Ten Years of Progress

The past ten years have been ten years of perhaps the greatest progress against disease that our country has ever seen.

As a recent article said, "You're living in medicine's golden age." It pointed out that new medical knowledge had meant the saving of 1,240,000 lives since World War II. It stressed the fact that "this miracle of medical progress has come largely within the last 10 years."

As I look back over the past decade, I am proud to have had the opportunity to work in Congress, year by year, to provide through Congressional appropriations the share of Federal aid that has helped achieve the progress of these ten years. This aid has been a major influence in increasing and stepping up our Nation's medical research that has meant the saving of those million and more lives.

This year marked the ninth time that it has been my privilege to present to my colleagues in the House of Representatives, on behalf of our Committee on Appropriations, a bill which represented the consensus of the House and Senate committees on the support for health and medical research to be provided through the Federal government. The bill represented, at the same time, carefully considered judgments as to the interests of economy. It reflected what was needed to strengthen and speed up just as much as scientifically and humanly possible this year's attack on the many problems of disease and disability.

This year, we believe, will see further medical advances, in which the continuing and new programs to which we have given adequate and needed support will play, as in the past, a vital role.
Let us glance back for a moment into the field of health research achievements to see what may lie ahead in the way of returns on the tax dollars invested.

The decline in death rates since World War II from some of the major illnesses dramatically shows how over a million lives have been saved by modern medicine.

Influenza has gone down over 90 percent in its death rate. I should mention here, and emphasize, too, that there is not only great concern with the threatened invasion of the Asian flu, but there is concerted action underway--to set up a great network of protection for the American people.

We in Congress will see to it that such action through legislation as is essential will be supplied.

The Public Health Service, American Medical Association, State health authorities, the medical societies, and individual physicians are all alert to the problem and are joined in the nationwide collaborative endeavor against this threat.

To return to the past ten years of progress, we see the striking fact that once-great killers like acute rheumatic fever, tuberculosis, diseases that cause maternal deaths, and appendicitis have had the rate at which they cause death reduced over 70 percent in each case. Syphilis' death rate has been brought down 63 percent, pneumonia's over 40 percent, some kidney disorders 60 percent, and infant death rates have dropped 33 percent. Even high blood pressure, one of the greatest medical problems in terms of numbers afflicted, has seen some decline in death rates in the past few years--and, authorities say, is going to be subject to even better control through new and improved drugs for treatment.
This is what the recent past has brought. What of the work underway today, the challenging and promising new areas of medical research that will pay off increasingly?

The medical research and health programs underway in our State of Rhode Island offers splendid examples of the march of progress and some of its new areas of promise.

As a result of these programs, Rhode Island is taking a place of leadership among those States that are in the forefront of medical research, modern medical teaching and practice and public health advances.

Our State institutions and organizations, both public and private, and Rhode Island's researchers, medical teachers, physicians, nurses, and allied hospital and health agencies workers of all kinds—these men and women and their institutions are placing our State in this new position of leadership—as well as bringing its people the very best in medical and health benefits.

Supplementing and aiding them, and helping make many of the forward looking programs in Rhode Island possible, is support such as that which we are providing through Congressional appropriations.

For health and medical research and related work in Rhode Island there was provided in Fiscal Year 1957, which ended June 30, almost 3 million dollars in grants and awards from the programs of the Department of Health, Education, and Welfare. From the Public Health Service's National Institutes of Health, about 1 million dollars aided research, research training, building and equipping of research facilities, and other activities in institutions in our State.
Some $251,000 last year from the Public Health Service's Bureau of State Services helped a variety of public health programs in Rhode Island, such as control of water pollution, tuberculosis, mental illness, heart disease, cancer, and poliomyelitis. Through the Service's Bureau of Medical Services, Rhode Island in Fiscal Year 1957 had available for medical facilities and hospital construction some $788,000. Of this, almost half a million dollars was for hospital construction for needed facilities at the Providence Lying-in Hospital, the State Hospital at Cranston (Howard), and Roger Williams General Hospital at Providence.

Through the Children's Bureau of the Department of Health, Education, and Welfare, our State health department had about $235,000 for services for crippled children and for maternal and child health activities. Also, from the Department's Office of Vocational Rehabilitation, came a research grant of $39,415 to Butler Health Center at Providence to evaluate the effectiveness of rehabilitation programs for both physically and mentally disabled persons.

Speaking of mental illness, which is one of our gravest health problems of today, we can be proud of the progressive work that is being undertaken in Rhode Island on this.

Butler, as well as another institution in Rhode Island, has recently been awarded Mental Health Project grants by the Surgeon General of the Public Health Service. The Emma Pendleton Home, a children's psychiatric hospital, is using the mental health project grants funds to study a special group program for acting-out children. This study will shed light on the effectiveness and application of group work to special diagnostic categories of disturbed children. This project, begun in August of this year, will
extend over a four-year period.

Butler Health Center which recently opened an in-patient unit, the fourth of its major programs, has been awarded two Mental Health Project grants. One of these projects has been set up to investigate the nature of attitudes, interactions, and activities by the patients and personnel, which help recovery of chronically ill psychotic patients. This project will continue, according to present plans, over a three-year period.

The other research program at the Butler Mental Health Center supported by a Mental Health Project grant is one essentially designed to discover and test effective alternatives to the conventional in-patient psychiatric treatment. Through the operation of a new kind of out-patient department, a day hospital and an hospitalization program for emergency services to patients in periods of intense panic, the Butler Health Center hopes to do pioneering work in treatment and care of the mentally ill. Present plans for this project cover a three-year period.

Grants have also been made to Rhode Island institutions to participate in the large scale evaluations of the tranquilizing drugs—that have been so useful in mental illness and other conditions, but that need a great deal of study before we understand just how they act and produce their effects. This kind of study will lead to even greater eventual usefulness on the part of these drugs which affect the central nervous system. Indeed, the whole knowledge of the brain and its chemistry—an area our scientists say that they need much more information on before it is fully understood—is being opened up tremendously through new investigations today.

In the field of cancer research, Rhode Island institutions are participating in the vast new endeavor that has been implemented through
National Institutes of Health grants to screen all chemical compounds that might have possible use in the treatment of cancer.

Moreover, in the field of cancer control, Rhode Island is actively engaged in a new program aimed at cancer of the uterus, the second largest cause of death from cancer among women, which claims the lives of nearly 15,000 American women each year. Now a test, known as the cytologic test, makes possible the early detection of this type of cancer.

Unfortunately uterine cancer, which is highly curable in its earliest stage, presents no detectable symptoms until the disease reaches a stage when cure is more difficult. By means of the cytologic test, women with a suspicion of uterine cancer can learn about its presence long before they ordinarily would. Numerous investigators and clinicians believe that, if widely used, this test could reduce mortality by as much as 75 percent.

The test is completely painless and usually takes less than 5 minutes. The technique consists simply in taking samples of vaginal fluid which contains cells shed by the internal organs of the body. Microscopic examination of slides made from these samples enables trained laboratory workers to distinguish cells which are suspected of being cancerous from those that appear to be normal. Scientists recommend that women take the test once a year to be sure that they do not have uterine cancer.

In collaboration with the Rhode Island Medical Society and Rhode Island Society of Pathologists, the Rhode Island State Department of Health is, for the second year, making the cytologic test available to women over 20 in the State. The project, which was aided by a grant of $70,000 from the National Cancer Institute in 1956, is receiving additional assistance this year in the form of a $100,000 grant from the same source.
The program is being conducted through hospitals, private practitioners, and State-sponsored cancer detection centers, and is endorsed by the Rhode Island Medical Society and the Rhode Island Society of Pathologists.

The Rhode Island cytology program is one of several which were recently established in this country after the effectiveness of the technique as a case-finding procedure was successfully demonstrated in Memphis, Tennessee. The Memphis project—now in its fifth year—led to the discovery of about 300 cases of uterine cancer among 100,000 women who were examined for the first time.

Half these 300 cases were found in the very earliest stages, and most of these were entirely unsuspected. Many of the 400 cases of advanced cancer were also unsuspected.

The first year of the Rhode Island project was spent in tooling up and training technicians to examine slide tubes as a part of the test. Since operations were started, a total of 3,200 women had been screened as of April 12, 1957. Eight cases of cancer were found among the first 2,200 women examined. Between 300 and 400 are now receiving the test every week, and the number is still increasing.

There are between 225,000 and 250,000 women over 20 in Rhode Island. It is hoped that the project will eventually make it possible for 50,000 a year to take this test. For the great majority, it will mean peace of mind and relief from needless worry. For those who have uterine cancer, it will mean the discovery of their disease at a time when cure is most probable.
Rhode Island is playing a key role in another project which has a direct bearing on the health and well-being of millions of Americans. I refer to the recently-launched nationwide investigation directed to studying and evaluating the factors which are believed to bring on such diseases as cerebral palsy and mental retardation—disorders which are often due to damage to the brain of an infant before, during or shortly after birth.

This investigation is being coordinated by the National Institute of Neurological Diseases and Blindness in Bethesda, Maryland. Eleven medical schools and hospitals—in key communities throughout the nation—are working with the Institute. Among these is our own Brown University in Providence.

I have had occasion to hear testimony on this nationwide study from medical men in position to know a good deal about cerebral palsy and related disorders. It is my feeling that this study—which may go on for a decade or longer—may bring the effective treatment and prevention of such disorders a generation or more closer to achievement.

What are some of the causative factors which the project will be evaluating? Well, there are many. Among these are such factors as lack of oxygen, brain injuries, infections occurring during pregnancy, and the so-called Rh factor which is actually a blood incompatibility between mother and child. Heredity, which is believed to play only a minor role in cerebral palsy and mental retardation, will also be evaluated.

Brown University, I am pleased to say, was among the first institutions to join in this important study and its program is well
underway. The University's initial grant—a grant covering the last fiscal year—was for just short of $100,000 ($97,633).

I might say here that Providence is truly blessed in terms of its fitness for this kind of project. Brown University, which has an unusually fine department of biology, is working closely with the Providence Lying-In Hospital on one hand and the Meeting Street School on the other.

Providence Hospital is one of the largest lying-in hospitals in the country and the Meeting Street School is a unique semi-custodial institution for cerebral palsied children. Thus, we have a coordinated approach to the research problem posed in which the onset and impact of cerebral palsy can be studied and evaluated through pregnancy, birth and the early years of life.

Dr. Eric Benhoff, director of the project, brings to the study not only years of research experience but a number of major contributions to our knowledge of cerebral palsy and related disorders.

Why is this collaborative program—in which Brown University and its associated organizations are playing a key role—of such importance?

One answer, of course, lies in its humanitarian aspects....in the promise it holds for the development of effective treatments and preventive techniques for coping with cerebral palsy, mental retardation and related disorders. But the problem can also be sketched in terms of statistics—statistics of vital concern to all of us.

Today, there are an estimated 500,000 people in the United States who have cerebral palsy traceable to brain damage occurring in the year or so surrounding birth. There are an estimated 4,500,000 Americans with
mental retardation, about one-third of them children. There are thousands of others with related disorders—thousands who stand to be benefited by the results of the study.

Clearly, then, the severity and scope of the problem cannot be questioned.

Eventually, it is expected that about 15 medical schools and hospitals will be collaborating with the National Institute of Neurological Diseases and Blindness and about 3,000 cases will be coming under investigation each year. Whenever possible, the mother will be studied through the entire period of pregnancy. Infants showing signs of neurological stress or brain damage at birth will be closely observed. They will be given detailed psychological and neurological tests. Normal infants will serve as "controls" to provide an adequate basis for comparison with those who show stress.

This broad-gauged investigation may go on for a decade or even longer. But, as I have said, its implications for future and present generations are considerable. It is among the most hopeful and most comprehensive studies in the medical field that the Congress has been called upon to consider during my service on "The Hill."
Turning to another field of disease, rheumatic fever, Rhode Island also offers a splendid example of how researchers, physicians, health workers, school authorities, and others team up to apply new medical knowledge through their alertness and cooperative action.

As knowledge about rheumatic fever developed, Rhode Island was one of the first States to develop and carry on a good, sound program against this killer andcrippler that strikes hardest at children and that does its damage through causing rheumatic heart disease.

The Rhode Island rheumatic fever program, as long as ten years ago, was selected as the subject of an educational film because our State exemplified how community resources could be brought to bear on this disease. The film was made with the sponsorship of the U.S. Children's Bureau, whose funds have aided the rheumatic fever program along with our own private and public funds in our State. Shown widely throughout the country, this fine educational motion picture, called "We See Them Through," is still being used, I understand, for health education purposes.

With this background, we can understand why, early this year when there seemed to be a good deal more scarlet fever showing up than there ought to be, our people in Rhode Island were in a position to do something about it. With cooperative programs already well grounded in the heart as in other fields, they of course were alert to and acting against rheumatic fever through these programs. Therefore, they would merely need to see what new or intensified action was necessary. There were meetings of the groups, and the medical society, State and city health department, school authorities, and heart association joined forces to take any desirable and necessary action.
The U.S. Public Health Service was invited to cooperate and a team of epidemiologists of the Service came to Providence and aided in studying the how, when, where, and why of the scarlet fever cases.

The situation, it was decided, needed an action program to prevent first attacks of rheumatic fever by treating or preventing scarlet fever in the areas where it had shown up heavily. Moreover, with measures to do this established along with other measures to strengthen the general rheumatic fever program, the data that could be gathered and the techniques that could be studied offered a vital research opportunity, which the Public Health Service assisted in starting and carrying on.

I understand that the intensified activity has been very successful and that our people, particularly our children, have been well protected through the physicians' and community's efforts. Alertness averted what might have been a grave situation. The combined forces of medicine, voluntary and official health agencies, school authorities, and parents and the people generally showed how activities could be intensified when needed. The research experiment has not been completed, but I am told by the Public Health Service that the splendid cooperation of the people in Rhode Island made possible gathering of important data which will be of value in the nationwide heart program.

With these examples of current progress in our fine State of Rhode Island, let me turn now to a glimpse of what may lie ahead for us as a result of the medical research and public health measures that the people want and that we in Congress are aiding through providing supportive funds.

I think—and my opinion is based upon the best thinking of the many authorities in medical and scientific fields whom I am in constant
touch with—that the foreseeable future will bring even greater gains.

The past ten years' advances have exceed those of the previous half-century. I think it likely that the next ten years' gains will surpass those of the past decade.

Why? Because, in almost every one of the great disease fields that cause most of the death and disability each year in the United States, there has been a tremendous opening up of new and promising avenues of research where just a few years ago there seemed to exist only blind alleys.

Hardening of the arteries is an outstanding example. Instead of previous, complete darkness and little research interest and few researchers working on this disease whose consequence is 400,000 or more deaths each year, there is today a burgeoning of research. Already many, many new clues have been turned up, and some of the causative factors are being intensively researched and being broken down into firm specifics. We may well look for treatments and preventives of real effectiveness in the coming years.

Cancer, another stubborn and difficult enemy, may yield, at least in part, within a reasonable time. It would require a volume to list the many pathways of new knowledge that are being charted today. To mention one effort, being implemented on a scale and with an intensity never before seen in history, there is the great search for chemotherapeutic agents, drugs, that may be effective. This is highly promising—as are, indeed, other avenues of approach, such as the new one that involves the possibility of "training" viruses to attack cancer without harming the host.

In the field of mental illness, that affects so many in our nation
today, we may see very exciting developments. As I mentioned earlier, the tranquilizing drugs and others that act upon the central nervous system are already bringing benefits, but the most encouraging thing about them is the new roads that they will open up into understanding. A broad scale program is just getting underway, for example, in psychopharmacotherapy that will mean both basic and clinical studies of a wide range and great magnitude.

The answer to the riddles of brain chemistry, an outstanding medical research authority has very recently said, may well come by 1967. Predicting tremendous strides in the next ten years, he feels that we are on the threshold of great discoveries. These, he says, could mean that many mental illnesses could prove to be chemically remediable.

These are only a few examples of the many cheering and promising new developments, yet they serve to show why I feel so strongly that the past ten years of progress are but a prelude of greater things to come.

This is why, too, I believe that the work we do in Congress to increase and speed up medical research is work that my own constituents desire me to do and at the same time a real fulfilling of my responsibilities to the whole electorate of the country, who look to Congress to establish and maintain programs that will protect and better their health and welfare.