. If fracture healing could be cut in half, it is estimated that the annual dollar saving would be over $250 million.

Basic research in this area is fundamental and is the basis for applied research in arthritis, joint substitution and fracture healing.

Examples of our major research involvement include: (1) Degeneration of joints, (2) bone physiology, (3) growth abnormalities, osteoporosis, and (5) bone cancer.

The National Institutes of Health and the National Institute of Arthritis, Metabolism and Digestive Diseases should have made available to it sufficient resources to meet the high priority areas listed. In addition these resources should be sufficient to permit the National Institutes of Health to—

1. Establish a musculoskeletal study section within the National Institutes of Health.
2. Establish an intramural musculoskeletal section at Bethesda.
3. Reinstate the training grant program in orthopedics, or some other comparable program to provide the necessary support for young and emerging researchers in this vital area of musculoskeletal health care.

We thank you for the privilege of representing the orthopedic surgeons of this country to you. Because of time limitations I will leave with you a more complete statement which elaborates on the subjects just discussed.

We thank you for the opportunity of being with you today and would be glad to respond to any questions.

Mr. MICHEL. What was the average cost of those 40,000 hip joint operations?

Dr. ENNEKING. About $4,000. This would include the cost of hospitalization, anesthesia, the surgeon's fee, and so forth.

Mr. MICHEL. I think I am a candidate. I was curious.

Mr. PATTEN. On the spelling of "orthopedic," is that the same—what I thought was—"pedic"?

Dr. HOYT. It can be either way.

Mr. PATTEN. Thank you.

Dr. ENNEKING. Mr. Chairman, I might say I feel right at home being from the University of Florida, with Congressman Gibbons and Congressman Fuqua sitting in the background.

Mr. FLOOD. Thank you very much, gentlemen.

WEDNESDAY, MAY 16, 1973.

HEALTH BUDGET PRIORITIES

WITNESSES

HON. DON FUQUA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

GEORGE K. DAVIS, DIRECTOR, DIVISION OF SPONSORED RESEARCH, UNIVERSITY OF FLORIDA; MEMBER OF THE COUNCIL OF THE AMERICAN INSTITUTE OF NUTRITION

Mr. FLOOD. We will now call Dr. Davis, who represents the American Institute of Nutrition who has the good fortune to have with him our colleague, Don Fuqua of Florida.

Don, do you have something to say?

STATEMENT OF REPRESENTATIVE DON FUQUA FROM FLORIDA

Mr. FUQUA. Thank you, Mr. Chairman.

We are very proud of Dr. Enneking and Dr. Davis. I came to present Dr. Davis to the committee. He has had a very distinguished record in nutrition for many years.

I have been a long time fan of his as a student at the University of Florida when he was doing more research than he is doing now. He is director of sponsored research at the University of Florida and speaking here on behalf of the American Institute of Nutrition. I just wanted to present Dr. Davis.

I am going to have to go to another meeting shortly. I wanted to present him to my colleagues on this very distinguished committee.

Mr. FLOOD. You may proceed, Doctor.

STATEMENT OF DR. GEORGE K. DAVIS

Dr. DAVIS. Thank you very much, Mr. Flood, and gentlemen, as Representative Fuqua said, I am here representing the Council of the American Institute of Nutrition, which happens to be one of the members of the Federation of American Societies for Experimental Biology.

I am submitting the prepared statement which goes into considerable detail, Mr. Chairman.

Mr. FLOOD. It will be inserted in the record at this point.

[The statement follows:]

STATEMENT BY DR. GEORGE K. DAVIS, DIRECTOR, DIVISION OF SPONSORED RESEARCH, UNIVERSITY OF FLORIDA

I am George K. Davis, director, Division of Sponsored Research, University of Florida, and also a member of the Council of the American Institute of Nutrition, which is one of the members of the Federation of American Societies for Experimental Biology. I am addressing you today as a private citizen deeply concerned with the programs of the National Institutes of Health and as a member of the American Institute of Nutrition because of our very great concern for what appears to be an NIH budget with somewhat unrealistic priorities and a design that will undercut advances in health support and health care delivery almost as well as if it had been planned that way.

The pattern of funding in the health field has been one of encouraging universities and particularly those parts of the universities concerned with the health field to develop strong programs to meet the increasing needs for solutions to health problems and personnel to deliver the necessary health care. The universities have responded because the need was there, and there is no less need today, but the present budget gives us the impression of having the branch cut off behind us when we are out on a limb.

Testimony which has been given to the subcommittee headed by the Honorable Paul Rogers has given, in great detail, both the change in attitude of our administration and the effect which this is having on the schools of public health, medicine, dentistry, pharmacy, and veterinary science, all of which have been responding to demands from the Federal Government to increase the supply of health personnel and to intensify their research directed towards a solution of some of the most pressing health problems in the country.

We who are working in the field recognize that you gentlemen have the problem of a finite amount of money but with an almost infinite number of good uses to which those funds can be put. Our complaint is not with the fact that funding must be limited but rather with the roller-coaster type of funding which suggests that there is no long-range planning for the health program of this Nation.

I think all of you will admit that good nutrition is basic to human health. The need for nutrition research, for education of our people with regards to good nutrition, and for the training of those who can serve in that part of health care delivery which is nutrition has never been greater than it is today. Anyone who has followed the hearings of the select Committee on Nutrition and Human Needs, commonly known as the McGovern Committee, cannot help but be impressed by the great lack which exists in our present knowledge of how to bring good nutrition to the population of this country and, indeed, to the population of the world.

Repeatedly, a number of my friends who are Members of the Congress have asked me and members of our university staffs for suggestions as to what can be done. What are some of the guidelines? It would be impertinent for me to try and provide you with specific details as to how the NIH budget should be restructured. There are, however, some rather obvious things that I believe bear repeating.

The President's budget for the National Cancer Institute calls for an increase of some $32 million in research and, in addition, an increase of some $30 million in a program called cancer control. Obviously, this will mean that more people are needed to deliver both the research and the cancer control. At the same time, the funds for training people who might conceivably carry out these responsibilities are being cut by approximately $4 million. The same kind of thing is happening in the National Heart and Lung Institute. Research is being increased by the much more modest sum of $3 million, but the training grants are being reduced by $6 million, and the money for these increases for the Cancer and Heart and Lung Institutes is coming from the budgets of the other institutes.

I am sure it must have been pointed out to you that the most prevalent disease of humans in this country is that of dental disease, sometimes called caries. The Dental Institute is one which really should be growing rapidly because of its importance, and in recognition of this, the research budget was nearly doubled between 1972–73 and then for 1974 has been dropped $4.7 million. You will recognize that I am talking specifically about the grants program since this is where the new ideas and the training of new people take place.

I mentioned that nutrition undergirds and underlies programs in all of the Institutes. Yet it is true that a larger proportion of nutrition research has been carried on under the aegis of the National Institute of Arthritis, Metabolic, and Digestive Diseases. It comes as something of a shock then to see that research grants have been reduced by $7 million and the total budget by $25.5 million in this Institute.

As one goes through the various Institutes and their budgets, one notices that the National Institute of Neurological Diseases and Stroke has been cut $10.6 million in its grants program, the National Institute of Allergy and Infectious Diseases by $12 million, the National Institute of General Medical Sciences by $21 million, the National Institute of Child Health and Human Development by $12 million, the National Eye Institute by $4 million, and in every case this replaces a program of increase in training and research support with every evidence that this has been in response to demonstrated need.

One would almost believe that our present thinking was like that of the farmer who was invited to come to the agricultural field day at the university and who replied, "Son, I don't use half of what I know already, so don't confuse me with anything new."

I believe that if we are not to see our health programs come to a screeching halt in terms of the development of new knowledge, and in the terms of the training of the people who can meet the ever-increasing demands of our citizens for health care, one of the fundamental programs which must be supported is a comprehensive national health plan which will include a pattern of funding for Federal health programs which can be depended upon for enough years that educators and those involved in the delivery of health care can make their plans and be reasonably assured that they will be supported from one year to the next without sudden increases or sudden cuts.

There has been a strong feeling of many well-intentioned people, and I am sure this has been communicated to many Congressmen in the past, that if only we put enough money into a program, then it will be successful. Indeed, when it comes to implementing the delivery of goods or services for which we have the basic knowledge, such faith seems to have been justified. On the other hand, we have yet to figure out how to translate dollars into ideas or how to crack the unknown enigmas that underlie so many of our critical health problems.

There are many here who are much more capable than I of demonstrating the need for basic research and why support of the areas of general medical sciences, the Eye Institute, dental research, arthritis, metabolism and digestive diseases is critical even if we were to restrict our efforts to the solution of problems of cancer and heart disease. But I should like to relate to you, perhaps by going backward, the contributions that have been made to the program of corneal transplants in which a cornea is transplanted from one person to another in order that, literally, the blind can be made to see. The University of Florida is, I believe, justly recognized as being outstanding for its work in ophthalmology and they perform at the University of Florida over 1,000 eye operations each year with a fairly large number of these, corneal transplants.

When corneal transplants were first attempted, the problems surrounding the operations were truly monumental. Remember, there were no eye banks because it was not known how to preserve corneal tissue successfully. It was not known how to induce the eye of the recipient to accept the cornea from a donor. It was very difficult to maintain the fluids within the eye so that healing could occur.

Let me relate some of the basic science that went into the development of the present state of the art which is by no means perfect, but which is surprisingly successful.

In the period 1937–42, many investigators in the field of animal science were concerned with the preservation of semen from bulls and rams and stallions with the idea that proven sires could be made much more productive in terms of offspring if only the sperm could be kept alive and in healthy condition. The need led to much basic research that sought to learn of single cell metabolism, nutritional requirements, lifespan and reaction to many materials introduced into the fluids in which sperm were suspended.

Eventually, research led to the development of diluents that permitted the preservation of sperm at temperatures of —160 degrees centigrade where they could be maintained for years in a viable and useful form. Little did those of us who were working on the basic problems of metabolism and nutrition of those singel cells realize that the research we were carrying on would provide the key to the development of fluids which could be used to preserve corneas in a condition that would make them available for corneal transplants. The solution used for sperm preservation, slightly modified, is now used to preserve corneas and has extended the useful lifetime of a transplant of a cornea from the few hours that originally was the limit of time when a cornea could be used to the almost indefinite periods that corneas can now be preserved.

The basic biochemical research which led to the development of the composition of these fluids has been paralleled by the research leading to the accumulation of the knowledge needed to develop eye fluids—tears, if you will—that could be used to maintain the transplant after it had been successfully transferred from a donor to a recipient. Basic research in biochemistry was a key in the development of related microbiological studies. Since infection has to be prevented in these transplants, a major breakthrough as a result of fundamental research of the microbiologists and biochemists was essential.

Rather than go into specific details for each one of these, let me point out that medicine contributed because of the fundamental research needed regarding the metabolism of the eye and its support tissues; pharmacology, because of the need for specialized drugs and antibiotics; zoology contributed because of the need to study this whole procedure in animals and to know the peculiarities of different animals and their relationship to each other and to the human being; physics contributed because of the need for knowledge about the materials used in the eye and the eye structure itself; materials engineering contributed because of their specialty of developing new materials and tailoring them for the special purposes used by the ophthalmologists; the immunologists, because of the need to develop information about preventing rejection of the "foreign body" transplant which has been introduced.

Chemistry, nutrition, pathology, and biology all have made contributions to a seemingly straightforward operation that enables the blind to see. Without the basic research supported by the National Institutes of Health and indeed by many other Federal agencies, such as the Department of Agriculture, the Department of Defense, the National Science Foundation, the Atomic Energy Commission, and the National Aeronautics and Space Administration, it would not be possible to do what is done every day at the present time—transplanting corneas from one person to another in order to restore sight.

But very frequently when I have related stories of these real advances, I have both students and lay citizens make comments to the effect that we must know all there is to know now and why should we continue to support fundamental research? I think the story of the corneal transplant provides a good example of why we need to continue support of basic research. This solution provided a key to more research and possibly even more fundamental solutions to other problems.

One of the principal reasons for the need to replace the cornea is the virus herpes simplex I. This organism causes a tremendous amount of blindness because the cornea becomes opaque as a result of the infection. The research into the mechanism of herpes simplex action and a search for the structure of the virus have led to the development of antiviral compounds which have provided a breakthrough and a key in the struggle to develop compounds which are capable of combating viruses. It may not be too much to suggest that the basic research which was directed toward an understanding of the structure of the herpes simplex I virus may someday be the building block on which we develop compounds which will enable us to combat the viruses which some people believe cause cancer or at least cause some cancers.

But, of course, the research doesn't stop there. At a recent American Cancer Society seminar in Arizona, Dr. Ysolina Centifanto of our Department of Immunology and Medical Microbiology reported that a virus very similar to herpes simplex I and therefore called herpes simplex II was regularly found in cancer of the cervix. It isn't possible today to say that herpes simplex II virus causes cancer of the cervix, but the association is suggestive and needs intensive research. Dr. Centifanto has found that a sizable proportion of men may carry the herpes simplex II virus without showing any symptoms and presumably could be the source of infection.

To me, this is a tremendously exciting discovery and the thing that so impresses me and I hope that it will impress you is that this particular discovery and its potential was not due to a massive support of cancer research but was actually due to fundamental research in areas far removed from any thought of cancer.

Gentlemen, when I examine what has been proposed in the President's budget for the National Institutes of Health, I have two great concerns. The great increase in support directed toward the conquering of cancer, without related support for the basic sciences, may have the effect of raising false hopes in the minds of our citizens. If we do not uncover far more basic information than we presently have, disillusionment is bound to come, and with it a reaction against support. The second concern is even more immediate. Big sums of money have been spent, encouraging our citizens to expect health care to a degree that has never been possible before. With health insurance, with medicare and medicaid, the demands for health care are increased astronomically. There has been a strong effort in years just preceding this one to try to develop the manpower and the knowledge through research and training to meet the rising expectations and demands of our citizens. A prime example of demand outstripping the capability to supply is in the field of nutrition.

And at this critical juncture it is proposed to cut the support and therefore the number of people who will be trained to meet the demand. This is occurring at a time when we have been tremendously concerned that even with the most active program we would not be able to meet the demand for trained nutritionists. With the cuts being made in support, it can only be predicted that the disillusionment of our citizens will increasingly amount to storm proportions. When you need help and can't get it, it's much too late to think in terms that you should have supported a training program years ago.

Gentlemen, I urge you to support and initiate the development of a comprehensive health planning program for this country and that you use this as the key to the development of your appropriations bill and that the appropriations be oriented to a long-range basis keyed to our Nation's needs. Inevitably, you will have to set priorities in NIH and total appropriations, but it seems to me that the health of our people must be one of the highest of your priorities.

Dr. DAVIS. Since my area is nutrition, where I have worked for many years, I have chosen my examples from this area. The need for trained people in the area of nutrition research has never been greater. I think you are aware of the hearings of the McGovern Committee which has shocked many of us who had thought that we did have a well-nourished population but we discovered that many of our people are not.

We look at the administration budget and see that those areas which have traditionally supported nutrition are the areas that are being cut, particularly in research and training. These have been the areas that have supported nutrition, nutrition that is really basic to all of the other sciences. I am sure that you have been apprised of the roller coaster funding—up and then down—and that we in the universities who find ourselves caught in the rapid buildup of training young people, who are now out on the limb, now find it is about to be cut off. What we are asking is, please don't let the limb be cut off. At least keep it intact. I would like to point out one other thing. Mr. Weinberger in a recent speech said, "We will shift from investigator-initiated research. Government can direct the way the money is going to be spent."

The implication is that the Government and this is the executive branch, is an all-knowing omniscient something but both you and I know that government in this regard is people, and we are dealing with the people. These people are not necessarily those who have the extraordinary wisdom which we need in the direction of the great health programs we want this country to have. You and the Congres are those who should be giving us direction and purpose and priority in our national health programs, but I think you should make it clear that lawyers and accountants are not necessarily the best sources of creative ideas, that lead to solutions of our problems. Systems management has become the watchword of many in the Federal agencies, but the support of creative people is more important than the complex organization plans.

As I look at the budget as prepared, I am reminded of a friend of mine, now deceased, Dr. A. L. Shealy. When he was a young man he was sent by Dr. Newell, who was the director of the experiment station, down to the Everglades to invite the farmers to come to a farmer's field day. Dr. Shealy went down to Lake Okeechobee, and when he came to a Mr. Roberts he said, "You know the university is putting on a program to show you how to farm better and increase your crops and yields."

Mr. Roberts looked at Dr. Shealy and he said, "Doc, you know when you can tell me how to catch more catfish, then I will be interested, but otherwise not."

In other words, we have our focus on one thing and we forget everything else. It seems to me that this is what is happening in the National Institutes of Health budget. We are focusing on a particular area and cutting out many of the others. It is almost like my friend in Levy County, when I went over to him to talk about trace element nutrition, and said, "If you will just add some trace elements to mineral mixture, it will stop the disease of your cattle." He said, "Son, I am not using one-half of what I know already, so don't confuse me with anything new."

I think that when we devote our time, as has been proposed in the new budget, to a particular area—in this case it happens to be cancer, heart, and lung—at the expense of the others, we are cutting off the source of the fundamental information that is going to make these others possible.

I believe I ought to quit there and simply ask that my prepared statement be made a part of the record and if you have questions, I will be more than glad to try to answer them.

Mr. FLOOD. Thank you very much, Doctor. Your statement has been made a part of the record.

WEDNESDAY, MAY 16, 1973.

CARDIOVASCULAR DISEASE RESEARCH AND DEMONSTRATION

WITNESSES

DR. H. J. C. SWAN, PRESIDENT, AMERICAN COLLEGE OF CARDIOLOGY
DR. SYLVAN L. WEINBERG, CHAIRMAN, GOVERNMENT RELATIONS COMMITTEE, AMERICAN COLLEGE OF CARDIOLOGY
DR. SAMUEL M. FOX III, IMMEDIATE PAST PRESIDENT, AMERICAN COLLEGE OF CARDIOLOGY
WILLIAM D. NELLIGAN, EXECUTIVE DIRECTOR, AMERICAN COLLEGE OF CARDIOLOGY

Mr. FLOOD. Now we have Dr. H. J. C. Swan, president, American College of Cardiology.

Dr. SWAN. Thank you, Mr. Chairman.

We have prepared material and submit it for the record.

[The statement follows:]

STATEMENT OF THE AMERICAN COLLEGE OF CARDIOLOGY

Mr. Chairman and members of the committee, I am Dr. H. J. C. Swan of Los Angeles, Calif., president of the American College of Cardiology. With me are Drs. Sylvan L. Weinberg, chairman of our Government Relations Committee, Dr. Samuel M. Fox, III, immediate past president of our college, and Mr. William D. Nelligan, executive director of our college. We appreciate your courtesy in permitting us to testify. Previous actions of this committee and the administration have indicated clearly the high level of priority placed on alleviation of disease of the cardiovascular system. We are also cognizant of the distinguished leadership provided to the National Heart and Lung Institute by its Director, Dr. Theodore Cooper.

In brief we would like to draw attention to areas of importance in cardiovascular disease research and demonstration which are at preesnt unfunded or scheduled to receive marginal funding. While we are cognizant of the need for restraint in the expenditure of Federal funds, the priority rating of the following issues are sufficient to justify increases in overall funding for the National Heart and Lung Institute.

The 1972 Heart Act contained provisions to establish 30 national centers for research and demonstration in the diseases of the heart, blood vessels, lung, and blood elements. Such centers offer possibilities for both the development of new knowledge and the broad application of this knowledge to the relief of these disease states in clinical practice. In comparison to major national scientific effort such as the AEC and NASA, biomedical sciences have operated on a minimal scale. While we have not heretofore requested the large facilities and staff to concentrate on the practical solutions of important issues, both government and industry have found that the concentration of such personnel in an orderly manner has allowed for the real life application of many major scientific discoveries in the electronic, pharmaceutical, engineering, and other disciplines.

Because of the results of original investigations in cardiovascular physiology and pharmacology, we have seen a marked change in clinical practice of clear benefit. Now in several areas such as coronary artery disease, atherosclerosis, and sudden death, even more vital relevant questions can be clearly specified. Hence the prompt development of categorical centers of larger magnitude is justified. These centers will assemble a critical mass of qualified biomedical scientists and physicians with clearly defined goals strongly oriented to public interest. An attractive scientific environment with some prospect of stability would do much to reverse the continued loss of this talent from the research and leadership roles in our society.

In addition to positive achievement in the development of new knowledge and its application to relief of disease, such centers are vital in developing and defining national standards of excellence in the care and management of patients. Their establishment on a modest scale will not significantly divert the available manpower from productive activities in other centers. In fact, the existence of such centers will greatly increase the pool of qualified scientists by providing attractive opportunities for young men of talent. We respectfully recommend, therefore, that funding be provided for the establishment of five such centers in the 1974 fiscal year. Construction costs are estimated at $20 million. For startup activities moneys up to $3 million could be usefully expended in each of the five centers. Several years might pass before the magnitude of operations justified funding at the level of $5 million per annum as outlined in the 1972 Heart Act. We would therefore suggest a sum not to exceed $15 million would be appropriate for operational funding in the next fiscal year.

High blood pressure is a form of cardiovascular disease of high prevelance in the community which is relatively easy to detect. We have just returned from a leadership conference at Airlie House (Va.) in which a national program for the identification and treatment of patients with systemic arerial hypertension was outlined. A national center for the coordination and dissemination of this information through currently existing information channels within organized medicine is now necessary. We estimate that the cost of the establishment of a central organization for the accumulation of appropriate information and its dissemination will require approximately $4 million within the next fiscal year—a small price to pay for the potential benefit to literally millions of our citizens. To bring such care to certain minority and rural areas will require further operational funds for demonstration as to the best method to bring such care to the disadvantaged. The demonstration programs in, for example, Georgia and Missouri, currently funded by the regional medical program show real promise of affording useful operational models for bringing these procedures to a wide group of citizens. This function could ultimately become a responsibility of individual States. For the present, however, we recommend Federal support of these functions at the level of approximately $6 million per year.

The opportunities for further breakthroughs in our understanding of the mechanisms of hypertension remains high and demands further research effort. We recommend an additional $3 million to augment the present high blood pressure research centers, and a further $5 million to support a wide variety of investigator initiated research projects.

MULTIFACTOR STUDY OF CORONARY DISEASE PREVENTION

It will be necessary to create and support six additional clinics for the evaluation of the modification of major known risk factors (that is, diet, cigarette smoking, high blood pressure, et cetera) on the occurrence of heart attacks, sudden death and disability. An adequate study of this matter will require additional support of $3 to $5 million for the multi risk factor intervention trial (MRFIT).

DIET AND DRUG THERAPY OF HIGH SERUM LIPID LEVELS

The present minimal effort to evaluate and treat some of the specifically defined lipid—blood fat—disorders has great relevance on the effects of atherosclerosis on the internal architecture of the coronary and peripheral arteries. To determine morbidity and mortality in these severe disorders of lipid metabolism, we request an additional $3 million.

REHABILITATION OF CORONARY PATIENTS

Encouraging reports continue to appear relating beneficial physical and psychological responses to rehabilitation programs of those who survive a heart attack—even into later years. No adequate, well-controlled studies are available to define who will respond to what program and at what cost of time, effort, and resources relative to benefit. The American College of Cardiology supports the urgency of this study of the increase of human productivity and performance and requests that $3 million be provided for this purpose in fiscal year 1974.

The Social and Rehabilitation Service and its system of research and training centers has supported planning and pilot studies for this research but has not been assured adequate funding for the necessary long-term trial. We do not believe it is our place to specify the administrative base for such studies but we welcome the opportunity to urge that they be done promptly and with the best of scientific talent and technique.

CARDIAC DYSRHYTHMIA PREVENTION

Changes in electrical stimulation have been implicated in many sudden deaths in persons under 65 years of age in whom the damage to the heart muscle itself appears not to be lethal. A controlled clinical trial of some of the presently available medications that can control such electrical disturbances is urgently needed to establish the value, indications, and therapeutic schedules for those agents which provide benefit. A first year cost of $1 to $2 million is requested for initiating this important study.

TRIAL OF THROMBOLYTIC AGENTS IN ACUTE HEART ATTACK

Although primary prevention is most desired there is encouraging evidence that clot dissolving agents—thrombolytic enzymes—will be demonstrated to be of value in acute coronary obstruction conditions as has been found in acute obstructions of the pulmonary arteries.

A first year program—of a 3-year trial—will require $3 million which we request be included for fiscal year 1974.

You are all aware that in the field of cardiology, coronary disease is the problem of greatest concern. Many consider it to be of epidemic proportions at the present time.

During the past decade two major advances have been made in the field of coronary disease.

The first has been the development of the coronary care unit. The initial unit was opened in 1962 with private funds in a small hospital in Kansas City. Since that time, with a minimum of Government support—estimated at less than $20 million—in terms of the total expenditures in coronary care, these units have proliferated to almost every hospital in the United States. Private expenditures by hospitals to create coronary care units is estimated to exceed $20 million. As a direct result of the coronary care units, mortality among patients who reach the hospital has been reduced, from approximately 30 percent to 15 or 20 percent. This has been achieved primarily by the use of electrical monitoring, defibrillation, and expert medical and nursing care to control abnormal heart rhythms which formerly accounted for half the deaths among patients hospitalized with acute heart attacks.

The coronary care unit has demonstrated that when an effective method of treatment is developed, it will be disseminated through private means.

The second phase in further reducing mortality in acute heart attacks by the coronary care unit involves control of shock and congestive heart failure which lead to gradual deterioration and death. Progress has been made through the special research coronary care unit, referred to as the MIRU project, sponsored by the National Heart and Lung Institute in several hospitals throughout the country. Greatly increased effort and expenditure for this kind of goal directed research may be highly productive since in large measure it employs existing techniques, knowledge, and instrumentation.

There is also desperate need for new knowledge of the mechanisms of shock and heart muscle failure which requires support of basic research where approaches and goals are less clearly defined. The estimated requirement in these areas is $3 million.

Federal funds are needed, therefore, to demonstrate an effective approach to the problem through the application of existing knowledge and by creating new knowledge.

The dissemination to the population at large will then follow through private means if past experience may be used as a guide for the future.

A second major area of progress in the field of coronary disease has been the development of coronary bypass surgery. This requires open heart techniques and the use of pump oxygenators to sustain individuals while surgery of the heart is carried out to bypass the blocked arteries. Although thousands of these operations have been performed, funding is needed to provide definitive evaluation of this surgical approach. Such an evaluation is required to direct in proper channels the vast expenditures which are required to implement and expand present surgical techniques. The rate of expansion of such facilities is such that in the event this procedure should ultimately prove unsuccessful a vast waste will have occurred. The projected funding needed for this purpose is $2 million.

The funds which we have requested are needed immediately to improve the treatment and to increase the chances of recovery and ultimate return to useful activity of patients which acute heart disease. It is emphasized that treatment in the coronary care unit and through surgery, however effective, is fundamentally palliative and is directed against manifestations of a disease process which has become far advanced.

Finally, another high priority need for funding in the cardiovascular field and for medicine in general is for the development and dissemination of new teaching techniques. Today's medical technology and sophisticated progress requires forms of instruction other than the classical medical journals, medical meetings, and conferences which have been effective in the past.

New means for communicating knowledge to health professionals are urgently needed so that new knowledge and methods may be brought to bear in helping the person who is sick.

Ideal techniques to accomplish this purpose are not fully known. Funding in the amount of $7 million in the field of coronary disease alone is required for research in improved methods of communication and teaching. It is not enough to say that the responsibility for learning lies with the individual health professional whether he be physician, nurse, or technician. It is a national responsibility because present methods of postgraduate teaching and dissemination of knowledge are inadequate.

In summary, we are requesting an additional $78 million above the administration request for fiscal 1974 at $265 million. There is much more that could be done that would be productive and worthwhile, but we recognize that Federal budget restraints do not permit doing all that appears promising.

Dr. SWAN. We are very conscious of the priorities this committee and Congress have placed on heart disease. We commend you for these and appreciate it and respect and thank you for it.

We would like to bring up certain other matters which we believe have a sufficiently high-priority rating to be considered seriously by your committee. First, in the 1972 Heart Act, there were provisions to establish a number, 30 to be precise, national centers for research and demonstration. This has not happened. These centers, however, offer the possibilities of very considerable development of new knowledge

and its application, and I think that now is the time to think about this issue again in a rather practical way.

Government and industry have traditionally followed a real life application of many scientific discoveries by the concentration of appropriate numbers of skilled people and faculty to make a move at the time at which the questions can be really asked and the ground rules are really laid for major advances. Because of these major advances we are now in a position to ask very fundamental questions, and we believe we have the ways to answer them.

I would recommend to you that we seriously consider the initiation of a concept of the 1972 Heart Act in terms of the establishment of the national centers. These centers will attract and establish a critical mass of qualified biomedical scientists and physicians with clearly defined goals in the public interest. This with some prospect of reasonable stability for a reasonable time will do a lot to reverse our continued and real loss of leadership talent in our profession.

In addition to these positive characteristics, the centers will serve to establish vital standards of excellence which you are all going to need in the future in general health care.

We respectfully suggest that in addition to the current funding, a serious consideration be given to the establishment of 5, not 30, such cardiovascular centers in the current fiscal year. The estimates for construction given to us by Dr. Cooper would be approximately $4 million per each of the five centers, and start up activity money might amount to $3 million each. We are talking about a substantial amount of money and we recognize this. We do, however, feel that this is a matter that you should consider in considerable detail.

The second matter is that high blood pressure is a common form of cardiovascular disease of high prevalence. We just returned from a leadership conference in which a national program for high blood pressure management was outlined. It is absolutely necessary that a central organization be established within some level of authority for the accumulation of proper information, authoritative information, and to give that information dissemination through established medical channels.

We believe that this will require an additional approximate $4 million in the current fiscal year, which is really a small price to bring this potential benefit to millions of our citizens.

I will not go on further, Mr. Chairman, but in the interest of time I will ask Dr. Weinberg to complete our presentation and testimony.

Mr. FLOOD. Dr. Weinberg.

STATEMENT OF DR. SYLVAN L. WEINBERG

Dr. WEINBERG. I am sure you are well aware that in the field of heart disease coronary disease is the great killer with some 600,000 or 700,000 deaths a year so caused. During the past two decades there have been two major advances in the treatment of coronary disease. One has been the coronary care unit and the second has been the revascularization of blocked coronary vessels by "By-Pass" heart surgery.

Briefly, to discuss the coronary care unit, I was interested in the remarks Congressman Michel made earlier. The coronary care effort

is another excellent example of how funding by Government, if done strategically with a relatively small amount of money, can trigger off a large expenditure from the private sector when an effective effort is demonstrated.

The first unit started in Kansas City about 10 years ago with private funds. This has now proliferated throughout the country with many thousand units in most of the 7,000 hospitals in the United States. It is estimated the total Government expenditure in this area has been under $20 million. The private expenditure in excess of $200 million provide effective treatment of abnormal heart rhythms which claim half the deaths of those who reach the hospital after an acute heart attack. This is an example how the private sector, with Government help, has been able to bring improved treatment to the public.

The second phase of reducing the high morality of acute heart attacks is in the area of shock and failure of the heart as a pump, the so-called congestive heart failure. A great deal of work is being done in this area through the research units sponsored by the National Heart and Lung Institute. This work appears to be on the verge of major advances and additional funding is needed. Funding is needed in two areas. One is in goal-directed research to prosecute efforts with known techniques and technology and instrumentation. The other is in what we might call nondirected research where new knowledge is needed on the mechanism of shock and congestive failure, along the line one of the previously testifying physicians mentioned.

We do have to have research that is not necessarily goal-directed so that competent scientists can have the range to develop new ideas. Another area of importance to us is heart surgery. You are familiar with the dramatic effect of by-pass surgery. This requires an enormous expenditure throughout the country. Even though much success appears to occur, there are questions as to the ultimate value of this surgery.

Definitive studies are needed so that before we crank up and spend literally millions we should have definitive efforts to know how effective this surgery is going to be. We estimate the cost of starting such studies at about $2 million for fiscal year 1974.

Another area which we would like to touch on briefly is the area of dissemination of knowledge. Technology has advanced so quickly that our old means of keeping physicians and health professionals educated through journals and conferences is obsolete. We need to disseminate information to the public through health care people.

Again the methodology which is most effective is really not known. We estimate $7 million is needed in the field of coronary disease alone.

In summary, for the various projects which we have emphasized we are requesting approximately $78 million above the administration's request for fiscal 1974 of $265 million. There is much more that could be done and much more productive work that would be promising but we recognize the constraints on the budget and therefore have made this request to you gentlemen.

Mr. FLOOD. Thank you very much.

I have this one question.

Here is a city with 100,000 people. They have five hospitals. Coronary care centers, worthy of the name—you want the best—are extremely expensive. Should the five hospitals have five coronary care centers? If hospital A has one, then hospital B and C and so on has to have one.

Dr. WEINBERG. That is an extremely cogent question.

Mr. FLOOD. That is why I asked it.

Dr. WEINBERG. I think it deserves an answer because it is very attractive to say, "Let us centralize." However, I come from Dayton, Ohio. We have five hospitals. The hospital I work at is located in the northern area. We service perhaps 70 miles north. The person who has an acute attack has to be treated on the spot and today's technology requires that services be available and it can be made perfectly available in the smallest institution—it is not practical to move these people all around, and actually the cost of coronary care is not prohibitively high today. Furthermore with the progress being made in open heart surgery we are going, in 2 or 3 years, to be where coronary surgery is going to be so commonplace that a truama case that is brought to the emergency room may have his life saved if that particular facility can do open heart surgery. I review an instance where a patient with pneumonia was saved by using the same pump that is used for open heart surgery.

I think we will have to upgrade all hospitals that treat coronary patients to de the effective job. We cannot leave some hospital to be second-class hospitals and others to be a first-class one because the man who happens to be taken, not with his own volition, to the place that does not have the facility will suffer. We feel that while facilities should not be wasted or indiscriminately proliferated we feel that a certain level of competence is needed in all the institutions.

Mr. FLOOD. Thank you very much.

WEDNESDAY, MAY 16, 1973.

BIOMEDICAL RESEARCH

WITNESS

DR. ROY P. VAGELOS, WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, REPRESENTING THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS

Mr. FLOOD. Now we have Dr. Roy P. Vagelos, Washington University School of Medicine, representing the American Society of Biological Chemists.

Dr. VAGELOS. Thank you, Mr. Chairman.

Mr. Chairman and distinguished members of the committee, I am Dr. P. Roy Vagelos, professor and head, Department of Biological Chemistry, Washington University School of Medicine, St. Louis, Mo. I am appearing today as a citizen witness and a member of the American Society of Biological Chemistry, although I do not formally represent that society. I very much appreciate the opportunity to discuss certain issues which I believe to be critical for the maintenance of excellence in biomedical research in the United States. Before I discuss the issues individually, I should first like to make a few statements that

reflect my opinion as to the reasons that U.S. biomedical research has become outstanding in the past 20 years. These reasons begin with the availability of training to any person who demonstrates interest and talent in biomedical science and research; until recently a student graduating from college, irrespective of his economic means, could be admitted to a university for graduate training in the biomedical sciences if he passed qualifying examinations. Thus the entire pool of interested talent in the United States was available for selection. No one was excluded if he or she was competitive at a national level. The availability of NIH training grants permitted universities to select and recruit the best applicants from any part of the United States. This recruitment of talent has been the basic and most important ingredient in the building of biomedical research in this country.

Many of the best Ph. D.'s produced by the graduate schools were selected, again by national competition, for postdoctoral training in specialized fields. This postdoctoral training was in most instances supported by NIH fellowships. These fellowships were applied for jointly by the trainee and the sponsor. Thus, a talented young Ph. D. could select an expert anywhere in the United States, and if he were acceptable to that expert, they could together apply for support of that young scientist so that he could gain additional experience before beginning his independent career in science. The freedom of choice permitted by this open system has allowed the important collaboration between the excited young scientists and established investigators in a way that could not be achieved by other means—the young scientist selected the man he wished to work with, they applied together for a fellowship to work on a joint project, and they entered national open competition. The awarding of such a fellowship always called for a small celebration, and obviously established an important aspect of the working relationship—the young applicant and the established investigator both contributed to the project at the very start.

Under normal circumstances in the past, a good person finishing his postdoctoral training period would accept a research and teaching position and then apply for a research grant, usually from NIH or NSF. An accomplished young scientist with good ideas had only to write a good application. He was assured impartial judgment by a peer review system, as practiced by study sections of NIH. High quality applicants were awarded research grants and they could immediately begin independent scientific research.

This ability of talented young people to gain the scientific training and then to launch independent careers has channeled the best minds in the United States into the important areas of the biomedical sciences. These young people have not only been guided and supported during their development, but they were also given the independence, which is as important, when they were ready to take off on their own. Every aspect or the development described above has been based largely upon functions of the National Institutes of Health that are now being threatened due to budgetary problems. Let us examine each of these separately.

NIH training grants in all fields are being phased out. The reasons for this include the opinion that research budgets in biomedical science have stabilized, thus decreasing the general need for research scientists; that the normal mechanism in the professional manpower

market should be able to produce required manpower; and that trainees in the biomedical sciences have a high enough income potential to expect them to bear the costs of their training themselves. Are these reasons so compelling that we can allow the destruction of the entire NIH training program in its present form? Although it is true that research funds have stabilized, one must provide for the training of the new minds that are to enter the expanded programs authorized by the National Cancer Act of 1971 and the Heart, Blood Vessel, Lung and Blood Disease Act of 1972. The basic information that is required for the control of diseases in these areas is not now available. New ideas and new approaches are essential. In the biomedical sciences such new approaches are absolutely dependent upon the new minds developed in the training programs. The most productive research come from laboratories in which there is intense interaction between the imaginative young scientists and estabilshed investigators. Scientific knowledge moves so rapidly that it is quite obvious to some of us who have been in the laboratory for 15–20 years that the background and style of leading young scientists changes about every 5 years. The leading edge of research is forged by the youngest scientists. Elimination of the production of young scientists will rob this country of the most important component of scientific research—the imaginative young mind.

Training grants in biochemistry were held by only the top 30 or 40 of approximately 135 biochemistry departments. Because these grants were obtained from NIH through national competition, the training provided under these grants was probably the best available, on a departmental basis, in this country. There are no obvious means by which the universities which are losing these grants can replace the support lost from these grants. Graduate students can carry part-time jobs, but this prolongs and dilutes the training program. They can obtain loans, but their earning potential is not sufficiently high to allow repayment in reasonable time periods. Another alternative is the support of graduate students through research grants, program projects, center grants, etc. This is an inferior method for supporting the training of students since it would force beginning graduate students to select mentors who either have a large enough research grant or who are included in program project or center grants. Although there are some administrators who favor such an arrangement, I do not. I should mention immediately that, to my knowledge, there has been no planned increase in research grants to accommodate graduate students. In fact research grants, which are said to have stabilized, are actually shrinking because of the inflationary pressures of the last several years. The overall decrease in the numbers of graduate student positions will ultimately lead to a decrease in the quality of students choosing biomedical research as their careers.

Another excellent training program of NIH, the medical scientist training program, was ideally suited to the training of young research physicians. This program, which was obtained through national competition by 12 out of 114 medical schools, selected the best of the research oriented medical students (not more than 5–8 percent of the class) for simultaneous training in medicine and in biomedical research. This program permitted over a 6-year period the training of physicians who were destined to become faculty at medical schools.

Many of these trainees obtained both M.D. and Ph. D. degrees at the end of their traineeships. This program selected young physicians who were gifted in science and trained them to become the future teachers of our medical students. This program is being phased out with the others.

The NIH fellowship program which supported postdoctoral training is being phased out. Although postdoctoral positions can be funded directly through research grants, fellowships awarded on the basis of nationwide competition have recognized the most capable younger scientists and given them a measure of independence that is otherwise impossible. I should point out again that research grants have not been expanded in order to provide the additional funds required to replace funds normally obtained through NIH fellowships. Only the relatively large research grants can support postdoctoral positions, and thus the possibility of a student obtaining a fellowship and taking it to the laboratory of a younger established scientist who has only a modest research grant will be eliminated, and that is unfortunate because it is often the unusually perceptive graduate student, who seeks further training in an exciting younger scientist's laboratory, who will be thwarted.

In view of the above I should like to express my strong support of H.R. 5064 which was introduced by Congressman Paul Rogers. This legislation would permit a continuation of the training process, through both training grants and fellowships, that has produced the present excellent biomedical research apparatus in the United States.

The next major issue that has contributed to the high quality of biomedical science supported by NIH is the peer review system utilized by the NIH for evaluation of research grant applications. The NIH study sections, which carry out these reviews, are composed of practicing scientists who make every effort to judge fairly and wisely the proposals of their peers. Since these study sections undergo constant turnover, many established scientists have participated in study section meetings during their careers. I have never heard a scientist, who has participated in such a meeting, complain of unfair treatment in this review system. High quality proposals are recognized, and they are given priorities which normally lead to the funding of the applications. When adequate funds are available, this review system assures the support of good research proposals and the rejection of inadequate proposals. It is a system that I strongly support; in my opinion, it should not be altered. Some difficulties arise in the allocation system when adequate funds are not available, as has been the case in certain of the institutes. In the past several years there have been differences between institutes in the priorities that received awards. As an example, in one institute a priority below 1.7 (1.0 being the highest possible priority) was not funded, whereas in another institute priorities as low as 2.5 received support.

This disparity is usually due to the differences in funds available to the different institutes and also to the different allocation of funds within an institute. Of particular concern to those of use who support the research grant program as the primary mechanism for support of biomedical research is the considerable increase in contracts, particularly in the National Cancer Institute and the National Heart and Lung Institute. Funds allocated to contracts obviously decrease funds

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available for research grants. The tendency for NIH to shift support for biomedical research to such mechanisms as contracts, program projects and center grants and away from research grants, is, in my opinion, not wise. The review of contract, program project and center proposals is not as stringent as the review of research grant applications. Funding of research through the research grant mechanism assures the best quality control for the expenditure of national research funds.

To conclude: I hope this committee will support H.R. 5064 since the future of biomedical research in the United States is dependent upon the continued availability of the best young minds to attack the health problems of humanity.

Mr. FLOOD. Thank you very much.

WEDNESDAY, MAY 16, 1973.

RESEARCH AND TRAINING GRANTS

WITNESSES

DR. FREDERICK E. SHIDEMAN, DEPARTMENT OF PHARMACOLOGY, UNIVERSITY OF MINNESOTA, REPRESENTING THE AMERICAN SOCIETY FOR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

DR. LOWELL M. GREENBAUM, PROFESSOR OF PHARMACOLOGY, COLLEGE OF PHYSICIANS AND SURGEONS, COLUMBIA UNIVERSITY

DR. WILLIAM WEST, CHAIRMAN AND PROFESSOR OF PHARMACOLOGY, HOWARD UNIVERSITY COLLEGE OF MEDICINE

Mr. FLOOD. Mr. Frederick E. Shideman, department of pharmacology, University of Minnesota, representing the American Society for Pharmacology and Experimental Therapeutics.

Dr. SHIDEMAN. Thank you, Mr. Chairman. I have accompanying me Dr. Lowell Greenbaum, professor of pharmacology and Dr. William West, professor of pharmacology at Howard University.

I have a prepared statement which I would like to present.

Mr. FLOOD. Please proceed.

Mr. SHIDEMAN. Mr. Chairman and distinguished members of the committee:

I am Frederick E. Shideman, a professor in and head of the department of pharmacology in the medical school at the University of Minnesota, a position I have held since 1962. Prior to that time I was chairman of the department of pharmacology and toxicology at the University of Wisconsin Medical School. My training is in both pharmacology, in which I hold the Ph. D. degree, and in medicine. My association with research, research training and education in pharmacology spans a period of 36 years. I am a past president of the American Society for Pharmacology and Experimental Therapeutics and represent the committee on public affairs of that society. I have served in a consultant capacity in my specialty to a number of governmental agencies, the National Institutes of Health, the National Institute of Mental Health, the Food and Drug Administration, the U.S. Department of Justice, and the Veterans' Administration as well as private industry. Currently I am chairman of the Drug Research Board of the National Academy of Sciences, National Research Council.

In pharmacology we are concerned with the interactions between drugs and other chemicals on the one hand, and living organisms and life processes on the other. At no time in history have medical scientists faced more challenging problems than those found in the realm of pharmacology today. Our commitments are many. These include the finding of new and safer drugs to prevent and treat disease in an ever expanding population, identifying problems in drug therapy so the treatment will not cause more difficulties than the disease itself, educating physicians and other health professionals as well as the public about the use of drugs as well as their abuse. We need to identify the complex mechanisms by which the body becomes addicted to or dependent on certain drugs and find drugs or means whereby these addictions can be cured. We also must solve the current problems as well as seek means of preventing future problems resulting from the dispersion of man-made chemicals into our world. These are some of the commitments of pharmacologists. They concern the health and well being of all the people in the Nation and to fulfill them will require an appropriate level of financial support on the part of those who are the potential beneficiaries.

Support for research in pharmacology is available through the various institutes in the Department of Health, Education, and Welfare. In these Institutes, other than the National Institute of General Medical Sciences (NIGMS), support is available principally for targeted or disease oriented research which has received a high priority in terms of funding; for example, cancer, heart disease, stroke, drug abuse. The vast majority of nontargeted or nondirected research in pharmacology derives support from the NIGMS. This is what is commonly considered to be basic research. However, in addition to supporting investigations of a more fundamental nature, these moneys also underwrite research relevant to diseases or altered states of well-being which are not sufficiently high on the priority list to be singled out for special attention, even though they may affect significant numbers of people. They include such diseases as arthritis which plagues upward of 20 million people in the United States and convulsive disorders (epilepsy) which affect about 2 percent or 4 million of our people. The development of new drugs in this country for the treatment of the latter has almost come to a standstill, not because they are not needed but because private enterprise finds this not to be a sufficiently probable line of endeavor. Other diseases in the relatively low priority area are gout, parasitic diseases, glaucoma and the disorders arising from environmental pollution. These and many others may not be of major significance in terms of numbers of people affected by any one of them but, taken collectively, they pose a very significant problem in terms of debilitation, nonproductivity, and decreased life expectancy.

At the present time these areas of investigation are receiving support not only in the form of research grants of the project type but also through the more integrated program and center grants in pharmacology and toxicology of the NIGMS (table 1). There are some 10 different general areas of research receiving funding of the latter type. These are widely distributed throughout the country in some 18 academic institutions in 16 States and the District of Columbia. In 14 of the 18 programs clinical research is a significant and integrated component of the endeavor.

Historically the NIGMS has supported training of individuals in the biomedical sciences, including pharmacology and toxicology. Limited support of this type also has been available, for training of clinical pharmacologists. You are thoroughly familiar with the current status of such support.

The past contributions of the biomedical sciences, including pharmacology to the improved diagnosis, prevention and treatment of disease are well known. I shall not belabor this but merely call your attention to such agents as the antibiotic, diuretic and antihypertensive drugs. I propose rather to direct my remaining remarks to three points. First, I shall illustrate by example the continuing productivity or promise of productivity of research in pharmacology. Second, I shall indicate, again by example, a few of the problems which need to be solved, are amenable to solution and depend heavily on support not available through high priority targeted programs. Finally, I shall point out a major budgetary deficiency which could result in an even much greater inadequacy in the funding of these programs than has been the case in the recent past.

You are familiar with the hazard imposed by methylmercury in our environment. Two groups of investigators supported by NIGMS are interested in this problem. At the University of Iowa workers have found that administration of a single dose of methylmercury to pregnant rats results in birth of offspring with a number of defects in several systems of the body. Eye defects include small eyeballs and/or enlarged protruding eyeballs, opacities of the lens and deformities of the retina with blindness. At the University of Rochester investigators have found a thiol (sulfur containing) resin which increases the rate of excretion of mercury threefold in animals. Early this year this group became involved in a study of an outbreak of methylmercury poisoning in Iraq. This arose from ingestion of bread prepared from wheat treated with a methylmercury fungicide. Some 6,000 people were hospitalized and over 400 died. In addition to obtaining considerable information on methylmercury poisoning in man these investigators also were able to study the effects of their resin on mercury excretion. Results of these studies have been accepted for publication.

Another project has shown there is no "placental barrier" protecting the fetus from drugs administered to the mother. All drugs which have been studied to date by one group of investigators crossed the placenta and were stored in fetal tissues. Thus, the fetus is exposed to adult concentrations of pharmacologically active compounds administered to the mother and after delivery must dispose of them. Of relevance to the developing fetus are recent findings of investigators at Baylor College of Medicine. They have demonstrated that certain drugs are metabolized by pathways involving epoxide formation. Diphenylhydantoin (Dilantin) is one of these. Epoxides are known to have cytotoxic and mutagenic properties and a higher than normal incidence of physical abnormalities has been observed in infants born of mothers receiving this drug and certain related ones which are metabolized via an epoxide pathway.

Of considerable significance to those individuals suffering from gout is the development of an animal model using the rat. Research at the Unversity of Florida, also supported by NIGMS, has demonstrated that acetazodimide or Diamox may be of significant value in the

therapy of hyperkalemic periodic paralysis. Familial periodic paralysis affects no large number of people but the cause has long been an enigma and the effects of Diamox on these individuals may not only provide insight into the cause of the disease but help us with the problems of disturbances in potassium balance in individuals during prolonged space flights.

Just one more example. This is close to home. In 1964 a young man fresh out of his postdoctoral training, trained exclusively in basic science laboratories and supported by training grant funds, began his independent research at the University of Minnesota. His studies with insulin and sugar metabolism led to the discovery of a new chemical component in cells which in laboratory shorthand is referred to as cyclic GMP. This is similar to cyclic AMP discovered 15 years ago by Dr. Earl Sutherland and subsequently shown by him to be the messenger molecule in cells through which the effects of a number of hormones are mediated. The young man, Dr. Nelson Goldberg, in our laboratories, accumulated information over the years which showed cyclic GMP promotes cellular events that are opposite to those promoted by cyclic AMP. For example, accumulation of the former was shown to be associated with such events as the clotting of blood platelets, contraction of blood vessels, promotion of contraction of the uterus, migration of white cells, and destruction of foreign agents (bacteria and cancer cells) and the initiation of cellular division. There are, of course, several clinical disorders in which the cellular processes that cyclic GMP appears to promote are defective. One of these is psoriasis, a disease of the skin affecting over 6 million Americans. It is characterized by a twelvefold increase in the rate of cell division in the affected cells of the skin. Dr. Goldberg, in collaboration with a dermatologist at the University of Michigan, has found an imbalance of cyclic GMP and cyclic AMP in cells from psoriatic skin, the former being abnormally high and the latter low. New therapeutic agents for the treatment of this disease are being developed on the basis of this knowledge and preliminary clinical trials with two such substances are very promising. Thus, observations that dealt originally with basic mechanisms in the control of sugar metabolism led to a better understanding of how biological processes may be controlled and development of a new approach to control of a disease affecting about 3 percent of our population.

There exist equally promising and important research programs which are deemed sufficiently meritorious to have been approved but very likely may not be funded as a result of the present budgetary restrictions and distribution of funds in NIGMS and the other institutes within the Department of Health, Education, and Welfare. I will give you only two or three examples of these.

Our era has often been referred to as the plastic age. All flexible plastics contain plasticizers. Common plasticizers include phthalic acid derivatives which are interfused with polymers to increase flexibility, extensibility, and workability. Such plastics are used in virtually every major product category—building construction, automobiles, household products, apparel, toys, packaging, medical products; for example, anesthetic masks, containers for blood. The estimated current annual utilization of phthalate ester plasticizers is one billion pounds. There is good evidence that these plasticizers can and do enter the body

by a variety of routes from a variety of sources. However, there is a paucity of information on the pharmacology of these compounds. A recently submitted research proposal, as yet unfunded, describes studies to determine some of the important ways in which the body handles a common phthalate plasticizer. Such studies are of importance since these agents may have teratogenic activity.

Another unfunded project would determine if certain iodine labeled compounds which are concentrated in cartilage might be sufficiently safe to use as radiocontrast agents for visualization of cartilage. Any method which would allow us to identify cartilage would seem to be of tremendous value for the study of traumatic cartilaginous lesions as well as the various diseases of cartilage.

A third project proposes to investigate certain sedative and hypnotic drugs for immunosuppressive effects. This study is of importance in that such agents, through suppression of immune responses, might enhance tumor growth in patients with cancer or lead to development of new drugs for the treatment of autoimmune diseases or for use in conjunction with organ transplants.

These and other worthwhile programs could be assured of support if funding for research were maintained at approximately the same level as in the past. Table 2, submitted as part of this testimony, shows an actual expenditure of $83,886,000 for support of the regular research grant program in NIGMS in fiscal year 1972. In the President's budget for fiscal year 1974 this would be reduced to $71,242,000. There is an increase of approximately $10,500,000 recommended in fiscal year 1974 for noncompeting grants, a commitment made when these ongoing proposals were approved for funding. Most disturbing is a reduction of approximately $23 million in funds for competing (new) grants. To make up for this difference it might be possible to reduce the commitments previously made to noncompeting grants or funds for other ongoing programs; for example, the Pharmacology-Toxicology Centers. This has been proposed. Not only would this be not desirable but also it is highly unlikely that the reductions achievable by this mechanism would make up the deficit in the competing category of grant funds. A point worth noting at this time is that any funds lost from the training programs as they are phased out will not be available for support of research. The suggestion that research grants be used for support of training in pharmacology in lieu of training grants and fellowships makes little sense in the face of reduced research support in NIGMS. If we are to lend any semblance of meaning to such a suggestion and also support new and innovative research it is essential that money available for competing research grants not be reduced. To accomplish this would require some $20 million more than is proposed in the President's budget for fiscal year 1974.

[The following information was submitted:]

TABLE 1

RESEARCH AREAS
PHARMACOLOGY-TOXICOLOGY PROGRAM
NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

INSTITUTIONS

RESEARCH AREA	U. of Kansas	U. of Pittsburgh	U. of North Carolina	Purdue University	U. of Michigan	Southwestern Med. Sch.	U. of Texas	Ohio University	U. of Rochester	Rockefeller Institute	Harvard University	George Washington U.	U. of Minnesota	U. of Florida	U. of Calif. (S.F.)	Purdue University	Vanderbilt University	UCLA	Johns Hopkins U.	Contracts
BASIC																				
CLINICAL																				
1. New drugs (pharmaceutics, drug design and synthesis, natural products)		X						X						X				X	X	
2. Pharmacokinetics (absorption, transport, distribution, disposition)		X	X	X	X		X	X					X		X		X			X
3. Preclinical pharmacology-toxicology (comparative biology, pharmacodynamics)		X			X		X		X	X			X			X		X	X	
4. Biochemical mechanisms of drug action and metabolism (teratogens, drug antidotes)			X	X		X	X		X			X	X	X		X	X		X	X
5. Drug instrumentation and analysis (analytical methods in biol. material & intact man)	X			X		X		X		X	X		X						X	X
6. Human variability factors and the response to drugs (genetic, immunologic, pathologic)	X		X	X				•		X		X	X							X
7. Factors affecting the optimum therapeutic use of drugs (drug interactions, environment)	X	X		X		X	X		X			X	X			X	X			X
8. Clinical drug studies (adverse effects, drug efficacy, drug epidemiology)	X			X	X			X		X					X		X	X		X
9. Toxic effects of chemicals as they distort drug action (enzyme induction & inhibition)			X		X	X	X	X	X	X	X	X			X	X	X			X
10. Drug-induced biological long-term effects (blood dyscrasias, allergies, mutagens, drug-disorders, teratogens)						X	X		X		X	X		X	X					

November 14, 1969

TABLE 2.—NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES, RESEARCH GRANT SUPPORT

[Dollars in thousands]

Regular programs	Actual fiscal year 1972	President's budget fiscal year 1974
Noncompeting grants	$55,572	$66,124
Competing grants	28,314	5,118
Total	83,886	71,242

Mr. FLOOD. Thank you very much.

WEDNESDAY, MAY 16, 1973.

VETERINARY MEDICINE SUPPORT PROGRAMS

WITNESSES

HON. WILLIAM J. SCHERLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

DR. MARK ALLAM, DEAN, SCHOOL OF VETERINARY MEDICINE, KANSAS STATE UNIVERSITY, REPRESENTING THE AMERICAN VETERINARY MEDICAL ASSOCIATION

DR. E. D. BESCH, DEAN, SCHOOL OF VETERINARY MEDICINE, LOUISIANA STATE UNIVERSITY

DR. DONALD TROTTER, DEAN, COLLEGE OF VETERINARY MEDICINE, KANSAS STATE UNIVERSITY

Mr. FLOOD. The next group will be led by Dr. Mark Allam, dean, School of Veterinary Medicine, Kansas State University.

They have the very good fortune to have to present them to us our colleague, Bill Scherle, from the great State of Iowa.

STATEMENT OF REPRESENTATIVE WILLIAM J. SCHERLE

Mr. SCHERLE. Mr. Chairman, the opportunity to address my distinguished colleagues on this committee is always welcome, but especially so today because introducing the next witnesses allows me to talk about two subjects of great concern to me: agriculture and education. One of the reasons we have attained such a high level of agricultural production both in quality and quantity is because our schools of veterinary medicine have kept pace with advances in science and technology.

The demand for good veterinarians has increased tremendously in the last few years. Part of it has been generated by the Federal Government itself through legislation like the Wholesome Meat Act. Part has simply been a response to the burgeoning needs of meat producers who are trying to satisfy consumer demands for a better diet. And part is due to a heightened awareness of the close relationship between human and animal health.

The next panel of witnesses, who are all experts in this essential field, can explain far more eloquently than I the funding requirements of veterinary education today, so I will preempt no more of their time on that score. Two of these gentlemen are very well known to me—Dr. Frank Todd, the Washington representative of the

American Veterinary Medical Association, and Dr. Phil Pearson, dean of the Iowa State University College of Veterinary Medicine.

This panel will present in detail the veterinary medical profession's position on four major issues: capitation grants; student loans and scholarships; special project grants; and construction grants. These experts will doubtless present an excellent case for each of them.

The one issue on which I would like to expand briefly is the construction grants program. The Comprehensive Health Manpower Act authorizes construction grants for colleges of veterinary medicine. However, these funds were frozen in the middle of the current fiscal year. Three veterinary colleges have been suspended in limbo, as a result, right in the middle of expansion programs that were approved but only partially funded: Iowa State University would have been entitled to $4.5 million; Kansas State to $6.5 million; and Colorado State to $9 million. All of these matching grants would have no trouble summoning broad local support, if past experience is any indication. Moreover, these colleges can command an even broader base of support from neighboring States because they serve students from out of State as well as their own. Iowa State's student body, for example, has agreements to accept qualified students from neighboring Nebraska as well as Oregon and North and South Dakota.

I urge the subcommittee to include language in its report specifically earmarking $20 million for these three schools to complete their vital construction projects.

STATEMENT OF DR. MARK ALLAM

Mr. ALLAM. I would like to present certain documents for your record and for you gentlemen. The first will be a summary of statements on the capitation funding, and a letter directed to you, Congressman Flood, from Dr. Adams, who is associate dean of the School of Veterinary Medicine at Tuskegee dealing especially with the importance of veterinary medicine and how Tuskegee is educating black veterinarians. Also a letter from Dr. Roger Smith, dean of medicine at Ohio State University. He has gone to great lengths to certify the need for more veterinarians for this country. The fourth is a document on the impact of the loss of training grant programs on veterinary medical education.

Mr. Chairman and members of the subcommittee: I am Dr. Mark W. Allam, dean of the School of Veterinary Medicine, University of Pennsylvania. I am accompanied by Dr. Donald M. Trotter, dean of the College of Veterinary Medicine, Kansas State University, and Dr. Everett D. Besch, dean of the School of Veterinary Medicine. Lousiana State University. I am pleased to have this opportunity to express the views of the American Veterinary Medical Association and the Association of Ameriean Veterinary Medical Colleges on certain Federal programs for assistance to schools of the health professions, including schools of veterinary medicine. We wish to speak particularly on the matter of capitation grants, and make brief mention of some of the other programs which directly affect the quality and the availability of veterinary medical education in the United States.

Capitation grants for veterinary medical colleges were authorized by Public Law 92–157, the Comprehensive Health Manpower Train-

ing Act of 1971. Prior to that, institutional grants had provided necessary incentives for increasing enrollments. In the academic year 1970–71, the 18 veterinary medical colleges had a total of 1,428 students in their entering classes. By the 1972–73 academic year, the enrollments of entering classes had been increased to 1,511. The Comprehensive Health Manpower Training Act of 1971, which will expire on June 30, 1974, authorized capitation grants for a period of 3 years. This act gave assurance to the colleges that financial support by the Federal Government would be a continuing fact that could be relied upon to provide a part of the funds desperately needed to add faculty and staff to renovate facilities, and to expand othere educational resources necessary to increase enrollments.

The President's budget provides no funds for capitation grants for colleges of veterinary medicine for fiscal year 1974. The budget further indicates the intent of the administration to drastically reduce the level of capitation grant support for fiscal year 1973 as compared to 1972. If the actions which have been proposed are permitted to occur, enrollments in the colleges of veterinary medicine must be reduced. The 17 States which provide a major portion of the support for these colleges cannot be expected to make up the loss of the funds which the Congress intended to provide.

Veterinary medicine is the health profession concerned with application of biomedical principles toward the alleviation of disease and maintenance of the health of nonhuman animals. Veterinarians contribute to many areas of human need through research and, in their practices, participate in many important applications that directly or indirectly influence the status of human health. The profession, from its inception, has been dedicated to and has contributed toward the support of what is now called the fundamental national health objective, that is, to secure the opportunity for all Americans to lead healthy lives regardless of their socioeconomic or ethnic status.

The essentiality of veterinary medicine as a health profession needs no defense. Public concern and clamor over the recent epidemics of zoonotic diseases in the horse, cow, and dog populations in various sections of our country attest to the need for increased manpower if we are to continue effective programs of preventive medicine. Now we are faced with a serious need to increase the animal protein production to meet consumer demand. Large concentrations of livestock and poultry populations have the inherent risk of greater and more frequent exposure to disease agents. In addition, the threat of serious foreign diseases of domesticated animals rests just off our shores. These diseases are of such dangerous nature that their introduction to our domesticated animal herds will have important direct and indirect effects on the health of man and his community. Although there is no need to add to the extensive public record, it must be stressed again that veterinary medical education is a national resource in the training of health manpower.

Utilizing the incentives available through the health professions educational assistance programs, the training capability of the Nation's colleges of veterinary medicine (18 in 17 States with 1 new school being established) has been expanded to an all-time high, actually to the limit of physical facilities and available resources. Approximately 320 new entering class spaces, a 25-percent increase

in the first year enrollment or a 22-percent expansion in total enrollment, have been established during the last 6 years.

The largest number of qualified individuals to be graduated in a single year will receive their DVM degrees in the spring, 1973—over 1,270 veterinarians. Further expansion in training capacity will occur when one new school of veterinary medicine begins instruction in early 1974. This school is the first new program in veterinary medicine to receive Federal support for construction of facilities. Yet, more must be done.

Recently, a special committee of the National Academy of Sciences, NRC, reviewed the current status of available veterinary medical manpower and the adequacy of veterinary educational and research facilities. The report of this committee "New Horizons for Veterinary Medicine," published in 1972, projected the national manpower needs for the profession to 1990. From data presented, it is obvious that there will be a need in the United States for about 42,000 veterinarians by the early 1980's and that under the most optimistic estimates of educational capability, only about 38,000 veterinarians will be available. A more realistic estimate would indicate that only about 35,000 will be available then. The need for increase in the Nation's veterinary medical manpower was supported in the DHEW publication "A Career in Veterinary Medicine" (1972).

The American Veterinary Medical Association and the Association of American Veterinary Medical Colleges do not concur in the administration's recommendations for distribution of health professions educational assistance funds for health education support for fiscal year 1973 and fiscal year 1974. As a profession that has no voice in the decisionmaking process in the Bureau of Health Manpower Education, we oppose the decision to exclude veterinary medicine from capitation grant funds and possibly other programs that has been made on the premise that there is no continuing national need for increased numbers of professionals in veterinary medicine. The administration appears to have ignored the findings of the National Academy of Sciences and to have underestimated seriously both the need for more veterinarians and their importance to the Nation's health and welfare.

Under provisions of Public Law 92–157, a capitation grant program was established to provide a base of financial stability to manpower training in the health professions. The wording of sec. 770 mandates the Secretary of HEW to make annual grants to schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, pharmacy and podiatry for the support of the educational programs of such schools. Report 92–549, supplemental appropriations bill, 1972, December 2, 1971 gives congressional intent on HPEA programs: "The committee believes that it is clearly the intent of Congress—and notwithstanding its meager budget request, the wish of the administration—to move ahead vigorously and promptly towards the goal of a diversified corps of highly competent health manpower that can adequately serve the health-care needs of the American people wherever the live and whatever their social and economic circumstances."

Evidence that NIH recognized the mandate is cited in the Bureau of Health Manpower Education publication, "Health Professions Capitation Grants" dated December 1971:

In authorizing the program of capitation grants described in this document, Congress indicated its intent to provide a dependable support base for the educational programs of the health professions schools.

Another publication of the Bureau "Comprehensive Health Manpower Training Act of 1971" further states:

Capitation grants provided by the Comprehensive Health Manpower Training Act of 1971 replace the institutional grants authorized under the Health Professions Educational Assistance Act of 1963 and its subsequent amendments. For the next 3 years, the capitation funds will be a significant Federal source to support educational programs for schools of the health professions in medicine, osteopathy, dentistry, optometry, podiatry, pharmacy, and veterinary medicine.

In good faith, the veterinary schools accepted these grants, increased enrollments to meet eligibility and began to build the annual grant funds into their educational budgets. Only by infusing Federal funds into their non-salary operating budgets have most schools been able to minimize the crippling effects of inflation in recent years. Loss of Federal funds therefore, even with faculty reduction and enrollment cutbacks, will drop the level of operating support well below 1969–70 levels. Quality is bound to suffer.

Elimination of capitation grants for the schools of veterinary medicine will cause serious reverberations in the training structure that has been stressed to its maximum output. Generally speaking, these grants for fiscal year 1973 comprise from 10 to 20 percent of the educational budgets. Reduction in operating funds for most schools would force a roll back of enrollment to the 1968 level, would force a layoff of newly employed faculty and staff, would require a revision of plans for curriculum and facilities improvement, would precipitate a curtailment of special training programs that have been developed during the past several years and perhaps, would cause an increase in tuition and fees for training. The consequences of such actions would make future shortages of veterinarians more critical than is apparent at the present time. Moreover, since each veterinary medical school gives priority for admission to residents from the State in which the school is located, cutbacks in enrollment would result mainly in fewer places being available for non-resident or regional students. Many qualified individuals from the 33 States that do not have veterinary schools would lose the opportunity for training in veterinary medicine.

Student year costs in veterinary medicine are similar to those in human medicine and dentistry. Funding of the capitation grant program is vital to the operation of the schools of veterinary medicine, optometry, pharmacy and podiatry if the increased enrollment and curricular improvement programs are to be continued. In addition, official recognition and commitment to an effective and dependable system of institutional support on a continuing basis is one essential factor to graduating more veterinarians. Continuing the current level of education of veterinarians will require the appropriation for 1974 to include $7,500,000 for capitation grants as authorized by Public Law 97–157 for the schools and colleges of veterinary medicine based on an anticipated enrollment total of 5,200 in the professional programs. This will maintain approximately the same level of financial support as was provided by the appropriation for 1972.

Three colleges of veterinary medicine are part way through major building programs. Construction grants have provided a part of the

funds for these projects. The President's budget provides no funds for construction grants for fiscal year 1974, thus leaving three colleges with partially completed projects located some distance from the current inadequate facilities. Unless these projects can be completed the proposed student enrollment levels cannot be attained. These new facilities can produce a valuable return on the money invested only if they are completed and fully utilized. Completion of these projects will require an appropriation of $20 million for 1974.

Many States in recent years have shown interest in establishing new schools of veterinary medicine. Several States have conducted feasibility studies which demonstrated need. However, failure to provide funds for Federal construction grants will delay, perhaps prevent, the establishment of badly needed new schools.

Veterinary medical students rely heavily upon funds made available to them under the student loan and scholarship provisions of Public Law 92–157. The proposed level of funding will be adequate if funding for capitation grants is provided at the same level as in 1972. If capitation grants were reduced or eliminated, tuition rates would be likely to increase. This would result in greater needs by the students. Unfortunately, the students who would be hurt by reduced Federal support are those with the least resources, people who particularly need opportunities for professional education.

Improving the quality of profesional education, offering special opportunities to disadvantaged students, and building attitudes of lifelong learning have been possible through the utilization of special project grants. Counseling, tutoring, and the development of autotutorial resources have been improvements supported by these grants. These activities are particularly valuable in assuring opportunities for students who could not otherwise meet the rigorous requirements of professional educational programs. Veterinary medical education has lagged behind human medicine in the development of modern teaching and training methods, largely because of lagging financial support. When special project funds became available to help improve the teaching programs of veterinary medical schools, improvements promptly were undertaken: autotutorial systems were developed, training programs in clinical specialties were established, curricular innovation was stimulated, and experiments with new teaching models were undertaken. Demise of the special project grants program has interrupted these developments at some schools and will delay or prevent them at others. These developmental funds are vital to the schools, particularly to several which are on probationary status with their accrediting agency because of inability to keep up with developments in modern veterinary education. The 1974 appropriation should be maintained at the same level as 1972 to assure adequate funding for such special projects.

The organizations which I represent feel that it is of utmost importance that the veterinary medical part of the health manpower supply of the United States be maintained at the highest possible level. Only through continued strong financial support from Federal funds can the veterinary profession continue to be an important national resource in the furtherance of the public health and well being.

Thank you, Mr. Chairman and members of the committee, for this opportunity to appear before you. If you have any questions on this matter, I will be glad to answer them.

[The following was submitted for the record:]

Capitation Funding for Veterinary Medicine—Information Statement for the Congressional Record

INTRODUCTION

In 1971, under Public Law 92-157, the Secretary of Health, Education, and Welfare was authorized to provide financial assistance to the colleges of veterinary medicine and other allied health institutions. The funds to be provided were allocated by a formula that had as its base the number of students enrolled in a given school. To be eligible for assistance, it was necessary that an applicant school increase the enrollment in the entering classes by a minimum of five students the first year and by a minimum of 10 percent of the previous year's class the second year. Other conditions related to curriculum revision and to shortening of the total training time. Accordingly, 17 of the 18 schools of veterinary medicine met the requirements, and in 1972, received a total of $6,970,381. This sum represents 28.5 percent of the contract and grant dollars and 18 percent of the total instructional dollars that were received by the participating schools.

USE OF CAPITATION FUNDS

Once received, the schools generally used the "capitation" dollars to defray the fixed costs associated with the required increase in enrollment, to modify and update the curriculum, and to provide improvement in the learning environment that would not have been possible under State appropriated budgets.

The capitation grants were applied to the following specific projects:

(1) Enrollment was expanded from 4,875 students in October 1969 to 5,439 in October 1972. This represents an increase in average class size from 68 to 76 or a total student increase of 564. The average size of the entering class in the fall of 1972 was 88 students, an increase of almost 30 precent over the 1969 average.

(2) The number of women students was increased from 430 in 1969 to 741 in 1972, an overall increase of 72 percent in 3 years. This increase represents 55 percent of the 564 new students added as a result of the capitation program.

(3) As a direct result of the capitation program extensive agreements have been generated between the 18 colleges of veterinary medicine and the 33 States that do not have such colleges to provide professional training. In the entering class of 1972, the colleges enrolled an average of almost 13 students from each of these "have not" States. These nonresident students represent 23.5 percent of the total students in the 1972, first year class. The funds spent in this fashion have been instrumental in combating the parochial attitudes of State legislatures that oppose using the educational facilities of their States for the education of students from any other State.

(4) Many of the schools receiving capitation assistance made an effort to shorten the time required to train a veterinarian or to extensively revise antiquated curriculums. Rigorous programs of examination and evaluation were initiated by virtually every veterinary medical faculty. These evaluations were self-conducted in some cases or involved outside professional consultants in other cases. Capitation dollars were first committed to the costs of evaluation and subsequently to the implementation of the recommendations that resulted from the evaluations. Whereas the study and evaluation was a transient cost, the implementation represents a permanent investment by many schools.

Examples of such investments include employment of additional professional staff in an area of weakness—e.g., radiation biology, environmental health, toxicology, public health—employment of support in order to free time for the professional staff, employment of support staff to improve the services of hospitals and clinics—e.g., records clerks, stenographers, account clerks—and the development of separate departments or sections of veterinary medical education. These latter have been charged with the continuing surveillance and evaluation of the curriculum. It can be projected that through such units the curriculum in veterinary medicine will continually be revised to meet the needs of society.

(5) In the evaluation of the instructional programs, deficiencies in equipment and facilities were also identified. Some funds were used to purchase the needed equipment and to improve the facilities, particularly those required for audio-visual and autotutorial instruction.

(6) New programs of teaching were incorporated into the various curriculums under the capitation program. Specialty training was increased in the fourth professional year and many schools established preceptorships which permitted advanced undergraduate students the opportunity to work in the real world of veterinary medicine. Outreach projects were initiated by some schools in which undergraduate courses were taught at public health laboratories, diagnostic laboratories, and animal production installations.

(7) Capitation and special project funds have been used by many schools to try to provide an effective minority student recruitment and retention program. Because of the prolonged preprofessional training period, adequate recruitment cannot be instituted on a short-term basis. It is necessary to identify talented, motivated individuals early in their college careers or preferably in high school or junior high school. Once enrolled in the preprofessional and subsequently in the professional curriculums, well-designed and responsive "interface" programs are essential to retaining the minority student. The colleges of veterinary medicine that have responded to this need have initiated the recruiting phase and have begun the interface development. Continued support of this type of project and of financial aid for the financially disadvantaged is an absolute necessity for the future of veterinary medicine.

LOSS OF CAPITATION

As indicated above the Health Manpower Training Act of 1971 was designed to assist colleges of veterinary medicine and other allied health institutions with their costs of educating allied health professionals. To qualify for such assistance the participating schools had to meet certain requisites including increasing overall enrollment, increasing enrollments of women and minorities, and revision of curricula in order to increase relevance and decrease time in school. To one degree or another each of the schools made an effort to meet the requisites, viewing them as desirable changes in a stagnated and somnolent system.

When the announcement was made by the Bureau of Health Manpower that capitation was to be severely curtailed in 1973, and eliminated in 1974, for colleges of veterinary medicine, the American Association of Veterinary Medical Colleges in conjunction with the AVMA questioned the 17 schools receiving capitation as to the effects of the cutback and eventual elimination. Several responses were common to all respondents.

(1) Agreement was universal that enrollment would be returned to precapitation levels—a reduction of from 10 to 20 percent. It was further agreed that the enlarged classes would continue through the system but that their education would very likely be compromised from lack of the capitation that was pledged for their support. Unfortunately, the loss of such support not only influences the quality of training received by the "extra" students and their classmates but it also effects all other students enrolled in the program because of the internal shifts that are necessarily made in order to take up the slack.

(2) As the provision for additional students was developed schools of veterinary medicine were able to increase their commitments to other individual States and to regional pacts. As a direct result of such agreements the 33 States without colleges of veterinary medicine average almost 13 students per State in one or another of the 18 veterinary colleges. Because of the internal interest of most State legislatures, the admissions committees will necessarily cut the out-of-State applicants before they cut any students from their home State. The resulting parochial nature of veterinary medical education will be even more marked than it was prior to the advent of capitation.

(3) Staff reductions will occur virtually across the board. First to be released will be lecturers and part-time specialists that had been brought in to enhance the basic course material. The second group to be released will be the technical and support personnel whose talents had permitted the general faculty and the specialists to use their "student-time" more efficiently and more effectively. Examples are a microbiology teaching-support laboratory, postmortem technicians, pathology lecturers, laboratory animal support facilities, and records and billing clerks. Finally, the release of some professional, full-time staff members will be necessary. These people were generally hired to fill programmatic voids that could not be supported by routine State funding. Examples of such cutbacks

by specific schools were faculty support for animal medical technology programs, and specialty positions in medicine and surgery as well as positions in herd health and food animal obstetrics.

(4) New and innovative programs that will be discontinued because of lack of special support funding include preceptorships with practicing veterinarians; special public health and pathology out-reach teaching projects, and work-study type instructional projects. It was these types of programs that fared extremely well with capitation dollars because they are difficult to initiate given the guidelines and formulas used by the average State commission on higher education.

(5) Many audiovisual and autotutorial projects were in the throes of development and will necessarily be abandoned. Purchase of slide projectors, microfische units, TV monitors, TV, and audio playback units depends upon having the facilities and instructional formats prepared for their use. Such facility and format development was proceeding well but far from complete. Those elements that have been completed will, of course, be utilized but unfortunately they represent only the first year's achievement in what had been planned as a long-term investment. The remainder must now be scrapped. This is particularly unfortunate since the increased student number for which such study systems are specifically designed are irrevocably part of the system. It is these extra students and their classmates that will be seriously compromised.

(6) Capitation has caused some permanent changes in the funding base for veterinary medical education that cannot be reversed by withdrawing Federal support. Termination of the capitation awards will not eliminate these new fixed costs and they will be absorbed into the system to be passed on, in most cases, to the consumer (that is, the student) in the form of increased tuition. The increase in direct student cost will discriminate against those students dependent upon State or Federal financial aid for their educational costs. Since most of these are fixed dollar programs two courses of action are open; either fewer students will be adequately assisted or a larger number of students will be inadequately assisted. In either case the difference between those that can afford their education and those that cannot will be greatly exaggerated and the financially disadvantaged individual will be preferentially eliminated. A large percentage of the people that will not be able to afford professional training will be minorities. It is ironic that the very individuals that should be encouraged to enter the health profession will be financially excluded.

(7) The Newman Report, published in April 1973, states that there is an overabundance of graduates in some fields and a "chronic supply of graduates in other fields; for example, the health professions". At the present time at a western university there are 310 job opportunities available to 80 graduating veterinarians in addition to their option of entering private practice at any one of an infinite number of locations. Again quoting the Newman Report "we take the position that graduate education should bear a reasonable relationship to opportunity for professional practice. No one can deny that there are extensive opportunities available for graduate veterinarians to practice. Reduction of the number of opportunities for students to enter the profession will only compound the problem. Such statistics reinforce the conclusion that the factors that caused Congress to increase health professions training resources have not materially changed as the result of two or three years of increased enrollments. In fact, the move to increase enrollments had just begun to pull fully on the traces when capitation funds were threatened with cancellation. It would seem that the conviction that lead to the initiation of assistance for health manpower training should persist until the job has been completed.

In summary, the funds committed to capitation were used to increase enrollments, improve curricula, make professional education a reality for many people that had been previously excluded geographically, financially or socially, improved the learning facilities and environment and improve delivery and service systems. It is believed that such use was the clear intention of the drafters of Public Law 92-157. Termination of capitation will necessarily cause termination of the same programs. An unfortunate waste of effort and sacrifice of talent.

CAPITATION FUNDS LOSS—EFFECTS ON COLLEGE OF VETERINARY MEDICINE AT KANSAS STATE UNIVERSITY (MAY 1973)

EFFECT OF LOSS OF FEDERAL CAPITATION FUNDS

1. Support loss will include reduction in:
   (*a*) Teaching equipment and supplies;
   (*b*) Teachers (teaching assistant); and
   (*c*) Animals for teaching.
2. Cessation of improvement in programs such as:
   (*a*) Upgrading audio-visual instruction;
   (*b*) Library accessions increase;
   (*c*) Teacher improvement through seminars;
   (*d*) Bringing in additional "guest" teachers in special areas;
   (*e*) Teaching herd and support;
   (*f*) Field trips to ongoing programs; and
   (*g*) Build-up in clinical specialty teaching.
3. Minority program—will be scuttled. The program now jointly conducted by the College of Veterinary Medicine and the Center for Student Development is entirely funded by capitation money.
4. Curricular improvement—will be slowed. The changes anticipated to include more chance to specialize better student-teacher ratio depends on adequate funds, faculty and facilities being available.

TUSKEGEE INSTITUTE,
Alabama, May 9, 1973.

Hon. DANIEL J. FLOOD,
Chairman, Health Subcommittee
U.S. House of Representatives

HONORABLE SIR: It is becoming increasingly apparent that the Nation is failing to benefit maximally from one of its most vital resources—veterinary medicine. This appears to be largely the result of a single factor: the public, and especially government leaders, fail to recognize and/or fully appreciate the broad health and welfare benefits to be derived from the exploitation of this resource. Contrary to popular belief, veterinary medicine is the sister profession to human medicine. The two professions are biologically, philosophically, and methodologically equivalent. Together, they encompass the broad field of general allopathic medicine.

Veterinarians are comparably and equivalently trained to physicians. Fully trained specialists in both fields are the products of 10 to 16 years of education and training beyond the high school level. Differences in training relate specifically to the species of animal attended in clinical practice. The physician receives greater depth of training in certain subjects, whereas the veterinarian receives greater breadth of training in most subjects. Human medical education places relatively greater emphasis on the care of individual patients, while veterinary medical education stresses group (preventive) medicine. Despite these minor differences, veterinarians and physicians are the most extensively trained professionals produced in the society.

Because of unfounded sociological concepts and attitudes relating to "animal" versus "human" medicine, veterianarians are indaquately utilized in (or excluded from) many health-oriented occupations. In many of these the veterinarian has equal (or superior) competence to the physician. Some of such occupations include public health and preventive medicine, environmental health and sanitation, epidemiology, communicable disease control, many areas of biomedical research, laboratory disagnostic services, and health care delivery systems development. In other areas veterinarians possess unique capabilities. Some of these include livestock medicine and disease control, food animal resources development, wildlife medicine and disease control, aquatic animal medicine and resources development, comparative medicine, and zoonotic disease control. (Zoonotic diseases are those which are naturally transmitted between man and animals. More than 200 of such diseases have been identified today. Among them are some of the most severe diseases affecting man.) Thus it can be seen that

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the scope of veterinary medicine exceeds that of all other medical professions. It is the only profession fundamentally oriented toward fulfilling the World Health Organization's broad definition of health "* * * a state of complete mental and physical wellbeing and not the mere absence of infirmity or disease".

Much evidence exists to suggest the world's food resources will become increasingly stressed in the not too distant future. There are also indications that the general health of mankind will be affected proportionately. This nation has already been familiarized with the untoward socioeconomic effects that can result from such eventualities. It witnessed the epidemic of Venezuelan Equine Encephalomyelitis (VEE) epidemic in horses and man (Texas, 1971); the Newcastle disease epidemic in chickens (California, 1972); and it is presently in the midst of a meat crisis. The two epidemics were controlled only after the loss of several hundred animals and several thousand chickens, and the expenditure of upward of $50 millions. The total socioeconomic effects of the meat crisis remain to be determined.

The national health orientation, today, is toward human clinical medicine. Little serious heed is being given to the fact that the health of a population is little influenced by the number of practicing physicians contained therein. In reality, the necessity for clinical medicine admits of failure on the part of a health-care system. Clinicians attempt to salvage patients from diseases and/or conditions the system failed to prevent. The placing of a major emphasis on clinical medical personnel and facilities is at variance with the concept of "quality of life." That concept embraces the philosophy of a life as nearly disease-free as possible. It is founded upon a sound system of preventive, rather than curative, medicine.

An adequate, and highly competent, veterinary medical profession is vital to a good preventive medicine system. This has been, many times, demonstrated in the military. In order to achieve, and maintain, a high level of health in a population there must be ample food resources, a sanitary and healthful environment, and a rigid system of human and animal disease control. Comparative medicine must be exploited in the attempt to gain knowledge which might provide a better understanding of diseases in the human and food-animal populations. This is particularly indicated in the study of the so-called noninfectious and/or chronic diseases (for example, mental diseases, diseases of the heart and circulatory system, and cancers). In all of these aspects veterinary medicine must be actively involved. This is especially true in the case of comparative medicine. The veterinarian, by virtue of his broad medical background, is the logical professional to play a leading role in this field.

Tuskegee Institute's School of Veterinary Medicine faces a serious financial crisis as a result of President Nixon's budget proposals to Congress January 29, 1973. The withdrawal of institutional support through capitation grants, general research support and the elimination of health-related construction assistance to the health professions institutions places this program in jeopardy. The President's budget for the Department of Health, Education, and Welfare is one that reduces Federal support for health delivery or service programs and health manpower training, the latter to the point of extinction for veterinary medicine, and cuts basic research funds as well.

Because of the unique role which the School of Veterinary Medicine at Tuskegee Institute plays in the training of 80 percent of the Nations black veterinarians, it is of primal significance to point out that Federal funds account for nearly 50 percent of the total budget. We cannot overemphasize the extent to which this school contributes to the veterinary medical education of the Nation's blacks. At the present time 84 percent of the total number of black veterinary students are enrolled at Tuskegee Institute. In the tradition of Tuskegee Institute, the School of Veterinary Medicine has addressed itself to the needs of students who have educational and cultural backgrounds but who also have sufficient capacity to overcome their disadvantage and become personally and professionally competent through appropriate curriculum reform. These curriculum provisions are a part of our present curriculum which is designed specifically to assist the type of student we basically serve. Support of reinforcement program has been brought about through special project grant funds provided through the Bureau of Health Manpower Education, Department of Health, Education, and Welfare (BHME). The success of the curriculum reform program is no longer in doubt, nevertheless, its continuation is in jeopardy unless funding through BHME is maintained at the level at which this program was started.

In view of the above discussion, the attached document has been prepared for distribution to government leaders. It is hoped that the information contained therein will serve to acquaint each of you with the broad concern of the veterinary medical profession. Most importantly, however, it is hoped that the information will serve as the basis for meaningful legislative actions which might remedy the current situation and reverse the trend of a decrease in the veterinary involvement in the promotion of the national health and welfare.

Thanking you for your time and attention, I am,

Respectfully yours,

EUGENE N. ADAMS, D.V.M., Ph. D.,
Associate Dean.

I. VETERINARY MEDICINE—AN OVERVIEW

From the status of an art in earlier year, veterinary medicine has developed into a scientifically based health profession serving not only the agricultural enterprise but also, with other professions, contributing substantially to the Nation's health and welfare. Although the veterinary profession continues to provide an essential professional service to the livestock industry, it is no longer exclusively, or even predominately, agricultural in its orientation. Veterinarians serve the needs of society in a variety of significant ways. These include specialities within the clinical practice of companion animal medicine, public health, laboratory animal medicine, herd health and production management, environmental health and safety, nuclear and space sciences, health research, health science administration, academic administration, and teaching and research, both basic and clinical and biomedical sciences.

Veterinarians and physicians are the only exclusively trained doctors of total-body biological medicine produced in this country. The two branches—veterinary and human medicine—encompass the broad field of general medicine as it concerns the health and welfare of man. Human medicine concerns itself exclusively with man; therefore, the primary education of the physician is oriented toward the care of the individual human patient. Veterinary medicine, by contrast, is concerned to a greater or lesser degree with all domestic animals. Man is also included due to his close relationship with domestic animals.

The health manpower deficit in this country and the recent emphasis on trying to provide a better health care delivery system for this Nation's peoples come at a time when schools of veterinary medicine have been in the process of changing their curriculums in keeping with the changing face of veterinary medicine. Clearer recognition of the need for reassessment of the roles currently being played by various team members of the health professions has become one of this Nation's top priorities.

This rapidly expanding role of veterinary medicine in the national effort to mitigate society's major physical, mental, and environmental health threats has exaggerated an already critical shortage of veterinarians. Unless the student enrollment in the veterinary medical schools can be increased substantially, the Nation will be faced by a shortage of more than 10,000 veterinarians by 1980.

The educational resources to accomplish this training task are the 18 colleges of veterinary medicine in the United States; Tuskegee Institute's School of Veterinary Medicine being one of these accredited schools. The current number of veterinarians who are practicing in the United States in one capacity or another is in the neighborhood of 26,400. Less than 400 of these are black; about 1.6 percent.

II. VETERINARY MEDICINE AT TUSKEGEE INSTITUTE AND THE UNIQUENESS OF THE PROGRAM

The School of Veterinary Medicine at Tuskegee Institute was established in 1945, at a time when opportunities for Negroes to enter the profession were denied by other institutions—those that recruited their students from groups who had not been disadvantaged by the necessity of obtaining their educational backgrounds from preparatory schools of very low standards. In its short history of 28 years, the school has made noteworthy contributions against numerous odds. It has provided the professional education for more than three-fourths of the black veterinarians now existent in this country. At the presen time, there are only 95 black students in the 18 veterinary colleges in the United States,

out of a veterinary student population of 5,149 (1972). Tuskegee Institute alone has 80 (84 percent) of the total number of black veterinary students, leaving only 15 black students in the other 17 colleges.

This significant fact is the basis for the concern of the Institute to obtain financial support in building a strong, dynamic, more diversified program on its solid foundation—on its continuing provision of educational opportunity to students who have not been considered acceptable for admission to other schools because of unfulfilled potential; on its developed sensitivities to personal and academic needs so common among these students; on its appropriated programs reflecting creative efforts to relate content and process required in professional development to inadequate background; and on the school's resulting awareness of the more drastic changes that must be made to involve students actively and effectively in removing the disadvantages in their lives and progessing themselves into maximum fulfillment in their chosen career.

Tuskegee Institute's School of Veterinary Medicine being the only one of the 18 schools in the country located at a predominantly black college is in a unique position to play a key role in helping this Nation to not only resolve its veterinary medical manpower shortage but to do it in a way that no other school can, that is, provide entry of minority students into the health professions, through the field of veterinary medicine. Additionally, the School of Veterinary Medicine at Tuskegee is located in rural Macon County with the majority of its population composed of blacks who have relatively limited cultural, economic and academic backgrounds but many of whom have promising potentialities for development into allied health professionals.

This school, because of its strong basic science faculty, assists in the training programs for nurses, physical therapists. X-ray technicians, medical technicians, as examples, are exposed to the strengths in teaching methodology which this seasoned faculty brings to the university.

The Tuskegee environs provides an unusually rich opportunity for cooperative, comprehensive development of a variety of additional health career educational programs of high caliber and at reduced expense for all concerned, for individuals who would otherwise be denied admission into programs serving the majority advantaged groups.

This Nation has made a recent crucial commitment to entry of minority students to all levels of higher education. This commitment brings clearly into focus the differences in the cultural, socioeconomic and educational background of the minority student. Recognition of these realities is mandatory if we are to respond intelligently to what minority needs are.

The Tuskegee veterinary medicine program has been developed with great difficulty over a quarter of a century and now stands as a splendid institution steeped in the tradition of taking students with the many handicaps which our minority students bring to higher education and dealing effectively with the strengths and weaknesses of these students.

The career record of its graduates attests to the signal success which this school has had in serving as a national resource in the preparation of more than 80 percent of the black veterinarians of this country.

These students come from almost every State in the Union and a substantial number of foreign countries. On the whole these students are admittedly below average academically to those admitted to other schools of veterinary medicine in this country. However, this school has designed a program which can admit students with less than desirable academic backgrounds and have them achieve at a superior level at graduation. For example: Students admitted over the years rank below the 30th percentile nationally on a standarized test, the Veterinary Aptitude Test. In the last 5 years these same students have averaged above 80 percent on the U.S. Department of Agriculture accreditation examination given to all graduating veterinary students in this country.

This performance has placed the graduates from this school in the top quartile of the graduates of all 18 veterinary schools for a number of years.

This sound, seasoned program with proven success in dealing with high risk (disadvantaged) students, producing out of them solid community leaders in the health professions, finds itself in serious financial difficulty. Although receiving limited State support, this program by its very nature, serving primarily a population of disadvantaged drawn from throughout the United States and returning its graduates to some 40 States, the District of Columbia and 14 foreign countries, finds itself caught up in the rising costs of higher education without sufficient State or private resources to offset this problem. The fact

that it serves such a unique role in health and health related training for a unique population clearly dictates that this Nation could ill afford to have such a program wane and wither away at this moment in history. The commitment of this Nation to more and better trained health care personnel and concomitantly entry of minorities into the realm of higher education in increasingly numbers demand that this program remain viable.

No other school of veterinary medicine, indeed no other program can replace the tested educational experiences nor provide the creative program enrichments needed to simultaneously stretch the disadvantaged student with recognized limitations and at the same time fill in and broaden the base of his educational foundation.

Tuskegee Institute's School of Veterinary Medicine, as is the case of Howard University, especially its college of medicine, is a recognized national resource for the training of the disadvantaged student in specialized fields of endeavor. Its program must be perpetuated and strengthened on the basis of its proven capabilities.

In recent years, much of the criticism directed at the American health care system and many of the recommendations put forth to improve that system have had a common theme. The theme has been that this country does not now have, and never has had, a comprehensive national health policy. We do not have a set of well defined strategies that can serve as the basis for developing well integrated programs in health care, scientific investigation, and education.

Meeting the needs of the people of the United States for adequate health care will require a much more coordinated and unified effort on the part of the providers than we in the health professions have been accustomed to making in the past. Decisions affecting the production of one type of health professional can no longer be made without regard to the role of the person in the delivery of care and, more particularly, the roles and numbers of those health professionals with whom the individual will be working. The determination of numbers of health professionals needed does not, in and of itself, constitute a national health manpower policy or even a sufficient basis for the development of one. The physician shortage, or any other shortage, is really not the problem. Rather, it is our failure, as a Nation, to decide on the appropriate distribution of manpower and the interrelation of these individuals in different operating situations and settings.

There is a need to take into account the capabilities and competences of related health fields, and the ways in which all components can function together most effectively. There is a need for greater interplay among those preparing for health-related occupations so that, when faced with responsibility for providing a service, they can function effectively together. What is required is an enlargement of professional outlook, an awareness of the contributions to be made by other professionals, and an ability to work in partnership with them. Development of coordinated educational programs would have enormous influence on the delivery of care and, by eliciting more explicit definition of the roles of members of the team, aid in establishing the number of professionals needed in various health fields and specialties throughout the United States.

III. HEALTH MANPOWER—VETERINARY MEDICINE AS AN INTEGRAL COMPONENT[1]

A number of recent national studies have pointed to the health manpower crisis which this Nation is facing. Veterinary medicine is an integral component of the health manpower requirements of the Nation. It is that health profession that applies that principle of the biomedical science to health and disease in nonhuman animals. In practice, however, veterinary medicine contributes, directly and indirectly, to man's well-being in many ways. Too frequently in the past, emphasis was placed only on the relationship of veterinary medicine to agriculture while virtually excluding other equally important relationships to human health and welfare.

Until recent years, long held erroneous beliefs on the presumed "biological uniques" of man have frustrated a general appreciation of veterinary contributions to the development of a science of general medicine. Veterinarians and physicians who were first brought into contact by a shared interest in the

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[1] Portions of this section have been excerpted from the following sources: (1) Hogness, J. R.: Toward a National Health Manpower Policy. J. Med. Education 48: 19–26, 1973. (2) Schwabe, C. W.: Personal Communication. Professor, Preventive Medicine, University of California, Davis, Calif.

zoonoses (those diseases of animals which can be transmitted to man—some 150 diseases), have found another common ground between veterinary medicine and human medicine—a current growing interest among all medical scientists in the comparative aspects of disease. It has thus been increasingly difficult to separate the goals of the two fields—veterinary and human medicine—because of individuals in both professions are so similar.

Because most veterinarians are not directly involved in the care of human patients, the extent of veterinary medicine's health science role is seldom fully appreciated by those who visualize the health sciences almost exclusively in that setting.

Veterinary medicine actually fulfills its role as a health science in two contexts:

(1) As the branch of general allopathic medicine which is applied to all animals other than man, veterinary medicine comprises the bulk of the broad cross-disciplinary field of comparative medicine.

(2) Veterinary medical professional activities also have a number of important direct human health implications.

These direct human health aspects of veterinary medicine include:

(1) *Medical Research.*—Next to physicians, veterinarians have made more basic medical discoveries than has any other recognized group of health professionals.

Because much of basic biomedical research is performed on animals, the practice of clinical veterinary medicine with respect to laboratory animals also contributes over and above this through a major supporting role to research on animals performed by other health professionals.

(2) *Public Health.*—Veterinarians were prominently involved in the creation of the field and concepts of public health. Leading positions held by some of the many American veterinarians in this field today include four assistant surgeons general in the USPHS, members of a number of State boards of health, the assistant commissioner of public health for the State of New York, the chief State epidemiologists of three States, the directors of public health laboratories of three States, the chief health officers of Pittsburgh, Pa., Denver and many smaller cities and counties, the assistant city health officers for Detroit, Little Rock, and several other large cities, the Director for Science and Technology of the WHO, et cetera.

Most importantly, veterinary medicine has contributed to public health demonstration of the following basic methodological approaches to the control of diseases in populations: (a) Vector control, (b) mass testing of populations, (c) mass treatment of populations, (d) mass immunization, and (e) the concept of regional disease eradication.

(3) *Food Production and Nutrition.*—The veterinary profession's major global impact is in the field of human nutrition, particularly in increasing supplies of animal protein and thus in combating kwashiorkor. In addition, much basic nutritional knowledge has resulted from veterinary research.

(4) *Medical Education.*—A recent survey shows that there are a total of 346 veterinarians on the faculties of 108 of the 111 medical schools in the United States, over 50 percent of these serve in areas other than comparative medicine and laboratory medicine. A veterinarian, Dr. Nathan Sinai, was the first professor of medical care economics in any school of public health in this country. One veterinarian is currently serving as dean, and three other as assistant deans in North American schools of public health. One veterinarian is professor of public health in a college of pharmacy.

A recent WHO study on multiprofessional education in the health sciences has identified more areas of fruitful interaction in education between veterinary medicine and human medicine than between human medicine and any other health science.

(5) *Private Veterinary Practice.*—The 60 percent of U.S. veterinarians who are in private practice contribute to human health principally as a result of activities related to diagnosis, treatment and control of zoonoses; food production; and the mental health consequences of pet ownership and care.

(6) *Environmental Health.*—Veterinarians set up in the meat and dairy industries in the late 19th and early 20th centuries many of the first governmental programs for consumer protection. Today the progression is also prominently represented in other environmental health fields such as radiological health (e.g., as professors of radiobiology in Rochester and Chicago medical schools; as the director of, and in many other significant positions in, USPHS activities in this field; as chief of the Reactor Section at Walter Reed, etc.) and environmental toxicology (e.g., as director of the Environmental Toxicology

Research Division (and heads of all 3 of its branches) in the National Environmental Research Center of EPA; in key positions in 6 branches of the FDA, etc.).

(7) *Liaison Role Between the Health Sciences and Other Important Fields.*—Veterinary medicine, of course, also contributes in other areas of human need. A number of these roles overlap with its health science role, but are often administratively related to other branches of government or of private service. These broad areas of relationship are illustrated by the fact that there are sizable veterinary organizations in three Departments of our Federal Government (Agriculture, Defense, HEW) and smaller groups of veterinarians in two others (Interior, State). This is also true in the U.N. (with sizable organizations in FAO, PAHO, and WHO and lesser numbers in UNESCO, UNICEF and the World Bank).

THE OHIO STATE UNIVERSITY,
May 10, 1973.

Hon. DANIEL J. FLOOD,
Chairman, Health Subcommittee,
U.S. House of Representatives.

Subject: Federal appropriations in support of veterinary medical education.

An urgent need does exist for an increase in veterinary medical services. Each U.S. citizen consumed an average of 667 lbs. retail weight equivalent of animal products in 1969–71. By the year 2000, it is predicted that the U.S. population will have increased from 210 million in 1970 to 280 million. By the year 2006, it is estimated that the world population will be double the 3.7 billion in mid 1971. Cash receipts from livestock and livestock products averaged 29 billion in 1969–71. The veterinary services of both the private and public practitioner are an inseparable and essential component of the U.S. livestock industry. Veterinarians play an indispensable role in our defense against: chronic food shortages and starvation; chemical pollution of food chains; the appearance of diseases which threaten the health of the public or constitute a hazard to the economic well-being of the livestock industry and a sense of loneliness and needlessness which distresses our children, widows, widowers, the aged, and young married but childless adults.

No individual or organization currently studying veterinary manpower is concerned about a surplus of veterinarians over the next three decades. The concern is that the best possible use be made of the 18 existing and two planned veterinary colleges. The Federal Government did provide the stimulus and substance for expansion of the productivity of veterinary colleges via the Comprehensive Manpower Training Act of 1971. They are now in a position of absolute dependency. If support is not continued, colleges will be forced to curtail enrollments at a time when the ratio of good applications to admissions ranges from 1:4 to 1:10. The Ohio State University, College of Veterinary Medicine is already faced with a serious retrenchment adjustment as a result of an austere State budget for the university. Veterinary medicine offers good career opportunities and is faced with genuine need for expanded enrollments when other disciplines are experiencing a decline in both.

The first need in veterinary manpower is for veterinarians per se. There are relatively few veterinarians—approximately 29,000 in the United States. Numercially this is equivalent to 53 percent of the 55,000 students currently enrolled on the campuses of the Ohio State University. The immediate need for veterinarians is even more acute than that for veterinary technicians. In Ohio, 21 of the 88 counties have 3 to 0 veterinarians.

The colleges are a national resource. Graduates of the Ohio State University are distributed throughout the United States. Students are accepted by agreement from eight other States. Federal support of veterinary medical education is appropriate, justifiable and essential.

C. ROGER SMITH, D.V.M.,
Dean.

APRIL 27, 1973.

The DEAN,
School of Veterinary Medicine,
Ohio State University, Columbus, Ohio.

Dear Sir: The enclosed plea is self explanatory.

We would deeply appreciate it if you would see that it gets to the students who are looking for a good location to begin their veterinary practice.

If anyone is seriously interested we will be happy to send them literature on the Eastern Shore of Virginia or they can write directly to the Chamber of Commerce, Accomac, Va. 23301.

We thank you and our animals thank you!

Signed by over 1,300 concerned citizens of the Eastern Shore of Virginia.

Contact: Mary Ann Bradley, For-Ley Farms, Onley, Va. 23418. 703–787–3060.

WE NEED YOU

We, the citizens of the Eastern Shore and the animals thereof are currently struggling due to the lack of a resident veterinarian. In our two county area there is only one semipracticing veterinary who is past retirement age and unable to administer to large animals due to poor health. Despite the efforts of our one veterinarian and ourselves, many tragic and otherwise avoidable deaths have occurred.

The animal population of the Eastern Shore of Virginia (a progressive rural community) is enormous. It is a mecca of standardbred farms. There are numerous saddle horses. Cattle and sheep are plentiful as well as other varied livestock. The pet population more than triples the human population—herein lie the victims. In a recent petition campaign, over 1,300 signatures were collected by concerned citizens of the Shore who recognize the seriousness of this situation. These signatures are available upon request.

This is an excellent opportunity to fill an urgent need in your chosen profession and at the same time enjoy the slower pace of life and natural beauty of Virginia's Eastern Shore. The Shore is surrounded by water—the Atlantic Ocean on one side and the Chesapeake Bay on the other—so the opportunities for sport and recreation are unlimited. The people are genuine and friendly and the need is critical for a veterinarian. There is no doubt as to the possibility for the establishment of a rewarding and gainful practice here. Anyone who is interested in visiting the Shore to look the situation over will be most welcome and gladly accommodated free of charge.

Call or write: Mary Ann Bradley, For-Ley Farms, Onley, Va.

CONSTRUCTION FUND LOSS—EFFECTS ON COLLEGE OF VETERINARY MEDICINE AT KANSAS STATE UNIVERSITY (MAY 1973)

Loss of funds a "disaster" to the college's three phase building program.

College was struggling to maintain its accreditation and responded to Federal "Health Manpower" program to produce more veterinarians.

Three phase building program was begun—State and Federal cost sharing program.

Phase 1.—is completed—veterinary medical science building.

Phase 2.—will be completed January 1, 1974—veterinary teaching building. The phases 1 and 2 total one-half of needed space.

Phase 3.—clinical science and pathology building—planned on anticipated Federal-State cost sharing to complete remaining half.

Enrollment increase of 20 percent was required for Federal funding received. Now Federal funding stopped, but large classes continue.

College in trouble trying to crowd larger classes of the Federal funding commitment into remaining old, small buildings not yet replaced. The old buildings were designed for classes about one-half as large. Phase 3 of the new modern facility needed to relieve crowding and to modernize program.

Federal-State sharing needed to complete project (phase 3).

At 50-percent sharing—$6,500,000 Federal funding needed; $6,500,000 State funding needed.

IMPACT OF LOSS OF TRAINING GRANT PROGRAMS ON VETERINARY EDUCATIONAL INSTITUTIONS

There are two fundamental issues in the assessment of the loss of training grant programs in veterinary education: (1) The need of our society for individuals with graduate training in veterinary medicine and veterinary science; and (2) the need for financial support of individuals and programs in advanced teaching, research and specialty areas in the veterinary profession.

The person with a newly earned DVM degree is admirably equipped to start practice of veterinary medicine. But especially within recent years the profession has been developing an all-important role in teaching and research in the health sciences which requires advanced training beyond the normal veterinary curriculum. In these days of emphasis on public health; on cancer, heart, and stroke research; and especially on the need for improvement of the quality of the environment as it affects the health of man and animals, there is an urgent requirement for advanced teaching and research by those who have a sound background in the various aspects of animal health. Specifically there are now veterinary certifying organizations in the following areas, all of which require special educational experiences; pathology, public health, laboratory animal medicine, radiology, microbiology, toxicology, and surgery. This role for the veterinarian is most important, first as a real service to society, and second, as a logical expansion of professional responsibilities.

Thus, while in some areas of education and science there may well be an over production of persons with advanced degrees—temporary or otherwise—it is surely the case that right now we need more and not fewer veterinary scientists with advanced degrees. The output of persons with advanced degrees from veterinary colleges is insufficient to maintain current teaching and research staff, much less to meet the increasing demand for veterinarians. The firm demonstration of this contention is the sustained demand for those who have completed such graduate work at the New York State Veterinary College as well as at most other veterinary colleges.

Over the years, the Federal training grant programs have supported a considerable proportion of advanced educational activities—up to 90 percent depending on the department—in the New York State Veterinary College. In past years up to 40 percent of graduate students in the college have been supported on training grant programs; this percentage would have been larger if approved applications had been funded. This support has been wide ranging including provision of: (*a*) Salary stipends that would attract capable young graduates, (*b*) specialized equipment, (*c*) needed supplies and materials, (*d*) limited indirect costs to partially defray institutional, library, and other expenses, (*e*) special faculty services and outside lecturers and instructors. It is not easy to estimate financial losses, even in one college. This is because loss of similar support elsewhere on campus has an impact; for example, we have had numerous graduate students supported on programs originating outside of the college such as in the areas of reproductive physiology, biochemistry, and genetics. A major advantage of study at a first-rate university is the opportunity for interdisciplinary experience which has been fostered by training grant programs especially in recent years. Also the loss of faculty support on career development awards has a bearing on the overall educational program.

It is often overlooked but graduate training activities have an important effect on the quality of undergraduate education. The graduate student as part of his education, engages in teaching and thus makes a direct contribution. The whole atmosphere of vigorous stimulating research which tends to motivate undergraduates is greatly enhanced by the efforts of graduate students in carrying on their thesis work.

Right or wrong Federal training grant support has become a pervasive integral part of the financial underpinning for graduate education. We cannot argue that this is the best mechanism, but there is no question that support must be maintained whatever the mechanism is to be. A sad feature about the present situation is the lack of stability which destroys the momentum in education built up by good departments and programs. Thus although the sudden and complete termination of training grant programs is a hardship for the individual potential student, the most deplorable effect is on the ability of the institution to fulfill its responsibilities to our society so badly in need of improved and expanded veterinary and public health services.

We recognize and accept the requirement for continuous reassessment of graduate programs to make sure that they are effective and responsive to the changing public needs; we realize that there must be pressures for increased selectivity. We regret that the blanket and abrupt terminations of training grant programs will in a real way greatly inhibit the contribution of veterinary medicine to the improved welfare of our citizens.

Dr. ALLAM. I would like to ask Dr. Trotter if he might mention another area of great concern which has to do with facilities for these schools.

STATEMENT OF DR. DONALD TROTTER

Dr. TROTTER. Thank you very much.

I would like to speak to the construction fund loss, the program that was begun and also stopped. Our particular situation is similar to the situation in Iowa and Colorado. These three schools are in almost a disaster situation from the standpoint of physical facilities being begun and then not completed.

These colleges were struggling to maintain their accreditation and actually responded to a Federal request in the Health Manpower bill to enlarge their enrollment and produce more veterinarians. The need for more veterinarians still exists. There are only 18 schools and we are in many respects a national resource. I thought perhaps our case at Kansas State University illustrates very much the problem that Iowa and Colorado also have in that we are in a phased program. We began these programs and in our particular instance we built phase 1 in which we are partly moved in and using. That is our veterinary medical science building. Our phase 2 is due to be completed in January 1974. At that stage we will be about halfway finished with the program facilities we intended to construct.

Phase 3, the clinical sciences and pathology building, the later part of our program, is planned and it was planned with anticipated Federal-cost sharing programs.

With the obligations we assumed in the first phases we had to increase our enrollment by 20 percent as a requirement of the Federal funding previously received. Now the Federal funding has stopped but the larger classes are continuing.

We have this obligation to continue. As a result the college is in trouble, as we will need to try to crowd the larger classes that resulted from our first phases into the remaining old buildings that had been a part of the original physical facility of the college. This becomes a nearly impossible situation as we have not been able to replace those old clinical or science pathology buildings. Phase 3 is about one-half of the plant we needed. It would give us the new modern facility needed to relieve the crowding and modernize the program. Our State legislature appropriated in the last legislature $445,000 in planning money so we will be moving ahead to get the plans up to the construction phase.

We have been working on the premise we will be funded at approximately the same amounts were were on the phase 2, which was about 50 percent State and 50 percent Federal, which would be about $6.5 million each. This is part of the way the statement in Dr. Allam's accounting was to get the $20 million for the three colleges to finish their three-phased program.

I believe that is all.

Dr. ALLAM. Thank you very much, Doctor. I see our time is up. I would like to introduce Dr. Edwin J. Kersting, the dean of the College of Agriculture at Connecticut State University and Dr. Philip Pearson, dean, College of Veterinary Medicine, Iowa State University, Dr. Eugene W. Adams, associate dean, School of Veterinary Medicine, Tuskegee Institute, and Dr. Jacob Mosher from Kansas State University.

Mr. CONTE. Mr. Chairman, if I may ask a question, I want to compliment you on a very fine statement. I am with you 100 percent. This new school is the first veterinary school that received Federal money. Where is that?

Dr. BESCH. Louisiana State.

Mr. CONTE. These other three that are under construction, Iowa State, Kansas State, and Colorado State, is that money appropriated and impounded, or are we just asking for that in this budget?

Mr. SCHERLE. If I may, Mr. Chairman, in the Comprehensive Health Manpower section of the continuing Labor-HEW Appropriations Act there was $100 million available. OMB impounded all of that. These were veterinary schools and facilities were designated to be completed with that money.

Mr. CONTE. I quite agree with you. I think we are lagging way behind. I do not see why every State does not have a veterinary school. The great State of Massachusetts does not have one.

Mr. FLOOD. I wrote to Congressman Scherle on April 30 on this. He has been in touch with me. This is concerning funds for construction of facilities. On the basis of the facts in that letter, we could agree with you that the Federal Government should make it possible, as I said to him, for these facilities at Colorado and Iowa State to be completed as they originally were planned. But we were not sure that additional appropriations was the answer. The continuing resolution that we talked about for fiscal year 1973 had the $100 million you talked about for the construction of health education facilities. HEW, as far as we know, does not plan at this time to obligate any of those moneys. On the other hand, we know of no reason why a portion of this money could not be utilized by Iowa State and Colorado State if the Office of Management and Budget and HEW could be persuaded to release the funds.

Mr. SHRIVER. Mr. Chairman, you are not going to eliminate Kansas.

Mr. FLOOD. No. The only reason for my reference is you did not ask me about it, but Mr. Scherle did.

Mr. SCHERLE. I certainly want to include Kansas State. There are only 18 veterinary colleges in the United States. We in Iowa have agreements to take some qualified students from Oregon and North and South Dakota as well as Nebraska.

Mr. SHRIVER. I remember when Mr. Flood helped us get the beginning of this program through this committee.

Mr. FLOOD. As a matter of fact, when I talked to them I mentioned Kansas first.

Mr. SHRIVER. It is all in the record.

Mr. SCHERLE. We are asking you now to give us an opportunity to complete the facilities that we started.

Mr. CONTE. You will have my cooperation, Mr. Chairman, and if there is anything I can do, let me know.

Mr. PATTEN. Mr. Chairman, I was under the impression you could not be a horse doctor in New Jersey until one died. I do not know how liberal you are in other States. I was always made to feel that the organization tightened up pretty good in the 1950's. I saw very capable people who graduated who could not get a license in my State.

Dr. ALLAM. If I may just make a comment, we are talking about the State of New Jersey, I am looking now not just from the licensing standpoint but the educational standpoint. We have been cooperating with New Jersey. As a matter of fact, we are discussing with them now the possibility of a more formal arrangement for taking New Jersey residents for veterinary medical education. We have promised to triple the number that we took last year.

Mr. FLOOD. That is the University of Pennsylvania.

Dr. ALLAM. Yes.

Mr. PATTEN. So they can work in Kansas and Iowa and not New Jersey.

You did not comment on whether or not when you let the professionals run the licensing board that they close the door.

Dr. ALLAM. I do not know that this is true. I never heard it to be true in New Jersey.

Mr. PATTEN. I will not belabor the point any more.

WEDNESDAY, MAY 16, 1973.

GUIDANCE COUNSELING

WITNESSES

DR. CHARLES LEWIS, EXECUTIVE DIRECTOR, AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION

MRS. THELMA T. DALEY, CHAIRMAN, GUIDANCE DEPARTMENT, OVERLEA SENIOR HIGH SCHOOL

E. NIEL CAREY, STATE SUPERVISOR, VOCATIONAL GUIDANCE, MARYLAND STATE DEPARTMENT OF EDUCATION, REPRESENTING THE AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION

Mr. FLOOD. Mrs. Thelma T. Daley, chairman, guidance department, Overlea Senior High School, Baltimore, Mr. E. Neil Carey, State supervisor, vocational guidance, Maryland State Department of Education.

We have Dr. Charles Lewis the executive director, American Personnel and Guidance Association introducing Mrs. Daley and Mr. Carey.

Mr. LEWIS. We are grateful for the opportunity to appear here today. We have asked two of our colleagues to present our testimony. I will present first Mrs. Thelma Daley who is chairman of the guidance department at Overlea Senior, and Mr. Niel Carey, State supervisor of vocational guidance.

STATEMENT OF THELMA T. DALEY

Mrs. DALEY. I am also speaking on behalf of the American School Counseling Association of which I am an immediate past president.

Mr. Chairman and members of the committee: My name is Thelma T. Daley. On behalf of the American Personnel and Guidance Association with its 31,000 members, and on behalf of the Association's largest division, the American School Counselor Association, I wish to express appreciation for this opportunity to present this testimony. My statements are prefaced on a career as a professional public school counselor and as one who has had direct involvement with counselors across the cuntry through leadership roles in the American School Counselor Association. I am currently serving as immediate past president and chairman of the Career Development Committee of the American School Counselor Association. Concomitantly, I am completing 4 years as a member of the governing board of the American School Counselor Association, which embraced roles as a governor, as president-elect, as national president, and the current status as immediate past president.

Likewise, I had the privilege of serving Dr. Sidney P. Marland during his term as Commissioner of Education, as a member of his panel of critics on career education. I am also currently serving on the Guidance Services Commission of the Educational Testing Services (ETS).

The American Personnel and Guidance Association is a unique organization with membership consisting of persons in educational and community settings, as well as those community based persons who may be in neither setting but highly interested in guidance and counseling. Our membership embraces both the private and public sectors of education, as well as Federal, State, and local agencies. The services offered by those persons employed in related guidance and counseling settings cover a population ranging from preschool child through adolescents, to adulthood and on to senior adulthood.

We are here today because of a deep, deep concern with services to the young people of America. In the interest of better and increased effective services to our young citizens, I strongly recommend continuation of funding of ESEA, title III—supplementary education centers and services: guidance, counseling and testing (Public Law 91–230) in the fiscal year 1974 budget. As the only Federal program that allows funds to be spent for the support of guidance and counseling services for all pupils in our elementary and secondary schools in both developmental and remedial programs, it is (in our opinion) imperative that Public Law 91–230 be maintained and appropriately funded if we are to indeed answer the echoes of the 1970 White House Conference on Children and the 1971 White House Conference on Youth. You will recall that some of these recommendations were:

1. Guidance counseling, which is crucial to the educational life of a student should be extended to the elementary level (1971 White House Conference on Youth).

2. A maximum of 300 students per counselor should be established to give counselors sufficient time to deal with students' individual problems (1971).

3. To facilitate the adjustment of youth into a pattern of education relevant to their long-term employment and educational aspirations, there is a need for a greatly strengthened vocational and educational counseling program, both in schools and institutions outside the schools so that youth might initially make intelligent choices of academic and vocational priorities (1971).

4. "We recommend that all persons in disciplines working with children have inservice training on a continuing basis to develop sensitivity to and empathy with children" (1970 White House Conference on Children).

Additionally, as cited in the volume 2, No. 2 issue of Impact, 64 years ago there were no counselors. Today there are more than 70,000. Forty-seven thousand are school counselors. The student-counselor ratios are on the secondary level 475 to 1 and on the elementary level 3,500 to 1 or 6,300 to 1. The counselor-pupil ratio in public schools was cut in half between 1958 and 1968. It has declined only a little since then. Professional standards have been raised across the board. There is a growing abundance of better research-based counseling tools. The number of colleges and universities training counselors has doubled in the last 15 years. Mr. Chairman and committee members, in spite of the burgeoning ratios there are many exciting counseling activities in progress across this Nation. When I have personal contact

with many of the persons involved, I gain personal positive reinforcement of the need for extended counseling services.

In my own State, I cite the ESEA, title III, project in Prince George's County public schools and its cluster concept of pupil personnel services, with each cluster composed of a community of feeder schools on a kindergarten through 12th grade basis. Through ESEA, title III, 169 of the 225 counselors have been through 15 weeks of inservice group counseling programs; also a sampling of student group sessions includes a focus on potential dropouts, special education students, adolescent pregnant females, foster children, interpersonal relationships and "fatties anonymous." Through ESEA, title III, 10 evening walk-in counseling centers have been established and several thousand persons have been assisted. The centers have covered a spectrum of sessions covering parent-child conflict, student-teacher conflict, school adjustment, marriage and family counseling, emotional development, career information, draft information, college counseling, learning adjustment, and social problems. Through title III, this Maryland county developed PULSE, parent understanding through learning shared experiences—a project designed to provide consultation for the parents of physically handicapped children. More recently, through ESEA, title III, Prince Georges County has established a career satellite program—with an emphasis on the 49 percent of graduates who do not continue with their education beyond high school and an emphasis on the greater utilization of community resources within the county for the purpose of providing information and experiences which will aid pupils in career planning and occupational choice.

Let me highlight further just a few of the many, many relevant counseling experiences. In Wilkes-Barre, Pa., counselors are involved in a program for underachievers and disadvantaged students who tested in the normal range but are not performing at a level commensurate with their ability. Through a curriculum-based approach, the first year of this achievement project succeeded in retaining 96 percent of those potential school dropouts.

Many persons still visualize counseling as being synonymous with their experiences of the 1950's where all of the sessions pivoted around remediation and were strictly one to one closed sessions. Today counselors are in classrooms effecting institutional changes as well as effecting innovative programs and more involvement with students, teachers, and parents. The April 1973 issue of Communique describes a title III program, the counselor in the classroom, in a school in Arizona. The counselors in this setting are working with basic English classes; the counselors are facilitating group discussions when classroom problems arise; the counselors are working with students on community schools. The counseling department also leads a course entitled "human relations seminar" which enables the student to learn more about himself and his relationship with others as well as to learn about growth motivation theories which encourage and promote self-development.

In Coronado High, Arizona, according to Communique, the counselors conduct seminars in behavorial modification for parents. The aim is to help parents establish an environment that supports the learning of desirable behavior and consequently facilitating better parent-child interaction.

In my own school and with other schools in my county, counselors have and are conducting evening sessions for parents in both college

planning and career planning. These sessions provide another means of effecting the positive behavior of youth since both the Baltimore County followup study of its graduates and the College Entrance Examination Board studies reveal that students indicate that parents exert the greatest influence over the students' choice of a college or post-secondary career.

Looking forward, counselors know that as elementary counseling services increase, so does parental counseling increase. Eleanor Luckey writes in March 1967 School Counselor, "Counseling with parents will become an inevitable function of the schools as elementary counselors are added to faculty rosters." In reference to elementary counselors, I am happy to add that my own county, Baltimore County, has provided an addition of 17.4 full-time equivalent counselors for the incoming year. This will allow the system to meet its present guidelines calling for a full-time counselor in every elementary school with an enrollment of 700 or more pupils and a half-time counselor for all smaller elementary schools.

Janet Worthington, a parent of three children in Palo Alto, California, writes in the May 1972 School Counselor, "Counselors are very much needed because they understand how students learn. With counseling and guidance help, a student's many years of school can be happier, more productive, and less destructive." She further states "* * * a counselor gave 2 hours before the school year opened to one of our children. The counselor successfully created the bridge that enabled our child to return to school willingly. The counselor's work can help teachers to teach and students to learn."

Project Talent, a national longitudinal study of the effects of personal, educational and social influences cites "* * * an improvement in the effectiveness of guidance programs in the high school." ("Progress in Education": A Sample Survey, 1960–70), December 1971 report. The Project Talent report indicates that in 1960 high school students showed dissatisfaction with their school programs and unrealistic educational and occupational programs. By contrast, in 1970, with respect to educational plans, 61 percent of the boys and 55 percent of the girls expect to obtain some regular college training. This represents only a 1-percent increase for the males but a 10-percent increase for the females—according to the report there is a trend especially for the girls, to discuss post-high school plans with school counselors to a greater extent. On the other hand, there is a definite trend for less discussion of post-high school plans with teachers and parents.

The Purdue opinion poll of high school students indicates increased counselor-student contact from 1966 to 1971. In September 1971, 76 percent of the students indicated a need for counseling. Twenty to thirty percent expressed a need for help in choosing colleges, in choosing courses in high school, in finding publications and locating future employment opportunities.

The Educational Resources Information Center (ERIC) records at the University of Michigan indicated improved school retention rates, because of effective counseling, in many cities of the Nation, including Baltimore, Seattle, St. Louis, Dayton, and Paducah. In Illinois, there are at least two ESEA, title III projects designed to improve retention rates. In Meridian, Ill., the dropouts reduced 46 percent from 1970–71 to 1971–72. In Mendon, Ill., where the counselor works with the family visitation program bringing together the parents, child and

teacher to improve home-school relationships, the dropouts reduced from 7.60 percent to 1.20 percent.

Under the administration of Dr. Sidney P. Marland as U.S. Office of Education Commissioner of Education, there has been a marked thrust toward career education and career development. Although counselors concern with efforts in career education preceded Dr. Marland's September 1970 major address on this topic, the key observation is that there must be a coordinated kindergarten through 12th grade approach to career education. As outlined by the Ohio Center for Vocational and Technical Education, counseling and guidance has to be a stable, ever present component. Let me say that from personal observation there has been a concerted effort on the part of counselors across this Nation to really make career education a working reality. Counselors are very involved in perfecting curricula, program and projects in the area of career education.

In a recent regional conference of the American Personnel and Guidance Association (April 15–19, 1973) in St. Louis, Mo., at least 14 program sessions were devoted to the counselor and career education. This represented counselors from a cross section of States such as Missouri, Kansas, Colorado, Maryland, Maine, Rhode Island, Kentucky, Ohio, Illinois, Indiana, Louisiana, West Virginia, as well as Canada, who felt that they had developed concepts, ideas, and programs worthy of presentation to other professional colleagues. The major key is that counselors are bringing to a reality a program that will help reach school leavers with their career education plans.

From my own person to person daily experience, I witness crowded guidance offices. I witness counselors working with drugs, veneral disease cases and pregnancy. I witness counselors planning with teachers and administrators to effect a learning environment. I witness counselors involved in in-service programs to meet the intricacies of working with human dynamics. I witness graduates returning to counselors already burdened with a 1 to 475 ratio for help in decisionmaking toward further plans. I witness groups of all types deeply involved with counselors, and I witness a very pointed effort for greater community involvement and utilization. I witness a close nexus with the vocational rehabilitation counselor who is an integral part of the existing school program. (The services of the vocational rehabilitation counselor have made work adjustment referrals a reality and have caused psychological and work evaluations to become immediate tools bringing data which otherwise would not be possible.) In essence, I witnes counselors involved daily in a myriad of meaningful change-oriented activities which are ultimately affecting the positive directions and learning experiences of youth. Without appropriate Federal funding, these meaningful guidance activities would be lost.

The funding, continuation and strengthening of a guidance and counseling component of ESEA, title III, is imperative for better services to youth through more counselors and particularly elementary counselors—more effective in-service training programs which facilitate a better knowledge of the world of work, use of leisure, group skills, and group counseling, curriculum development, community utilization, children's involvement, and greater development of young men and young women.

In reiteration, on behalf of the American Personnel and Guidance Association and the American School Counselor Association, I urge

appropriate funding at the $190 million level for ESEA, III and support of Mr. Carey's recommendations on other issues. I thank you for listening.

[Additional information submitted for the record.]

OVERLEA SENIOR HIGH SCHOOL,
Baltimore, Md., May 14, 1973.

Congressman DANIEL J. FLOOD,
Chairman, U.S. House of Representatives, Committee on Appropriations, Washington, D.C.

DEAR MR. FLOOD: As a principal with more than 30 years experience I wish to recommend that ESEA, title III—supplementary education centers and services; guidance, counseling, and testing—be continued and funded. My experiences have revealed that guidance and counseling is the core of the total school program. One of the busiest departments in my school is the guidance department, with its innovative approaches in career development, group guidance and now peer counseling. Contrary to the belief that all emphasis is placed on college counseling, in my situation where 55 percent of the students do not choose to enter postsecondary training upon graduation counseling services have been made available to those students entering the labor force or seeking not to enter the labor force or college. In fact, each student is treated as an important human being as humanism prevails and individuality is a key focus.

In reiteration, as a practicing administrator I fully support and urge your support of ESEA, title III.

Sincerely yours,

AUSTIN E. GISRIEL, *Principal.*

OVERLEA SENIOR HIGH SCHOOL,
Baltimore, Md., May 14, 1973.

Hon. DANIEL J. FLOOD,
Chairman, Committee on Appropriations, House of Representatives, Washington, D.C.

DEAR MR. FLOOR: This letter is in regards to the ESEA appropriations bill before your committee. I think this money is needed in many ways through all school systems. I personally am satisfied with my opportunities to take advantage of the things which I receive through Guidance. Working with Guidance has been a great help to me because it has shown many things that I will need to know for the future. This knowledge has given me the opportunity to take college level courses while still in high school. I think every student should have the opportunity to have a good Guidance Department and have the proper counseling they need. Through Guidance, I have found myself in regards to what I want to do in the future and it has opened many doors. I have been involved in group sessions this year for the first time and I highly recommend this.

In conclusion, I would like to see funds given in regards to Guidance and Counseling.

Very sincerely,

JAMES ERCOLE, *a Junior.*

OVERLEA SENIOR HIGH SCHOOL,
Baltimore, Md., May 14, 1973.

Hon. DANIEL J. FLOOD,
Chairman, Committee on Appropriations,
House of Representatives, Washington, D.C.

DEAR MR. FLOOD: I would like to bring to your attention a very serious matter. I am speaking about the Guidance, Counseling, and Testing bill.

I very strongly urge the support of the ESEA title 3—Guidance, Counseling, and Testing bill. Besides myself, others would be completely at loss without this important service.

This service cannot function properly without funds. With a partially functioning Guidance System, students are forced to seek answers from other sources. It is here that some students "break" under the strain and turn to unfavorable sources to try to combat their troubles, such as alcohol, drugs, etc. There are some students who can't cope at all without a strong Guidance System. I suggest more money should be allotted for this worthy purpose, not taken away!

96-712 O - 73 - 32

Without the right decisions made by students, America is in danger because the students of today are the backbone of America tomorrow. The students are depending upon you to do your part.

Thank you.

Sincerely yours,

ANITA BAWGUS, *a Sophomore.*

OVERLEA SENIOR HIGH SCHOOL,
Baltimore, Md., May 14, 1973.

DEAR MR. FLOOD: I am writing this letter to let you know how the counselor has helped me through my senior year. Well, to sum it up, in the 10th grade I was a fresh, smart, and nasty girl. I flunked a lot of my subjects at the end of the year. But the counselor made me see how I could remove the chip off my shoulder and improve my disposition greatly. Now this year, I'm not a scholar in grades, but I am in attitude and interests of people and studies and manners.

Another example, I have come to this office for help as far as family relations are concerned.

I have for many a year found it difficult to communicate and I am sure at first my counselor did too. But I have found that going to the Guidance Office relieves my tensions and hatred attitude; I am more calm and have more self-control on my feeling and senses. It is not just for me who goes and is helped, but others who are helped in family problems or school problems are many.

But it's a shame that we have to wait until our junior year or senior year to get an understanding of our problems as they grow bigger and more unbearable. If there could be help before it got to be a big problem, it would be a lot better. I think kids' attitudes on a lot of things would change.

Yours sincerely,

AMY DEPALMA, *a Junior.*

STATEMENT OF NIEL CAREY

Mr. CAREY. Mr. Chairman, all I can do is second Mrs. Daley's eloquent plea and also ask this committee to support the other education and related appropriation in title I, Vocational Education, Rehabilitation Services, and Occupational Education. I think it is very important at this time when many of our State and local school systems are struggling to provide the kind of services Mrs. Daley is talking about, this strong Federal support is especially important at the present time in view of some of the confusion that exists about educational appropriations. We should simply ask your help along these lines.

[The statement follows:]

STATEMENT ON BEHALF OF THE AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION BY MR. E. NIEL CAREY, STATE SUPERVISOR OF VOCATIONAL GUIDANCE, STATE DEPARTMENT OF EDUCATION, BALTIMORE, MD., AND MEMBER OF THE GOVERNMENT RELATIONS COMMITTEE OF THE AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION ON FISCAL YEAR 1974 APPROPRIATIONS FOR THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Mr. Chairman and members of the subcommittee, my name is E. Niel Carey. I'm a member of the Government Relations Committee of the American Personnel and Guidance Association. I'm employed as the State supervisor of vocational guidance for the Maryland State Department of Education. It's an honor for me to appear before you today, on behalf of the American Personnel and Guidance Association, in order that I might strongly recommend funding of the programs listed below to the extent indicated for fiscal year 1974:

ESEA, title I—$2 billion, title III—$190 million; vocational education, $531 million; rehabilitation services, $747 million; and occupational education, part B, $125 million.

These programs contain major provisions through which professional counselors, as well as trainers and supervisors of counselors, provide the guidance, counseling, placement services expected by students, by parents, and by the public. Other programs containing provision for guidance and counseling are supported by APGA. These programs are listed in the attached document, "Federal Legislation and Funding for Programs of Guidance and Counseling."

The recommended level of expenditure, with the exception of the occupational education category, is based on fiscal year 1972 appropriations, plus a 12-percent increase to compensate for inflation. The recommended appropriations level for occupational education is 50 percent of the amount authorized in that bill for fiscal year 1974.

It is not necessary for me to discuss in great length the human needs and the needs of our society that these programs were designed to meet. These needs have been documented and discussed by other able committees of the Congress. I would like to point to the importance of strong support for these related programs within the context of strong, visible Federal support for education and related areas generally. This is especially important to professional counselors many of whom work in a variety of school and community settings. For example, if the funding for guidance and counseling services in rehabilitation legislation is cut, an added burden would be placed on school counselors who are funded under the provisions of ESEA III or vocational education. In another instance, the major involvement of school counselors in the career education process, described in the occupational education legislation, would place an unmanageable burden on existing counseling and pupil services staffs unless appropriations for these increased services are provided through the occupational education legislation. This balance of support is important, because there is considerable evidence to indicate that effective pupil services programs, including guidance, counseling, and placement have made a difference in helping to solve some of the problems faced by our schools and our communities. These programs have made major contributions in areas such as helping to improve human relations in desegregated school districts; helping to reduce youth unemployment rates through effective placement and helping to increase the ability of students to make more effective decisions regarding the range of opportunities available to them.

The recent report to the Secretary of HEW entitled "Work in America" points to the relationship between some of our social problems, such as drug addiction, and lack of satisfaction in work. This same report points to the school's responsibilities in helping individuals prepare for and benefit from meaningful careers. In this area, the role of counselor and allied professionals is very important. The importance of career counseling and related services has been stressed by many people who are responsible for career education, and it has been supported wholeheartedly by parents and students.

In spite of the public demand for counseling and related pupil services, and the demonstrated effect that these services have had on solving some of the problems facing our society, guidance and counseling programs will have the desired impact only where there is adequate support for education and related programs generally. In many states, pupil services programs have been most effective where the educational systems at the State and local levels have responded to need for dramatic changes in educational programs by devising new ways of assessing the educational needs of the people, by employing new program planning and implementation methods, and by utilizing new systems for evaluating educational programs and activities. Many of these changes have been made possible, incidently, through ESEA title V which provided for the strengthening of State education agencies.

Our activities in Maryland over the past 2 years may serve as a specific example of how, with effective leadership and proper financial support, educators can respond quickly to the needs of the public we serve. During that time, our State education department conducted a major study of the public's needs and expectations for education, on the basis of that study and other factors established priorities and began to implement programs in reading, early childhood education, career education, human relations, and environmental concerns. At the same time, many of our staff members worked with the State legislature in developing a statewide system of accountability for education.

Major contributions are being made in these priorities areas by the 17 staff members of our State education department who were funded under title V of ESEA. For example, our only consultant in reading is funded by that source. It is obvious that, without the recommended ESEA funding, we will lose many of these positions. If that happens, there are likely to be at least two consequences. First, the work on our identified priority areas is likely to be curtailed or slowed considerably. Second, it is quite likely that many of our personnel presently assigned responsibilities in the area of counselor and pupil services will have to pick up major responsibilities in the priority areas. This would seriously hamper the work of our pupil services section at a time when we have recently reorganized our personnel to work in major program areas related to the five priorities mentioned earlier.

In Maryland, as in many other States, vocational rehabilitation is a function of the State education department. Because of the Presidential veto of the fiscal year 1973 rehabilitation expenditures authorized by Congress, we will have $900,000 less than anticipated; we will be unable to serve 2,600 people needing rehabilitation services immediately; and many of our institutional programs will be cut by as much as 100 percent. These program cuts will also place an added workload on many of our school social workers, counselors, and special education programs.

Many of the examples that I have cited in varifying the need for the requested appropriation relate to the State of Maryland with which I am most familiar. However, similar situations exist in most of the States. At a time when there is a great need for a variety of educational programs to enable people to cope with the accelerating changes in our society, there is uncertainty and confusion about the degree and amount of Federal support.

In conclusion, many of our local school systems and State education agencies have worked together in planning and operating effective education programs, including counseling and related services. I strongly recommend that this committee support our efforts at the State and local level and reduce the confusion that many of us see as we view the Federal funding picture, by recommending the appropriations levels suggested here if at all possible, prior to the 1st of July of this year. I appreciate having the opportunity to talk with you today, and I'll be happy to provide you with additional information or to answer questions that you may have.

WEDNESDAY, MAY 16, 1973.

HEALTH BUDGET DISTRIBUTIONS

WITNESS

DR. EDGAR HABER, HARVARD MEDICAL SCHOOL, REPRESENTING THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

Mr. FLOOD. We will now hear from Dr. Edgar Haber, Harvard Medical School, representing the American Association of Immunologists.

Dr. HABER. Thank you, Mr. Chairman.

Mr. Chairman and distinguished members of the committee, I am here to testify as a member of the American Association of Immunologists. It would help the committee in evaluating my testimony to know the background upon which my views are based. I am responsible for directing patient care, teaching and research in cardiology at the Massachusetts General Hospital. This institution is a principle teaching hospital of Harvard Medical School and participates in a very major way in the care of the sick, in training of medical students, as well as of medical investigators, and the implementation of both fundamental and applied research programs. This is a vantage point which gives an unparalleled opportunity to see the evolution of an idea from its inception in the research laboratory to its application at the patient's bedside. It is based largely on such personal experience and observation that I would like to address myslef to a major issue in the support of health research, which I am certain is of great interest to the committee. A review of the administration's proposed budget for the National Institutes of Health reveals that while there is a modest increase in the total of all the research budgets for the institutes and divisions, a significant redistribution has occurred. While substantial increases are seen in the budgets of the National Cancer Institute and the National Heart and Lung Institute significant reductions have occurred in all other categorical institutes. I would particularly like to draw your attention to a $13 million reduction in the Institute of General Medical Sciences.

The other important area of redistribution is reflected in a $38 million reduction in competing or new research grants (an overall reduction of $6 million in total research grants) while there has been a $44 million increase in research and development contracts. These budgetary redistributions recognize that heart disease and cancer are the two major killers in America today. This is a claim which I will not dispute. Indeed, as a chief of cardiology, I can attest that 55 percent of the admissions to our hospital have cardiovascular disease as the primary diagnosis. However, I will contest with considerable vigor the implication that all the information is presently at hand to mount applied development programs which will be effective in arresting heart disease and cancer. Highly planned and structured contractual programs are an efficient and appropriate mechanism for the implementation of known approaches to a problem. However, where approaches are uncertain and the direction from which an answer to a problem will come is unknown, the past record indicates that ideas initiated by investigators rather than planning committees, are the most likely road to success.

A classic example which I know this committee has heard discussed before, is that of poliomyelitis. During the great epidemics of the 1940's and 1950's scores of patients at each major care center were dependent on respirators (iron lungs) for their lives. A well-planned contractual research effort would certainly have been successful in designing better respirators, in improving the care of these patients and may well have saved many lives. Who would have guessed in that era that the need for this kind of care would not exist today because other technologies have essentially eliminated the disease from the United States. Of course, everyone knew in 1940 that a vaccine would be the desirable solution to the problem of infection with the poliomyelitis virus. However, in that earlier era of virus studies, attempts were made to grow and isolate the virus through the use of experimental animals. Everyone expected that the answer would come in roughly the same way as it did for rabies, in the hands of Louis Pasteur. At that time, if funds had been available, a committee might have judged that a massive contractual effort involving the study of a wide variety of different animals to determine which would be the best host for the polio virus would be the ideal method to develop an effective vaccine. If such an effort had been mounted, it would have resulted in a massive waste of money. The answer came from an unexpected source. Few individuals in the 1940's would have guessed that attempts to grow animal cells outside the living animal in tissue culture would have provided the best possible way for culturing the polio virus. This massive contractual effort would certainly not have funded the work of John Enders whose basic discoveries on the growth of viruses in tissue culture led not only to his winning the Nobel Prize, but also to the direct application of his discovery in the development of the Salk and Sabin polio vaccines. When we do not know which approaches are appropriate to implement, the answers often come from unexpected places.

This historical analogy is directly applicable to the problems of cancer and heart disease. By tying the hands of the Cancer and Heart and Lung Institutes to the support of categorical and contractual research, the basic discoveries which may well lead to the prevention of major cardiovascular diseases and cancer could be

overlooked. I am pointing particularly to the marked reduction in the budgets of some of the other categorical institutes and of the Institute of General Medical Sciences. The prevention of arteriosclerosis or of cancer may well derive from a discovery made during the pursuit of a fundamental investigation funded by a grant which has neither cancer nor heart in its title.

Let me site some examples derived from my personal experience. Hypertension is a major health problem in America and the greatest contributing factor to strokes, the third leading cause of death. There are two forms of hypertension which are subject to a definitive cure by a surgical operation; narrowing of one of the arteries to the kidney and a form of benign tumor of the adrenal gland. An essential test in the diagnosis of these conditions is the measurement of the concentration of renin in blood. While this method has been known for many years, the test itself was so difficult and so complicated that it found application in only a few specialized research centers. The development of a relatively simple test for renin which is now widely available across the country resulted from a chance lunch table conversation between a physician interested in hypertension and a biochemist pursuing the immunology of peptides. The fruits of this conversation was the development of a radioimmunoassay for renin activity which by this time has undoubtedly contributed to the recognition and cure of a number of hypertensive patients and their rehabilitation.

A second example may also be of interest. Derivatives of digitalis are the most effective and commonly used drugs in the treatment of heart failure. These drugs are also very toxic. It is all too easy to overdose a patient, sometimes with fatal results. Through the application of immunological methods and the direct cooperation of immunologists and physicians, it is now possible to measure the concentration of digitalis derivatives in the blood and thereby help to avert toxicity.

Digitalis intoxication is a very frequent clinical problem. Of 931 consecutive patient admission to the Harvard Service at the Boston City Hospital, 15 percent were taking a digitalis preparation, and of these, 23 percent were suffering from digitalis intoxication. If I were to extrapolate these figures to hospitals across the country and make the assumption that digitalis intoxication only increases the average length of hospital stay by a single day, the costs which could be saved by the prevention of overdosage are counted in the millions of dollars.

Neither of these significant advances in the practice of cardiology could have been possible under a planned contractual arrangement. In searching the scientific literature prior to the times of these discoveries, no one was guessing that the solutions would come from precisely these directions. Investigator-initiated ideas, rather than long-range categorical planning, were the keys to success.

If one is willing to accept that investigator-initiated research is valuable, then one must examine the best way to judge which ideas should be funded and which not. Peer review, which was developed at the very inception of the National Institutes of Health, has proven to be a very effective method. Scientists with competence in a given field evaluate the validity of the proposed approach and its likelihood for success.

Since the evaluation is highly technical, it is best carried out by individuals who have the greatest competence to do so; these are the working scientists in the field. The same methods of review, however, may not necessarily be applicable to all methods of funding in the health sciences.

These comments are by no means meant to denigrate the great usefulness of the contractual method of funding. When an approach is discovered, the implementation of which is deemed appropriate, the contractual method is most effective in marshaling resources efficiently to do the job. Both approaches to funding must work hand in hand. The investigator-initiated grant must concentrate in areas in which we do not even understand the mechanism whereby a disease process starts. The contract must concentrate where implementation of known methods is the challenge. The inappropriate application of either of these methods results in wastage of funds and lost opportunities. It would seem from a review of the administration's proposed budget that this is exactly what we are facing now: the application of contractual funding to areas where the problem is not implementation but discovery of fundamental biological processes which are responsible for disease. If, in this time of reduced budgets, we are to invest most wisely in finding methods which will deal effectively with the prevention of the major problems affecting the health of Americans, the wiser course by far is first to uncover the causes, now largely unknown, and then to implement methods of prevention and cure. The point which I have tried to make in this presentation is that this may be best accomplished by an effort in which there is balance between investigator-initiated and centrally planned research, and that appropriate selection and funding mechanisms be used in each category.

I am indeed very thankful to the committee for this opportunity to express my views.

Mr. Flood. Thank you, Doctor. I am glad you were here.

Wednesday, May 16, 1973.

Child Welfare Services

WITNESSES

FRANK NEWGENT, ADMINISTRATOR, DIVISION OF FAMILY SERVICES, STATE DEPARTMENT OF HEALTH AND SOCIAL SERVICES, MADISON, WIS.

HERSCHEL SAUCIER, DIRECTOR, DIVISION OF COMMUNITY SERVICES, GEORGIA DEPARTMENT OF HUMAN RESOURCES

Mr. Flood. Mr. Frank Newgent, State Department of Health and Social Services, Madison, Wis.

Mr. Newgent. Thank you, Mr. Chairman.

With me is Mr. Herschel Saucier who is director of the Division of Community Services in the Georgia Department of Human Resources. We are here representing the American Public Welfare Association, specifically their board of directors of which I am a member, and their National Council of State Public Welfare Administrators of which Herschel Saucier and I are members.

We appreciate the opportunity to speak to you for a few minutes.

The heart of the request we present to you is an appropriation for fiscal 1974 of the full amount authorized in 1972 by Congress for child welfare services. That amount is $211 million. Federal support for child welfare services is provided by the Social Security Act under title IV, part B. These services have been recognized in the law since 1935 when the act was first passed. For years, IV–B funds have been an important tool to develop, extend, and strengthen child welfare services, and that is the stated statutory purpose of these funds. They were never a large portion of the total public expenditure for child welfare services. Indeed, Federal funds have averaged less than 10 percent of the total expenditures. So States and localities have carried the preponderant burden over the years.

But some changes in recent years have endangered adequate provision of child welfare services in the States. In 1967, amendments to the act required that services to AFDC and child welfare services be administered by a single organizational unit, and the larger program of AFDC began overshadowing child welfare services. In that same year of 1967 Congress appropriated $46 million for child welfare services just as HEW had requested. That amount has not changed since 1967. Actually expenditures by State and local governments have increased in that period of time so that, instead of less than 10 percent of the total, Federal funds now represent 4.6 percent.

In 1969, HEW stopped collecting statistics on child welfare services. I believe that may have been the beginning of a conscious plan by HEW to stop all Federal support for child welfare services. For testimony today we had to go to individual States. We initially turned to HEW for facts but they had a woeful lack of facts to present to us. We had to do our own surveys.

In 1972 Congress put a ceiling of two and a half billion on social service expenditures under title IV–A, and required at least 90 percent of this money must go to actual recipients of welfare, except for five exempted categories. At the time this occurred, some of the costs of child welfare services had been transferred to 75 percent funding. This had taken pressure off raising that earlier appropriation of $46 million. Then in 1973, HEW, as you undoubtedly have heard, promulgated new regulations for social service expenditures. This has cut further into the 75 percent matching available for child welfare services. One State, Maryland, for example, estimates 47 percent of the children in their day care program will—as a result of this 90–10 limit in the Revenue-sharing Act and the new social service regulations—no longer be eligible for day care.

In the current budget request to Congress, HEW reports that the number of children receiving child welfare services will decrease. This is absolutely appalling to me because it is exactly opposite of my information. I have personally talked to 7 or 8 State welfare directors across the country, and every one reports an increase in child welfare services.

In Wisconsin, in 1965, approximately 20,000 children were being provided child welfare services. Seven years later, last year, that 20,000 figure had increased to 52,000. Therefore, that figure more than doubled in 7 years. We do not anticipate any downward swings at this time.

What are these child welfare services that I refer to? I have attached as an appendix to our written testimony, copies of which are available

to you, some detailed definitions of child welfare services and descriptions. In addition, we have included in the information on several States represented in your subcommittee some specific details of what we are talking about in the individual States.

Children who are covered by Child Welfare Services do not fall into just one economic bracket. This is one reason why the current orientation in Washington to limiting social service expenditures largely to AFDC families is so threatening to current child welfare services programs.

Childen who are verging on delinquency do not come from poor families only and they are one group covered by child welfare programs.

Physically abused children certainly do not come only from welfare families. This group, too, is served through child welfare services.

In another area, homemaker services, funded by IV–B are needed at all levels of our society to prevent children from entering foster care. One such situation arises when the mother has had to be hospitalized, father has to work all day, and there is no other family care available. If homemaker services are absent, there is a distinct danger that such child may have to go into foster care until mother can return home. In my State we have 25 counties out of 72 that do not have homemaker services for children. Child welfare services also included foster home and adoption services with which most people are familiar.

Is there other support for increasing the authorization to $211 million? We believe there is, because in the process of preparing testimony for you we contacted other organizations concerned with children, and they join us in urging appropriation of the full $211 million.

Included are the following organizations: the American Humane Association, which concerns itself with the abuse and neglect of children; the Child Welfare League of America, which is a national standard-setting private organization for services to children, and its board of directors, consisting of private citizens, made a special point of reviewing the need for these funds and voted to support the increase; the American Legion, which has an extensive nationwide system of child welfare auxiliaries, sponsors and supports increase of these funds, as do the United Way Organization and the National Catholic Charities.

In conclusion, Congress has maintained a long-time posture of support for adequate child welfare services. That posture is being threatened now by HEW's new social service regulations, and other moves to limit social services to welfare families alone. Major gaps in services do in fact exist in the States at this time, which can only be filled by title IV–B appropriations. Title IV–B appropriations are very well tailored to the "new federalism" of which we hear so much.

States, under title IV–B appropriations, can design their own service packages to meet their own individual needs within broad Federal guidelines. There are present also, however, two general controls: one, annual expenditure plans must under the law be approved by HEW, State-by-State; secondly, the appropriation is a closed-end one. The $46 million appropriation level set 6 years ago is no longer adequate and an appropriation of the full amount authorized last year by Congress is urged.

[The statement follows:]

Statement of Frank Newgent - APWA

AMERICAN PUBLIC WELFARE ASSOCIATION AND NATIONAL COUNCIL OF STATE PUBLIC WELFARE ADMINISTRATORS

Statement Of Frank Newgent, Administrator, Division Of Family Services, Wisconsin State Department Of Health And Social Services

Mr. Chairman and members of the Committee, I am Frank Newgent, Administrator of the Division of Family Services of the Wisconsin State Department of Health and Social Services.

I am accompanied by Mr. Herschel Saucier, Director of the Division of Community Services, Georgia Department of Human Resources. Our responsibilities are to administer the public assistance and social services programs within consolidated multi-purpose state departments. We appreciate the opportunity to appear before your Committee in behalf of the American Public Welfare Association, of whose Board of Directors I am a member, and of the National Council of State Public Welfare Administrators, which is a constituent body of the Association.

Our purpose in appearing before your Committee today is to urge that the appropriation for Federal grants to states for child welfare services authorized under Title IV-B of the Social Security Act be substantially increased to a level more consistent with the current service needs and the fiscal efforts and capacities of the states, and in recognition of the $211 million authorization level adopted by Congress last year.

For the past six years the Federal appropriation for these grants has remained constant at $46 million. During that period, as well as in prior years, the Federal share for these services has accounted for a relatively minor portion -- generally less than 10 percent -- of the total Federal-state-local expenditures for these services. In FY 1969, the total expenditure was $563 million, of which the Federal $46 million amounted to about 8.6 percent. Due to the merging of Title IV-A and IV-B expenditures in more recent years, the state costs for these services are not readily identifiable. However, in the period of FY 1960-69, the average annual rate of increase of expenditures for CWS services was 12 percent.

If the known annual average increase of 12 percent for FY 1960-69 is projected, the total expenditure for FY 1974 would be $992 million, of which the Federal $46 million would represent 4.6 percent. This record renders moot the Federal statutory formula which limits the Federal share to no more than an amount within the range of 1/3 to 2/3 of the total expenditure, individually determined for each state. It also calls into question the standing of the statutory requirement that a state must develop and extend these services as a condition for receiving these Federal grants.

The purpose of the Federal CWS grants is to assist and encourage states to establish, develop, extend and strengthen services for the protection and care of homeless, dependent and neglected children, and those in danger of becoming delinquent. Such services are needed by the total community and not only children and families who are actual or narrowly defined potential recipients of public financial assistance. And, for the most part, these services are not available unless provided through a public agency.

In recent years, the broad interpretation of the social services provisions in the AFDC part IV-A has enabled states to claim Federal matching at 75 percent for

some of the same types of services that are defined under CWS part IV-B. This has had the effect of easing the burden on the states to some extent, but it has also resulted in the gradual merging in Federal regulation and reporting of these two services programs so that by now the CWS part has a less clear and distinct identity of its own.

The new regulations governing social services under the public assistance categories recently issued by HEW, together with the new "90-10" statutory limitation on 75 percent matching for social services to non-recipient of assistance, however, once again emphasizes the reality of the distinction between the IV-A and IV-B programs. States will be forced to curtail or eliminate services to great numbers of children because of the limitations of IV-A matching. As I have indicated, the states are already spending about $500 million of unmatched funds for IV-B type services, and will not be able to go much higher to pick up the costs that will no longer be covered under IV-A. These services are not frivolous or trivial. They are hardcore, critical and essential. They have to do with children who are neglected and abused, or who are in need of placement in foster homes or adoptive homes, or specialized institutions, or who are in danger of becoming delinquent.

It is our judgment that over the years, and dollar for dollar, the Federal CWS grants to states, even though relatively minor in comparison, have brought the most constructive benefits of any Federal program.

In view of our urgent request that your Committee move in a single step to a substantially higher level of funding, we are including in our statement the following review and analysis of the development and purpose and operation of this program. We are also including attachments which expand on certain basic types of CWS program activities and needs, and are pleased to make available separately some examples of CWS program activities in a few selected states.

REVIEW OF THE CHILD WELFARE SERVICES PROGRAM

In accordance with the statutory authorization, the objectives of child welfare programs have been defined, in part, as being to strengthen family life and preserve the child's own home wherever possible, and, if the child must be cared for away from his own home, to provide substitute care for him with a relative, if possible, or in a foster-family home, group home, or institution according to his individual needs. For youths, especially those who are in danger of becoming delinquent, these programs provide guidance and resources for making a better life adjustment, and, to the extent possible, accomplish this outside of the juvenile justice system, and, when appropriate, in cooperation with and support of the law-enforcement agencies and the courts.

Among the methods and resources employed by child welfare services are day care, foster homes (including home finding), protective services, adoptions, services to unwed mothers and to children of migrant workers, group homes and shelters, and information and referral services. (These are discussed in more detail in the attached material.)

These are services which are widely needed throughout the community, and the need cannot be measured in terms of eligibility for public assistance. Since its inception as a nation-wide, Federally assisted program, Child Welfare Services has

by legislative mandate related its programs to need for services -- rather than income only -- recognizing that, whether or not parents are employed or have adequate resources:

> •Children are beaten, their bodies broken and their minds damaged by disturbed parents and other caretakers;
>
> •Children who might have remained within their own homes, cared for by their own families, are removed to foster care because services are not available to strengthen and help preserve a distressed, disintegrating home, or identify day care resources to supplement home care if needed;
>
> •Children whose mothers are working to support a family deserted by the father, must be left to the care of babysitters who are not always "caring" persons, or even to fend for themselves, if the mother cannot locate reliable child care;
>
> •Children whose home situation is so threatening or whose problems are not being resolved in that setting, by unnumbered thousands run away from home and problems each year;
>
> •Children languish in foster care year after year because agency services are not available to do the detailed study and background research for legal action that would free them to be adopted and grow up in permanent homes of their own -- or because families, ready and willing to adopt these children receiving foster care at public expense, simply cannot afford to pay their medical bills.

Such children and families need the help and protection that Child Welfare Services can provide.

While it is true that under the broad interpretation of the term "former and potential" recipients of financial assistance a substantial share of the cost of these services was covered by 75 percent Federal matching under Title IV-A, there always have been severe limitations on that mechanism as a source of funding for the child-welfare type services.

For example, under the new IV-A regulations, no child who is abused or neglected, or in danger of being homeless altogether, or of becoming delinquent or institutionalized, or shuttled into make-shift substitute care, will be able to receive help if his parent's income is so much as half again (with the exception of the slightly higher sliding scale for the purchase of day care) the modest amount most states can allot to welfare families. With the recent changes in law and regulation even such funds as have been available through that source have now virtually disappeared.

HEW Secretary Weinberger made this clear in his appearance before the Senate Finance Committee when he said that the only persons the public assistance-related social services program is designed to serve are welfare recipients and those in danger of dependency. The new regulations, together with the requirement in the General Revenue Sharing Act of 1972 that 90 percent of the Federal matching funds

for services (except for the narrowly defined exemptions) must be used for services furnished to current recipients of and applicants for financial assistance, will force states to terminate services previously provided to many thousands of families and children

Where appropriate and to the extent possible, these services will now have to be covered through Federal CWS funds or through state and local funds as available. But, even if the Federal CWS grants are substantially increased, it is quite likely that some services will have to be curtailed.

The need for increased support becomes even more apparent in view of the fact that the costs of services have risen along with all other costs, and that the population in need of services, along with the population in general, has grown.

Adequate and complete data on the CWS program are no longer available through HEW. (See below for further discussion.) Therefore, it is not possible to arrive at a precise determination as to what amount should be appropriated by Congress for FY 1974. However, we urge your Committee to give consideration to the factors which we have identified, including the fact that there has been no increase in five years, together with the 1972 action of Congress to raise the authorization to $211 million.

From the inception of the Social Security Act in 1935 and until 1967 the authorization for CWS grants was in Title V, Part 3, and Federal responsibility for the program during that period was carried by the Children's Bureau. The CWS program, at all levels, Federal, state, and local, was an identifiable entity. Although the funding was modest at best, the CWS program placed great emphasis on high quality of performance, and a substantial proportion of its meager funds was used for staff development and professional training.

Under the leadership of the Children's Bureau and the state child welfare divisions, a number of innovative services were advanced, such as day care and homemaker services, which are today being supported on a greatly expanded basis. Throughout most of those years, the social services funded through the open-end authorization of the public assistance titles were at a relatively low stage of development. When the states first started to move seriously to develop social services through the public assistance titles under the stimulus of the 75 percent matching authorization by the 1962 Social Security Amendments, they found a sudden need for large numbers of professionally qualified personnel. The pool of CWS professionals which had been so carefully developed over the years was virtually the only resource available. As a result the corps of trained child welfare services staff was dispersed to staff this greatly expanded public assistance program. For the most part they were assigned to supervisory and administrative positions.

The 1967 amendments transferred the CWS authorization from Title V, Part 3, to Title IV, Part B. This was done for the reasonable purpose of facilitating the coordination of the two children's service programs. These amendments also introduced the requirement that state and local agencies maintain a single organizational unit to administer services to children under Titles IV-A and IV-B. There soon followed the merging of these two programs for the purpose of administration within HEW.

Here began the erosion of the distinct identity of child welfare services as a program to serve children in need of services without reference to the financial eligibility test of AFDC. Further, the direct line responsibility and leadership roles of the Children's Bureau to state welfare services programs has by now disappeared.

As long as the services provided through AFDC and CWS have some semblance of a common focus and purpose (as during the past few years), such a blending was to a degree supportable in logic. But that is no longer the situation. The services through AFDC are now clearly and explicitly to be provided to children and families who are recipients of financial assistance or on the verge of eligibility. And they are to be provided for the purpose of enabling families to become self-supporting. While this is a worthy objective, it is so severely limited and involves such narrow range of goals and activities as to make the two programs essentially incompatible within the prescribed single organizational unit.

In the meantime, the two programs have become so blended as to have nearly lost their separate identities. With the new statutory and regulatory limitations on IV-A services, the IV-B program now stands in danger of following along in the same limited direction of getting families off AFDC, and the point may soon come when the basic purpose of CWS will become submerged and disappear.

By way of illustration, the National Center for Social Statistics discontinued the separate report "Child Welfare Statistics" (CW-1) with the report for 1969. Since then there has appeared one report, entitled "Children Served by Public Welfare Agencies and Voluntary Child Welfare Agencies and Institutions" (NCSS Report E-9, March 1970), which was issued in March, 1972. This report makes no distinction between services under IV-A and IV-B. Moreover, it shows only numbers of children and living arrangements, and the provider of services. Data on types of services and many other program activities, comparisons, expenditures and a variety of other factors pertinent to CWS are no longer published by the NCSS.

As another illustration, the law has always required that HEW and the states engage in joint planning of the CWS program for each state. Any meaningful compliance with this requirement has been discontinued and is now observed by HEW requiring states to sign pro forma a uniform pre-printed plan.

In the light of the known needs for expanded CWS services, HEW continues to recommend an appropriation of $46 million for CWS. When that is considered together with the blurred and incomplete HEW reporting of all services, and the elimination of the comprehensive CWS report, the question is not frivolously raised as to whether HEW is moving, through decreased accountability toward decreased appropriations, and finally to the obliteration of Federal grants for Child Welfare Services.

In direct opposition to such a move, it is our judgment that the existing statutory authorization for Federal CWS grants to states is a sound basis for building a program that would effectively provide the social service needs of children and their families throughout the nation. The funding mechanism permits flexibility and innovation in developing services consistent with the needs and special circumstances of the individual states. With adequate support and proper direction, it could again begin moving forward at once to the attainment of that objective.

APWA

ATTACHMENT NO. I

ANALYSIS OF PROGRAM AND NEEDS

A. The Numbers of Need

For child welfare services, what are the numbers of need? The question itself surfaces the need for a mechanism to report comprehensively on existing services and providers and to gather and analyze statistics on unmet need in terms of type of service and locality, if any precision in planning and providing is ever to be achieved.

We do know some dimensions of the universe of need:

There are 80.5 million children under age 21 in the U. S. today (Census Bureau estimates for May 1973).

7,983,000 children were receiving assistance under the AFDC program in December 1972.

2,768,000 children were reported receiving social services from state and local agencies on March 31, 1970, in the combined title IV-A and IV-B NCSS E-9 report (these statistics included estimates from two states, excluded children receiving services under title IV-A in six states).

694,000 children were reported to be receiving CWS on March 31, 1969 (NCSS Report CW-1 (69)). Disregarding the fact that these 1969 statistics do not include all previously reported children, a projection based on the 8% average increase in CWS from FY 60 through FY 69, indicates that 1,019,000 children will receive Child Welfare Services in FY 74.

$563,119,000 were expended by state and local public welfare agencies in FY 69 (NCSS Report CW-1 (69)). Disregarding the fact that, in the case of 23 states, 1969 statistics did not reflect some expenditures previously financed under the Child Welfare Services program, a projection based on the 12% average increase in expenditures for the ten-year period FY 60 to FY 69 would indicate expenditures of $992.5 for Child Welfare Services in FY 74.

In fact, statistics for both services and expenditures are buried in IV-A reporting. Thus, the HEW budget request for child welfare services in FY 74 depicts a progressive decline both in services (from 513,000 to 438,000 individuals) and expenditures ($532 million to $520 million) from FY 72 through FY 74. This bland portrayal of declining expenditures and services, when related to the wholly inadequate HEW reporting on all services raises a question not in the least frivolous as to whether HEW is moving through decreased accountability toward decreased appropriations and, finally, to the obliteration of federal funds for Child Welfare Services under title IV-B.

B. Program Needs

1. Day Care Services

The worth of day care for children was early recognized and subsequently developed through CWS, long in fact before the concept became an accepted value nationwide. The need for expanded day care services are manifest in the statistics set forth below, though these do not speak to the equally pressing needs of children whose parents are not necessarily in the work force but who could be diverted from foster care through day care services and family strengthening.

In the U.S. today, children under the age of 5 years number 17,600,000 (May 19, 1973 Census Bureau estimates).

Children between the ages of 5 and 9 years number 18,000,000 (May 1973 Census Bureau estimates).

Children under 6 years, whose mothers are in the work force, number 5,607,000 (DOL, Women's Bureau statistics for March 1972).

Children under 18, whose family is female-headed family and the mother is in the work force, number 4,040.000 (DOL, Women's Bureau statistics, March 1972).

Licensed day care facilities available to children in the U. S. (NCSS unpublished statistics for March 1971):

Centers: 17,382 - capacity 682,569,

Day Care Homes: 54,261 - capacity 186,780,

Total Day Care Facilities: 71,382 - capacity 869,349.

What is happening to the 4,737,000 children under six whose mothers are working and for whom no licensed day care facility is available? And what of the others who could remain in their homes, if these homes were strengthened and day care services were available?

A poignant footnote is provided by Elizabeth Wickenden in her November 20, 1972 address to the Child Welfare League of America, Conference of Executives: "We do not make it easy for a mother to combine outside earnings with her home responsibilities by providing the necessary supportive services. Even those services that are grudgingly provided -- like day care -- are geared to saving the taxpayer money rather than to the best interests of the children and their families."

2. Foster Care and Group Services

Additional funds are urgently needed for the spectrum of services related to the provision of foster family and group care. Although payments for foster care have absorbed increasing proportions of CWS funds, the need for adequate payments for foster care have not been met thereby. Furthermore, the need for extensively broadening the base of professionally oriented foster family homes; for thorough home studies and assessment of needs and provision of specialized professional services where necessary, both before and after placement in foster care; for developing homes that can properly care for children with special problems when unnecessary institutionalization would be the alternative; and for training, educating, and reimbursing foster parents for social services can only begin to be approached with existing resources.

Numbers of foster family homes have increased by four to six thousand in the past three years, though turnovers may have contributed to such increase. Placement in foster homes, unaccompanied by thorough preparation of the parents and careful matching of child with family, has resulted in discouragement and withdrawal from this service by many foster parents. Statistics reveal the progress made in diverting children from unnecessary institutionalization, and also illustrate that the trend in provision of foster care has moved steadily from voluntary agency to public agency auspices.* In light of the fact 84% of foster care services are now provided under the auspices of public welfare agencies, and in view of the agency-recognized need for up-grading and strengthening those services, additional funds under title IV-B are essential.

* Trends in foster care are detailed from NCSS CW-1 (69): Total number of children in foster care and group homes under public and voluntary agency auspices from calendar years 1933 through 1969 increased 136%, from 105,000 to 249,000 children. Total number of children in institutions for neglected, dependent and emotionally disturbed children declined 49% during this period, from 144,000 to 74,000.

In 1933, 42% of children in foster care were in foster family homes; 57% were in child welfare institutions. In 1969, 77.1% were in foster family homes, 22.9% in child welfare institutions.

In 1933, among children receiving care in foster family homes and institutions, 28.9% were under public agency auspices, 71.1% under the auspices of voluntary agencies; in 1969, 67.2% were receiving foster care through public agencies, 32.8% through voluntary agencies.

In 1933, 46.7% of children receiving foster family care only, were served under the auspices of public agencies, 53.3% under voluntary agency auspices; in 1969, the percentages had shifted to 82.3% for public agencies, 17.7% by voluntary agencies.

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3. Protective Services

From the very beginning, protecting children from abuse by their parents or other caretakers has been at the heart of Child Welfare Services. Headlined tragedies and legislative hearings have now aroused the conscience and consciousness of millions of Americans to the need for concerted action in the detection of child abuse, and in care and treatment for the child victim. In this regard, among the complexities involved in the problem, authorities on child abuse have correctly pointed to the inadequacy of training for social workers in this special field and, we can add to that, the woeful inadequacy in numbers of such adequately trained workers. Authorities have also pointed to the need for early intervention on behalf of the maltreated child with no signs of abuse other than minor physical evidence of deprivation and neglect. Trained child welfare services personnel present in or consultant to schools and child caring facilities should fill this need and funds should be made available to train and employ such personnel.

Again, authorities note that the passage of child abuse laws does not of itself assure continued protection of the child and rehabilitation, where possible, of the family. Development of community programs to provide these services is, too, a responsibility of Child Welfare Services, staffed adequately both in number and professional qualifications of personnel. Finally, it must be recognized that in any program of preventive, protective, or developmental care for children in need, parents remain the key personnel and they must be reached by professional child welfare services workers whether through school, in small groups or in their homes. Here is where protective services must begin in order to prevent neglect, expoitation and abuse. Here, in the preservation of children in their own homes, the ultimate objective lies.

4. Adoption Services

If a child cannot be maintained in, or restored to, his own home, the permanence and security offered by adoptive parents would be the remedy of choice. For many children of minority races, for children with physical, developmental or emotional handicaps, for those children of ages beyond twelve months, and for several hundreds of thousands of children now in foster care under circumstances that avail no hope for return to family, that optimum solution is virtually unavailable. The few statistics related herein clearly illuminate that fact.

Adoptions reported by the National Center for Social Statistics for 43 states numbered 175,000 in 1970. Unpublished NCSS statistics for 1971 indicate a decline in adoptions for the first time in the years reported since 1957. Children of minority races accounted for only 12% of those reported adoptions. Among 38 states reporting in 1970, the median age of all children adopted was 1.8 months. Among the same states, 86% of all children adopted were under one year of age, 11% were between the ages of one and six years, and 2% were ages 6 and 12.

Beyond the widely recognized need for removal of impediments to interstate adoptions and the establishment of a nationwide adoption information exchange system, there is enormous need for intensive effort in the development of adoptive homes for minority children and for children outside the range of instant adoptibility. Such effort requires greatly increased numbers of skilled and experienced personnel. Furthermore, funds are needed for subsidized adoption which would open homes for the many children who would be welcomed by families otherwise unable to meet the cost of adoption proceedings and child-care costs thereafter.

5. Juvenile Services

"Children in danger of becoming delinquent" were among those specifically designated for services under Title V, Part 3, of the 1935 Social Security Act. Until the past few years, this has been perhaps the most neglected of all services, not through deliberation but because priority in the use of limited funds was assigned to the protection and care of homeless, neglected, dependent and abused children.

The factors which contributed to breakdown of the family authority, the tremendous mobility of youth, and the rejection of established institutions, led also to increased delinquency. Nationwide attention to the delinquency of youth led to an uncoordinated proliferation of agencies, services and small amounts of funds to prevent and correct delinquency. Meanwhile, public welfare agencies, primarily through use of title IV-A funds, began to develop innovative programs for positive involvement of youth in understanding, preventing and solving the problems that lead to delinquency, as well as programs to divert children from court involvement.

Public Law 92-512, and the implementing social services regulations, will eliminate these programs for virtually all youth who are not recipients of public assistance. Delinquency programs developed through grants under the Law Enforcement Assistance Act are limited to children adjudicated or identified by law enforcement agencies as wrong-doers. Funds -- and they are a meager $10 million in HEW's FY 74 budget -- for the Youth Development and Delinquency Administration are directed not toward service programs but toward the development of systems to bring about institutional change and reform as a means of preventing delinquency.

Thus, if programs and services are to be maintained, developed and extended to those hosts of young people who are neither officially identified wrongdoers or recipients of public assistance -- and surely there is no persons in touch with reality today who believes that poverty alone produces delinquency -- then IV-B funds, which are tied neither to crime nor to poverty, must provide the base for such.

Demonstration projects for the integration of youth services among all involved community agencies (health, education, mental health, law enforcement, courts) must be undertaken.

Projects that involve youth in community enterprises (local government, advisory committees, environmental concerns, recreational development) must be maintained and extended.

Clearinghouses, along the lines of Youth Service Bureaus, to provide information and referral services must be established. Such referral services would relate to employment, health, training, parenthood, shelter, etc. These clearinghouses would also act as a point of reference for law enforcement officials in diverting youth from the juvenile justice system.

Funds are needed for training and consultation for law enforcement officers on means and resources available to divert children from automatic arrest and detention, and the labeling that results therefrom.

No one imagines the problems of delinquency prevention can be solved with IV-B funds along; however, public welfare agencies through Child Welfare Services have lead responsibility for developing the programs and services that can contribute to the solutions, and, moreover, the authority to use the only unfettered funds that can be made available for this purpose.

6. Qualified Professional Personnel

Funds are urgently needed to develop and augment resources of trained child welfare services personnel. The 1960 amendments to the Social Security Act specified that, to the extent feasible, child welfare services would be provided by trained child welfare personnel of the agency administering the plan. States had, in fact, used these funds extensively in the past for the purpose of developing a corps of trained professionals. The 1962 amendments authorized expanded services under titles IV-A and IV-B, and provided for their coordination. Thus, when public welfare agencies began to expand services in accord with the 1962 amendments, the pool of child welfare services professionals developed under title IV-B was virtually the only resource available. As a result, the corps of trained, professional child welfare services staff was dispersed to fill a vastly expanded requirement for social services professionals, and the ranks of front-line workers were further depleted to organize services in supervisory positions.

Since then, expanded work loads, have diminished the chances of "success" in terms of providing the quality or service that is essential when you are taking the responsibility for literally arranging the lives and future of dependent children. New workers have become discouraged, and have entered fields where hope of achievement was higher and financial rewards more promising.

Front-line workers today are often inadequately trained as well as inexperienced as a result of high turnover and the need to expand staff more rapidly than professionals could be trained or budgets could support. Short-staffed agencies could ill afford to release staff for training even though that training could be paid for by federal funds, particularly if funds were not available to hire additional staff.

Although it is fully recognized that not all tasks involved in child welfare services require highly trained professionals, such personnel are indispensible not only to the specialized, sensitive, difficult and time-consuming services that relate directly to safeguarding of children, but to the supervision of the child welfare services program, and to the development and extension of services within the community. Because those professionals are in short supply, the community planning and coordination of resources effort is slighted, the strength and leadership of the service is diminished, and the quality of service itself suffers. So then have children.

While the federal government recognized the need to under write graduate and undergraduate programs in human services through Sec. 707 grants to colleges and universities, that support will end in FY 74. Child welfare services benefitted directly from these funds beginning in 1963, when grants for training Child Welfare Services personnel were administratively earmarked. These were progessively increased to a total of $5.9 million in 1972. For the past several years, 400 students completed the graduate program annually, and an undergraduate program was undertaken for 200 students last year. Both programs will operate at half strength in the term beginning in the fall of 1973, and then terminate. This personnel resource will then be lost. Full-time professional child welfare employees, when last reported in published HEW statistics, had increased steadily from a rate of .9 per 10,000 children under 21 in the U. S. in the first reporting year, 1955, to 1.8 per 10,000 in 1968. The rate dropped sharply in 1969, the last year of any published reporting by HEW on CWS.

C. The Record

How have title IV-B funds been expended, for what services, for how many children? Based on the last published report on child welfare services we know that, on March 31, 1969:*

694,000 children were receiving CWS from state and local agencies -- 49% in the homes of parents and relatives, 32% in foster family homes.

* These statistics begin to reflect the changes in reporting in that they excluded, in 7 states, previously reported services to AFDC recipients. Services reported on a specific date, e.g., March 31, 1969, are not to be confused with annual statistics, which are cumulative and therefore higher by a rate of about 1.7.

The percentage of children receiving CWS in the homes of families or relatives increased from 40% to 51% during the period 1957-1967, while percentages of children receiving services in institutions, foster homes, and adoptive homes declined.

Numbers of children receiving foster care under the auspices of public and voluntary agencies in foster family homes more than doubled between 1933 and 1969 while numbers of children receiving foster care in institutions dropped to almost half.

12,500 full-time staff were employed in Child Welfare Services by state and local agencies in 1969 (46 states reporting); there were 5,200 CWS case workers and 900 CWS supervisors (37 states reporting); 1,100 personnel were on educational leave on June 30, 1969. These personnel statistics reflect declines from 1968 of 16%, 21%, 10%, and 8%, respectively.

A total of $563,119,000 in local, state and federal funds were expended for Child Welfare Services in FY 69; however, 23 states had transferred reporting of some cost to title IV- , and in several states data was incomplete or estimated. Of this amount 64.5% was expended for foster care payments, 3.7% for provision of day care*, 26.4% for personnel, .8% for educational leave, 4%, other (space, equipment, etc.). Total expenditures for CWS by state and local agencies more than quadrupled in the period from FY 55 through FY 69.

State Programs

State by state listings of and descriptions of programs developed and presently operating under title IV-B are not available at this time. Appended hereto are descriptions of special programs and program overviews prepared by several states.

D. Priorities for Program Development

Were additional funds available through an increased appropriation under title IV-B, states have cited examples of program -- areas that should be either expanded, developed or demonstrated, as follows:

* This small percentage expended for day care reflects the fact that day care during that period could be substantially charged to IV-A funding.; however, henceforth this will not be possible.

Demonstration Projects. In selected areas, projects to demonstrate such programs as comprehensive protective services to divert placements in foster care or institutions.

New Methods of Program Administrations. Development of innovative administrative techniques to measure quality and effectiveness of programs and services.

Seed Money. Use of "seed money" to encourage initiation of community based programs in such areas as day care, e.g., one-month grants and grants financed at 100% the first year, reduced annually and phased out to full program support by developer in three years.

Child Abuse. Education and orientation programs for personnel in the medical profession, educational institutions, law enforcement agencies and juvenile courts on child abuse reporting; liaison with schools in child abuse prevention, and placement of social professional child welfare services workers in school to detect adjustment proglems; supplemental child-abuse services to include community psychiatric, homemaker and day care services for both parents and children; arrangements for 24-hour emergency services.

Foster Care. Services to develop "professional" foster parent care for children with severe mental and physical handicaps; provision of training and education for foster parenthood; payment of fees to foster parents for provision of social services; development of recruitment programs for new foster care parent resources, e.g., in suburban areas, among young parents for whom foster parent "fees" would provide needed income for children's college education; conduct of surveys of the various levels and kinds of foster care needs and resources; development of planning services and follow-through for the future of children in foster care; upgrade of foster care services to include such items as diagnostic studies of the child's needs; provision of emergency parent service to avert long-term commitment; provision of medical services to foster children who do not qualify for such services under other programs and would not otherwise receive essential medical and dental services; development of additional group homes for children who benefit more from this setting than from foster family care.

Incentive Grants. Provision of one-time grants to child-care institutions when, for example, a small amount would make the critical difference in up-grading facilities.

Day Care. Encourage development of facilities and services for provision of day care to the children of low-income working mothers and to children in special need of day care; strengthening of psychiatric and pediatric consultation in day care facilities.

Youth Services. Demonstration programs for delinquency prevention; extension of consultation on child welfare to police officials to avoid court as first resource; funding for studies on which to base CWS coordinated inter-agency programs for prevention of drug abuse and delinquency.

Adoptive Homes. Provision of adoption subsidies to prospective adoptive parents who desire to bring a child into their home but cannot otherwise afford to adopt.

Increase Professional Staff. Funds to develop and expand professionally trained child welfare services staff through recruitment, in-service training and educational leave; reduction of caseloads to restore quality services.

Services to Unwed Mothers. Counseling and planning for unwed mothers to enable the mother to raise the child if she desires through career or marriage, or both, and to avoid recurrence of unwanted pregnancy. Assistance for unwed mothers who are ineligible for AFDC or MA and whose income from employment does not suffice for the cost of lying-in care to protect the newborn child's health.

Services to Migrants. Ombudsmen and outreach in child welfare services to migrants and other difficult to reach groups.

Foster Home-Finding Service. Demonstration projects for development of central home-finding service within a single community, to overcome the continuing critical lack of suitable, stable foster homes.

APWA ATTACHMENT NO. II

DEFINITIONS OF CHILD
WELFARE SERVICES

What Are Child Welfare Services?

In order to develop a policy that would facilitate expansion of child welfare programs on a sound basis, the Children's Bureau in 1950 and 1951 consulted with representatives of state welfare departments, other public agencies and voluntary agencies through regional conferences and a final conference for national voluntary agencies. The results of those deliberations, set forth in a policy manual,* described services and defined the purposes of a federally assisted child welfare service. A more instructive and succint statement of role and objectives than the one quoted below could not easily be discovered or devised:

* Policy Manual for the Use of Child-Welfare Service Funds
Children's Bureau
Social Security Administration
Federal Security Agency, Washington, D. C. 25
April 9, 1961

"The primary objectives of the child-welfare program are to strengthen family life and preserve the child's own home wherever possible, and, if the child must be cared for away from his own home, to provide substitute care for him with a relative, if possible, or in a foster-family home, group home, or institution according to his individual needs.

"The focus of a child-welfare program should be the child and his needs. Children in need of case work services are found in all economic, social, and ethnic groups. Therefore, case work services should be available to all children needing them regardless of their economic or social status.

"Among the services and facilities that should be available on a local, regional, or state-wide basis, as needs may require, are: homemaker service, day care facilities, foster-family homes including adoptive homes, and group care facilities. In addition, the child-welfare program should make use of and stimulate the development of services from other fields needed in promoting the well-being of children, such as health services, psychiatric and psychological services, services of the courts, leisure-time and recreational services, services to foster the spiritual growth of children, and law enforcement services for the protection of children from neglect, exploitation, or abuse.

"Achievement of the objectives of a well-rounded child-welfare program involves the use of various methods of social work, including social case work, social group work, and community organization. Research and sound administrative practices are needed throughout the program.

"Leadership given on a state-wide basis in the operation of programs, the improvement in skills of workers, and in the development of additional needed resources promotes the development and maintenance of service and equitable treatment of all individuals. State child-welfare services are essential for the encouragement and assistance of adequate methods of community child-welfare organization. Because the social services provided by public welfare agencies, other public agencies, and voluntary agencies, all go to make up the comprehensive child-welfare program of a state or community, it is important that they recognize their interrelationship, unite their efforts, and reenforce each other.

"The core of any service program is personnel. A comprehensive program of public child-welfare services to children requires staff with many kinds of specialization. Depending upon the needs of the program, professional personnel needed may include: social workers with basic knowledge, skill and experience in case work, group work, community organization and research; and specialists in other fields such as psychiatry, psychology, and public information interpretation.

"Adequate and effective child-welfare services depend upon the competence of personnel. This fact, together with the limited number of qualified child-welfare workers available, makes provision for staff development a major responsibility of public welfare agencies in establishing, extending and strengthening child welfare services. The comprehensive nature of public child welfare services requires staff with many kinds of specialization. The scope of training, therefore, must be broad enough to cover basic professional preparation and necessary specialization."

In brief, the purpose of a Child Welfare Service under title IV-B is to assure that children and families receive essential protective services 1) through cooperative arrangements with existing community agencies for services, facilities and trained personnel, 2) by stimulating development, expansion or up-grading of services and facilities in identified areas of need through use of IV-B funds as start-up financing, and 3) by direct provision of services and facilities where needs are not otherwise met. This is a leadership role in community planning, development, coordination and provision of professional child welfare services.

In the interest of clarity and because they make explicit often misunderstood or unknown functions and services, the following definitions pertinent to Child Welfare Services are quoted from the aforecited policy manual:

> "A foster-family home is a home which cares for children not closely related to the foster family. A foster-family home usually does not care for more than a maximum of four to six children including own children. Foster-family homes include boarding homes, free homes, adoptive homes, work and wage homes.
>
> In spite of continuing efforts to strengthen and improve services to children in their own homes, many children must be care for away from their own families because of conditions in the community, or in the family, or becuase of the child's own special needs. If these children cannot be cared for by close relatives, foster care must be provided.
>
> For many children foster-family care offers the best opportunity for normal development and happinesss. This type of care is generally best for the child who needs and can accdpt new family ties. It is desirable, especially for a baby or young child, for the child who needs permanent care away from his own family, and for the child who needs the kind of individual attention that is possible only in a family setting.

Day care is care provided in foster-family day-care homes or day-care centers. A "foster-family day-care home" is a family home providing care on a fee basis during part of the twenty-four hour day for approximately one to six children. An important feature of a day-care program is the availability to mothers considering use of such care, of individual counseling and advisory service to help them plan for their children and themselves and to make the most effective use of day care resources and other community facilities.

"Homemaker service is the supervised placement of a woman chosen for her skills in the care of children and in home management and for her ability to get along with people, in a home where her services are needed to maintain and preserve the home as a unit. Casework service is an essential part of a homemaker program for helping the family to use the service effectively and for assisting the homemaker in her service to the family.

"Specialized services are those diagnostic and remedial services necessary, as part of the casework plan, for the understanding and rehabilitation of children disadvantaged by mental, emotional or social conditions, or by chronic physical conditions affecting their social adjustment. Such services include psychiatric and psychological study and treatment, remedial speech and reading, and other therapies.

"Community planning and organization for children include those activities that: identify needs of children and youth and determine causes of children's and youth's problems within the community; determine appropriate and effective methods of community action to eliminate the hazards to the welfare of children and youth; determine and take steps to establish or strengthen programs, services, resources and facilities to meet needs; and coordinate programs of the various community agencies into a network of services in behalf of children and youth.

"Research. Broadly conceived, research in child-welfare services is the process or processes by which an administrative agency attempts to secure the essential information it needs for the proper and effective promotion, development and administration of programs that advance the social well-being of children and youth. Included within this definition of research are such programs as: operational and administrative research, including position classificqtion surveys; evaluative research; legal research; surveys; exploratory studies; and collection and analysis of social statistics, including statistics on child-care programs."

Mr. FLOOD. Thank you very much.

Mr. PATTEN. You can add the Council of Churches of New Jersey to your list of people.

Mr. NEWGENT. Yes, sir.

WEDNESDAY, MAY 16, 1973.

POVERTY PROGRAMS

WITNESS

WILLIAM T. ROGERS, JR., EXECUTIVE DIRECTOR, MIDDLESEX COUNTY ECONOMIC OPPORTUNITIES CORP.

Mr. FLOOD. Mr. William Rogers, the executive director, Middlesex County Economic Opportunities Corp.

Mr. PATTEN. Mr. Chairman, may I say I was there when we talked about how we should implement the county program. We agreed to form a county corporation. It has been said from time to time by State people and others that our setup in Middlesex County was one of the best in the United States.

Mr. Chairman, I want you to know I just love William Rogers for the way he has devoted himself to the poverty program in our county. It is a pleasure to have him before our committee.

Mr. FLOOD. Thank you, you are lucky.

Go ahead.

Mr. ROGERS. Thank you, Mr. Chairman.

Gentlemen, I am William T. Rogers, Jr., executive director of the Middlesex County Economic Opportunities Corp., located in New Brunswick, N.J. This is a poverty program and our funding is from HEW, The Department of Labor, the now controversial OEO, and from the State of New Jersey and the County of Middlesex. I wish to first take this opportunity, on my behalf, the behalf of the Board of Trustees of the Corporation and of the thousands of people in Middlesex County who are benefitting from these programs, to thank Congressman Edward Patten, who has arranged to have this invitation extended to me to make a statement before your subcomittee. Mr. Patten is again showing his strong support of the vulnerable members of our society.

There are over 930 organizations similar in varying degrees to my own which are being threatened by the situation which has developed over the tenure which the OEO office will or will not enjoy. The Office of Economic Opportunity has not funded programs which in their entirety serve the needs of those members of our society which I called vulnerable in my opening statement. OEO has, however, served as an educational force, a catalytic force, and as an administrative force to insure, within the limits of its capabilities, the delivery of benefits which may be derived from other departments within our Federal Government. Our organization conducts day care centers, on the job training programs, mainstream programs, programs for those people trapped in the ravages of alcoholism, programs for those people who are unfamiliar with our political system and in many instances with our social system. Moneys that have been derived from the Federal Government, from the Office of Economic Opportunity have provided a cohesive force to channel programs into one admin-

istrative office, and deliver to the people of our county, and in fact, throughout the entire Nation, services that would otherwise be too expensive to administer or would be too difficult to deliver to the people. Perhaps I should go back for a moment and clarify my use of the word vulnerable. By the vulnerable ones in our society I am referring to: unwed mothers, blacks, Puerto Ricans, Chicanos, people with limited education, people who have larger families than their incomes can support, the aged, particularly the aged without the benefits of pensions, which in themselves are inadequate for survival and maintenance of life in some of our society's concentrations of population, heads of households with lower than an 8th grade education, female heads of households, and in some instances members of the society who because of one disadvantage or another have never been able to achieve an income adequate to the demands of our economic situation in the United States. These vulnerable members of society have been given, over the past years, almost 7 years to be exact, an opportunity to become part of the system. They have been given access to the decisionmaking process in the development of programs and the distribution of the services, they have been encouraged to believe that there are people within this Nation who care about their plight, their future, and about the situation that has developed throughout the history of this country, which has left a few people standing at the side. In short they have been given hope, now it seems that the machinery is afoot to dash these hopes and to take away advantages that have been developed over the past 7 years.

I among many, feel that this is perhaps an act of cruelty. No longer will there be, should the plans achieve their goal, an Office of Economic Opportunity, which does provide finances for offices such as mine, who do such minor things which are so key in the lives of so many people. Minor things such as guiding someone through, what to them is unintelligible set of documents, which when clearly understood will give them food stamps, providing for them transportation that will take them to the hospital, to the bank, to the food centers, where perhaps, without our services a large portion of their extremely limited income would have to go for transportation which they should never have to subsidize. Such things as the early detection of a child in a Head Start Center with a speech impediment, which could stand between him and the full development of his potential. Such minor things as maintaining an office which to them represents the first step in having their plight heard, answered with some degree of hope that someone will try to do something to relieve the agonies of poverty.

As I seem to be reaching the limits allowed me I wish to then very precisely outline my request for your consideration:

(1) I strongly request that you recommend an increase in the budgets for HEW and for the Department of Labor, particularly in the areas of the poverty programs.

(2) I strongly request that you recommend that those rules for implementation now being developed in HEW be relaxed in order that many of the nonworking mothers will be able to become trained and employed while their children are properly cared for in day care centers which gives them an equal opportunity for early development with those who are not struck with poverty.

(3) Within whatever limits that you have available to you I would ask that you not only recommend but that you strongly fight for the inclusions in the budget of the United States, funds for the continuation of the Office of Economic Opportunity, with certain guarantees or protections to see to it that the chaos, now existing when people do not know after June 30, what the status of our poor shall be ended.

I feel that you have indulged me in making my statement before you, but I also feel confident that your good offices will be used to maintain that hope that I mentioned earlier, that has been extended to the member of our poverty section of society and that, that hope will be fulfilled by a long and successful operation of poverty programs throughout our Nation. In conclusion I would say that if the efforts to maintain this program are coupled with efforts to eliminate the abuses which have in many isolated cases cast a shadow on the programs themselves, then I would say that our Nation is well on the way to proving to itself and to the rest of the world that we in the United States do care about all of the people, all of the time.

Mr. FLOOD. Thank you very much.

WEDNESDAY, MAY 16, 1973.

FAMILY MEDICINE

WITNESSES

DR. CARL B. HALL, PRACTICING FAMILY PHYSICIAN
DR. AMOS JOHNSON, PRACTICING FAMILY PHYSICIAN
RICHARD NEY, WASHINGTON REPRESENTATIVE, AMERICAN ACADEMY OF FAMILY PHYSICIANS

Mr. FLOOD. Dr. Carl B. Hall, chairman of the Commission on Legislation and Public Policy, American Academy of Family Physicians.

Dr. HALL. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I am Carl Hall, a practicing family physician from Charleston, W. Va. I am appearing here today in behalf of the American Academy of Family Physicians (formerly the American Academy of General Practice) which is an organization of 34,000 physicians residing in all 50 States, Washington, D.C., Puerto Rico and the Virgin Islands. I am a member of the academy's board of directors and chairman of the Commission on Legislation and Public Policy.

Seated with me is Mr. Richard Ney, the academy's Washington representative and Dr. Amos Johnson, a practicing family physician from Garland, N.C. Dr. Johnson is a past-president of the American Academy of Family Physicians and president of the American Board of Family Practice which is the specialty certifying board in family practice.

In the interest of conserving time, my remarks will be confined to one very pertinent section of Public Law 92–157 which is commonly known as the "Comprehensive Health Manpower Training Act of 1971." Section 767 of the Comprehensive Health Manpower Training Act reads as follows:

There are authorized to be appropriated $25 million for the fiscal year ending June 30, 1972, $35 million for the fiscal year ending June 30, 1973, and $40 million for the fiscal year ending June 30, 1974, for grants by the Secretary to any public or nonprofit private hospital:

(1) To plan, develop, and operate or participate in, an approved professional training program—including continuing education and approved residency programs in family practice—in the field of family medicine for medical students, interns, residents, or practicing physicians;

(2) To provide financial assistance—in the form of traineeships and followships—to medical students, interns, residents, practicing physicians, or other personnel, who are in need thereof, who are participants in any such program, and who plan to specialize or work in the practice of family medicine; and

(3) To plan, develop, and operate, or participate in, other approved training programs in the field of family medicine.

The American Academy of Family Physicians firmly believes that the residencies contemplated by these provisions of the Health Manpower Training Act are a vital first step on the road to improving this Nation's health care delivery system. In the last few years there has been a proliferation of proposals before Congress which would establish mechanisms for providing continuing, comprehensive health care for all Americans. However, regardless of how well conceived these mechanisms are and regardless of how well they are implemented, the reality will never match the dream unless there is a sufficient number of physicians available to provide continuing, comprehensive care at a price which society can afford; a sufficient number of physicians who are trained to treat people not only when they are sick but before they get sick. This is what family practice is all about.

In the past, medicine has been crisis-oriented with the result that medical care was given to cure disease and not prevent it. Medical education was geared to train large numbers of doctors to diagnose and remedy individual disease processes with the result that many patients were hospitalized for diagnostic procedures which could be provided as well or better, and certainly at less cost, on an ambulatory basis.

With the establishment of family practice as medicine's 20th specialty in 1969, new emphasis was placed on training physicans to provide continuing, comprehensive health care to all patients regardless of sex or age. Family physicians are being trained to treat the patient within the totality of his environment—his family relationships, his job, his economic situation. The famly physician is trained to treat the patient as a whole person—not as a disease process or an organ. He is the people specialist.

The family physician is capable of treating 85 perecnt of mankind's illnesses. In those instances in which it is necessary to refer his patient he assumes the role of team quarterback. From his vantage point, he can see the whole person as that person relates to his environment. With that perspective, the family physician is in the best position to determine the patient's next step in the health care system. Although the patient may be referred, the family physician never relinquishes full responsibility for the patient's health, thus providing that most important element—continuity of care.

There is no doubt that Congress has committed itself to the proposition that sufficient numbers of high quality family practice residency programs should be developed in order to shape and reshape the Nation's health care system for the benefit of the people. This com-

mitment is evidenced by the previously mentioned provisions of the Health Manpower Training Act of 1971. The question at hand is what financial commitment the Federal Government should make in fiscal year 1974 for the development and support of these residency programs.

In fiscal year 1972, only $5 million of an authorized $25 million was requested by the administration for the support of family practice residencies. The American Academy of Family Physicians did not appear before you at that time to ask for a larger appropriation. Since these residency programs were in the earliest stages of development, we believed that $5 million might be an adequate amount in fiscal 1972. Consequently, $5 million was appropriated and awarded to 52 family practice residency programs.

In fiscal year 1973, the administration again asked for an appropriation of $5 million out of an authorization of $35 million. However, by this time. It had become obvious that $5 million was an unrealistic amount if those 52 programs receiving money were to grow and improve in quality and new programs were going to be developed. We presented our views to this subcommittee and your counterpart in the Senate. The administration's reqeust of $5 million was increased to $15 million in the 1973 HEW appropriations bill sent to the President. Unfortunately, this bill was vetoed with the eventual result that again in fiscal year 1973, only $5 million was available for the support of family practice residencies.

Today we are appearing before you to ask that out of the $40 million which is authorized for fiscal year 1974, $25 million be appropriated. We feel there are several reasons why the administration's request of $5 million for fiscal year 1974 is totally insufficient and unrealistic.

A great many of the 52 residency programs receiving grants in 1972 were at the developmental stage or just beginning operations. Consequently, grant awards were made to these programs on this basis. As these programs increased in size and quality, it was to be expected the costs involved would also increase. However, because there was no increase in the amount appropriated in fiscal year 1973, due to the veto of the HEW appropriations bill, it was not possible to increase the grant award to any of these programs in 1973 even though HEW's Medical Education Review Committee had originally recommended increased amounts for fiscal years 1973 and 1974. Those which did receive additional amounts in 1973 did so through the small amount available for supplemental grants. According to HEW, out of the $5 million available in fiscal year 1973, $4,750,000 went to continuation funding and $249,999 went to supplemental grants. In other words, 95 percent of the $5 million went to support the 52 programs funded in 1973 at the same level they were funded in 1972 and only 5 percent of the $5 million was available to the 52 programs in the form of supplemental grants. If all programs received the same amount of supplemental grants, this would amount to only $5,000 per program. Obviously, not all programs received supplemental funds with the result that programs funded at minimum developmental or baseline operational levels in 1972 were funded at the same level or, in some cases, very slightly more than the same level in 1973.

Even more startling is the fact that even though practically no funds were expended in fiscal 1973 to expand and improve the programs

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funded in 1972 above their 1972 level, not one new grant application was approved for funding in 1973. This is true even though more than 60 new grant applications were submitted to HEW in fiscal 1973 and nearly half of those were recommended for approval by HEW's Medical Education Review Committee. Having exhausted the entire 1973 appropriation to enable approved programs to operate at their 1972 level, there was simply no money for new programs even though they merited support.

Gentlemen, unless the appropriation for fiscal year 1974 is increased to a more realistic level, the same situation as occurred in 1973 will occur again. Funds will be swallowed up to support those 52 programs originally receiving grants with no or minimal funds to improve and expand them and no funds will be available to assist new programs.

In fiscal year 1972, there were 87 family practice residencies training 532 residents. By the start of fiscal year 1973, this had grown to 133 residencies with 910 residents. It is estimated that by the start of fiscal year 1974, there will be 175 residencies training nearly 1,500 residents. This is the number of family practice residencies approved by the Residency Review Committee for Family Practice and does not include the many additional developing programs which haven't yet been approved.

To assume the level of financial commitment in 1974 should be based on the level of financial commitment in 1972 is to ignore the fact that the number of approved residencies involved will have doubled and the number of residents in training will have tripled from the start of fiscal year 1972 to the start of fiscal year 1974. It will ignore the fact that many additional residency programs which haven't been approved, but which weren't even in existence in 1972, are now in their developmental stages.

To assume that this phenomenal growth has occurred due to the fact that sufficient financial assistance has been available is to ignore the fact that these residencies have come about because of a demand which has been created by the public and the medical students themselves. They have come about in spite of the tremendous financial difficulties which have been encountered.

The next few years will be a critical time for the family practice concept. The momentum is there; however, unless the resources by which these programs can grow and prosper are there, our efforts will have been for naught. Now is the time to move forward in our commitment and I urge that at least $25 million be appropriated for this purpose. The ultimate beneficiary of our efforts will not be me or Dr. Johnson or the American Academy of Family Physicians or the Congress. The ultimate beneficiary will be the people of the United States.

We appreciate the opportunity you have given us to appear before you today and will be happy to answer any questions which you may wish to ask. Thank you.

Mr. FLOOD. You seem to be doing pretty well.

You are making progress, in spite of the fact you only got $5 million. What will happen in 1974 if you only get $5 million?

Dr. JOHNSON. Mr. Chairman, we have raised our programs to this level by our bootstraps. We have done it by pledges to physicians and local communities that they would be given a better opportunity to

work with these programs. They would be given an opportunity to work part time, full time, or whatever.

The students themselves have an overwhelming interest in these programs and by not demanding the stipends they could have gotten in other programs have been able to expand to this point. We have now 150 programs. We will be training 1,500 to 2,000 family physicians in the next year. There is very clear evidence that unless there is money available to help that we will lose one-third of the programs that we now have. If we are not funded at a higher level, we will lose 33⅓ percent or perhaps more of the programs, and thereby have frustrated the aim of 500 or 600 or 700 medical students who are planning to become family physicians.

Mr. Flood, let me just say this: Last year we got approximately 40 percent of the physicians licensed to practice medicine in the United States by raiding the foreign countries. Some of them came from the United States. Most came from the foreign countries. If we cannot do something to educate our own doctors rather than to take them away from other countries who need them more than we do, and if we cannot do something to increase the number of family physicians who can see three times the average number of patients per day for the same cost as specialists in the same area, we are in a bad way. The best money that can be spent for health facilities in this country would be support for our programs in family practice.

Mr. Flood. You use the phrase "pull yourself up by your own bootstraps." I learned about that from the administration on the flood control in my own area. If your bootstraps are down in 30 feet of water, it is pretty tough.

Dr. Johnson. If you can't reach the bootstraps, you can't pull yourself up.

Mr. Flood. Thank you, very much.

Thursday, May 17, 1973.

Digestive Disease

WITNESSES

DR. KURT ISSELBACHER, MASSACHUSETTS GENERAL HOSPITAL AND MEMBER, NATIONAL ACADEMY OF SCIENCES

DR. LESLIE J. SCHOENFIELD, DIRECTOR, DEPARTMENT OF GASTROENTEROLOGY, CEDARS-SINAI MEDICAL CENTER, REPRESENTING THE AMERICAN GASTROENTEROLOGICAL ASSOCIATION

IRWIN M. ROSENTHAL, PRESIDENT PRO TEM, AMERICAN DIGESTIVE ASSOCIATION

SUSANNE ROSENTHAL, PRESIDENT, FOUNDATION FOF ILEITIS AND COLITIS

Mr. Flood. Continuing with the public witnesses, we now have Dr. Kurt Isselbacher, chairman, Executive Committee, Departments of Medicine, Harvard Medical School, and member National Academy of Sciences, and Dr. Leslie J. Schoenfield, director, Department of Gastroenterology, Cedars-Sinai Medical Center, Los Angeles, representing the American Gastroenterological Association.

You have a prepared statement for the record?

Dr. ISSELBACHER. Yes, sir, also for Dr. Schoenfield.
[The statements follow:]

STATEMENT OF KURT ISSELBACHER, M.D., ON BEHALF OF THE AMERICAN GASTROENTEROLOGICAL ASSOCIATION

Mr. Chairman, members of the subcommittee, it is a privilege to appear before you today on behalf of the American Gastroenterological Association to speak in support of increased funding for research and training in the field of digestive disease. My name is Dr. Kurt Isselbacher. I am chairman of the Executive Committee of the Departments of Medicine, and Mallinckrodt Professor of Medicine, Harvard Medical School, and chief, Gastroenterology Unit, Massachusetts General Hospital, Boston, and a member, National Academy of Sciences.

Accompanying me this morning is Dr. Leslie Schoenfield who is professor of medicine, UCLA, and director, Department of Gastroenterology, Cedar-Mount Sinai Medical Center, Los Angeles, and the coordinator of the cooperative control gallstone study at Cedar of Lebanon Hospital. Copies of our curriculum vitae will be inserted in the record.

The American Gastroenterological Association is the major national organization of physicians and scientists who specialize in digestive disease. It is a professional medical society of the Nation's most highly skilled practitioners in gastrointestinal disorders; that is, diseases of the esophagus, stomach, liver, pancreas, and intestinal tract. The principal digestive disease are peptic ulcer, gastritis, hepatitis, cirrhosis of the liver, pancreatitis, gallstones, ulcerative colitis, ileitis, infectious diarrhea, malabsorption, and cancer of the esophagus, stomach, pancreas, liver, colon, and rectum.

Mr. Chairman, I realize it is not necessary for me to dwell at length on the scope and magnitude of digestive disease in American society for you and the other knowledgeable members of this subcommittee. However, for the benefit of those who may read the record, and to further impress upon you the importance of this problem, let me say that digestive disease is truly a major national health problem, enormous in scope, affecting a larger proportion of our population than any other category of disease. Allow me to cite a few statistics which will be useful in grasping the magnitude of the problem:

One out of every six illnesses suffered by Americans is a digestive disorder.

Digestive diseases are the No. 1 cause of hospitalization in this country, causing the hospitalization of more than 5 million people yearly, outnumbering hospital admissions for heart disease, for example, by 5 to 3.

Digestive diseases account for fully one-third of all deaths from cancer.

The total economic cost to the Nation resulting from digestive diseases is about $8.1 billion annually. The cost is human suffering, disability, and discomfort is incalculable.

Mr. Chairman, it is clear that this is a problem of massive proportions, affecting, directly or indirectly, nearly every one of us. An estimated 21 million Americans suffer directly from some form of digestive disease annually, and I venture to say that each and every one of us has a friend, relative, or loved one who has or had a chronic digestive disorder at one time.

In spite of the widespread incidence of digestive disease in the United States, Federal support for research and training in this area has been woefully lacking. In comparison with funds appropriated, for example, for heart and cancer research, Federal support has been pitifully insufficient to the need.

To give you some idea of just how lowly digestive disease is regarded as a national problem by the Federal Government, consider the following: In recent years, the National Institutes of Health, the Government agency charged with primary responsibility for digestive disease research, has been spending less than $1 for every American suffering with a chronic digestive disorder for research and training in this area. This is neither justifiable nor tolerable.

Last year, with passage of Public Law 92-305, which created the National Institute of Arthritis, Metabolism, and Digestive Disease, the Congress called for increased emphasis in the area of digestive disease research at the Institute. We fully expected that in light of the strong language in the committee report calling for increased emphasis, the Institute would follow suit and increase the digestive disease budget accordingly. Increases have been, to say the least, minimal. This is a point which should be clearly brought to the attention of Congress, Mr. Chairman.

In fiscal 1972, $16,404,000 was available through the Institute (NIAMD, prior to passage of Public Law 92-305 creating the NIAMDD) for digestive diseases. Despite recommended increases initially by the administration and later by the Congress for fiscal 1973, it now appears that digestive disease funding for fiscal year 1973 will fall a quarter of a million dollars short of the fiscal year 1972 level.

And the administration recommendation for fiscal 1974 is $16,409,000, which represents an increase of only $5,000 over the 1972 level. Discounting the obvious increased need, and considering only the inflationary factor of 6-percent a year, this increase should be approaching $2 million, not $5,000.

Mr. Chairman, at the risk of appearing ungrateful, the time has clearly come to make public our concerns so that these dreaded diseases, affecting more people than any others, can be dealt with in an effective manner.

Therefore, it is the recommendation of the American Gastroenterological Association that the President's budget request of $16,409,000 for digestive diseases be increased by at least $5 million, $3 million of which should be specifically targeted, as we shall illustrate shortly. Even at that level, we will fall far short of our goals; bona fide grant applications will go unfunded; and digestive disease will not receive the Federal support that it so urgently needs and deserves.

I wish, at this time, to bring to your attention, Mr. Chairman and members of the subcommittee, two vitally important opportunities in digestive disease research which hold a real and tangible promise for early and practical improvement in the health of many Americans. Because development in these two areas has been intense, and because we are so close to implementation which would alleviate untold suffering in millions of Americans, we are seeking additional funding specifically for these areas.

The amounts we seek are comparatively small; the results could be mammoth. We are not holding out false promises. We are offering a means to help millions of Americans, suffering with chronic disorders, to once again lead full, normal, and active lives.

We are asking for $1 million this year, and a total of $3 million over a 4-year period, to continue development of endoscopy. Endoscopes are instruments which are inserted into the gastrointestinal tract for direct visual examination of its lining. In the past decade, large improvements in these instruments have been possible because of development of fiber-optic systems which allow transmission of images along bundles of very flexible glass fibers.

Designation of instruments as esophagoscopes, gastroscopes, colonoscopes, or small bowel endoscopes reflects the previous trend to develop instruments appropriate for each of these regions. Combinations which allow examination of multiple areas of the gastrointestinal tract with one instrument are of obvious interest. The goal, it seems to us, should be to develop an endoscopic instrument that can be placed readily and quickly at the site of the examination with great safety and little discomfort to the patient, and that will provide excellent diagnostic capabilities, as well as make possible wide variety of the therapeutic maneuvers.

Once the endoscope has been brought to the desired level of the gastrointestinal tract, the instrument potentially can be used for a variety of diagnostic and therapeutic purposes. These include biopsy, cauterizing and removing tumors (thereby eliminating a major abdominal operation), stopping bleeding, dilating obstructions, and many others. Instruments for accomplishing these are inserted through an open channel of the endoscope.

A state of the art has been reached that now provides a great opportunity for developing much better instruments which will allow rapid and comfortable placement of the endoscope anywhere in the gastrointestinal tract without delay, provide high quality and versatility of diagnostic visualizing capabilities, allow conversion of the endoscope in place into an operative system for use of the large variety of therapeutic (and diagnostic) units, and accomplish the above objectives with a reasonable amount of research and development that will in great measure utilize now existing endoscopic instruments design and concepts. These improvements can contribute greatly to the diagnosis and treatment of peptic ulcer disease, liver and pancreatic diseases, inflammatory bowel diseases (ileitis and colitis), and cancer of the colon, as well as open new avenues for research in these areas.

Exciting opportunities are also available in the field of gallstone disease, and we are seeking an additional $2 million to continue this work this year, with a total Federal financial involvement over a 5-year period of approximately $10-

$12 million. In the United States, over 15 million people have cholesterol gallstones, of which over 300,000 are removed annually at operation, leading to total medical expenses of about $1 billion per year. Obviously, an effective and safe medical therapy of gallstones that obviates the need for surgery would represent a major advance in the treatment of one of the most prevalent diseases in western civilization.

Results from the Mayo Clinic indicate that a medical treatment of gallstones may be at hand. The long-term feeding (1–2 years) of a natural bile acid, chenodeoxycholic acid, resulted in the complete disappearance of stones in four of the original seven patients and a decrease in size of stones in the remaining three. In another series from the Royal Postgraduate Medical School at London, stones have disappeared in 4 out of 12 patients and have become smaller in another four patients after 6 months of treatment. These encouraging results have been obtained with only minor side effects, primarily diarrhea. A large, cooperative clinical trial in which the efficacy of chenodeoxycholic acid is definitely established is urgently needed before the drug can be cleared for use by private physicians. We also must be absolutely certain that prolonged treatment with chenodeoxycholic acid is safe.

This medical treatment of gallstones will probably not supplant surgery for acute attacks, but may prove life-saving in certain patients such as those who are extremely poor surgical risks. In addition, it may prove to be useful to prevent the formation of gallstones in groups who are known to be at high risk, such as the American Indian female, of whom 70 percent develop gallstones by the age of 30. For the majority of the gallstone population, it may at least offer an alternative mode of treatment for the physician to use as befits the individual case.

I think you will agree that these are excellent opportunities, and early implementation of the two processes would be to the benefit of not only those who are seriously afflicted with digestive disease, but all Americans who yearn for an end to suffering, for a happier, better way of life.

In summary, Mr. Chairman, on behalf of the American Gastroenterological Association, I want to thank you for this opportunity to appear and present our testimony. I know the demands on your time are many, and we are deeply appreciative of the time afforded us today, and we are grateful for the manner in which we have been received. I hope you are able to favorably consider increasing the digestive disease budget by a minimum of $5 million, and specifically earmark $3 million of this sum for continued development this year in the areas of endoscopy and gallstone disease.

Thank you very much.

STATEMENT OF LESLIE J. SCHOENFIELD, M.D. PH. D.

MEDICAL DISSOLUTION OF GALLSTONES

A. Definition of the problem

Attention has been directed recently to the problem of cholesterol gallstones because of a greater awareness of them as a significant health hazard, a better understanding of their pathogenesis and a potential for their dissolution by medical rather than surgical treatment.

In the general population of the United States, cholelithiasis is a major medical and financial concern. Among certain groups, such as the American Indian, the magnitude of the problem is extreme. For example, 70 percent of Pima Indian women have gallstones by the age of 30 years and the same proportion of men develop them in the later decades of life. Estimates suggest that about 12 million women and 4 million men in the United States have gallstones. Currently, surgical removal of the gallbladder is the only definitive therapy. Each year, about 800,000 people develop gallstones, one-third million cholecystectomies are performed, and 6,000 to 8,000 patients die because of gallstones. Thus, hospitalization and other medical expenses attributed to cholelithiasis total almost $1 billion a year.

The promise that medical treatment can prevent or dissolve gallstones has emerged directly from basic research observations. Cholesterol is the predominant component of more than 90 percent of gallstones analyzed in the United States. Three stages of cholesterol gallstone formation are recognized: (1) saturation of bile with cholesterol, (2) precipitation of cholesterol, and (3) growth of the gallstone.

Bile acids and phospholipids are the primary agents in bile responsible for maintaining cholesterol in solution. Precipitation of cholesterol is a prerequisite for the development of cholesterol gallstones. Bile that is saturated or supersaturated with cholesterol or contains crystals of cholesterol, therefore, is termed lithogenic bile. A prestone state, defined as lithogenic bile without gallstones has been described in young Indian women, a population at high risk for cholelithiasis. The factors responsible for precipitation of cholesterol from saturated bile and for the growth of gallstones, however, have not been determined.

Patients with cholesterol gallstones have increased secretion of cholesterol by the liver, a decreased bile acid pool size and thus bile saturated with cholesterol; they may have an altered enterohepatic circulation of bile acids. Treatment with chenodeoxycholic acid leads to decreased hepatic secretion of cholesterol, increased bile acid pool size, diminished saturation of bile with cholesterol and thus causes dissolution of cholesterol gallstones.

B. Recent research

Admirand and Small (J. Clin. Invest. 47:1043, 1968) demonstrated that cholesterol gallstones in man are usually associated with bile that is saturated with cholesterol. Vlahcevic and associates (Gastroenterology 59: 165, 1970) found a diminished bile acid pool in patients with cholesterol gallstones. Thistle and Schoenfield reported that administration of chenodeoxycholic acid led to significant improvement in the biliary lipid composition of caucasians with gallstones (Gastroenterology 61:488, 1971) and in young Indian women with saturated bile without gallstones (New Eng. J. Med. 284: 177, 1971).

Danzinger and colleagues (New Eng. J. Med. 286:1, 1972) presented evidence in six patients that chenodeoxycholic acid expands the bile acid pool, renders bile unsaturated in cholesterol and induces gallstone dissolution in 6–24 months without significant adverse effects. Bell, et al. (The Lancet 2:1213, 1972) concurred, reporting disappearance in 4 and decrease in size of gallstones in 4 more of 17 patients treated for 6 months with chenodeoxycholic acid.

C. Future efforts

(1) A double-blind, controlled, clinical trial of the treatment of cholesterol gallstones with chenodeoxycholic acid is indicated. Complete toxicity studies, particularly related to the liver and cholesterol metabolism, should be included. The lowest and least toxic effective dose of chenodeoxycholic acid should be determined. Because of the multiple variables involved and the large numbers of patients required, a cooperative study should be instituted. Proven, effective and safe therapy thereby could be available to the public in about 5 years.

(2) The clinical trial must inclue a placebo group not only to control observations, but also to obtain data on the natural history of gallstone disease. Thus, reasonable indications for the utilization of medical therapy can be formulated. The recurrence of gallstones after dissolution and the need for continuous or intermittent therapy should be evaluated.

(3) Ancillary studies should be performed to investigate the pathogenesis of gallstones. The roles of hepatic enzymatic defects, biliary lipid secretion, gallbladder function and the enterohepatic circulation in the saturation stage should be clarified. More information is needed concerning the precipitation and growth stages of gallstone formation. The mechanism of action of agents that effect the synthesis and secretion of bile acids, lecithin, and cholesterol should be studied. The interrelationships between hepatic synthesis and biliary secretion of these lipids should be determined. A simple, reliable method, suitable for mass screening is needed to identify individuals who are likely to develop gallstones.

(4) Prophylaxis of cholelithiasis is a pertinent consideration among certain populations at high risk for the subsequent development of cholelithiasis. In addition to American Indians, such groups might include siblings of patients with cholelithiasis, individuals with recurrent gallstones, multiparous women and patients with vagotomy, gastrectomy, and disease or resection of the terminal ileum. Because of the demonstrated rapidity with which gallstones develop among American Indian women after age 20, a prospective double-blind study of gallstone prophylaxis would be most propitious in this group.

(5) Dissolution of gallstones has required between 6 and 24 months of treatment with chenodeoxycholic acid. More rapid therapy should be sought. Pheobarbital or other agents, which may decrease the cholesterol saturation of bile, warrant further investigation. Also, nontoxic, surface-acting compounds which counteract interfacial barriers may serve as adjuvants for enhancing gallstone dissolution. Other future therapeutic approaches might depend upon the effect of agents on gallbladder function or on the enterohepatic circulation of bile acids.

(6) A controlled, cooperative trial should be initiated to evaluate the treatment of cholesterol gallstones retained in the bile ducts of cholecystectomized patients. In those subjects with T-tubes, bile acids can be infused directly into the T-tube, perhaps with adjuvants that facilitate solubilization of cholesterol by bile acids.

Dr. ISSELBACHER. Congressman Flood, we will be brief. We are here to emphasize the problem of digestive disease in this country and the unfortunate situation in terms of the support which it has received. I think you recognize from all you have heard up to now that while heart and cancer disease are important, digestive diseases are also very significant in terms of suffering and economic cost.

Some of the data that have been accumulated indicate that one out of every six major hospitalizations is related to digestive diseases.

One out of every three cancer deaths involves the intestinal tract and digestive diseases.

Digestive diseases turn out to be the No. 1 cause of hospitalization in the country. U.S. Public Health Service data shows that 5 million people during a year are admitted for digestive disorders, and about 21 million have digestive diseases.

While the magnitude of the problem is great it does not have the drama of heart and cancer. But it is a major national problem. With that information as a background the support which the Government, the NIH, has made available for digestive diseases, turns out to be obviously woefully inadequate.

The administration for fiscal 1974 is recommending a $5,000 increase in the budget over the fiscal 1972 budget. Given the scope of the problem, this seems preposterous.

In the few minutes we have, Dr. Schoenfield, an expert in gallstone disease, and I would like to emphasize two areas which we feel are at the brink of making major breakthroughs, if you will. I use the term "breakthrough" advisedly because it has been used many times before your committee, sometimes inaccurately. I would like to submit to you that in the field of endoscopy and gallstone disease we now are able to do something of significant proportions for the health of our people.

Endoscopy, as you probably know, is the technique whereby one can examine the esophagus, the stomach, colon, and so on, using an instrument to examine the lining, and using light. That technique has been available for many years. The great breakthrough has been the use of fiber optics whereby lighting goes through channels, by means of small fibers, which permits the light to be bent around corners. Now we can use instruments that are flexible. We do not have to have the patient be anesthetized. We can use the instruments with any organ and the stomach, and all areas of the colon, for example.

This allows tremendous opportunities. We can diagnose things like peptic ulcer and see the ulcer bleeding. We can attempt to stop the bleeding with the instrument. We can not only see but take samples and biopsies, and have the opportunity to remove tumors. The whole advantage of this approach is that it does not require an operation, it can be done simply without anesthesia, that it permits the installation of medication.

Mr. FLOOD. Operation of what—the gallstone?

Dr. ISSELBACHER. No; I am not dealing with gallstones now, but endoscopy. We will speak of gallstones later. The point is that here these techniques are making a tremendous advance, but an infusion of

funds is required in order to develop the equipment and the expertise in the equipment that is necessary.

Mr. FLOOD. You mean just hardware.

Dr. ISSELBACHER. Yes, this concerns the development of the proper hardware. This does not require very much. We suggest $1 million a year perhaps for 3 years. That small amount—small in relation to many other things—will permit this potential to be realized, and will have a tremendous impact.

Endoscopy gives us the ability to visualize in a nonoperative setting, practically every organ, as I said. The other day, using this technique, we were able to see a gallstone in the bile duct that had not been visualized by any other technique. The tube was passed into the duodenum and X-ray material was introduced through the tube and bile duct seen.

Mr. FLOOD. Was the duct dilated?

Dr. ISSELBACHER. Yes.

Mr. FLOOD. X-rays did not show it?

Dr. ISSELBACHER. X-rays in the conventional manner did not show it. In fact, the patient had been operated on twice and it was missed.

Mr. FLOOD. Operated on twice for what?

Dr. ISSELBACHER. The question was what the nature of the disease was and they were not certain. We felt it was a stone in the duct but it had not been demonstrated.

Mr. FLOOD. How could you miss a stone in the duct?

Dr. ISSELBACHER. Perhaps it is a surprise to you, but a small stone can be missed.

Mr. FLOOD. If it was small, why didn't it dilate the duct?

Dr. ISSELBACHER. If it is there long enough, it will dilate it. Be that as it may, you can see it directly right in front of you and then introduce radioisotope material that will show up on X-ray and see it. This is just one example of what can be done. The ramifications are infinite.

So one of the things we wanted to mention in terms of applying some of the advances that have beeen made is in the area of endoscopy. The second area, which I am sure you are familiar with, is in the area of gallstones, where as a result of the research which has been supported by the NIH, the basic research in the physiology and biochemistry of cholesterol and bile salt, has now brought us to a point where we can dissolve gallstones.

Mr. FLOOD. You mean you are talking about the British discovery and study?

Dr. ISSELBACHER. And our American studies. Let me refer you to Dr. Schoenfield who will tell you about the findings.

Mr. FLOOD. Are you talking about what the Mayo people are doing, too?

Dr. SCHOENFIELD. Yes.

First let me introduce the subject by pointing out why I think gallstones are such an important area which we should approach. The figures are that some 16 million people in the United States now have gallstones; that 800,000 cases are discovered each year; that gallstones are responsible for some 6,000 to 8,000 deaths each year in this country; that 300,000 operations on the gallbladder for removal of the stones are done yearly.

Mr. FLOOD. How many of those operations are necessary? We hear a great deal about unnecessary operations. Some of our spies tell us that one of the great unnecessary operations is gallstones.

Dr. SCHOENFIELD. What we hope to be able to do with the medical therapy is to have an alternative approach to treatment other than surgery. There are indications for surgical removal of gallstones. Actually, what I would like to present to you now is what we have in the way of potential for medical treatment of gallstones.

The problem is greater than I indicated among certain populations in this country. For example, in the American Indian population, about 70 to 75 percent of American Indian women beyond age 30 have gallstones. It is a tremendous problem in this population.

Mr. FLOOD. The Indians, they tell us, have a problem. It is tragic for a number of reasons. Does alcohol contribute materially, not just in Indians, to this problem?

Dr. SCHOENFIELD. Not as far as we know toward the development of gallstones.

Let me get on into the current status of the situation now. We have learned from the experiments that Dr. Isselbacher alluded to——

Mr. FLOOD. What is there peculiar about the female physiology? Why the female?

Dr. SCHOENFIELD. We don't know. Men do get gallstones as well.

Mr. FLOOD. You can be sure of that. I never heard it was peculiar to the female.

Dr. SCHOENFIELD. Yes. It is about 2½ to 3 to 1. Even in the Indian population it is greater.

Mr. FLOOD. You have an age problem, too.

Dr. SCHOENFIELD. Yes.

Mr. FLOOD. Beyond a certain age the chances are 10 to 7.

What is the age?

Dr. SCHOENFIELD. They increase with age.

Dr. ISSELBACHER. Beyond age 40.

Dr. SCHOENFIELD. We learn that there are gallstones formed by abnormality in the composition of the bile. Through experiments that we originally did at Mayo, we found that admission of a bile acid will bring about dissolution of gallstones.

Mr. FLOOD. If the liver is diseased for any number of different reasons, will that in itself accelerate the gallstone condition?

Dr. SCHOENFIELD. No, it won't affect the gallstone condition. The gallstones can affect the liver.

If you would like to see this, this is an illustration of a series of four X-rays. The first one in the upper lefthand corner is a gall bladder X-ray. Within that you see these lucencies which represent the gallstones. This patient was treated with CDC (chenodeoxycholic acid) that is the compound, over a period of 2 years.

Mr. FLOOD. Is there a difference in the texture of the stone among patients?

Dr. SCHOENFIELD. Most all gallstones in this country are comprised of cholesterol.

Mr. FLOOD. I mean the texture, hard, soft, medium.

Dr. SCHOENFIELD. Most are hard.

Mr. FLOOD. That contributes to the difficulty of the dissolution, of course.

Dr. SCHOENFIELD. That is right. This compound takes the cholesterol out of the gallstone.

Mr. FLOOD. Is that the solution that the British discovered which the Mayo people are working on—with the horribly long name?

Dr. SCHOENFIELD. Yes.

Mr. FLOOD. I have never heard of anything else.

Dr. ISSELBACHER. That is right. It was really worked on by Dr. Schoenfield at the Mayo Clinic and others.

Mr. FLOOD. The British fooled me. They told me they gave birth to it.

Dr. SCHOENFIELD. No, actually we started it at Mayo. They confirmed what I have shown you at Mayo.

Mr. FLOOD. Of course, the success for this is a long way off. You are talking about 4, or 5, or 7 years away. You are not talking about tomorrow morning.

You have had several cases. And females, I gather, too.

Dr. SCHOENFIELD. Yes. Dissolution occurs between 6 months and 2 years.

Mr. FLOOD. I know, but you are not having any dramatic successes with this.

Dr. SCHEONFIELD. All patients who have been treated for a 2-year period have had their stones dissolved.

Mr. FLOOD. But you are still in the R. & D. area.

Dr. SCHOENFIELD. Yes, in a way.

Dr. ISSELBACHER. That is why we are here.

Mr. FLOOD. You are talking about 4 or 5 years.

Dr. SCHOENFIELD. That is the point. What I am here to say is this: I would propose that we undertake a large-scale national cooperative study to determine, not just the efficacy because it certainly looks as though it works, but the safety of this in a large number of patients.

Mr. FLOOD. Can this treatment be performed without hospitalization?

Dr. SCHOENEIELD. Yes.

Mr. FLOOD. That is the important thing.

Dr. ISSELBACHER. If I might just interject, every one in the medical area is convinced that this works. It is not a question of whether it works.

Mr. FLOOD. That it can work.

Dr. ISSELBACHER. It does work. The question is safety and the dosage. This is what we are concerned about. We need a large number of patients to work with and it will take 4 or 5 years.

Mr. FLOOD. After they have taken the first treatment, they do not come back to the hospital for another treatment. It is over.

Dr. ISSELBACHER. No.

Mr. FLOOD. The family physician can handle this.

Dr. SCHOENFIELD. Yes, ultimately.

Mr. FLOOD. That is not clear.

Dr. ISSELBACHER. Physicians ask us: can we give it?
We know it works. We have to say we don't know how safe it is. We feel it is safe, but we need a clinical trial that is comprehensive.

Mr. FLOOD. As you state yourself, this is of such widespread interest and concern even among the medical societies back in the provinces, I do wish you would pay more than ordinary attention to the record. When you prepare your record, address the record on the subject you did this morning. This record will get great attention.

Dr. ISSELBACHER. Yes. I hope you recognize that the funds we are asking for these studies, in the order of $3 million a year, are really minimal. The present budget request by the administration is obviously just completely inadequate.

Mr. FLOOD. There is nothing unusual about that. Thank you very much.

[Additional information submitted for the record:]

AMERICAN GASTROENTEROLOGICAL ASSOCIATION,
May 29, 1973.

HON. DANIEL J. FLOOD,
Chairman, House Committee on Appropriations,
Subcommittee on Labor-HEW, Washington, D.C.

DEAR CONGRESSMAN FLOOD: Thank you for permitting us to appear before your committee on behalf of the American Gastroenterology Association.

As you will recall, we requested that an additional $5 million be spent at the National Institute of Arthritis, Metabolism and Digestive Disease, $3 million to be earmarked for gallstone study, and $1 million to fund endoscopy research—both areas have considerable research opportunities at present.

You asked that we furnish more complete information for the record on economic costs of digestive diseases and comparisons of research dollars for heart, cancer, and digestive diseases.

The day after we testified, Dorothy P. Rice, of the Office of Research and Statistics, Social Security Administration, reported at the Second Conference on Digestive Disease as a National Problem (May 18, 1973) the following:

In 1968, the last year for which there are adequate figures, an estimated 111 digestive conditions affected every 1,000 persons in the United States; the economic cost to the Nation was $9 billion; direct expenditures for digestive disease health care were $4.7 billion (one-tenth of the total of $49.1 billion spent on national direct health care in 1968—since then, both totals are higher, because in 1971, national direct care costs were $69 billion, and digestive disease costs were likely to be $6.5 billion approximately); more than 38 million days of work were lost because of digestive disease, or nearly 157,000 man-years, which cost the economy over $1 billion in lost earnings; housewives afflicted with digestive diseases lost 120,000 years of work.

Any statistical analysis would show that digestive diseases cause an economic loss equal to 10 percent of the total disease loss.

Finally, it should be understood that the above costs do not take in the cost of cancer of the digestive organs, which is considerable. In 1968, over 93,000 persons died of malignant neoplasms of the digestive organs, and the net lost earnings alone cost an additional $2.5 billion.

Please find attached to this letter five charts which show in considerable detail the economic costs described above. All are taken directly from the social security data.

Other studies at the conference showed: 7.7 percent of all deaths in the United States were of digestive diseases; 10 percent of all hospital discharges were for digestive disorders (15 percent in Federal hospitals); between one-fourth and one-third of all major operations are for digestive diseases.

One would presume that a set of diseases which cause 10 percent of the economic loss would have 10 percent or so of research funds to study their cause or cure. That has not been the case. In this connection, I am reminded of the statement made by Dr. Robert Q. Marston, former Director of NIH, in his farewell remarks on April 27, 1973, to NIH personnel, that "* * * my public record does spell out * * * my strong support * * * for a balanced biomedical research program—for example, cancer research should not be increased at the expense of other fields of biomedical science."

No one wants to see the fields of cancer and heart research receive less money than they are now receiving—however, it should be understood that, aside from basic research done in other institutes in areas that in some way impinge upon digestive disease, our field is currently budgeted in NIAMDD at $16.4 million, while the Cancer Institute is budgeted at $500 million, and Heart and Lung at $265 million. Granted, an incessant debate could rage as to the meaning of those figures, and others which could be brought to bear to hsow the ratio somewhat incorrect. I have no desire to manipulate figures or research dollars: What is abundantly clear is that digestive disease research in this Nation is badly underfunded.

With best wishes,

Sincerely,

KURT J. ISSELBACHER, M.D.

Attachments.

Table 7. Number of deaths and lost earnings discounted at 6 percent due to malignant neoplasms of the digestive organs and peritoneum, by age and sex, 1968

Age	Number of deaths			Lost earnings (000's)		
	Total	Males	Females	Total	Males	Females
Total[1/] ...	93,551	50,320	43,231	$2,456,985	$1,356,684	$1,100,301
Under 1	18	9	9	549	339	210
1-4	19	13	6	718	559	159
5-9	10	5	5	467	289	178
10-14.....	20	14	6	1,369	1,083	286
15-19.....	49	30	19	4,130	3,001	1,129
20-24.....	86	45	41	8,017	5,360	2,657
25-29.....	156	84	72	15,341	10,672	4,669
30-34.....	343	189	154	33,436	23,608	9,828
35-39.....	765	411	354	69,816	48,025	21,791
40-44.....	1,673	939	734	140,501	97,635	42,866
45-49.....	3,352	1,870	1,482	242,166	162,651	79,515
50-54.....	5,815	3,283	2,532	345,750	224,538	121,212
55-59.....	8,770	5,171	3,599	408,805	258,302	150,503
60-64.....	11,491	6,751	4,740	362,821	198,324	164,497
65-69.....	13,764	7,810	5,954	284,313	116,720	167,593
70-74.....	15,318	8,367	6,951	263,554	104,161	159,393
75-79.....	14,571	7,502	7,069	190,691	71,494	119,197
80-84	10,214	4,931	5,283	75,643	27,293	48,350
85 and over...	7,117	2,896	4,221	8,898	2,630	6,268

1/ Excludes deaths with age unknown

Table 6.--Number of deaths and lost earnings discounted at 6 percent due to diseases of the digestive system, by age and sex, 1968

Age	Number of deaths			Lost earnings (000's)		
	Total	Males	Females	Total	Males	Females
Total 1/..	73,704	43,027	30,677	$2,794,088	$1,847,509	$946,579
Under 1.....	1,093	649	444	34,783	24,423	10,360
1-4.....	238	135	103	8,537	5,802	2,735
5-9.....	162	97	65	7,914	5,598	2,316
10-14.....	156	73	83	9,612	5,649	3,963
15-19.....	292	155	137	23,644	15,506	8,138
20-24.....	424	215	209	39,156	25,611	13,545
25-29.....	690	402	288	69,752	51,075	18,677
30-34.....	1,191	682	509	117,673	85,188	32,485
35-39.....	2,340	1,372	968	219,905	160,318	59,587
40-44.....	4,080	2,485	1,595	351,533	258,385	93,148
45-49.....	5,689	3,519	2,170	422,508	306,079	116,429
50-54.....	7,084	4,519	2,565	431,864	309,072	122,792
55-59.....	7,769	5,069	2,700	366,116	253,207	112,909
60-64.....	8,047	5,270	2,777	251,190	154,817	96,373
65-69.....	8,089	5,042	3,047	161,120	75,353	85,767
70-74.....	7,834	4,512	3,322	132,347	56,170	76,177
75-79.....	7,491	4,011	3,480	96,905	38,225	58,680
80-84.....	5,770	2,735	3,035	42,914	15,138	27,776
85 and over..	5,265	2,085	3,180	6,615	1,893	4,722

1/ Excludes deaths with age unknown.

Table 3.--Estimated value of lost earnings due to all diseases and diseases of the digestive system for persons in the labor force, by sex and age, 1968

Sex and age	Work-loss days (000's)	Work-loss years 1/	Annual mean earnings	Lost earnings (000's)
	All diseases			
Total....	412,619	1,684,159	---	$12,355,535
Men.....	247,103	1,008,584	---	8,851,495
17-44.....	126,319	515,588	$8,194	4,224,728
45 and over....	120,784	492,996	9,385	4,626,767
Women.....	165,516	695,575	---	3,504,040
17-44.....	96,208	392,686	4,969	1,951,257
45 and over....	69,308	282,890	5,489	1,552,783
	Diseases of the digestive system			
Total...	38,445	156,918	---	$1,097,358
Men.....	19,193	78,339	---	686,593
17-44.....	10,001	40,821	8,194	334,487
45 and over....	9,192	37,518	9,385	352,106
Women.....	19,252	78,579	---	410,765
17-44.....	9,685	39,530	4,969	196,425
45 and over....	9,567	39,049	5,489	214,340

1/ Work-loss days divided by 245

Table 1.--Estimated economic cost of all diseases and diseases of the digestive system, 1968

(in millions of dollars)

Cost	All diseases	Diseases of the digestive system	
		Amount	Percent of total
Total.....	$119,575	$9,022	7.5
Morbidity.....	64,071	6,228	9.7
Direct costs.....	49,060	4,725	9.6
Indirect costs.....	15,011	1,503	10.0
Mortality costs 1/..	55,504	2,794	5.0

1/ Present value of lifetime earnings discounted at 6 percent.

KURT JULIUS ISSELBACHER

Born: September 12, 1925
Married: Rhoda Solin; 4 children

1946	Harvard College
1950	M.D., Harvard Medical School
1950-51	Intern in Medicine, Massachusetts General Hospital
1951-52	Assistant Resident in Medicine, Massachusetts General Hospital
1951-53	Teaching Fellow in Medicine, Harvard Medical School
1952-53	Resident in Medicine, Massachusetts General Hospital
1953-54	Clinical Instructor in Medicine, Johns Hopkins School of Medicine
1953-56	Clinical Investigator, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health
1954-56	Clinical Instructor in Medicine, George Washington University School of Medicine
1956-58	Instructor in Medicine, Harvard Medical School
1956-68	Assistant in Medicine, Massachusetts General Hospital
1957-	Chief, Gastrointestinal Unit, Massachusetts General Hospital
1958-60	Associate in Medicine, Harvard Medical School
1958-61	Assistant Physician, Massachusetts General Hospital
1960-64	Assistant Professor of Medicine, Harvard Medical School
1961-66	Associate Physician, Massachusetts General Hospital
1964-66	Associate Professor of Medicine, Harvard Medical School
1966-	Professor of Medicine, Harvard Medical School
1966-	Physician, Massachusetts General Hospital
1968-	Chairman, Executive Committee of the Departments of Medicine, Harvard Medical School
1970-71	Sabbatical leave, Imperial Cancer Research Fund; Laboratories of M.G.P. Stoker; American Cancer Society - Eleanor Roosevelt Fellow
1972-	Mallinckrodt Professor of Medicine, Harvard Medical School
1972-	Chairman, Harvard University Cancer Committee

Societies and Memberships:

National Academy of Sciences
American Academy of Arts and Sciences

American Association for the Study of Liver Diseases
American College of Physicians
American Federation for Clinical Research
American Gastroenterological Association
American Society of Biological Chemists
American Society for Clinical Investigation
Association of American Physicians
Biophysical Society
Gastroenterology Research Group
Interurban Clinical Club
Marine Biological Laboratory (Woods Hole, Mass.)
Society for Experimental Biology and Medicine

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Other Professional Activities:

1961-65	Member, Gastroenterology Training Grant Committee, National Institutes of Health
1961-65	Steering Committee, Gastroenterology Research Group
1962-	Consulting Editor, Medicine
1962-70	Council, American Association for the Study of Liver Diseases
1962-72	Editorial Board, Journal of Clinical Investigation
1963-68	Editorial Board, Gastroenterology
1965-68	Council, American Society for Clinical Investigation
1965-68	Member, General Medicine Study Section, National Institutes of Health
1967	President, American Association for the Study of Liver Diseases
1967-70	Chairman, Committee on Research, Massachusetts General Hospital
1967-	Coeditor, Harrison's Principles of Internal Medicine
1968-71	Trustee, Boston Biomedical Research Institute
1970-71	Vice-President, American Society for Clinical Investigation
1970-	Chairman, Board of Scientific Counselors, National Institute of Arthritis, Metabolism and Digestive Disease, National Institutes of Health
1972	President-Elect, American Gastroenterological Association
1972-	Councillor, Association of American Physicians
1972-	Editorial Board, Disease-A-Month
1972-	Visiting Committee, Clinical Research Center, Children's Hospital Medical Center (Boston)
1972-	Membership Committee, Society for Experimental Biology and Medicine

Honors:

Phi Beta Kappa
Alpha Omega Alpha
Comfort Memorial Award, Mayo Clinic, 1968
Bengt Ihre Award, Swedish Medical Society, 1969
Olaf Acrel Medal, Swedish Surgical Association, 1969

Mr. FLOOD. Dr. Irwin Rosenthal, president pro tem of the American Digestive Disease Society and Mrs. Susanne Rosenthal, president, Women's Auxiliary, National Foundation for Ileitis and Colitis.

STATEMENT OF IRWIN M. ROSENTHAL

Mr. ROSENTHAL. I am Mr. Rosenthal, Mr. Chairman. I get called Doctor periodically because of my work in the Foundation. I am a lawyer. I would like to introduce my wife, Mrs. Rosenthal, who has been very active in the development of the National Foundation for Ileitis and Colitis. With me today is Zelda Baum, vice president for chapter development. I would like to go outside my prepared statement to talk about the thing you mentioned before, and that is not to compare us to heart and cancer. They have captured the public attention, but digestive diseases are far more widespread in our population.

We have just come from a 3-day medical meeting which is culminating tomorrow in a National Conference on Digestive Diseases as a National Problem. It is estimated by NIH that in 1973, 22 million Americans are suffering from serious digestive diseases, 1 out of 10 persons. One out of two people in our Nation have a digestive disease complaint. There is one relatively small foundation dealing with ileitis and colitis, two of the several digestive diseases involving over 1 million people. We are now forming a new organization called the American Digestive Disease Society, which will cover all digestive diseases.

We are dealing with a serious national problem. Unfortunately it has been only recently recognized. In part it is the lay public's fault because of the fact that unlike national organizations for heart, cancer, cystic fibrosis and many other diseases we did not come together as fast as we should have. But we are doing that now, and it is essential.

What we are talking about in terms of the health of the American population and the effect on the economy of the American population is so enormous that it is really essential to understand what our problem is. It has been mentioned that, we represent the No. 1 cause of hospitalization in this country, and by far the greatest economic loss to this country because of the medical problems. Individuals involved with digestive diseases spend directly, for doctors and pills and hospitalization, some $10 billion a year. Indirectly the loss is estimated at many more billions of dollars a year, which is an incredible loss.

The labor force, the effect on our economy in terms of profit structure is enormous, because of this loss on a day to day basis.

Up until recently there was no public support for digestive disease research. Until last year there was no separate division or institute at the NIH dealing with digestive diseases. There was a sprinkling of money coming from the different institutes. Last year, through the good efforts of the House of Representatives and the efforts of the Senate, a Division of Digestive Diseases was set up at NIAMD, now NIAMDD, and the concept and specification in the law was very, very clear. We were then getting between 9.8 and 10 percent of the budget of that particular institute. Congress specified clearly that in its judgment this field of study is seriously underfunded in light of the tremendous adverse impact on the health of the Nation caused by these diseases. For this reason the House Committee Report stated

that legislation, which was intended to insure an expanded role of digestive disease research and training within NIAMDD was "crucial."

Unfortunately, we came from euphoria when the bill was passed to depression in this regard right now. Aside from the fact that the 1973 budget, the proposed budget was not signed by the President, and fell back therefore on last year's budget, we remained at the 9 to 10 percent level. Less than 1 percent increase was given to digestive diseases.

On any equity basis we should have received a great deal more, without taking from anybody else. Every year ¼ of the total budget of the Institutes is available for grants. When I say equity, I am talking about the largest group of Americans, heart, cancer, and everyone else included, that have major diseases. The tremendous impact on the economy and health of the country because of digestive diseases can be imagined. If last year's budget is carried over, the intent of Congress will not be carried out. We were promised a separate committee of the Advisory Council made up of outstanding people, medical and lay, in the field of digestive disease. Two doctors, no lay people, were recommended for clearance for a separate committee and are held up somewhere along the line in the White House and they have not been approved.

So as lay people we have no committee or no voice at all at NIAMDD and no laymen on the Institute council.

The public sector has begun to move and try to help. Unfortunately however, when you look at the picture it is incredible. We do not know how to deal with it. We have 22 million sufferers. We have the worst hospitalization problem and an enormous amount of money expended on health by these individuals; the third greatest rate of death as a group; the worst economic impact on the country. The lay area is just beginning to get off the ground.

We don't want to take from anybody. We are not saying we are better than anybody else, because that is not true. The point is that the bill which was passed last year has not been carried out. We are not sure any bill as such would be carried out in that regard. Therefore one of two things has to occur; either the Institute's dollars should be increased so we do not take away from anybody else, with some direction to the NIAMDD to give to digestive diseases what was the intent of the enabling statute when the division of digestive diseases was set up—additional funds, with a direction that there be at least set aside a reasonable amount for digestive diseases.

If for various reasons additional funds are not made available, that somehow NIAMDD should be made aware of the fact, if you understand and agree with what we are saying, that the equity is so out of whack with the facts that even if the same budget of $137 million was passed, the 10 percent is absolutely inequitable for us to receive.

In the Cancer Institute, which is over $300 million, only $16 million has been allocated to research of cancer of the colon, which causes one out of three deaths resulting from cancer. This is the third worst cause of death and I think the second most prevalent of cancer, of all cancers, including lung cancer; $16 million out of $300 million.

We have no voice in the institutes and even in the NIAMDD where we are supposed to have our own division, our own committee and our

own lay and medical people; we have no voice in the other Institutes. It is obvious when you have no voice, other people who are fighting causes and who have come to fight are going to get more than their fair share. But you cannot forget the statistics. We have a national tragedy on our hands and it is growing. As a matter of fact, we prepared this brochure, which we request be inserted in the record, a few weeks ago for the national conference which will take place tomorrow at the NIH, and we thought the statistics were 13 million people suffering chronic illness. That has been changed, because the National Bureau of Health Statistics estimates in recently released figures that at this time more than 22 million Americans are affected by serious digestive diseases and one out of two have at least a digestive disease complaint yearly. We do not know what to do about the problem. We need your help.

Mr. FLOOD. At least as far as we are concerned on the hearings, the cancer people are going to get 10 minutes, no more than you are going to get. At least we are going to do that. We can begin. I guess they don't need it.

You should have their 10 minutes, I suppose.

Thank you very much. I know what you want.

We will insert your full statement and the brochure in the record.

[The information follows:]

Mr. Chairman and members of the subcommittee, I am Irwin M. Rosenthal, president and founder of the National Foundation for Ileitis and Colitis, one of the Nation's largest private digestive disease research foundations.

With me are my wife, Suzanne Rosenthal, president of the women's auxiliary of the foundation, Zelda Baum, vice president for chapter development, and Toby Fuchs, vice president for membership.

Ileitis and colitis, also known as Crohn's disease and ulcerative colitis, are the major diseases which are characterized in general by intestinal inflammation. Ileitis is a diseases characterized in general by inflammation of the small intestine; colitis by inflammation of part or all of the colon.

The major goal of the foundation is the support of research to find cures for these diseases, to improve patient care and to educate, in both a preventive and postillness program, about these diseases and their effects. Upwards of 1 million persons in this Nation are now affected by diseases of the upper and lower intestines.

I am here also in my capacity as president pro tem of the American Digestive Disease Society, now in formation, which is intended to draw together all of the present organizations in the field of digestiv disease, both lay and medical, so as to permit greater coordination of education, research, and patient care activities.

Mr. Chairman, until our foundation was established, people with ileitis and colitis did not talk about these diseases—they were hidden, not only in private discussions, but in public policy discussions as well. The same is true of nearly all digestive diseases. Now that we are establishing the American Digestive Disease Society, we want to make sure that these diseases are brought out into the light of public policy discussions.

Over 13 million Americans have these chronic diseases, and these diseases constitute the number one reason for hospitalization in the country, the number two reason for disability, and the number three cause of death. More dollars are spent for medical purposes by individuals afflicted with digestive diseases than any other class of disease.

We are just 2 days short of the first anniversary of a law passed by Congress and signed by the President on May 19, 1972 (Public Law 92-305). Several things were intended by Congress.

It renamed an institute at NIH the National Institute of Arthritis, Metabolism, and Digestive Disease. It called for an increased emphasis on digestive disease within that Institute. It called for the appointment of an Associate Director, and finally it called for the establishment of a new committee as part of the Institute's advisory council, with the members of the committee to have "* * * a significant

role within the advisory council," and was to be composed of persons who are "* * * outstanding in the field of digestive disease."

Those of us who worked hard for this law were exuberant at its passage last year. I must say, however, that our exuberance turned to uncertainty, and now to considerable dismay. Although an Associate Director has been named, several months ago, the committee called for in the law has not yet been named. We all had hoped that it would be named quickly, and that it would contain several lay persons active in the field of digestive diseases. It is our understanding that two members only were nominated—I believe that a two-member committee is absurd—and that these two members are exceptionally able doctors. We are very pleased at the selection of the two eminent physicians, but we are very angry that no lay people were named. Further, these nominations of the two physicians have been blocked by the administration; no action has been forthcoming for months. These two physicians are now under a cloud of uncertainty. Why is it that no reason has been given for the lack of action in their naming?

Leaving aside these affronts, not only to those who worked for passage of the law, but we believe to the Congress as well, whose intention we believe has been thwarted, there is still another, more far reaching than the rest.

That is the matter of the emphasis on digestive diseases in the Institute. Last year, even though the law was passed, the Institute did not greatly increase its request for digestive disease funds. Congress, however, did do so, adding on, in the fiscal year 1973 budget, what amounted to about a $6 million increase for digestive diseases, indicating in its appropriations committee report that it placed a great emphasis on the need to get moving in the digestive disease field. Unfortunately, the President's veto nullified these gains, and now we find the present fiscal year 1974 Institute's request to be less than the 1972 figure.

This is distressing, of course, and we hope the Congress will reverse, not only in the Institute's work, but in health in general, a spreading pattern which can only seriously damage the health effort in the Nation.

But what is more distressing is what we see as the Institute's refusal to increase the proportion of funds set aside for digestive disease work, in spite of the clear intent of the authorizing and appropriating legislation. According to the Institute's calculations, the percentage of DD research has been raised only eight-tenths of 1 percent since the law was passed.

I would like to quote for the record now the report language from the Committee on Interstate and Foreign Commerce when it reported the bill to the House floor on March 22, 1972:

"Despite the great impact of digestive diseases, only about 10 percent of the funds of the Arthritis and Metabolic Disease Institute are allocated for research and training in digestive diseases.

"In your committee's judgment, this field of study is seriously underfunded in light of the tremendous adverse impact on the health of this Nation caused by these diseases. For this reason, the committee believes that legislation which will insure an expanded role of digestive disease research and training within the NIAMD is crucial."

Finally, I would like to indicate the amount of work done in the nongovernmental area to conquer digestive diseases. When hearings on the bill were held before Congressman Paul Rogers' Subcommittee on Public Health and the Environment, he exhorted a group of lay and scientific leaders who visited him to take the lead in the nongovernmental area, to awake the public, to educate, raise funds and do research, and to continually prod the Government administrators to greater efforts. We believe we have made a good beginning.

We have begun to organize the American Digestive Disease Society, of which I spoke earlier.

We have held a major workshop on digestive diseases just 3 weeks ago at Airlie House, Virginia, which was only a prelude to a national conference on digestive disease as a national problem, to be held tomorrow, where nearly 500 persons will gather to chart the future lay and medical efforts in this field. For the first time, a systematic look is being taken at the state of the art, and immediate and long-range potential research activities for each of the digestive diseases, as well as delivery of care, manpower needs, educational opportunities, and resources available.

Next week will be "Digestive Disease Week." Thousands of lay and medical people will gather in New York for further intensive inquiries into the problems.

Lastly, Mr. Chairman, I must take this opportunity to say that Dr. Howard Ticktin, who appeared before you last year, to testify on behalf of the American Gastroenterological Association, and who did such a splendid job in organizing

the doctors of his profession to more vigorously involve themselves in promoting the cause of digestive disease research and education, died a short time ago, at the age of 46, in Rome on a vacation. It was a tragedy for all of us concerned with digestive diseases, and because he worked so hard with the Congress, I wanted to pay tribute to him here and now.

I am aware, Mr. Chairman, that the President's budget for NIAMDD is $133.6 million, and that Dr. Fred Kern, Jr., an outstanding researcher and leader in the field of digestive diseases who testified before you on May 10, called for a budget of $176.7 million for the Institute, including a considerable increase in funds for digestive diseases.

I am also aware that Dr. Kurt Isselbacher and Dr. Leslie Schoenfield, who have just appeared before you, have called for a similar expenditure of funds, and that they additionally requested the expenditure this year of $2 million in the breakthroughs in gallstones, and $1 million for endoscopy research. I completely support these requests, even though I realize that the latter two requests will not directly benefit the members of the foundation for ileitis and colitis. We know that these are extraordinarily significant research advances, and though diseases can be categorized, human suffering is undeniable.

I thank you for your time. I am hopeful that you can, in your reports and future interest, continue to support the drive to conquer these very serious diseases.

THURSDAY, MAY 17, 1973.

CYSTIC FIBROSIS

WITNESSES

ROBERT D. McCREERY, PRESIDENT, NATIONAL CYSTIC FIBROSIS RESEARCH FOUNDATION, ON BEHALF OF DR. GUILIO BARBERO, CHAIRMAN, DEPARTMENT OF PEDIATRICS, UNIVERSITY OF MISSOURI SCHOOL OF MEDICINE

MRS. JACQUELINE LASLOW, LEGISLATIVE DIRECTOR, NATIONAL CYSTIC FIBROSIS RESEARCH FOUNDATION

ARTHUR LEE QUINN, OF DAWSON, QUINN, RIDDEL, TAYLOR & DAVIS, COUNSEL TO THE NATIONAL CYSTIC FIBROSIS RESEARCH FOUNDATION

Mr. FLOOD. Dr. Giulio Barbero, representing the National Cystic Fibrosis Research Foundation.

Mr. MCCREERY. Dr. Barbero could not be here so I will deliver his testimony.

I am accompanied by Mrs. Laslow, who is the legislative director of the foundation, and our attorney, Arthur Lee Quinn of the Washington firm of Dawson, Quinn, Riddell, Taylor and Davis, the senior partner of which is Donald Dawson, a person of your acquaintance.

Mr. FLOOD. Yes, he was with us last night at a dinner party.

Mr. MCCREERY. I have a brief statement, and following that I would like to insert Dr. Barbero's statement in the record.

Mr. Chairman and members of the committee, I am Robert D. McCreery, a businessman from Cleveland, Ohio, who, for the past 2½ years has had the privilege of being president of the National Cystic Fibrosis Research Foundation. As a lay volunteer, representing the thousands of volunteers and parents of children suffering from chronic lung diseases, such as cystic fibrosis, who comprise the membership of 120 chapters across the country, I particularly appreciate the opportunity to be here today, and I thank you, gentlemen.

My distinguished colleague, Dr. Barbero, will be addressing you on the medical and scientific aspects of the problem—I will, therefore, confine my remarks to the humanitarian aspects.

As parents, we all suffer anguish if our children are afflicted. If this affliction is of a chronic nature, we then will go to almost any lengths to seek relief for the ailing child. In such a quest, some years ago, my eldest son, John, who was 5 years old at the time, was a victim of chronic asthma. After consulting with doctors and specialists all over the country, to no avail, finally it was in my own hometown that the answer was found.

At the Cystic Fibrosis Center at Case Western Reserve University, which had been supported by grants from the National Institutes of Health, under the direction of Dr. LeRoy Matthews, my son received excellent treatment and today is leading a healthy, normal life. Were it not for the treatment he received at this center, he might well be today a hopeless pulmonary cripple and a burden on society.

Disease is no respecter of class, color, or creed. We are all vulnerable and personal fiancial resources alone cannot buy life. Because of this, gentlemen, I join with the vast army of parents in the United States and add my pleas to theirs—"to keep alive the cystic fibrosis and pediatric pulmonary centers that are literally providing the breath of life for 10 million lung-damaged kids."

Our foundation was incorporated as a national nonprofit health agency in 1955. The catalyst for its growth and development was a mere handful of bewildered and frustrated parents. The ensuing years saw more and more concern, and nonpersonally involved citizens joining our ranks. As we progressed, medical and scientific professions became more interested and allied themselves with our cause, whereby today, NCFRF takes justifiable pride in its nationwide network of care training and research centers.

The incredible dedication of our volunteers in raising funds to help support our programs is only matched by their intense determination to see a better quality of life emerging for these chronically ailing youngsters. It is on this basis, gentlemen, that I approach you today.

In our 1971–72 fiscal year close to $4 million was expended by our foundation on program services, which includes over $1 million in direct grants to our 110 care teaching and research centers. This achievement certainly then reflects a responsibility on our part, which in turn, engendered the much-needed participation of the Federal Government through the National Institutes of Health, and, in particular, the National Heart and Lung Institute, the National Institute of Arthritis and Metabolic and Digestive Disorders and the National Institute of General Medical Science. Likewise, support received through the regional medical program, has helped to broaden the spectrum of the program.

To abruptly cut off the lifeline with almost no advance notice, is to me, gentlemen, an incredible decision. I, as director of an engineering firm, cannot conceive of a situation whereby my plant would invest the capital and time necessary to tool up for an increased output and then, almost as soon as the finished items rolled off the production line, ruthlessly blow the whistle to halt operations. This would be an unrealistic action in a business dealing with nuts and bolts—how much more so when human beings are the commodities at stake.

I urge you, gentlemen, please to help save lives today and contribute toward the rightful inheritance of good health for tomorrow's citizens. A mere $2 million will not only save these pediatric pulmonary centers from extinction but preserve the vital component parts of this dynamic medical mechanism.

Thank you very much.

[Dr. Barbero's statement follows:]

STATEMENT OF GUILIO J. BARBERO, M.D.

Mr. Chairman and members of the committee, I am Dr. Guilio Barbero, chairman of the department of pediatrics at the University of Missouri Medical Center. I appreciate the opportunity to testify today in my role as chairman of the General Medical and Scientific Council of the National Cystic Fibrosis Research Foundation.

RESPIRATORY DISEASES ARE A MAJOR KILLER OF CHILDREN

More children die in the first year of life from respiratory problems than from any other disease. Childhood emphysema, chronic bronchitis, bronchiectasis, lung-damaged asthma, and cystic fibrosis are the principal killers that command the attention of the pediatric pulmonary centers and the National Cystic Fibrosis Research Foundation.

THE CONFUSED STATE OF HEALTH FUNDING

Last year when I appeared before you it seemed to us then, and still does, that the pediatric-pulmonary program is an essential part of any comprehensive health planning that must include children. You, gentlemen, likewise recognized the need and saw fit to appropriate funds under the regional medical program budget. This year has been a confusing one. Frustration, anxiety and disappointment have dogged our footsteps as we have tried to move forward in the implementation of the health programs approved by Congress. The withholding of appropriated funds by the administration in 1972, the continuing resolution of 1973 and the directives for the abrupt phaseout of many vital and significant programs has led to a state of near chaos, in some instances and extreme difficulties in others. I am indeed sensitive to the problems the members of the committee face and I am also grateful to you for the measures you have taken in an endeavor to ameliorate and rectify the situation.

HEW IS THE TRUE DEPARTMENT OF DEFENSE

Through the funding received via the regional medical program to 12 pediatric-pulmonary centers, and through grants awarded to researchers from the National Institutes of Health, teams of experts began to tackle this enormous and ever-increasing health problem concerning more than 10 million lung-damaged children. In fiscal year 1974 our goal remains unchanged, but ways and means to accomplish it have become complex, and in light of this, I would ask the committee to bear with me. I continue to believe that the Congress of the United States, by funding health service programs, and particularly the ones I speak of today, in its wisdom and compassion, was and is fortifying its army against invasion. Billions of dollars have been spent in an effort to ward off attack by a virulent enemy—whose potency and long-term destructive power certainly equals, if not surpasses, that of the atom bomb. I speak of disease, gentlemen, which, in the passage of time, takes a toll far greater than the ravages of warfare. This kind of virulence is comparable to blight that not only decays the recently implanted root but also destroys the generative ability of tomorrow's seed.

It further appears to me that the Department of Heatlh, Education and Welfare is the true defense department of our country. Under its banner we have raised generals, trained adjutants, developed task forces, deployed innovative scientific technology, nurtured embryonic talent, and encouraged the incorporation of paramedical personnel to be a part of the health fighting team. All these segments have been coordinated into a multidisciplinary approach to overcome disease and spare the victims undue suffering.

ABRUPT TERMINATION OF THE REGIONAL MEDICAL PROGRAM WOULD BE DISASTROUS

Strategy and economic considerations certainly take on a mantle of significance. In line with this, we understand to some extent, and are in sympathy with the administration's attitude regarding the streamlining of bureaucratic procedures and the desire to prevent overlapping of programs. However, we cannot condone the ruthless surgery that is virtually putting clamps on the aorta, at tremendous cost to the Nation.

The precipitous termination of the regional medical program by June 30, 1973, means that essential and unduplicated services will come to a screeching halt. Some of our pediatric-pulmonary centers have already been forced to close their doors due to expiration dates of grants; $1.7 million of the total regional medical program budget was obligated in grants to 12 centers located at:

Orange County Pediatric-Pulmonary Center, University of California at Irvine.

Pediatric Chronic Pulmonary Center, University of Colorado Medical Center, Denver, Colo.

Pediatric Chronic Pulmonary Center, Medical College of Georgia, Augusta, Ga.

Philadelphia Regional Chronic Pediatric Pulmonary Disease Center, Greater Delaware Valley, Philadelphia, Pa.

Regional Pediatric Pulmonary Program, Kauikeolani Children's Hospital, Honolulu, Hawaii.

Georgetown University, Washington, D.C.

University of Nebraska, Omaha, Nebr.

Southwest Pediatric-Pulmonary Center Lovelace-Bataan Medical Center, Albuquerque, N. Mex.

Tulane University School of Medicine, New Orleans, La.

Pediatric-Pulmonary Center, Babies Hospital, Columbia University, New York, N.Y.

Center for Management and Treatment of Chronic Pulmonary Diseases in Children, University Hospital, Rio Piedras, P.R.

Children's Orthopedic Hospital and Medical Center, Seattle, Wash.

THE VITAL NEED OF PEDIATRIC-PULMONARY CENTERS

The serious lack of professional expertise in the various disciplines necessary for the total management of pediatric-pulmonary disease has resulted in the establishment of regional centers for the dissemination of diagnostic and therapeutic techniques, stimulating research and demonstrations to area physicians. Many of the programs were not coterminous with State boundaries but spiraled out regionally stretching geographically to cover three or four States. The impact of the sudden cessation of funding on these centers is frightening. Home care demonstration, a vital component of the ambulatory management of chronic pulmonary disorders will deteriorate. It takes 2 hours of care a day to keep children afflicted by these diseases alive. If you multiply 2 hours by the number of children affected in a family, you can readily see that more than an 8-hour working day is entailed for these parents. Hospital demands, which will skyrocket the cost of care for these young victims of pulmonary disease, will be multiplied manifold by the absence of outpatient services, now provided under these minimally financed programs.

Drastic curtailment of these services would result in a degree of medical indigency far below the eligibility level for relief under title XIX (medicaid). Consequently, it would impose a burden upon the taxpayers and create undue financial hardship upon both providers and consumers, many times greater than the present cost of this program.

THE REGIONAL MEDICAL PROGRAM SHOULD BE EXTENDED

Therefore, gentlemen, I ask you to give urgent consideration to appropriating the necessary funds to support a 1-year extension of the regional medical program, effective from July 1, 1973. Within this budget, I would further ask that you direct the sum of $2 million be obligated for a 12-months' extension of funding for the existing pediatric-pulmonary centers. This would enable us to keep intact the highly qualified teams of medical and paramedical experts who have already undergone many years of specialized training. These people are all the more valuable today because, as you are well aware, opportunities for training in the medical and scientific fields are being reduced to a minimum. Furthermore, the sudden dismantling of these centers, whose needs is undisputed, will cost the taxpayer untold thousands of additional dollars and medical

professionals endless manpower hours spent in efforts to reassemble comparable facilities.

PEDIATRIC-PULMONARY CENTERS NEED A MORE PERMANENT HOME

At very best, it would seem that under the RMP, as presently constituted, the pediatric-pulmonary centers can only hope for a temporary lease of life, not to mention at this point in time, the aspirations and plans for expansion of existing centers and development of additional ones. I would, therefore, like to propose to the committee an alternative method of financing these centers that seems to us both sound and practical.

The Maternal and Child Health Service (MCHS) of HEW is a unique agency, in that it has, over the years, demonstrated its competency in administering programs which are devoted exclusively to children and their needs. In addition to this, 5,000 youngsters suffering from cystic fibrosis receive aid annually through the crippled children's program administered by MCHS. Familiarity with the gamut of services necessary for maintaining the cystic fibrosis patient, and other similarly chronically afflicted children, makes this agency the logical home for our program.

Under this proposal we appeal to you to increase the 1974 MCHS budget by $2 million and direct that this sum of money be allocated to the funds available under section 511 of title V of the Social Security Act and be used to fund the 12 existing pediatric-pulmonary centers.

RESEARCH EFFORTS CONTINUE TO BE NEEDED

Since cystic fibrosis is one of the most baffling diseases known to man, research in diverse areas is an essential key to its control and possible cure. Accordingly, I would like now to make reference to research efforts of the National Institutes of Health and how they relate to the challenge that faces us.

The testimony of many distinguished witnesses concerning the scientific progress and achievements stimulated by the National Institutes of Health is already a matter of congressional record. Departmental heads of NIH have spent many days substantiating their budget needs and enumerating supportive documentation. I, therefore, will only touch briefly upon these issues.

NATIONAL HEART AND LUNG INSTITUTE

Last year when the Heart Blood Vessel, Blood and Lung Act of 1972 was signed into law, it enlarged the authority of this Institute. The law further stated that 15 percent of the total budget would be used for pulmonary programs, specifically mentioning the inclusion of cystic fibrosis. The President's 1974 budget request is for $265 million. We do not feel that this sum is adequate to fund the expanded programs so decreed. We regard a figure approaching $350 million as much more realistic for the implementation of the mandate.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC AND DIGESTIVE DISORDERS

Cystic fibrosis, a "medical masquerader" is also a metabolic disease. This Institute has generated relative metabolic research over the years and hopefully, if their budget permits, will continue to award grants for meritorious research in this significant area. As an example of the invaluable work being supported by this Institute, I make mention of the $54,000 grant for studies in cystic fibrosis awarded to Dr. Hary Schwachman of Children's Hospital Medical Center in Boston. Dr. Schwachman, one of the world's leading authorities on this disease along with others, through the support they received from NIAMDD, are providing clues that fill in the component parts of a mammoth baffling jigsaw puzzle. We earnestly urge the committee to give serious consideration to increasing this Institute's 1974 budget by $25 million, thereby making their total budget $158 million for the next fiscal year.

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCE

Finally, we address ourselves to the most enigmatic factor of the disease with which we are concerned. It is now known that some 2,000 diseases of mankind are the manifestation of genetic disorders. Some are comparatively rare, it is true, but on the other hand, the answer to the more prevalent diseases, will emanate from the constant probe of the basic human cell. The number of victims

with cystic fibrosis will increase over future years unless the carrier can be found. The work of this Institute is extremely important in this area. Therefore, gentlemen, we deem it most important that the NIGMS budget be commensurate with the enormity of this task. The President's 1974 budget request for this Institute calls for $138 million, of which approximately $39 million has already been expended on genetic centers. Seven have already been established, and an eighth is scheduled to be in operation this year, and, in accordance with the findings of the genetic task force, proposed by the National Cystic Fibrosis Research Foundation, the implementation of a total of 10 such centers should be established in the not too distant future. Accordingly, I would like to recommend an increase of an additional $20 million to enable the funding of two more genetic centers this year, and uniformly keep pace with the expansion of much needed research grants.

In conclusion, Mr. Chairman and members of the committee, I thank you for your time and would like you to know that I completely endorse the testimony of Dr. Goddard, who will follow me, and devoutly hope we will live long enough to see the fruition of our efforts.

Mr. FLOOD. I understand. We know a good deal about this.

Mr. MCCREERY. May I say if this funding cannot be done through RMP, it can be done through the Maternal and Child Health Service of NIH who have been servicing kids and would take over the responsibility. Two million is needed.

Mr. FLOOD. But you do believe in the RMP potential?

Mr. MCCREERY. Yes, but if it cannot be done that way we would like to offer the committee an alternative method, and that is to put this program with the Maternal and Child and Health Service. Thank you, sir.

THURSDAY, MAY 17, 1973.

PEDIATRIC PULMONARY CENTERS

WITNESS

DR. ROY F. GODDARD, DIRECTOR OF PEDIATRIC RESEARCH, LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

Mr. FLOOD. Dr. Roy Goddard, representing the Association of Pediatric-Pulmonary Centers.

Dr. GODDARD. Thank you, sir.

I would like to thank you on behalf of the 10 million children with chronic pulmonary diseases for this opportunity to appear before you.

I represent the Association of Pediatric Pulmonary Centers. I also speak for the Convalescent Home and Hospitals for Asthmatic Children and the American College of Allergists. I believe you have heard and seen from what has been said, and the exhibits which you have here, that this is a serious problem. You see, of the 68 million children under the age of 20 in our population, 15½ million have chronic diseases and of these 10 million are chronic respiratory diseases. I introduce for the record the statistics in more detail.

Mr. Chairman, distinguished members of the committee, thank you for giving me the privilege of appearing before you today in behalf of 10 million children in America who suffer from chronic respiratory conditions. I represent the Association of Pediatric Pulmonary Centers, the Association of Convalescent Homes and Hospitals for Asthmatic children, and the American College of Allergists. All of us are in unison in our desire to establish early diagnosis, and institute adequate preventative treatment in this younger age group. We are

joined by other organizations and councils in this plea, including the National Cystic Fibrosis Research Foundation and the Pediatric Pulmonary Liaison Council.

I believe you became acquainted with the incidence, mortality, and morbidity of chronic pulmonary diseases in infants, children and young adults last year in our testimony to you then. Suffice to say, those figures have not changed. Gentlemen, 50 percent of the population of this country is still under the age of 24, and roughly 10 million of these children (or 10 percent of the population of this age group suffers from chronic lung disease). Over 35,00 of these children die each year from respiratory disease and 55 percent of all school days lost because of chronic conditions, result from such chronic lung conditions as asthma, allergies, sinusitis, bronchitis, bronchiectasis and cystic fibrosis. Another 28,000 die each year during the first year of life, and the cost of care to a family with a child with chronic pulmonary disease may be as high as 15 percent of their total income. Gentlemen, I think you can understand the physical, emotional, financial and psychosociological impact this problem presents to our country.

We are here today to speak for the "Breath of Life," to sustain if you will, each child's given right to that life and to insure that he will become a healthy, sef-sustaining human citizen. You, and others in Congress, have wisey legislated acts which allow this sustenance of life and provide new avenues into research and control in these dreaded disease areas. You have further appreciated that to carry out this struggle for breaths, that we and the disabled children of America need medical and para-medical expertise to provide these services. We have been able to partially meet this challenge with a meager budget of 1.7 million under the regional medical program, to assist in funding some 12 specialized pediatric pulmonary centers throughout the country. This funding is to be terminated and these centers and their programs and services to be abruptly halted June 30, 1973. The impact of such discontinuance will have the following effects:

(*a*) Thousands of children will suddenly be cut off from the "Breath of Life";

(*b*) Home care demonstration, programs which have been so vital in the ambulatory management of children and young adults with chronic pulmonary disease will become nonexistent. This will impose a frightening psychological, emotional, social and financial burden upon parents and siblings, as well as hospital and professional staff;

(*c*) Thousands more youngsters, yet to be diagnosed, will have no place to turn for essential preventive medicine;

(*d*) The loss of these patient populations will impede progress in clinical research, and the development of prophylactic and ambulatory services;

(*e*) Outreach programs into rural and underdeveloped areas will be terminated, depriving those most in need of these services and a hopeful outlook for a future productive and healthful life;

(*f*) Dismantling now of these 12 centers, even if revitalizing at a later date becomes possible, would result in the loss of innumerable thousands of man-hours and countless millions of dollars needed to reassemble such comprehensive staffs to provide comparable operating organizations.

This cannot and must not happen, gentlemen. We join with you members of the committee and all our medical and paramedical colleagues across the country in asking that this meager $2 million be budgeted through regional medical programs for the continuance of those vitally needed centers and programs.

The regional medical program has afforded in the past an efficient agency for administration of these 12 "truly regional" specialized pediatric pulmonary centers (see exhibit B), which we believe have most effectively proven themselves. We, therefore, support the continuation of regional pediatric pulmonary centers under the regional medical program and Congress endorsement of a 1-year extension proposal for regional medical programs.

If such continuation of the regional medical program cannot be accomplished, then we should like to suggest an alternative plan for consideration. For many years, first the Children's Bureau, and then the Maternal Child Health Division of HSMA, has directed and administered programs for crippled and handicapped children. Certainly, these children with chronic lung disease are crippled and many suffer from multiple handicaps, as defined in the law:

> * * * a crippled child is an individual under the age of 21 who has an organic disease, defect, or condition which may hinder the achievement of normal growth and development.
> (Social Security Act, sec. 514, as amended through Jan. 2, 1968.)

The Maternal Child Health Agency has, over the years, demonstrated, in our opinion, its competency to administer the special care and programs of these handicapped pulmonary cripples, now being served by this existing meager network of pediatric pulmonary centers.

If you gentlemen see fit to appropriate an additional $2 million to the budget of Maternal Child Health, we believe that under section 511 of title V of the Social Security Act, as amended through January 1968, these moneys could be set aside for the continuation of these vital programs.

Just as early diagnosis and evaluation are of vital concern in the management of these chronic pulmonary diseases in children, so are the causes, control and hopefully the care and/or alleviation of their chronicicity. We believe it is therefore imperative that research continue in this area, and we support the Heart Lung Institute in the continuation of its present programs, and those we advocated together with you and the Institute, in the expanded Heart and Lung Act of 1972. Many of these were not able to be initiated, as you know, in fiscal year 1973 due to the withholding of the HEW appropriations, and the reductions of funds in the continuing resolution. To successfully meet the challenge that these crippling diseases of children offer in the research area, we believe it advisable to increase the administration's budget of $265 million for the Heart-Lung Institute for fiscal year 1974 to a more reasonable $350 million. This will allow that Institute to initiate a sizable number of the programs we had all hoped for fiscal year 1973, and enlarge the research in diseases of the lungs to the 15 percent of the total Institute budget, without curtailing or abolishing existing research programs in heart, blood vessel and blood diseases. We sincerely believe that a minimum amount of 5 percent of

the Institute's budget should be channeled into those lung diseases originating in infancy and childhood.

Allied with the NHLI programs are those programs concerning allergies, asthma, and infections diseases that are administered by the NIAID. Similarly, if we are to make inroads into the cause, treatment, control and reduction of morbidity and mortality in these areas, it seems only justified that an appropriation of $120 million be requested for consideration for that Institute by this committee. You are probably aware that under this Institute 10 outpatient oriented Asthma and Allergic Disease Centers exist throughout the country. One of these centers is involved primarliy in research in childhood asthma, while the major interest of the nine other centers is centered in older individuals. We cannot stress too strongly the need to continue these centers and endorse the Institute's role in immunological developments and research in infectious respiratory diseases.

I should like to endorse Dr. Barbero's statement referring to research in the metabolic and genetic areas of Cystic Fibrosis and other inherited respiratory diseases, and enjoin the committee to provide adequate support of such research in the budgets of the National Institute of Arthritis, Metabolic and Digestive Diseases, and the National Institute of General Medical Sciences.

Thank you, gentlemen, for the opportunity to bring these matters into their just focus before you here today. We believe you will see fit to give these 10 million children with chronic lung diseases the opportunity to become productive and helpful citizens of tomorrow, just as the economy of the Nation is synonymous with humanitarian principles in health care.

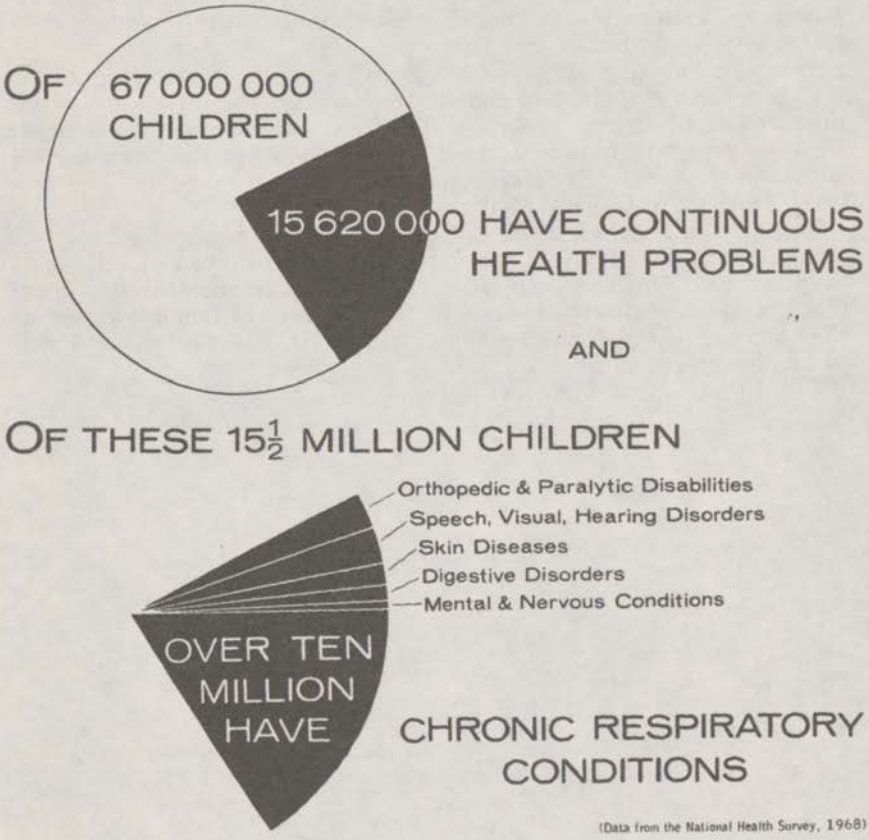
[The information follows:]

ASSOCIATION OF PEDIATRIC PULMONARY CENTERS

EXHIBITS TO ACCOMPANY 1973 TESTIMONY OF ROY F. GODDARD, M.D.

EXHIBIT A:

The Prevalence of Chronic Respiratory Diseases in Children



(Data from the National Health Survey, 1968)

PREVALENCE OF CHRONIC CONDITIONS AMONG CHILDREN
IN THE UNITED STATES OF AMERICA

TOTAL POPULATION	67,006,000
ALL CHRONIC LISTED CONDITIONS	15,620,000
Hayfever, Asthma & Other Allergies*	6,618,000
Other Respiratory Conditions*	3,727,000
Orthopedic & Paralytic	1,571,000
Skin Diseases	1,006,000
Digestive	733,000
Speech Disorders	575,000
Hearing Problems	537,000
Visual Disorders	406,000
Mental and Nervous Conditions	447,000
*ALL CHRONIC RESPIRATORY (15.44% of Population)	10,345,000

(Data from National Health Survey, 1968)

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THE IMPACT OF ACUTE AND CHRONIC ILLNESS IN RESTRICTING CHILDREN'S ACTIVITIES

	LIMITED IN SCHOOL OR PLAY FOR ILLNESSES (Age 0 - 17)	LIMITED IN SCHOOL (ALONE) FOR ILLNESSES (Age 6 - 16)	DAYS SPENT IN BED FOR ILLNESSES (Age 0 - 17)
DAYS LOST FOR LISTED ACUTE CONDITIONS (1968)	605,629,000	191,561,000	166,973,000
1. Acute Respiratory	343,605,000	122,683,000	169,288,000
a. Acute URI's (Colds)	(175,067,000)	(59,005,000)	(73,211,000)
b. Influenza	(148,409,000)	(60,719,000)	(84,996,000)
c. Other Acute Resp.	(20,128,000)	(2,959,000)	(11,080,000)
2. Infections	98,020,000	33,209,000	49,561,000
3. Gastro-Intestinal	25,563,000	7,772,000	10,459,000
4. Injuries	81,180,000	12,035,000	15,388,000
5. All Other Acute	57,261,000	15,873,000	22,277,000
DAYS LOST FOR LISTED CHRONIC CONDITIONS (1968)	62,912,000	27,667,000	11,067,000
1. Asthma (22.9% rate set in 1959-1961)		6,338,000	
2. Other Allergies (4.5%)		1,245,000	
3. Other Respiratory Diseases (27.6%)		7,636,000	
4. All Other Chronic Conditions (45.0%)		12,450,000	
DAYS LOST FOR ACUTE AND CHRONIC CONDITIONS	668,541,000	219,229,000	278,040,000

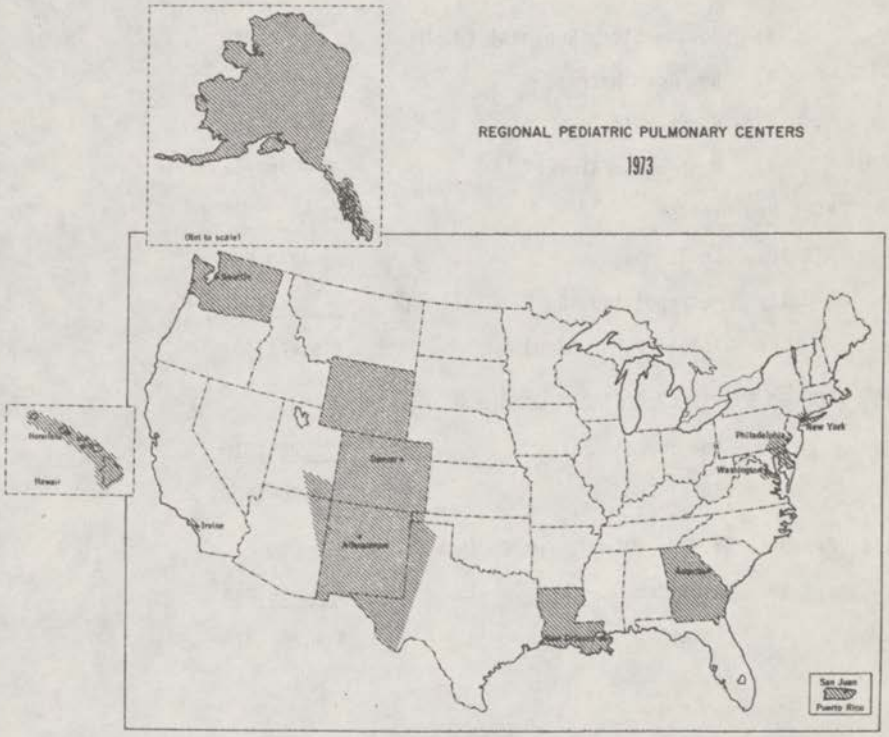
CHILDREN WHOSE ACTIVITIES ARE RESTRICTED BY CHRONIC DISEASES

	NUMBER	PERCENT OF ALL CHILDREN	PERCENT OF ALL CHILDREN
ALL CHRONIC CONDITIONS	15,620,000	23.3%	100.0%
THOSE WITH ANY LIMITATIONS	1,427,000	2.1%	9.2%
THOSE WITH SOME LIMITATIONS IN SCHOOL OR PLAY	825,000	1.2%	5.3%
THOSE WITH "LESSER" LIMITATIONS	602,000	0.9%	3.9%

(Data from the National Health Survey, 1968)

EXHIBIT B:

Existing and Proposed Pediatric Respiratory Disease Centers



I. EXISTING PEDIATRIC PULMONARY CENTERS FUNDED BY THE REGIONAL MEDICAL PROGRAM

		Funding for FY 73
A.	Continued Grants	
1.	California (Irvine)	$ 137,420
2.	Colorado/Wyoming	51,211
3.	Georgia	49,300
4.	Greater Delaware Valley	147,649
5.	Hawaii	121,000
6.	Southwestern Regional (N. Mex.)	138,763
7.	New York Metro	214,171
8.	Puerto Rico	118,393
9.	Washington/Alaska	75,724
B.	New Grants*	
10.	Louisiana	273,581
11.	Metropolitan, D. C.	133,826
	Total (RMF funded)	$ 1,471,038

II. FUNDED BY DIRECT CONTRACT WITH MCH

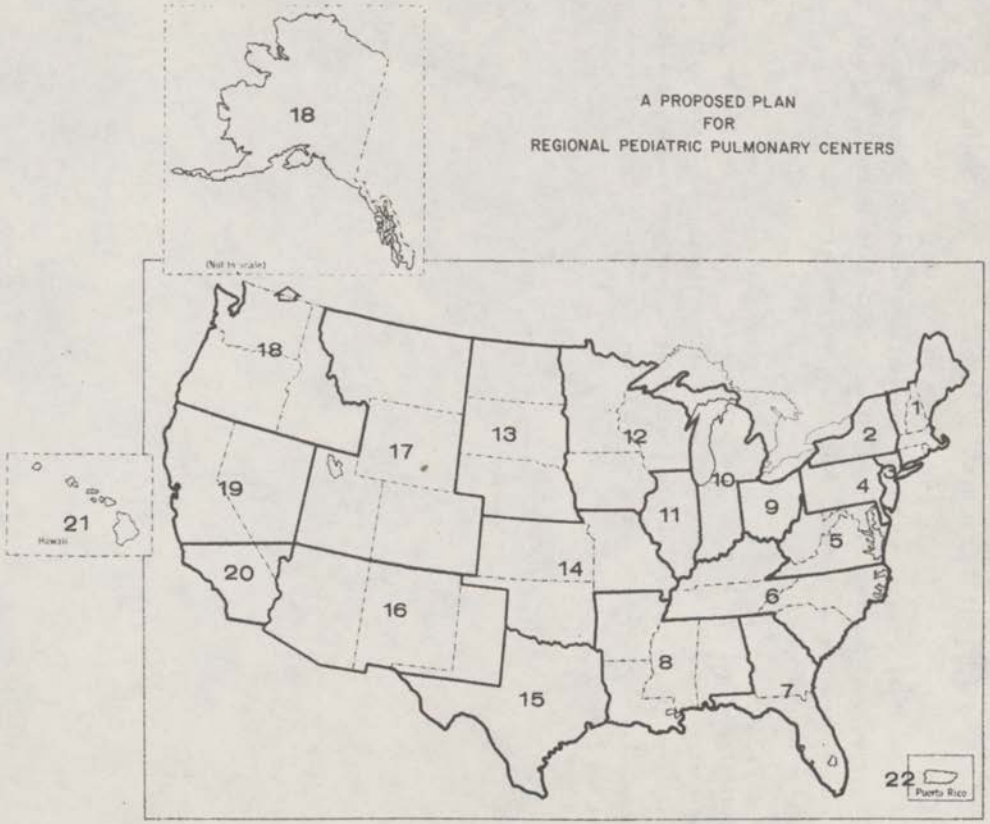
12.	New York	$ 235,518
	Total Funded	$ 1,706,556

III. APPROVED BY RMP, BUT NOT FUNDED (NEW)

13.	Nebraska	$ 55,718
	Total	$ 1,762,274

*Previously direct contract grants with Chronic Disease Division of USPHS.

A PROPOSED PLAN
FOR
REGIONAL PEDIATRIC PULMONARY CENTERS



FUTURE PROPOSED REGIONAL PEDIATRIC RESPIRATORY CENTERS

In FY 74, it is imperative that the presently existing 12 Centers now in operation throughout the Country (including Centers in Hawaii & Puerto Rico) be funded. These highly specialized centers have effectively proven themselves.

Budgeting beyond FY 74 is difficult to consider at this time. However, to adequately cover the geographic United States it is suggested that an additional ten centers should be planned for as depicted in the preceding geographic sketch. This would mean doubling the current funding figures in the future.

EXHIBIT C:

The Pediatric Respiratory Center



Professional and Para-professional Training



Teaching a Patient Inhalation Therapy



The Patient and Breathing Exercise



Outreach Community Visitation



Home Visitation

A Pediatric Respiratory Center

A. WHAT IT IS

A comprehensive and coordinated diagnostic, treatment, training, and clinical and basic research center for children and young adults with chronic respiratory disease.

B. WHY

The prevalence, mortality, and morbidity statistics emphasize the importance of acute and chronic lung diseases as a health problem in children. The establishment of pediatric respiratory disease centers is the most practical and economical method of increasing the availability of professional personnel and improving the quality of care in this field.

C. OBJECTIVES

The primary objectives of such a center is to bring together in a teaching center personnel with special skills for a coordinated approach to the diagnosis and comprehensive management of children with acute and chronic respiratory diseases. Such a center will represent an optimal program unit which is structured to:

(1) Serve as a training area for physicians of various disciplines, medical students, nurses, paramedical, and health career personnel;

(2) Provide optimal diagnostic and treatment services for children having acute and chronic respiratory diseases;

(3) Stimulate and conduct clinical and basic research in the patho-physiological changes associated with chronic respiratory diseases, thus improving the clinical management of these afflictions;

(4) Develop and improve communications between the pediatric respiratory unit and the medical and/or paramedical personnel in the outlying communities. This will permit the prompt application of new diagnostic and therapeutic measures in the treatment of neonatal, pediatric and young adult pulmonary diseases; and,

(5) Provide an opportunity for the longitudinal study of children and young adults with chronic respiratory diseases, thus obtaining information concerning the natural course of pulmonary diseases, and the effectiveness of preventive or prophylactic measures.

D. SERVICES

The pediatric respiratory center coordinates the existing broad diagnostic treatment and rehabilitation and research programs found at the University Medical Center in order to provide comprehensive and exemplary care for children with chronic and acute respiratory diseases. The center must have the required personnel and facilities to provide the diagnosis, evaluation, and subsequent optimal care of the patient and the family afflicted with any type of respiratory disease (allergic, congenital, immunologic defect, infectious, metabolic-related, cardiac-related, multiple etiologies, et al.). Inpatient services include:

(1) Nursery;

(2) Intensive care respiratory unit;

(3) Facilities and personnel for diagnosis and treatment of patients with infectious, acute and chronic respiratory diseases;

(4) Rehabilitation.

Outpatient facilities and personnel complements and extends the inpatient services. Home visitation programs are an integral part of the program.

Services are offered at a level and phase appropriate to the nature and severity of the individual child's basic pulmonary problem. An attempt is made to provide comprehensive outpatient evaluation, therapy, and followup, with hospitalization reserved for patients requiring special diagnostic studies or intensive therapeutic measures. Such care necessitates the interaction of the entire medical team of the respiratory center. In addition, for optimal care, a close liaison is developed among the center staff, local physicians, public health authorities and community services.

All children seen at the center, especially those handicapped by their respiratory diseases, have a thorough followup with the aid of the vocational and social services in order to make certain that the child realizes the full potential for

rehabilitation. Since the results of rehabilitation with pediatric problems is directly related to the enthusiasm and effectiveness of the therapeutic program provided by the parents or other members of the household, special instructions are given to the family members as well as the local community in the medical and emotional management of the child with chronic pulmonary disease. Educational programs are carried out both at the center and in outlying communities.

The longitudinal study of children with chronic respiratory disease provides an opportunity to obtain data concerning the natural course of pulmonary disease, especially the subsequent development of chronic obstructive respiratory diseases in adulthood. The effectiveness of various therapeutic regimens is also evaluated by developing a multiple parameter computerized evaluation system.

E. TRAINING

An equally important objective of the center is to provide a training ground for pediatric respiratory disease specialists. Pediatricians, internists, specialists, and trainees in the field of pulmonary disease, child psychiatry, clinical psychology, nursing, physical therapy, inhalation therapy, radiology, social work, and education will have an opportunity to train a broad spectrum of pediatric pulmonary disease professional personnel to serve in the pulmonary clinic facilities across the area served by the medical center. Community and continuing education training will be a part of the overall training.

Clinical training

(1) Fellowship training for periods of 1–2 years should be available to board certified specialists.

(2) Selected training programs for periods of 1–4 weeks are available for physicians in practice.

(3) Elective programs are available for medical students.

(4) Specific programs are available for physician assistants, inhalation therapists, public health nurses, nurses, and other health career personnel.

F. RESEARCH

A clinical research unit should be available to perform to perform appropriate investigative studies concerning the etiology and pathophysiology of pulmonary afflictions in children.

Normal values for pediatric patients must be secured especially in regard to pulmonary function testing. An attempt is made to obtain simpler diagnostic tests especially in patients less than 6 years of age.

Specific therapeutic programs are developed and evaluated. Basic research is integrated with the clinical aspects to assure the utmost returns in research areas.

G. BASIC STAFF

The basic staff for a pediatric respiratory center includes:

(1) Medical or professional:

(*a*) A full-time physician (pediatrician, board qualified—preferably certified) whose main interest is in respiratory disease care. (See D, the pediatric respiratory physician.)

(*b*) Part-time educator, physician.

(*c*) Part-time research physician (or equivalent).

(2) Paramedical:

(*a*) A full-time nurse (R.N.) with specialized training in pediatric respiratory disease.

(*b*) A full-time inhalation therapist, interested and trained in the care of children and young adults with CPD.

(*c*) A part-time (or pay-for services) physical therapist.

(*d*) Social service worker or director—part-time.

H. CONSULTING SERVICES

Other medical and paramedical services and facilities should be available for integration into the care, research and teaching programs. These include:

(1) Medical: Anesthesiology, biostatistics, cardiology, radiology, thoracic surgery, ENT, environmental health, infectious diseases, allergy, immunology, psy-

chiatry and psychology, gastroenterology, geneticist, and pathologist (pediatric-oriented).

(2) Paramedical: Nursing (RN, LPN, nurses' aides and assistance), inhalation therapy, physical therapy, pulmonary physiology technicians, laboratory technicians, allergy technicians, dietician, and microbiologist.

(3) Community: Community medicine and public health, schoolteacher, vocational and occupational therapy, social workers, welfare departments, allied lay health agencies, health planning agencies, manpower development groups, and HMO's.

(4) Administrative: Full-time executive secretary, and full-time or part-time coordinator-administrator.

I. FACILITIES

The actual physical plant should be commensurate with the staff and its functioning, including the laboratory or ancillary services and resources. Such service facilities are obviously most likely to be available in a medical school or other medical center complex, or within the confines of foundations or group practice organizations.

EXHIBIT D:
The Pediatric Respiratory Physician



Schooling in Histo-pathology



Teaching Others to Help in Diagnosis



Examining and Caring for the Patient



Experience in Pulmonary Function Testing



Patient Discussion with Parent

THE PEDIATRIC RESPIRATORY PHYSICIAN

(As defined by the Workshop on Training and Education of the National Conference on "Cystic Fibrosis and Other Pediatric Respiratory Diseases" Washington, D.C., April 3–5, 1973)

The director of a pediatric respiratory center should be a board qualified pediatrician who has had additional training and experience in the diagnosis and management of chronic respiratory problems.

A pediatric respiratory physician should not only have this training and experience in chronic respiratory problems but also be trained in the area of acute respiratory problems. He should likewise have had experience and gained knowledge in the comprehensive medical management of emergency or life-threatening respiratory problems. Particular emphasis on the pathophysiological assessment of these emergencies should be covered in this period of traineeship, as well as the application, selection of various types of inhalation therapy equipment for the patient, a proper home maintenance. The trainee should develop efficiency in both negative and positive pressure mechanical resuscitation devices, and his knowledge should include the techniques of physiological monitoring to assess the condition of the patient.

The pediatric respiratory physician should be well schooled in the anatomy and radiology of the respiratory system. He should gain proficiency in performance as well as interpretation of pulmonary function studies. He should gain experience and knowledge in long-term management of chronic respiratory disease, with emphasis on preservation of function of cardiorespiratory status. He should gain experience and knowledge in evaluation of the metabolic problems confronting children with cystic fibrosis and other chronic respiratory problems, he should gain experience in the management of nutritional problems in children with chronic respiratory disease; he should have some knowledge and experience in immunological and microbial management of children with chronic respiratory diseases. The trainee should gain further experience in the provision of comprehensive medical care. This training should give him experience in coordinating the responsibilities of all allied health personnel who constitute the pediatric respiratory and rehabilitation team. The trainee should have knowledge of the function of local and State health community agencies and the procedures of referral to these agencies. Lastly, he should have knowledge and training in maintaining a close working relationship with those agencies that have specific relationships to education, additional training and job placement for physically handicapped patients.

THE MANPOWER SHORTAGE IN RESPIRATORY DISEASE PHYSICIANS

The Manpower Survey (done for the NHLI by the American Thoracic Society, American College of Chest Physicians, Association of Pediatric Pulmonary Centers and others) estimates that 1,500 clinicians are needed in pediatric chest diseases, and approximately 100 more professionals are needed in medical schools, and another 100 in research institutions.

Manpower shortage in pulmonary diseases

Practicing Physicians (Task II):	
Goal (United States)	
2 adult chest MD/100,000 population	4,160
1 pediatric chest MD/100,000 population	2,080
Available:	
0.95 "internist" MD/100,000 population	1,976
0.24 "pediatric" MD/100,000 population	495
Total needed	[1] 3,769
Medical Schools (Task IV):	
Funded vacancies	131
Needed, in addition, within 2 years	226
Total needed	357

See footnote at end of table, p. 571.

Manpower shortage in pulmonary diseases—Continued

Research Institutions (Task V):	
Funded Vacancies	18
Needed, in addition, within 2 years	183
Total needed	201
Total (all categories) needed	[1] 4,327

[1] Since this number includes a large but unknown number of full-time physicians in medical schools and research institutions who are not practicing physicians, it overestimates the total number of available physicians. For the reason given (footnote above), both the total practicing physicians needed and the total needed (all categories) are underestimates of the actual figures.

Source: ATS–ACCP Survey of Professional Manpower in Pulmonary Diseases, 1972.

TUFTS UNIVERSITY SCHOOL OF MEDICINE—BOSTON CITY HOSPITAL,
Boston, Mass., February 10, 1971.

ROY F. GODDARD, M.D.,
Lovelace Clinic,
Albuquerque, N. Mex.

DEAR ROY: After spending a lifetime in the management of obstructive lung problems in adults, I have become convinced that rehabilitation of the young patient is the key. I think this may be the area that I will work in after my emeritus status in a couple of years. I would like to spend a few days to a week visiting with you for I have been impressed with the work you have been doing with children.

If you would suggest the better time of year for a visit with you, I would go ahead and make plans. I would prefer comfortable hotel or lodge accommodations that would provide pool and tennis facilities not too far from your hospital unit. If you feel that my monosyllabic utterings on deaths in bronchial asthma or the management of respiratory failure could be useful I would be pleased to talk on these subjects while in Albuquerque.

At any rate, I hope this brief note finds you well. It is some time since our paths have crossed.

Sincerely,

MAURICE S. SEGAL, M.D.

EXHIBIT E:
Research in Chronic Respiratory Disease



Serum Reveals Abnormalities



New Developments in Sweat Testing



The Pathology of Cystic Fibrosis



What Is My Future?



Genetic Studies



Longitudinal Spirometry Studies



Bicycle Work Test

Outline Of Pediatric Respiratory Research Areas

I. BASIC LUNG FUNCTIONING

(A) Anatomy (growth and development) : 1. The fetal lung; 2. neonate; 3. the development and growth of the lung.
(B) Pulmonary function: 1. Normal function relevant to growth parameters; 2. abnormal function studies.
(C) Cellular and biochemical roles.
(D) Immunological roles.
(E) Cleansing mechanisms.
(F) The modification of lung function: 1. By diseases; 2. environmental factors.

II. DIAGNOSIS AND EVALUATION

III. DISEASE AND ITS EFFECTS ON THE LUNGS

(A) Categorical diseases:
1. Infancy: Respiratory distress syndrome, sudden death syndrome, acute respiratory infections, bronchiolitis, and narrowed airways (such as in mongolism, normal infants).
2. Children: Alpha$_1$ antitrypsin, asthma (and allergies), bronchiolitis, bronchiectasis, bronchitis, chronic cough, cystic fibrosis, collagen diseases, drug induced (O_2 toxicity, opiates, et cetera), diffuse, fibrosis, granulomatosis, and infections: bacterial, mycobacterial, mycoplasma, mycotic, viral; and neoplasm (primary or metastatic).
3. Congenital.
4. Cardiac related (secondary to CRD).
(B) Etiology: Genetic, immunologic, infections, and environmental.
(C) Pathophysiology: Progression, longitudinal studies, and reversibility.
(D) Diagnosis and evaluation: Early recognition and diagnosis, evaluation of severity of disease, progression of disease, and pediatric origins of CRD in adults.

IV. EVALUATION OF MODALITIES OF THERAPY

(A) Types of therapy.
(B) Plans of therapy.
(C) Areas of therapy: Hospital, outpatient—ambulatory, and home—ambulatory.
(D) Preventive medicine: early treatment, reversibility, and longitudinal.

V. MULTIDISCIPLINARY APPROACH

(A) Training in: Research, clinical, and sociological.
(B) Personnel: Medical, paramedical, and lay.
(C) Centers: Research, clinical, and demonstration and education.

VI. ANIMAL MODELS

(An attempt to reproduce the disease in animals, or parts of it, which can allow more intensive research into all areas of pathophysiology, progression of disease, and effect of treatment.)

VII. PERTINENT RESEARCH IN OTHER INSTITUTES AND GOVERNMENTAL AGENCIES

(A) Genetic studies—NIGMS.
(B) Eccrine and GI—NAIMD.
(C) Allergies and infectious diseases—NIAID.
(D) Interagency cooperative studies: RMP, MCH, and Others.

VIII. PRIORITIES

In order of priority, it is believed the above research areas should be listed as:
Priority 1: Early recognition, evaluation, and treatment.
Priority 2: Longitudinal studies as repeatedly emphasized in all areas.
Priority 3: Preventive approaches (prophylaxis) and emphasis on reversibility, where such a possibility exists.
Priority 4: Etiologic factors.
Priority 5: Training (professional and paraprofessional).
Priority 6: Animal models.

Dr. GODDARD. The impact of losing these pediatric pulmonary centers will result in cutting off the breath of life from thousands of children, and eliminating the home care demonstration, which is a very important part of our program.

We have thousands of youngsters, who are not diagnosed today, that will have no place to turn to for preventive medicine. Loss of these patient populations will impede progress in clinical research and ambulatory prophylactic services, and our outreach programs, will also be tremendously curtailed.

I would like to furnish the committee, for whatever use you wish to make of it, something on our outreach programs which you can peruse at your leisure. We currently have 12 centers. These are geographically indicated for you. I won't go through these. They are listed in the appendix to my testimony. They cover geographic and population areas.

Eventually we need more than this but let us talk about trying to maintain what we have today. These are very specialized centers. We are talking about the child who is gasping for breath and having problems. We are teaching him how to help himself to breath. We are trying to teach him and the parents. We are going to these Indian communities and other areas of underprivileged people and right into the home.

As you know, the administration has talked about cutting down on training. It takes not just a general practitioner but somebody who can do a little more than this. We have to train these people to look for specific things. We have to train them in anatomy, histology, and pathology. We have to train them to teach others. We have to train them to talk to parents. This is why we vitally have to continue, in my opinion, and the opinion of our colleagues throughout the country with some kind of extension of this program. The regional medical program has been a major source of funding for the past several years. As it has been pointed out to you, if it is not possible to continue these centers under the regional medical program, there is a possibility that the Maternal and Child Health Service of HEW, which for years has dealt with maternal and child diseases, could accept this responsibility under section 511 of title V of the Social Security Act in the educational aspects of this.

I think one of the most critical areas for us is in research. If you look at the exhibits we have here, every single individual in a typical center is a patient. This is a little girl. I would tell you that her prognosis is no longer than 2 more years. What is her future? I mean we are now determining in research laboratories around the country, serum abnormalities, new sweat testing methods, genetic studies and other pulmonary tests. Therefore it is very important that research in the Heart and Lung Institute, which we have been able to help support in the past and which does have research budgets for this, be continued. We would like to see the $265 million budget the President has called for this Institute be raised to $350 million, at least.

In Dr. Barbero's statement you will see cystic fibrosis referred to as "medical masquerader." It is not just a respiratory disease, it is a GI disorder. We have to talk here again about the inequities in the amounts that are spent. We wish to encourage that an additional $25 million be put into the budget of the National Institute of Arth-

ritis and Metabolic and Digestive Disorders, raising their amount to $158 million.

Finally, the most enigmatic factor of the disease is that it is a genetic disorder. As you know, the National Institute of General Medical Science deals in genetic diseases and they are probing into basic human cells. They have 7 centers at this time and are trying to establish an eighth one, and on up to 10. We would like to recommend an increase of an additional $20 million in this Institute's appropriation to enable the funding of two more genetic centers in this year.

The one other Institute that is involved in research of respiratory and infectious diseases is the National Institute of Allergy and Infectious Diseases. They have 10 outpatient oriented disease centers. One is involved primarily in childhood asthma. I think they need money and we would like to also ask that they have a budget of $120 million, which is about $15 or $20 million greater than what has been asked for in the administration's budget.

I would be very happy to answer any questions. I submit all of this for the record. I thank you for the opportunity to bring these matters before you for your attention. I hope you will consider giving these 10 million children with chronic lung diseases the opportunity to become productive and helpful citizens of tomorrow because the economy of our Nation is synonymous with humanitarian principles and health care.

Mr. FLOOD. Thank you.

THURSDAY, MAY 17, 1973.

EDUCATION ASSISTANCE—OCCUPATIONAL SAFETY AND HEALTH

WITNESSES

KENNETH PETERSON, LEGISLATIVE REPRESENTATIVE, AFL–CIO
HOWARD McGUIGAN, LEGISLATIVE REPRESENTATIVE, AFL–CIO

Mr. FLOOD. Mr. Kenneth Peterson, legislative representative, AFL–CIO.

Mr. PETERSON. My name is Kenneth Peterson and I am legislative representative of the AFL–CIO. I am accompanied by Howard McGuigan, who is also legislative representative of AFL–CIO. The AFL–CIO appreciates this opportunity to testify before this hard-working, knowledgeable and truly dedicated committee. I am impressed by what I heard today and other days in the past and by the great decisions and the important things that you handle that generations of Americans will feel in the years to come. I am going to ask to submit our statement because it is too long for the time allotted.

Mr. FLOOD. It will be entered in the record at this point.

[The statement follows:]

EDUCATION

The AFL–CIO has always taken a special interest in educational expenditures. Our 14 million members pay taxes to support the schools and their children attend the schools and we therefore have a strong consumer interest in American education.

We have come before this committee year after year urging that existing educational legislation be funded to the fullest level of existing authorizations. These authorizations have been established by Congress after exhaustive study of the actual need. The fact that the Elementary and Secondary Education Act, the

Vocational Education Act, the Higher Education Act, and other education legislation have been funded at only a fraction of the need and the authorization has crippled these programs.

We are in no way retreating from this position when we admit that the prospects for full funding in this session are bleak. The President has already vetoed education appropriations four times. It is certain that he will do so again if the Congress adopts an education budget that represents susbtantial gains. We cannot agree that money spent for education represents a significant inflationary threat to the Nation, but neither do we want to see the schoolchildren of America made the pawns in a power struggle between the Congress and the executive branch.

Short of full funding then, we would urge that certain minimum standards at least be maintained in education appropriations. It would, we assume, be unthinkable that appropriations for 1974 would be any less than they were for 1973. We would certainly hope that there would be increases over the present year's funding which would be sufficient to cover rising costs and to permit at least some new programs and expansion of old ones.

We especially urge that the funding be increased for title I of the Elementary and Secondary Education Act. We agree with the Office of Education recommendation that these funds should be concentrated at no less than $300 per pupil, but to do this, most school districts are then able to serve only about one-third of the economically disadvantaged children who were counted to determine the district's entitlement.

We urge funding of the impact aid program to include the "B" category children. To do otherwise would be a crippling blow to thousands of school districts. If the "B" category impact aid program has some drawbacks, it should at least be retained until a better substitute is available. And we are particularly disturbed by the proposed cuts in funding for the bilingual education program. This is an important program of modest dimensions. It should not be curtailed; it should be expanded.

While pointing out some of these special areas of concern, we again want to emphasize our basic commitment to full funding. The needs of education at all levels deserve a place of high priority in the Federal budget.

PUBLIC ASSISTANCE AND SOCIAL SERVICES

In its continuing effort to save money at the expense of the neediest people, the administration budget cuts back both the amount of money the States estimate they need to make money payments to those on public assistance, and the money to provide services for the poor and near poor. The administration is proposing a 20-percent cutback to States from their 1973 expenditures for payments to public assistance recipients. Their justification for this cut is not that there are fewer people out of work needing assistance, but that new Federal actions yet to be taken will result in more "efficient" state-run programs. The AFL–CIO bitterly opposes such capricious actions. An appropriation slash of 20 percent less than the present level of spending, coupled with proposed regulations making it extremely difficult for families and individuals to apply for assistance, and far easier for the States to deny assistance, will most certainly result in starving people in the name of efficiency.

Further evidence of the administration's request for efficiency at the expense of the poor is their request for only $2 billion for social services. This amount will be reduced even further by the restrictive regulations recently issued by HEW. These actions deliberately ignore both congressional intent to spend $2.5 billion, and the States expressed need to provide more services to people to prevent welfare dependency. The intent of the Social Security Act, and the services provided thereunder, is to help people stay on the job or get jobs through training or education. A range of services was provided, based on the real needs of people if they were to be self-sufficient. Among these services, day care, homemaker services, education services, and legal services—just to have a few of most essential—are obviously needed by people who are trying to remain or become self-sufficient. The Congress authorized and appropriated funds to help decrease the welfare rolls. What this budget item, along with the regulations does is virtually destroy a program which is meant to prevent dependency.

HEALTH

The President's budget for all Federal health programs amounts to $30 billion. Most of this budget is for medicare and medicaid. Only $5 billion of the budget will be used for improving health services and developing health resources.

The President's 1972 health message stated: "Nothing should impede us from doing whatever is necessary to bring the best possible health care to those who do not have it—while improving health care quality for everyone at the earliest possible time."

The President's health budget for fiscal 1974 contradicts this statement. All financial aid for the regional medical program, for research training grants and for the Hill-Burton facilities construction and modernization program would be terminated. The recommended budget for these programs is zero dollars.

President Nixon's 1972 health message also stated:

"The Comprehensive Health Manpower Training Act of 1971 and the Nurse Training Act of 1971, which I signed last November, will spur the greatest effort in our history to expand the supply of health personnel."

Yet, the administration's health manpower budget is reduced $58 million with elimination of Federal funding for nurse training, and for institutional support to schools of public health and of the allied health professions.

Substantial cuts are proposed for maternal and child care, family planning services, comprehensive health services, venereal disease control and lead poisoning.

These cuts are just further evidence that what President Nixon says bears no relation to what he does.

The AFL–CIO does not claim to have the expertise to make an independent determination of health funding needs. For this, we turn to the health experts. The Coalition for Health Funding has come up with a modest increase in health expenditures over that of the administration. We fully support the coalition's minimum budget which exceeds that of the administration by only $108.5 million. If account is taken of the fact that the Nixon budget includes funds for the support of community mental health centers through 1980, this increase would amount to $739 million for fiscal 1974. A summary of coalition minimum budget is included in the appendix which follows:

APPENDIX

SUMMARY: HEALTH BUDGET

[In thousands of dollars]

Pension	President's request	Coalition minimum
National Institutes of Health	1,938,270	2,464,589
Health Services and Mental Health Administration	2,003,470	1,487,219
Indian Health	218,685	222,685
Social and Rehabilitative Services	964,128	1,045,564
Food and drug Administration	166,140	174,140
Total	5,290,693	5,394,197

REHABILITATION SERVICES ADMINISTRATION

During 1972, action on vocational rehabilitation appropriations was delayed pending some determination of the form VR substantive legislation, under consideration throughout the year was to take. Finally, toward the end of the second session of the 92d Congress it appeared that a "Rehabilitation Act of 1972" would replace the present VR Act, and appropriations were made in supplemental (Public Law 92–607).

The Supplemental Appropriations Act made reference to "Rehabilitation Act of 1972;" however, that "act" was vetoed by the President. The result was that funds were appropriated for an "act" that did not exist. It was determined by DHEW that the funds thus appropriated could not be used to fund programs under the existing VR Act, and that the program would have to be funded under a continuing resolution, which holds fundings to the fiscal year level, or the amounts requested in the President's budget, whichever is less.

The original budget for fiscal year 1973 submitted by the President had requested $610 million for the basic support (section 2) formula grants program that funds rehabilitation services in the States. Under the continuing resolution, basic support expenditures are held to $560 million. Requested funding for all other sections of the VR Act was less in the President's budget, and under the continuing resolution this lower level prevails.

Complicating the picture is the fact that HEW-Labor appropriations bills were twice vetoed by the President during the 92d Congress so that all programs are under continuing resolution. The President submitted to the 93d Congress shortly after it was organized a revised budget for HEW and Labor. In this budget, the President requested $590 million for the basic support VR program, $30 million more than fiscal year 1972, but $20 million less than in the original budget request.

The Congress has indicated, however, that it will not pass another fiscal year 1973 HEW-Labor appropriations bill to replace the ones vetoed by the President.

State VR agencies had begun to spend at the $610 million rate last year when it appeared that amount would be available. As this was later reduced to $590 million, the State agencies reduced expenditures to that level. As the end of the fiscal year becomes closer, the actual rate may be held to the level of the continuing resolution, and many State agencies have stopped making new commitments so that they can come out even at the end of the year.

We urge that action be taken to release fiscal year 1973 funds for the basic support program at a $610 million level and that provision be made for a similar appropriation for fiscal year 1974 pending enactment of a revised Rehabilitation Act of 1973.

President's Committee on Employment of the Handicapped

The disallowance of the $40,000 supplemental appropriation requested by the President's Committee comes at a most critical time in Committee activities. It is particularly unfortunate in view of the previous House and Senate positions which approved two additional positions and supporting funds twice before in the vetoed legislation.

The Executive Committee of the President's Committee composed of 50 volunteers from many national organizations has just mandated a new program to increase and improve efforts of the President's Committee with particular emphasis on support for Governor's Committees on Employment of the Handicapped. It is imperative that these new efforts not be impeded by a cutback of $40,000, an amount which had been anticipated in the program planning by the executive committee.

More than money is at stake. The denial of these funds could have a dampening effect on the voluntary efforts of the organizations that support the President's Committee and which are responsible for so much that has been accomplished. It will be a symbolic gesture that will tend to demonstrate whether or not the Congress intended the President's Committee to move forward or whether the President's Committee is expected to maintain the status quo.

DEPARTMENT OF LABOR—EMPLOYMENT STANDARDS ADMINISTRATION

We believe that the administration's proposed budget for the Employment Standards Administration must immediately be increased by at least 20 percent in the area of enforcement to allow adequate staffing for its increased obligations. Recently, the compliance obligations have been greatly expanded by the addition of the amended Service Contract Act of 1972, the Farm Labor Contractor Registration Act of 1963, previously a responsibility of the Manpower Administration, and the Office of Federal Compliance. Also, growth in the size of our labor force requires more enforcement personnel.

While the duties of the Employment Standards Administration in enforcement have been increasing, their staff of compliance officers has been decreasing. In June of 1969, there were almost 1,000 compliance officers. By June of 1972 there were only 918 compliance officers. The most recent figures available, April 30, 1973, shows a staff of 899 compliance officers. The administration's budgetary cuts scheduled for 1974 perpetuate this most regrettable trend. We believe that the staff of compliance officers should be raised to its previous level of 1,000 to maintain the previous work load—assuring that some 50 million nonsupervisory workers are paid proper minimum wage, equal pay, and overtime amounts—and should also be increased by at least another 20 percent,

to 1,200, to make possible adequate enforcement of the three new enforcement responsibilities mentioned above.

The Age Discrimination and Employment Act amendment and the Fair Labor Standards Act amendment currently being considered by Congress promises continuance of the trend of an increasing workload on the Employment Standards Administration, further manifesting the necessity of an immediate and substantial budgetary increase.

Workers' complaints of employer violations continue to mount. Because of a lack of adequate staffing, over 6,000 complaints were backlogged at the beginning of 1973. An immediate increase in the total staff would allow thousands of workers currently underpaid to receive their just wage. The current expenditure of approximately $27 million in enforcement more than paid off in the recovery of approximately $100 million found due workers in back wages last year.

Needless to say, the workers who are directly aided by wage-hour enforcement efforts are those most likely to be classified as working poor. Therefore, effective wage-hour enforcement contribute to the Nation's attack on poverty, as well as to economic justice for those who most need income protection.

DEPARTMENT OF LABOR—MANPOWER ADMINISTRATION

We must express our shock and disappointment that the Nixon administration has failed to ask Congress for a continuation of the Emergency Employment Act and the public employment program authorized by this act. The success of the EEA–PEP program in providing jobs to unemployed people and in providing needed public services in hundreds of communities thoroughly justifies continuation and expansion of this important job-creating program. In the absence of the necessary enabling legislation, we urge your sympathetic attention—when Congress enacts the enabling legislation—to the need for adequate funds for EEA–PEP or its succesor public service employment program.

In addition to the shortsighted, penny-wise and pound-foolish plan to kill the EEA–PEP program, the administration is cutting its budget request for manpower training. It is, in effect, killing the Neighborhood Youth Corps program which provided 740,000 summer jobs for youths last year, and it is killing other important programs for young people and older workers. If States and local communities want to provide summer jobs, they must take funds from reduced appropriations for manpower training or public service jobs programs. And, in addition to this attack on manpower and jobs programs in fiscal 1974, the administration has already asked this subcommittee for a rescission of $283,881,000 of the $829,862,000 already appropriated in a 1973 supplemental appropriation bill for funding Economic Opportunity Act programs—mainly New York City summer jobs—operated by the Department of Labor. The misguided rationale for this proposed cutback is that State and local officials will finance summer programs out of funds left over from the Emergency Employment Act, but this rationale has no reasonable foundation. Other programs suffering from this rescission cutback are the Job Corps and Operation Mainstream, effective job programs for youths and older people.

The administration's proposal to kill the EEA–PEP program and its mickey mouse legerdemain cutback proposals for fiscal 1973 and fiscal 1974 manpower funds are deplorable. And we further deplore the administration's so-called special manpower revenue-sharing proposal. It is clear that the purpose of manpower revenue sharing is not to help State and local governments but rather to cut back drastically on funds to bring training and jobs to unemployed and disadvantaged workers. The Nixon administration unsuccessfully tried to get Congress to approve manpower revenue sharing in 1971. At that time the House of Representatives rejected this proposal when it was presented as a substitute for EEA. Now, apparently, the administration seeks to accomplish through executive action what it was not able to accomplish through the legislative process.

We urge this committee to give the most careful scrutiny to the administration's efforts to circumvent the legislative process and its efforts to cut back funds for manpower and employment programs. We urge this committee to reject the 10-percent cut in total manpower funds to $4.8 billion for fiscal 1974. We believe that total manpower funds appropriated for fiscal 1974 should be no less than the fiscal 1973 budget estimate of $5.3 billion.

The work of the Bureau of Labor Statistics has tremendous relevance to economic policymaking. It is very important, therefore, that the statistical output of BLS should be accurate, consistent, timely, objective, and neutral in presentation. Public confidence in the reliability of Federal statistics is an essential element in economic policymaking. In this connection we note and commend to the attention of this committee a recent report, "Maintaining the Professional Integrity of Federal Statistics," a report of the Americans Statistical Association-Federal Statistics Users Conference, Committee on the Integrity of Federal Statistics. We share the concern of the ASA–FSUC about the need to protect the integrity of the Federal statistical system.

The overall BLS budget request for $47.4 million for fiscal 1974, a $1.7 million increase over the fiscal 1973 budget request, appears reasonable and we support it, although we have some concern about specific components and omissions in the budget.

Wages and Industrial Relations

We are particularly concerned about the proposed $417,000 cut in the industry wage studies program and we urge restoration of these funds to the BLS budget.

BLS has indicated that higher priority should go to study on a "general wage index"—but we disagree. We think that industry wage studies will produce a much bigger return for the research dollar and we have serious reservations about the conceptual basis for BLS developmental work on a "general wage index."

We are also concerned about the failure of BLS to ask for funds and to proceed with research on annual earnings. Such information for occupations and industries is urgently needed. We urge that at least initial funds for such research be added to the BLS budget. We also strongly urge that funds be included for study and analysis of collective bargaining in the public sector.

Prices and the Cost of Living

For the work on prices and cost of living, BLS requests a total of $6,893,000 in fiscal year 1974 as against the pending 1973 appropriation of $5,654,000. This is a net increase of $1,239,000.

The new money would go principally into improvements in the Consumer Price Index and the Wholesale Price Index plus expansion of work on export and import price indexes.

We wholeheartedly support specific technical improvements in the Consumer Price Index and the Wholesale Price Index. In particular, we welcome the proposal to add monthly pricing for various nonfood items now priced on an infrequent basis for the CPI. And we support the proposal to increase the number of industries included in the coverage of the WPI.

We oppose, however, continuation of the international price competitiveness program on its present basis. It is unsound, in fact meaningless, because changes in international trade make the price comparisons misleading. Large multinational firms—the principal exporters and importers in the United States—adjust prices for corporate accounting purposes rather than for competitive purposes in international trade. Even small firms are stepping up their international activities. Because of these changes in the program on international price competitiveness that is now underway is absolute and unrealistic. Money devoted to this program would be better spent on studies on international comparisons of wages and working conditions.

We are also less than enthusiatic over continued investment of BLS resources in work on the so-called general price index—a generalized measure of price movements for the economy as a whole, which would be a refined equivalent of the present GNP deflator prepared by the Department of Commerce. This may indeed turn out to be useful to the community of economists. But we are disturbed at the trend which has developed in BLS toward increased preoccupation with general economic measures and vanishing concern with the direct needs and welfare of working people.

While pressing forward with a "general price index" (no specific cost esitmates have been provided for this work), the BLS is in process of discarding its basic work on the "family budgets," which measure the living costs of a four-person family at "lower," "intermediate," and "higher" levels of living. It has grudgingly consented to update these budgets from time to time (once a year), by applying changes in the Consumer Price Index to the existing basic budget components

developed from the 1960–61 Consumer Expenditure Survey. There are no plans for direct repricing of budget components. Even more important, there are no plans for revision of the basic living standards embodied in the budgets, using family expenditure data which will become available from the 1973–74 consumer expenditure survey. The budgets will thus become less and less realistic with the passage of time. The city-to-city comparisons of family living costs, now available from the budget figures, will be superseded by a set of generalized average price levels in different locations, which BLS plans to introduce in fiscal 1974.

The Congress has traditionally relied upon the family budget figures for many types of legislative judgments on family needs. We strongly urge that the Appropriations Committee make clear in no uncertain terms that the basic family budget work must be continued, even if certain other BLS projects must be curtailed or given a lower priority.

Manpower and Employment

The proposed BLS budget calls for a $200,000 increase to accelerate development of information on the hours and earnings of some 10 million nonproduction or supervisory workers in the private sector. These workers constitute a significant portion of the labor force. At present, there is not enough information about their hours and earnings. We support this proposed budget increase.

We note that BLS proposed to expand its work on job vacancies. We consider this work of low priority and low utility and we suggest that your Committee refrain from support expansion of this work.

However, we support the BLS intention to continue and, we hope, to expand its development of statistics on persons living in poverty areas throughout the Nation. We also support BLS in its intention to develop and to analyze labor force information about Spanish-speaking Americans as we support continued general BLS research on social and economic conditions of black and Spanish-speaking Americans and other minority groups.

Productivity

In general, we support the BLS budget request for research in productivity and technology, particularly research on productivity change in services industries, construction and government. We hope that BLS will maintain its traditionally high standards in pursuing output measurement and productivity research in government activity at the Federal, State and local community levels, and particularly in its new work on Federal Government productivity.

Employees' Compensation

The AFL–CIO continues to be disturbed over what appears to be a continued downgrading of the Department of Labor's employees compensation functions. The Bureau of Employees' Compensation has been abolished and two separate, apparently lower organizational level units established. Further there has been a steadily rising series of complaints about backlogs and time delays in the processing of injury claims, particularly those filed by Federal employees.

We understand that no increases were requested by the Employment Standards Administration for the administration of the FECA, Longshore Act, and State workmen's compensation programs in fiscal years 1972 and 1973 and that relatively small increases are being requested for fiscal year 1974—and these are limited to implementation of the 1972 Amendments to the Longshore Act and for the Department's forthcoming responsibilities under the Black Lung Act.

The AFL–CIO is very much concerned over what appears to be a somewhat callous disregard for injured workers and urges the Congress to carry forward the following improvements:

FECA.—The tremendous increases in workload under this program—claims have increased over 100 percent since 1964—dictates that the Department's staff should be increased by 141 employees—to bring it to 100 employees over the fiscal year 1971 level.

Longshore Act.—The 1972 Amendments to the Longshore Act significantly increased the responsibility of the Department. We believe that the 30 extra positions requested in the fiscal year 1974 budget is too small for the Department to properly carry out its responsibilities and urge that something closer to 90 positions be added.

Black Lung Act.—The AFL–CIO requests the Congress to give more than their usual careful attention to the Department's request for a total of 231 positions for this new program. We do not have supporting material to justify higher

staffing levels other than to point out that the Social Security Administration, which currently administers the Black Lung Act has been utilizing over three times this number of employees—and that the Department of Labor's track record in staffing for its responsibilities under the FECA and the Longshore Act have been poor at best.

State Workmen's Compensation Laws.—We believe that the Department's activities this past few years in this area have been unduly curtailed particularly in light of the recommendations of the National Commission on State Workmen's Compensation Laws (issued on July 31, 1972). We understand that only 12 positions have been made available in the Office of Workmen's Compensation programs for the very important function of encouraging and assisting the States in improving their workmen's compensation laws. We consequently urge the Congress to look further into this area with the view of advising the Department of Labor of the Congress' desire for seeing improvements in the State laws; and with the view of providing the Department with adequate resources for this responsibility.

IMPLEMENTATION OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

After 2 years of operations under the Occupational Safety and Health Act, the entire program has never gotten off the ground. It has been chiefly a giant unloading operation of Federal responsibilities to States whose unwillingness or inability in the past to mount effective occupational safety and health programs was the principal reason for enactment of a strong Federal program in 1970.

As a result of this mistaken emphasis, Federal enforcement activities have been curtailed by starvation budgets requests and freeze orders on new hiring by President Nixon. They are ineffective both as to manpower and firmness. Only one new standard has been promulgated by the Secretary of Labor since the act went into effect. Feeble programs to train and inform both employees and employers, particularly small business concerns and nonunion workers about their rights and responsibilities under the act have failed to make a dent in the problem. Expansion of statistical reporting programs to explore casual factors of occupational illnesses and injuries, and economical effects on those who are their victims cannot be undertaken because of the budgetary ax.

The National Institute for Occupational Safety and Health of the Department of Health, Education, and Welfare has been given by the Congress an enormous assignment, both in scope and importance in the field of occupational health. Recently Dr. Marcus M. Key stated before a meeting of the National Advisory Committee on Occupational Safety and Health that NIOSH was no longer a viable agency and cannot properly undertake the functions assigned to it by the Congress. The desperate straits faced by NIOSH are compounded of axing, downgrading in the HEW hierarchy, and being pronounced unofficially dead as a permanent fixture in HEW because it is proposed to remove it from this Department under President Nixon's reorganization plan.

The President's fiscal year 1974 budget will bring about the loss of 100 key jobs in areas vital to effective operations of this agency. Its program to train the manpower cadres in field of occupational health will be completely eliminated at the end of fiscal year 1974. At present such courses no longer are being offered free of charge, and now involve a stiff fee. NIOSH estimates that there is a need for 57,000 individuls—occupational health physicians, industrial hygienists, researchers, technicians, paraprofessionals to meet the needs of industry, the States and labor unions involved in this field. This is not inclusive of what is involved in Federal manpower needs. Now there are no funds to develop a pipeline to produce these kinds of personnel on the scale of the national demand for them.

Early this month, Secretary of HEW Weinberger casually announced that NIOSH has been thrust deeper into the pit of neglect and impotence by being transferred from its place within the Health Services and Mental Health Administration, which was more than sufficiently invisible, to the Center for Communicable Disease in Atlanta, Ga. This will only result in further curtailment of NIOSH to exert any force in its attempts to develop the programs in the occupational health field that workers so direly need and which the Congress established.

Finally, the civil service grade level of GS7 which governs the hiring of new employees by NIOSH, makes it impossible to offer qualified technical and medical personnel needed to carry out the complex and demanding work of this agency.

This apparently endless disarray into which NIOSH has been plunged has caused the AFL–CIO Executive Council earlier this year to propose that it be

transferred in its entirety to the Department of Labor with provision for proper resources and visibility within that Department and the tools by which can at last begin to function effectively.

The Occupational Safety and Health Review Commission is enmeshed in a destructive power struggle among its members. One Commissioner, representing the unions, has resigned at the end of this term. This struggle is resulting in a failure of the Commission to handle its mounting caseload; decisions on contested citations are made in the heat of emotion. Caseloads are rapidly climbing, and the backlog of pending contested citations continues to mount while the safety or health hazard prompting such citations remains unabated to threaten the health and lives of thousands of involved workers.

Mr. Chairman, organized labor is appearing before you today as part of its broad appeal to the Congress to save the Occupational Safety and Health Act and to provide it with the guidance and resources necessary to carry out the mandate of this body to achieve the goal of a safe and healthy workplace for every American working man and woman.

We have attempted unsuccessfully to obtain such a commitment from the Nixon administration to implement this act for which we fought so long and hard. Our attempts have been fruitless. Without your help organized labor will be forced to fight a futile rear guard action, while the vitality is slowly wrung from this great program, and the needless deaths, injuries and illnesses continue to take their tragic toll.

We are asking your subcommittee to recommend the appropriation of funds needed to begin to move and take the initiative in the fight to defeat the specter of death, injury and illness that continue to haunt the American workplace. And we are asking you to give direction as to the priorities of the programs undertaken by all three Federal agencies upon which the Congress has reposed the responsibility of administering this act. It is a long road that leads to the noble goal of Public Law 91–596, but this year is the year to begin to travel that road to its very end.

Here are our specific proposals in brief. More detailed analyses are found in the tables attached.

DEPARTMENT OF LABOR—OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

We urge the subcommittee to increase the amount to be appropriated for enforcement from $24.9 million in the President's budget, to $56.1 million.

This will enable the acquisition training a deployment of 1,500 additional compliance personnel, including 75 more badly needed industrial hygienists. In would bring the total field personnel in enforcement to 2,000 and enable the assignment of significant numbers of OSHA inspectors and industrial hygienists to the larger industrial States, and still allow for sharp increases in numbers of inspectors available to serve the least populated States.

We have proposed this increase to be absorbed to the amount of $20 million by reprograming this amount from State programs in the Labor Department's OHSA budget request.

Although the Labor Department estimates that 22 States will have operating sec. 18(b) plans by the end of fiscal year 1974, this is a vastly inflated figure, as the attached table III demonstrates. Of the nine plans thus far approved, only two are in operation—Washington and Utah. Action on enabling legislation has been killed or postponed in Montana, North Dakota and New Jersey, and is still pending in California, North Carolina, Oregon and South Carolina.

Legislation is yet pending in 24 States with plans before the Secretary but not yet approved. Some of these States will postpone or reject. The AFL–CIO through its May 8 policy statement adopted by the AFL–CIO Executive Council is actively opposing further defederalization of OSHA by means of these paper developmental plans which are a fraud on the American worker. We are working hard in the State legislatures still in session to secure either withdrawal of such plans, or the defeat of their enabling legislation.

Therefore, it is entirely unlikely that even the $10 million that would still remain for the operation approved State plants would be used in fiscal year 1974, and the reprograming of $20 million to enforce—will make it possible for workers to gain significantly in protections against workplace hazards in every State, by means of strong uniform Federal enforcement programs.

We are also requesting that appropriations for training and information be increased from the President's $3.5 million budget request to $6 million. This additional amount is necessary for the mounting of significant programs to in-

form workers of their rights and obligations under the act, and to accomplish what has not been done—inform small business concerns of their rights and responsibilities under the act, and how they can comply with the Secretary's standards affecting their particular operations.

The field of statistical recording, reporting and analysis, we urge an increase of $1.2 million over the President's 1974 budget for the purpose of expanded analyses of causal relationships of accidents and illnesses, industry sector studies, and developing techniques to derive data on economic costs techniques on to employees and employers of plant accidents and illnesses.

The total estimated needs of the OSHA program under our proposals would amount to about $84 million, a net increase of $13 million over the fiscal year 1974 Nixon budget.

DEPARTMENT OF LABOR—NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

Table II attached will set forth in detail our proposals to your subcommittee for providing the needed funds to enable NIOSH to begin to shoulder the responsibilities assigned to it by the Congress, which it cannot begin to do under the Nixon budget.

We ask for a doubling of the recommended appropriation by the Nixon budget—from $21.2 million to about $39 million for fiscal year 1974. It is particularly vital that all program activities be given increased appropriations, manpower training, hazards evaluation, development of occupational safety and health criteria which constitute the basis for the final standard and the rest.

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

This presidentially appointed Commission expects a caseload of contested citations 1.5 times greater in fiscal year 1974 than in fiscal year 1973. Yet, the Nixon budget request is for $4.9 million, a decrease of nearly $1 million from fiscal year 1973.

We expect an even larger caseload than that projected by the Commssion. There is every sign that large corporations are more and more filing contests for the purpose of delaying effective dates of abatement orders.

The AFL–CIO, therefore, urges your subcommittee to approve the amount of $8 million for fiscal year 1974. This will enable the acquisition of more trial judges and backup personnel to handle the expanding flow of contested citations, so that the Commission will be able to work out of its present situation of being a bottleneck to effective enforcement of the act.

TABLE I
DEPARTMENT OF LABOR
OCCUPATIONAL SAFETY AND HEALTH BUDGET FOR FISCAL YEAR 1974, COMPARED TO FISCAL YEAR 1973 BUDGET, AND TO PROPOSED AFL-CIO BUDGET FOR FISCAL YEAR 1974
($1,000)

Program Item	OSHA,FY 1973(Est.)	OSHA,.FY 1974 (Est.)	AFL-CIO FY 1974(Est.)
Safety and Health Standards	$ 2,932	$ 2,955	$ 3,000
Enforcement	23,747	24,939	56,139 1/
Training and Information	3,459	3,491	5,000
State Programs	30,065	30,080	10,000 2/
Safety and Health Statistics	4,796	4,841	6,500
Executive Direction and Administration	3,706	3,530	3,530
Total	$ 68,705	$ 69,836	$ 84,169

1/ $15 million reprogrammed from state programs
2/ $15 million reprogrammed to enforcement
Source: Budget of the United States Government, Fiscal year 1974

TABLE II
DEPARTMENT OF HEALTH EDUCATION AND WELFARE
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH BUDGET FOR FISCAL YEAR 1974, COMPARED TO FISCAL YEAR 1973 BUDGET AND PROPOSED AFL-CIO BUDGET FOR FISCAL YEAR 1974

Program Item	NIOSH, FY 1973	NIOSH,FY 1974	AFL-CIO,FY 1974
Surveillance	$ 1,297	$ 1,474	$ 3,000
Criteria Documentation	1,737	2,649	6,000
Industry-wide studies	3,108	3,641	6,200
Laboratory Res. and Services	8,442	9,004	15,000
Technical Assistance	2,599	2,671	3,000
Manpower Development	1,900	600	5,000
Program Direction	1,270	1,204	1,500
Total	$20,353	$21,243	$39,700

Note: Does not include item for Coal Mine Safety Act ($5,317 in FY 1973, and $5,561 for FY 1974.)
Source: Budget of the United States Government, Fiscal year 1974.

TABLE III
STATUS OF STATE OSHA PLANS SUBMITTED UNDER SEC. 18(b)
OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

STATE	APPROVED	ENABLING LEGISLATION		SUBMITTED AND AWAITING ACTION BY ASSISTANT SECRETARY OF LABOR			NOT SUBMITTING OR WITHDRAWING PLAN
	Enacted	Postponed	Pending	Enacted	Killed or Postponed	Pending	
Alabama						X	
Alaska				X			
Arizona				X			
Arkansas						X	
California			X				
Colorado						X	
Connecticut				X			
Delaware						X	
Florida						X	
Georgia					X		
Hawaii				X			
Idaho					X		
Illinois						X	
Indiana				X			
Iowa				X			
Kansas							X
Kentucky				X			
Louisiana							X
Maine						X	
Maryland				X			
Massachusetts						X	
Michigan						X	
Minnesota						X	
Mississippi					X		
Missouri						X	
Montana		X					
Nebraska							X
Nevada				X			
New Hampshire						X	
New Jersey		X					
New Mexico							X
New York						X	
North Carolina			X				
North Dakota		X					
Ohio							
Oklahoma			X				X
Oregon			X				
Pennsylvania							X (withdrawn)

TABLE III

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
BUDGET FOR FISCAL YEAR 1974, COMPARED TO FISCAL YEAR 1973 BUDGET
AND TO PROPOSED AFL-CIO BUDGET FOR FISCAL YEAR 1974

FISCAL YEAR	AMOUNT
1973	$5,979
1974	4,890
AFL-CIO 1974	8,000

Source: Budget of the United States Government
Fiscal Year 1974.

State	APPROVED ENABLING LEGISLATION			SUBMITTED, AWAITING ACTION ENABLING LEGISLATION			NOT SUBMITTING OR WITHDRAWING PLAN
	Enacted	Postponed	Pending	Enacted	Killed or Postponed	Pending	
R. I.						X	
S. Caro.			X				
S. Dak.							X
Tenn.				X			
Tex.						X	
Utah	X						
Vt.				X			
Va.				X			
W. Va.					X		
Wisc.						X	
Wn.	X						
Wyo.				X			
D. C.						X	
Guam						X	
Puerto Rico						X	
V. I.				X			
TOTAL	2	3	4	14	5	20	7

Mr. PETERSON. We are appalled at the cuts in social progress after so many years of struggle to achieve some form of social justice in America. We this year when the profits are reaching new highs, attempts to dismantle these social programs. We know we are talking to people some of whom have dedicated their lives to the progress and justice and fair treatment of all Americans. We recognize that. We have mentioned specifically in our testimony some of the things we object to. We recognize there will be other witnesses coming and also testifying on these, but we feel there will be very little attention given to the occupational health and safety situation. So I would like to read that to you, with your permission, sir.

IMPLEMENTATION OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

After 2 years of operations under the Occupational Safety and Health Act, the entire program has never gotten off the ground. It has been chiefly a giant unloading operation of Federal responsibilities to States whose unwillingness or inability in the past to mount effective occupational safety and health programs was the principal reason for enactment of a strong Federal program in 1970.

As a result of this mistaken emphasis, Federal enforcement activities have been curtailed by starvation budgets requests and freeze orders on new hiring by President Nixon. They are ineffective both as to manpower and firmness. Only one new standard has been promulgated by the Secretary of Labor since the act went into effect. Feeble programs to train and inform both employees and employers, particularly small business concerns and nonunion workers about their rights and responsibilities under the act have failed to make a dent in the problem. Expansion of statistical reporting programs to explore causal factors of occupational illnesses and injuries, and economical effects on those who are their victims cannot be undertaken because of the budgetary axe.

The National Institute for Occupational Safety and Health of the Department of Health, Education, and Welfare has been given by the Congress an enormous assignment, both in scope and importance in the field of occupational health. Recently Dr. Marcus M. Key stated before a meeting of the National Advisory Committee on Occupational Safety and Health that NIOSH was no longer a viable agency and cannot properly undertake the functions assigned to it by the Congress. The desperate straits faced by NIOSH are compounded of axing, downgrading in the HEW hierarchy, and being pronounced unofficially dead as a permanent fixture in HEW because it is proposed to remove it from this Department under President Nixon's reorganization plan.

The President's fiscal year 1974 budget will bring about the loss of 100 key jobs in areas vital to effective operations of this agency. Its program to train the manpower cadres in the field of occupational health will be completely eliminated at the end of fiscal year 1974. At present such courses no longer are being offered free of charge, and now involve a stiff fee. NIOSH estimates that there is a need for 57,000 trained individuals—occupational health physicians, industrial hygienists, researchers, technicians, paraprofessionals, to meet the needs of industry, the States, and labor unions involved in this field. This is not inclusive of what is involved in Federal manpower needs.

Now there are no funds to develop a pipeline to produce these kinds of personnel on the scale of the national demand for them.

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Finally, the civil service grade level of GS–7 which governs the hiring of new employees by NIOSH, makes it impossible to offer qualified technical and medical personnel needed to carry out the complex and demanding work of this agency.

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The Occupational Safety and Health Review Commission is enmeshed in a destructive power struggle among its members. One Commissioner, representing the unions, has resigned at the end of this term. This struggle is resulting in a failure of the Commission to handle its mounting caseload; decisions on contested citations are made in the heat of emotion. Caseloads are rapidly climbing, and the backlog of pending contested citations continues to mount while the safety or health hazard prompting such citations remains unabated to threaten the health and lives of thousands of involved workers.

Mr. Chairman, organized labor is appearing before you today as part of its broad appeal to the Congress to save the Occupational Safety and Health Act and to provide it with the guidance and resources necessary to carry out the mandate of this body to achieve the goal of a safe and healthy workplace for every American working man and women.

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Mr. Chairman, I appreciate your courtesy.

Mr. FLOOD. Thank you very much.

THURSDAY, MAY 17, 1973.

VETERANS' EMPLOYMENT SERVICE

WITNESSES

TERRELL M. WERTZ, ASSISTANT DIRECTOR, NATIONAL LEGISLATIVE COMMISSION, AMERICAN LEGION
AUSTIN E. KERBY, DIRECTOR FOR ECONOMICS
WILLIAM J. FLAHERTY, DEPUTY DIRECTOR OF LEGISLATION, DISABLED AMERICAN VETERANS
NORMAN HARTNET, NATIONAL DIRECTOR OF EMPLOYMENT, DISABLED AMERICAN VETERANS

Mr. FLOOD. Mr. Terrell M. Wertz, assistant director, National Legislative Commission, American Legion, and Mr. Austin E. Kerby, director for economics, American Legion.

Mr. WERTZ. Mr. Chairman, I am Terrell M. Wertz.

Mr. FLOOD. Do you have a prepared statement that you wish to present for the record?

Mr. WERTZ. Yes, I have one from Mr. Kerby for the record, Mr. Chairman.

Mr. FLOOD. Very well, it will be received for the record at this point.

[The statement follows:]

STATEMENT OF AUSTIN E. KERBY, DIRECTOR FOR ECONOMICS, THE AMERICAN LEGION

Mr. Chairman and members of the subcommittee, the American Legion has traditionally supported adequate funds for the Department of Labor to operate and carry on an effective job placement, employment counseling and job training placement program in order to help answer the economic needs of our Nation's veterans. Current resolutions asking support and adequate funds for these programs and activities were adopted at our 1972 annual national convention and our national executive committee in Indianapolis early this month, and copies of pertinent resolutions mentioned in my statement are attached hereto. I would appreciate your making these resolutions a part of the hearing records.

Resolution No. 240 of our 1972 national convention specifically concerns adequate funds for the Veterans Employment Service as well as earmarked funds for the Veterans Employment Service as well as earmarked funds for services to veterans through the public employment service system. The Veterans Employment Service has reported a fine record of accomplishment on the President's six-point veterans program. As of the end of February 1973, this program, which combines and coordinates the programs of many agencies, placed some 950,000 veterans in jobs or job training during fiscal year 1973 against a fiscal year goal of 1,372,000. We believe, however, that this program should be expanded to cover not only Vietnam-era veterans, as at the present time, but older unemployed veterans such as those of World War II and the Korean conflict.

While the American Legion relies quite heavily on the employment services provided to veterans by the Federal Government, we also conduct an employment program of our own through our departments (States), districts, and more than 16,000 posts. For instance, our "Jobs for Veterans" program predates the Government program carrying the same name. American Legion sponsored and cosponsored veteran job fairs and similar events, operating cooperatively with the Veterans Employment Service, State employment agencies, civic and other groups, have been responsible for placing some 90,000 veterans in meaningful jobs. To date, over 260 American Legion veteran job fairs and opportunity fairs have been reported.

Our employment program is also designed to encourage employers to hire veterans, the handicapped, and older workers. On the basis of nominations received from our State organizations, national awards are presented annually to employers whose employment practices in these areas are outstanding. In 1972, a

total of 96 employers across the Nation were so honored; 54 of them for hiring veterans, 20 for hiring the handicapped, and 22 for hiring older workers. These awards are made in cooperation with the Veterans Employment Service, the President's Committee on Employment of the Handicapped, and State employment agencies.

The Department of Labor in its proposed fiscal year 1974 budget has requested $2,746,000 to cover salaries and expenses of the Veterans Employment Service, representing an increase of approximately $300,000 over that authorized by the Department's Appropriation Act for 1973. This small increase covers only mandatory increments. The American Legion has a serious objection to this very limited Veterans Employment Service budget in view of the mandate of section 502 of Public Law 92–450, the Vietnam Era Veterans' Readjustment Assistance Act of 1972. Section 502, among other provisions which are designed to strengthen State employment service assistance to veterans, required the Secretary of Labor to assign to the several States one employee of the Department of Labor, called the assistant veterans employment representative (AVER) "per each 250,000 veterans of the State veterans population," as well as such additional AVER's as the Secretary shall determine, based on certain data items.

This law, which became effective January 24, 1973, in effect requires no less than 68 AVER's, in addition to the 25 currently employed, to be hired and assigned to a number of States with large veterans population. We are attaching a list of States, their veterans population, and the additional AVER's provided for by section 502 of the act. If these 68 assistant veterans employment representatives are established at grade GS–12, one grade level below the State veterans employment representative, this would require an additional earmarked amount of about $1,600,000 within the Department of Labor's 1974 budget, solely for basic salaries and expenses.

Mr. Chairman, the American Legion maintains that this additional amount of $1,600,000 which we are suggesting be appropriated and set aside for these 68 AVER's is not an optional item. It is required by law. The law has been in effect about 4 months now, and, while the American Legion and other veteran organizations have urged the Department of Labor to implement the law, they have not hired a single assistant veterans employment representative as required, nor has the Department established a schedule to hire them. It appears to the American Legion that, with more than 13,000 employees in the Department of Labor, it should be possible to establish and fill the 68 positions without further delay. Our most recent resolution (No. 9) adopted by our national executive committee early this May. "Urging maximum implementation of all aspects of the Veterans Employment and Readjustment Act of 1972," is attached.

In spite of improvements in the Department of Labor's program of service to veterans, almost 300,000 Vietnam-era veterans still are unemployed, in addition to the hundreds of thousands of older veterans, mostly of World War II and the Korean conflict, whose unemployment problems are complicated by the "older worker" barrier and physical handicaps.

Lacking any firm commitment of the Department of Labor to establish and fund these 68 AVER positions, as required by section 502 of Public Law 92–540, the American Legion respectfully requests this subcommitttee to specifically earmark and set aside an additional $1,600,000 within the Veterans Employment Service portion of the Department of Labor's budget, as represented in the 1974 Appropriation Act for the Department, specifically for these positions.

Mr. Chairman, the American Legion believes that this amount of $1,600,000, plus the proposed fiscal year 1974 request of the Department of Labor of $2,746,000, for a total of $4,346,000, earmarked for the Veterans Employment Service, is necessary for the purpose of carrying out the employment program for veterans as intended by Congress when enacting Public Law 92–540. We respectfully request that this total of $4,346,000 for the salaries and expenses of the Veterans Employment Service be approved by the subcommittee.

Another matter we would briefly refer to is the Veterans Reemployment Rights program. The American Legion has long advocated reemployment rights benefits for those persons who serve their country in active military service or in performance of reserve training. Therefore, The American Legion at its 1972 National Convention, consistent with its traditional support of a strong National Defense and an adequate military reserve program, adopted Resolution No. 302, which is attached hereto.

It is imperative that the Office of Veterans Reemployment Rights continue the same efficient service to those individuals returning from active military duty

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or reserve training as they have in past years. In order to accomplish this purpose, we understand the Department of Labor has requested the sum of $2,121,000 for fiscal year 1974 for the Office of Veterans Reemployment Rights. The American Legion supports the approval of this amount as fair and reasonable for the purpose of carrying out this important veterans program.

Before concluding our statement, The American Legion would like to take this opportunity to endorse the outstanding work and programs of the President's Committee on Employment of the Handicapped, including endorsement of the President's Committee program for barrier-free environment in architecture and transportation, and to renew our pledge of continued support. At our 1972 National Convention we adopted three resolutions, Nos. 50, 73, and 471, relative to the handicapped program.

I thank you for this opportunity to express the views of the American Legion. And may I again urge you to act favorably upon the fiscal year 1974 budget request of the United States Department of Labor for those programs in that Department designed to place the veterans in gainful employment so that they may resume a normal life in society after service to their country.

PROPOSED DISTRIBUTION OF ONE ASSISTANT VETERANS EMPLOYMENT REPRESENTATIVE (AVER) PER EACH 250,000 VETERANS, BY STATE PURSUANT TO SECTION 502, PUBLIC LAW 92-540

United States	Total veterans population in December 1972* (thousands)	Total AVER's as per formula	Present number of AVER's	Additional AVER's as per formula
Alabama	418	1	0	1
Alaska	41	0	0	0
Arizona	270	1	0	1
Arkansas	246	0	0	0
California	3,195	12	2	10
Colorado	333	1	0	1
Connecticut	460	1	0	1
Delaware	79	0	0	0
District of Columbia	110	0	0	0
Florida	1,091	4	1	3
Georgia	585	2	1	1
Hawaii	92	0	0	0
Idaho	96	0	0	0
Illinois	1,556	6	2	4
Indiana	714	2	1	1
Iowa	370	1	0	1
Kansas	308	1	0	1
Kentucky	396	1	0	1
Louisiana	442	1	0	1
Maine	140	0	0	0
Maryland	592	2	0	2
Massachusetts	867	3	1	2
Michigan	1,182	4	2	2
Minnesota	540	2	1	1
Mississippi	238	0	0	0
Missouri	675	2	1	1
Montana	100	0	0	0
Nebraska	193	0	0	0
Nevada	86	0	0	0
New Hampshire	117	0	0	0
New Jersey	1,086	4	1	3
New Mexico	136	0	0	0
New York	2,509	10	2	8
North Carolina	599	2	1	1
North Dakota	66	0	0	0
Ohio	1,509	6	2	4
Oklahoma	374	1	0	1
Oregon	343	1	0	1
Pennsylvania	1,750	7	2	5
Puerto Rico	210	0	0	0
Rhode Island	146	0	0	0
South Carolina	307	1	0	1
South Dakota	80	0	0	0
Tennessee	512	2	1	1
Texas	1,527	6	2	4
Utah	142	0	0	0
Vermont	61	0	0	0
Virginia	626	2	1	1
Washington	550	2	0	2
West Virginia	232	0	0	0
Wisconsin	574	2	1	1
Wyoming	49	0	0	0
TOTAL		93	25	68

* SOURCE: VETERANS ADMINISTRATION

FIFTY-FOURTH ANNUAL NATIONAL CONVENTION OF THE AMERICAN LEGION, CHICAGO, ILL., AUGUST 22, 23, 24, 1972

RESOLUTION NO. 302

Subject: Support the Office of Veterans Reemployment Rights, U.S. Department of Labor.

Whereas the American Legion has consistently supported the maintenance of a strong military defense capability with full recognition of the justice in protecting veterans, reservists, and members of the National Guard against the loss of their jobs and other reemployment benefits because of their absence in the U.S. Armed Forces, and

Whereas the Office of Veterans Reemployment Rights, Labor-Management Services Administration, U.S. Department of Labor, is charged with the responsibility of rendering aid in the restoration of their former positions to persons who have satisfactorily served in the armed forces: Now, therefore, be it

Resolved, by the American Legion in national Convention assembled in Chicago, Ill., August 22, 23, 24, 1972, That we strongly endorse the reemployment rights persons who have satisfactorily served in the armed forces: Now, therefore, be it

Resolved, That the American Legion urge the Congress to provide adequate funds, and urge the Department of Labor to provide adequate personnel, necessary for giving prompt and effective service to all persons having rights and obligations under Federal laws.

FIFTY-FOURTH ANNUAL NATIONAL CONVENTION OF THE AMERICAN LEGION, CHICAGO, ILL., AUGUST 22, 23, 24, 1972

RESOLUTION NO. 240

Subject: Support funds for Federal-State veterans employment service to assure that the veterans employment representatives in local public employment offices may adequately serve veterans.

Whereas the American Legion has a long and continuing policy to promote and support a maximum employment program for all veterans; and

Whereas the American Legion and the President of the United States actively support a "jobs for veterans" program to promote the employment of veterans; and

Whereas veterans constitute almost one half of the male population of the United States seeking supportive services through the public employment service and the veterans employment service; and

Whereas the Congress has enacted legislation providing preference and priority to veterans seeking employment assistance and training through the public employment service and the veterans employment service, and

Whereas the Congress through legislation, has provided for the positions of State and local office veterans employment representatives whose duties shall be to assist all veterans seeking employment assistance, develop training opportunities, provide for counseling services and other indepth services: Now, therefore, be it

Resolved, by the American Legion in national convention assembled in Chicago, Ill., August 22, 23, 24, 1972, That the American Legion does hereby petition the President, the Congress, the Secretary of Labor, and all others concerned to provide adequate funds earmarked for the public employment services of the several States and for the veterans employment service, in order that they may carry out the mandates of Congress and the directives of the President; and, be it further

Resolved, That the Secretary of Labor be requested to provide local veterans employment representatives sufficient in number to carry out the policies of the Secretary of Labor in providing services to all veterans.

NATIONAL EXECUTIVE COMMITTEE MEETING OF THE AMERICAN LEGION HELD MAY 2-3, 1973

RESOLUTION NO. 9

Subject: Urge maximum implementation of all aspects of the Veterans' Employment and Readjustment Act of 1972

Whereas the Veterans' Employment and Readjustment Act of 1972, (title V of Public Law 92-540) effective January 24, 1973, declared the intent of Con-

gress that there shall be an effective employment placement program administered by the U.S. Department of Labor to provide maximum employment opportunity and other services to all eligible veterans; and

Whereas section 2003 of the act provides that there shall be assigned to each State one assistant veterans employment representative per each 250,000 veterans of the State veterans' population; and

Whereas the immediately above cited section 2003 provides specifically that the assignment of assistant veterans employment representatives in the respective States shall be based solely on the State's veteran population, and not on the State's veterans work force; and

Whereas section 2006 provides that the Secretary of Labor shall estimate the funds necessary for the "proper" and "efficient" administration of the act, and that such estimated funds necessary for the proper counseling, placement, and training services by the various State public employment offices shall be separately identified in the budget of "those" agencies and that all such funds shall be used only for the purpose specified; and

Whereas section 2007 of the act provides that the Secretary of Labor shall establish administrative controls to ensure that each eligible veteran who requests assistance shall promptly be placed in a satisfactory job or job training opportunity or receive other services to determine whether or not the employment service agencies in each State have committed the necessary staff to insure the provisions of the act: Now, therefore, be it

Resolved, by the National Executive Committee of the American Legion, in regular meeting assembled in Indianapolis, Ind., on May 2–3, 1973, That the American Legion does hereby request the Secretary of Labor to proceed immediately with the maximum implementation of all aspects of the Veterans' Employment and Readjustment Act of 1972, including, but not limited to, the immediate assignment of the some 70 additional assistant veterans employment representatives in the several States as required by section 2003 of the act.

Mr. WERTZ. We appreciate the opportunity to present our testimony to supply adequate funds for the veterans employment services and related programs. The Legion has long been vitally interested in this program and the readjustment and rehabilitation to civilian life of our returning veterans.

The program comes under the direction of our Economics Division, Mr. Austin Kerby, who is with me this morning, and is the director of the day-to-day efforts of the American Legion in the program for veterans.

I would like to ask him to speak for our organization at this time.

STATEMENT OF AUSTIN E. KERBY

Mr. KERBY. It is always a privilege to appear before you.

We appreciate your interest on behalf of the veterans. I would like to highlight our statement. We have several resolutions attached concerning the statement, and I know you will make those a matter of record. We are very appreciative of what has been done, and much has been done, to decrease the high unemployment rate for veterans. We appreciate what Congress did last year in passing Public Law 92–540, and section 502 especially, which requires that there be additional assistant veterans employment representatives (AVER's) in the several States as determined by the population of those States. We have been very much concerned with this.

This would be, Mr. Chairman, a total—I have a chart in my statement—68 assistant VER's in the various States. California, an additional 10, and other States down to one or zero. Pennsylvania, for instance, would be five additional AVER's, according to the statistics and the population of veterans throughout the States at this time.

We feel this is very much necessary. However, the Department of Labor has done nothing to put these people in there. They are requesting in their budget request an amount of $2,746,000 for the Veterans Employment Service which actually is only $300,000 more than was authorized in 1973. We feel that this is entirely inadequate. We would like to see the committee set aside an additional $1.6 million, which would be required, if these people were rated one grade level below the State veterans employment representative at grade GS-12. This is what it would be, what it would cost according to the statistics. We would certainly appreciate this.

I might say this is determined in the law by one veterans employment representative in each State and one assistant VER per each 250,000 veterans of the State veterans population.

It would be, as I say, a total of 68 additional AVER's. Mr. Chairman, the American Legion has its own employment program. We actually initiated our job for veterans program back in 1970, some several months before the President initiated the Government's program. We have worked 100 percent with the Veterans Employment Service and the people in the State agencies, and we certainly appreciate this. Our program does reach out, we have some 16,000 posts, as you know. Many posts have sponsored job fairs, and through the efforts of our State organizations there are approximately 90,000 veterans that have been employed either on the spot or as a result of these fairs. We are thankful that we are able to do this.

We do, however, feel that the Government has a responsibility, too.

We feel these assistant VER's in these States would certainly help greatly to lessen the problem. Today there is, according to the figures I received yesterday from the Department of Labor, from the Department of Labor's Bureau of Labor Statistics, 302,000 Vietnam-era veterans—in the 20-to-29 age group unemployed and that is not counting the many veterans of World War II and Korean conflict—that are unemployed.

I don't know what the figure may be in that area. We would appreciate anything that can be done to lessen this problem. We wrote to the Secretary of Labor recently concerning a resolution passed by our national executive committee this month, and we pointed out this fact. They have 13,000 employees in the Department of Labor and they could place that 68 people, even with no additional funds, in this area to lessen the situation.

In addition, the total that we would like, and suggest in our statement, is $4,346,000, which would include this $1.6 million for these additional people.

In addition to our interest in the Veterans Employment Service, we are interested in the veterans reemployment rights program as administered by the Department of Labor and comes under the Office of Veterans' Reemployment Rights. They have requested $2,121,000 which is not earmarked. We would support that amount as a fair and adequate figure.

I would like to briefly comment in connection with the Legion's working with the President's Committee on the Employment of the Handicapped. I have been serving as Chairman of the Disabled Veterans Committee of that committee. We appreciate their efforts and

certainly we support their appropriations when they come before you, if they have not already done so.

That concludes my remarks, and I would appreciate the statement being put in the record. If you have any questions, I would be glad to try to answer them.

Mr. FLOOD. Thank you very much.

Now we have Mr. William J. Flaherty, deputy director of legislation, Disabled American Veterans, and Mr. Norman Hartnett, national director of employment, Disabled American Veterans.

STATEMENT OF WILLIAM J. FLAHERTY

Mr. FLAHERTY. Mr. Chairman, I have a relatively short statement that I would like, with your permission, to read in the record.

Mr. FLOOD. Yes.

Mr. FLAHERTY. Mr. Chairman and members of the subcommittee: I appreciate this opportunity to present the views of the Disabled American Veterans on matters relating to the fiscal year 1974 budget request of the U.S. Department of Labor. Specifically, our discussion will cover that portion of the budget designated for the administration of the Veterans' Employment Service (VES).

At the outset, Mr. Chairman, I would like to emphasize that vocational rehabilitation training for veterans to overcome service incurred physical and mental handicaps is a subject of first importance to the Disabled American Veterans. The DAV was, in fact, founded upon the principle that our Nation's primary obligation to veterans is the rehabilitation of its wartime disabled.

In this connection, the Veterans' Administration's vocational habilitation program has proven its value in restoring disabled veterans to a state of employability. Most of the veterans currently training under this program are young service disabled Vietnam era veterans with a disability rated 30 percent or more. However, about 4 percent of the fiscal year 1972 participants were seriously disabled veterans from either World War II or the Korean conflict.

Under the program, each disabled veteran is assisted in selecting an occupational goal compatible with his disability and consistent with the pattern of his particular abilities and interest. Unfortunately, many of these rehabilitated veterans—upon completion of their training—cannot find suitable and gainful employment.

A key responsibility for lessening this problem rests on the "Veterans' Employment Service" in the Department of Labor. The DAV is deeply concerned about proper staffing of this Service so that disabled veterans can be assured of adequate and effective job counseling, employment placement services, and referral to occupational training opportunities provided by the GI bill and reaffirmed by the Congress last year in passage of the "Vietnam Era Veterans' Readjustment Assistance Act of 1972."

Out of a total veteran population of 29 million, there are today over 2 million veterans who are disabled as a result of military service. Of this figure, the unemployment rate—according to official Government estimates—stands at more than 14 percent.

Official estimates also show that in fiscal year 1972 there were

371,906 disabled veterans registered as jobseekers with the various 2,400 local Employment Service Offices throughout the country.

Concerning this figure, Veterans' Employment Service records disclose that 53,911 were counseled, 8,264 were enrolled in training, 29,000 job development contracts were performed, and 64,727 veterans were actively placed in jobs. Thus, Mr. Chairman, of the 371,906 disabled veterans who registered with the public employment offices, 298,915 (80.38 percent) were neither placed in jobs nor enrolled in training. This statistical pattern is also evidenced for the first 6 months of fiscal year 1973. In our view, this placement rate is intolerably low. We feel that more effective employment services for all disabled veterans can be brought about by substantially augmenting the field personnel of the VES.

The basic responsibility of the Veterans' Employment Service, and its State employment representatives in each State, is to functionally supervise all services to veterans in the public employment offices. Presently, across the United States, the VES has 52 State veterans' employment representatives (VER's) and 25 assistant State VER's. It is an extraordinarily difficult task for these 77 people to supervise the job-finding efforts for all veterans who register with the local State employment offices. In fiscal year 1972, there was an overall total of 3,115,692 veterans registered as job applicants with the various State employment offices. This means that there was 1 field VES employee for every 40,000 job-seeking veterans, an almost impossible ratio by any standard.

As you are aware, Mr. Chairman, last year the Congress demonstrated a deep interest and concern for the problems besetting the VES in accomplishing its mission. I am referring, of course, to the Vietnam Era Veterans' Readjustment Assistance Act of 1972 which passed the Congress and was signed into law by the President on October 24. This measure established a strong job counseling, training, and placement service for veterans, with special emphasis on the employment of qualified disabled and Vietnam era veterans by Federal contractors. While he DAV welcomed this valuable and necessary legislation, we are disturbed to find that its provisions have not been properly implemented. The act (Public Law 92–540) provides for the assignment of 70 additional assistant veterans' employment representatives. Sadly, these positions have not been filled and not 1 cent has been funded for this purpose. In this connection, the law directs the Secretary of Labor to estimate the appropriation required for the proper administration of the VES program, and to include such appropriation as a "special item" in his annual budget request.

The DAV wholeheartedly supported these provisions, and our hopes were raised when they became the law of the land. In retrospect, we now see that our elation was a bit premature.

The Department of Labor in its fiscal year 1974 budget request has set aside for the administration of the VES, $2,746,000. This represents an increase of $311,500 over fiscal year 1973. Despite this increase, we feel it represents standstill funding for the VES inasmuch as the salary increases for Federal employees effective January 1, 1973, will absorb a major portion, if not all, of the increased funds. The VES has estimated that the additional 70 assistant VER's could be hired at a cost of approximately $800,000. Unfortunately for America's

unemployed veterans, this is as far as compliance with the law has gone.

Mr. Chairman, we strongly feel that filling the 70 assistant VER positions mandated by the Congress would help facilitate the development of maximum employment opportunities for veterans. It would also assure that the disabled veteran—when he applies at a public employment office—can expect the service he is entitled to and should have. Accordingly, we respectfully ask that this distinguished committee report a bill reflecting an increase in the funds designated for the operation of the Veterans' Employment Service. We further ask that the increase be adequate to accomplish all of the directives pertaining to the VES which are set out in Public Law 92–540.

Mr. Chairman, I have attached to this statement a copy of a March 15 letter addressed by our National Commander, Jack Hicks, to Secretary of Labor, Peter J. Brennan; a copy of the Secretary's response; and also a copy of official Labor Department statistical data regarding employment services to disabled veterans. With your permission, Mr. Chairman, I would like to have these items made part of the hearing record.

In closing, Mr. Chairman, I again express appreciation for this opportunity to present our views in this important matter.

Mr. FLOOD. We will do that.

[The information follows:]

DISABLED AMERICAN VETERANS,
Washington, D.C., March 15, 1973.

HON. PETER J. BRENNAN,
Secretary of Labor, U.S. Department of Labor,
Washington, D.C.

DEAR MR. SECRETARY: We certainly welcome this opportunity to meet with you and members of your staff regarding the pressing problems of unemployment among the disabled veterans of this Nation. We, in the Disabled American Veterans, are seriously concerned about the degree of effective employment assistance being delivered to handicapped veterans who, either by law or policy directives, are supposed to receive priority and preference.

The validity of our concern is supported by official Department of Labor statistics for fiscal year 1972 and the first 6 months of fiscal year 1973. In fiscal year 1972, of the 447,707 handicapped veterans registered for employment assistance with 2,400 public employment service offices, only 64,727 (14.4%) were placed in regular jobs and 8,264 (1.8%) were enrolled in training. The younger disabled Vietnam-era veterans were placed at the rate of 20.4 percent, whereas, disabled veterans of all other wars were placed at the rate of 11 percent. It becomes quite obvious that almost 375,000 registered handicapped veterans received neither a job nor a training slot. This pattern has been continued in the first 6 months of fiscal year 1973 which indicates that of 319,000 registered handicapped veterans, only 38,000 (11.9%) were placed in jobs and 4,000 (1.25%) were enrolled in training. Again, the younger disabled veteran fared better than the older disabled veteran, as his placement rate was 15.2 percent with a 9.39 percent rate applicable to the older handicapped veteran.

The Disabled American Veterans has conducted two employment surveys of disabled Vietnam-era veterans, one in November 1971 at which time 101,178 were contacted, and the most recent in January and February of 1973 when 23,807 were queried. In both surveys we had a significant response which concluded to substantially higher unemployment rates among disabled veterans than officially disclosed in the Department of Labor statistics. Our most recent survey results, a copy of which is attached, indicate that of 4,638 respondents, 53 percent are unemployed but 71 percent want jobs, implying not only a great degree of unemployment but substantial underemployment as well. Each of our respondents indicating a request for employment assistance will receive such assistance by a referral of questionnaires to local veterans employment representatives of the public employment service through our DAV department commanders.

Congress is also keenly aware of the need for improved employment assistance to disabled veterans as represented by the passage of Public Law 92–540, signed

by the President on October 24, 1972, which contains many provisions in chapters 41 and 42 which have as their intent a more effective job counseling, training, and placement service for veterans with "special emphasis" for the employment of qualified disabled veterans and veterans of the Vietnam-era by Federal contractors. The Code of Federal regulations pursuant to Public Law 92–540 and Executive Order 11701, as published in the Federal Register on January 31, 1973 is woefully weak and totally inadequate to comply with the statutory obligation of "special emphasis" by Federal contractors in the employment of qualified disabled veterans. We have since December 1, 1972, exchanged correspondence with your predecessor and the Manpower Administrator requesting appropriate changes in the regulations to insure compliance with the law. We ask that you personally intervene to effect such changes.

The initiation of a cooperative plan between the Manpower Administration and the States to train seriously disabled veterans as employment counselors and placement specialists for other disabled veterans was most welcomed, as this was initially suggested by the Disabled American Veterans. We are distressed, however that the original intent to hire 450 such seriously disabled vetgrams (MRP) veterans preference, particularly that applicable to disabled States just prior to the implementation of the plan. Again, we request your intervention to continue this very worthwhile program and in fact, to expand it both in scope and funding. Many of these training positions could be filled with the scores of thousands of job seeking disabled veterans who are registered with the public mployment service.

Since it is apparent that the trend in government appears to be revenue sharing with the States, we are requesting that in any manpower revenue sharing programs (MRP) veterans preference, particularly that applicable to disabled veterans, be continued as it now exists or strengthened to perpetuate the application of priority and preference in employment services to handicapped veterans.

There are other areas of concern which we may discuss with appropriate staff officials at a later date, but we do request specifically the funding of the 70 additional assistant veterans employment representatives in the affected States which are specifically documented in the legislative history regarding Public Law 92–540.

In closing, the Disabled American Veterans wants to commend you for your statement of support for programs to enhance employment opportunities for veterans, when you appeared before the Senate Labor and Public Welfare Committee. We look forward to mutual cooperation leading to improvements in the delivery of effective employment services to all veterans, especially disabled veterans. We also await your first annual report to Congress regarding the quality and quantity of employment assistance to disabled veterans as required by Section 2007, Public Law 92–540.

Sincerely,

JACK O. HICKS,
National Commander.

Enclosure.

SURVEY OF DISABLED VIETNAM-ERA VETERANS

Number contacted	23,807
Responses, 19 percent	4,638
Employed, 47 percent	2,173
Unemployed, 53 percent	2,460
Want jobs, 71 percent	3,322
Number requesting ES assistance	2,552
Number commenting on ES service	1,172
Education:	
Less than high school	556
High school graduate	1,992
Some college	1,504
College graduate	580
Currently under the GI Bill	990
Chapter 31	535
Not in school	3,113

This survey was conducted by the DAV during the months of January and February 1973.

All respondents who have requested employment assistance will be contacted by local veterans employment representatives of the public employment service to whom their questionnaires will be mailed.

U.S. DEPARTMENT OF LABOR,
OFFICE OF SECRETARY,
Washington, May 14, 1973.

Mr. JACK O. HICKS,
National Commander,
Disabled American Veterans,
Washington, D.C.

DEAR MR. HICKS: This is in reply to your recent letter in which you expressed concern about several areas of services to disabled veterans. It was most interesting to learn about the results of your extensive survey of disabled Vietnam-era veterans, particularly the interpretation that many of the veterans surveyed were underemployed.

Some of your comments centered on the inadequacies of the Federal regulations for administering the provisions of Public Law 92–540 which require that Federal contractors must give special emphasis to the employment of qualified disabled veterans and veterans of the Vietnam era. The companion Executive Order 11701 and the implementing Federal regulations do spell out that contractors subject to the order must list their job openings (with some specified exceptions) with the appropriate State employment service. The regulations further require that the contractor shall incur "the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and nonveterans." Although the Department of Labor is of the opinion that the listing of job openings and acceptance of referrals constitutes satisfactory compliance with the law, I intend to carefully review this matter to determine if further interpretation of the law is required.

It is unfortunate that State employment security agencies were unable to fill all of the 450 job openings provided by the Department of Labor. As you know, this program was designed to assist State agencies to provide employment opportunities for seriously disabled veterans who, as paraprofessionals, would help other disabled veterans to find suitable work or training. However, State employment security agencies have contracted to hire approximately 150 seriously disabled veterans for this purpose, and you may be sure that I will give every consideration to your suggestions concerning this worthy program.

In regard to manpower revenue sharing, we expect to establish national priority target groups, from time to time, which State and local manpower administrators will have to serve appropriately. Clearly at present, veterans—especially Vietnam-era veterans—will be a national priority. Further, you may be assured that whenever the prime sponsor in any manpower service delivery system is a State employment service, veterans preference will continue to be observed, with preferential treatment given to disabled veterans over other veterans.

As to the funding of the additional Assistant Veterans Employment Representatives (AVER) mandated by Public Law 92–540, certain considerations must be made. Based on December 1972 veterans population data from the Veterans' Administration, it appears that additional AVER's would be required. It is our intention to carry out the requirements of Public Law 92–540 as soon as possible. However, inasmuch as the Department is operating under tight budgetary constraints, it should be understood that necessary moneys to fund the additional AVER positions will have to come from existing funds.

We share your concern for providing help in alleviating some of the problems of veterans, particularly disabled veterans, who have earned much more than whatever measures of aid we can provide. I look forward to continued cooperative efforts with you on behalf of disabled veterans.

Sincerely,

PETER J. BRENNAN,
Secretary of Labor

SELECTED EMPLOYMENT SERVICE ACTIVITIES—DISABLED VETERANS

JULY TO DECEMBER 1972 (FIRST HALF FISCAL YEAR 1973)—50 STATES REPORTING

A. Disabled veteran applicants available, 100 percent—319,000.
B. Disabled veteran applicants placed in jobs, 11.9 percent—38,000.
C. Disabled veterans applicants enrolled in training, 1.25 percent—4,000.
D. Disabled veteran applicants counseled, 10.3 percent—32,000.
E. Disabled veteran applicants placed as a result of job development. (Included in total placement under B)—5,000.

The 138,000—43.3 percent—of the disabled veteran applicants were Vietnam era and 181,000—56.7 percent—represented all other periods of service.

Of the 38,000 job placements, 21,000—55.3 percent—were for Vietnam-era veterans and 17,000—44.7 percent—were placements for disabled veterans of all other periods of service. Although the overall placement rate was 11.9 percent, Vietnam-era disabled veterans were placed at a 15.2 percent rate compared with a 9.39 percent rate for all other disabled veterans applicants.

The 4,000 training slots were allocated on the basis of 2,000 to Vietnam-era veterans and 2,000 to all others.

Counseling was given to 15,000 Vietnam-era veterans and 17,000 veterans of other periods of service.

Vietnam-era veterans obtained 3,000—60 percent—of the 5,000 jobs developed by the employment service, and the other 2,000—40 percent—were granted to all other disabled veterans.

Mr. FLOOD. Thank you very much.

Mr. FLAHERTY. Thank you, Mr. Chairman.

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