Henderson DA. The responsibility of academic institutions to preventive medicine and health promotion. Testimony before the US Senate, Committee on Labor and Human Resources, 97th Congress, 1st session, Jul 16-17 1981. Healing on *Preventive medicine and health promotion* 

Senator QUAYLE. Thank you very much

We will move on to our first panel today which will provide a broad overview of the issues related to preventive medicine. We have Dr Henderson, Dr Mason, and Dr Pesch.

Senator Hatch will return momentarily; but if I do not depart with a great deal of dispatch, I am going to miss that vote.

He will be back very shortly.

Dr. SUNDWALL [acting chairman]. Our first panel today, as mentioned, will give a broad overview of issues related to preventive medicine

Dr. Donald A. Henderson is currently the dean of Johns Hopkins School of Public Health and Hygiene He will discuss the role of academic institutions

Dr. James Mason is the executive director of the Utah State Department of Health. He will talk about major killers—those diseases which are related to preventable causes and the impertance of lifestyle

Our third speaker is Dr. LeRoy A. Pesch. He is chairman of the Health Resources Corporation of America which is in Chicago He will discuss the new roles of the public and private sectors in the health care market.

I would respectfully request, gentlemen, that we keep our comments to  $\theta$  to  $\vartheta$  minutes. The remainder of the comments can be submitted completely for the record at the completion of all the oral presentations of the panel.

Dr. Henderson, would you proceed?

#### STATEMENT OF D. A. HENDERSON, M.D., M.P.H., DEAN, SCHOOL OF HYGIENE AND PUBLIC HEALTH, JOHNS HOPKINS UNI-VERSITY

Dr. HENDERSON. Thank you very much.

I will endeavor to try to constrain my remarks to 6 to 8 minutes and will summarize my statement.

I think at this time the interest in the potential of preventive medicine and health promotion is appropriate and urgent

I think, to me, just how urgent is dramatized by the fact that the projected increase alone in medicare/medicaid expenditures during the coming year will be \$9.4 billion. That is the increase alone — an increase which I believe is twice the amount now spent totally on all preventive medicine measures, as indicated in the figure quoted by Senator Kennedy.

I think the public generally recognizes that only marginal increments in the improvement of health are being made by enormously increased expenditures. It calls for a different strategy—a strategy, as I see it, of prevention of disease and disability

There has been a lot said about this over the last 5 to 10 years, particularly. Yet I think it is very difficult to sell the idea that money needs to be spent in prevention to yield a result at the other end.

1 am particularly mindful of this myself in a field I knew well of smallpox eradication in which 10 years ago the United States was spending \$300 million a year in vaccination and quarantine. The United States invested \$26 million to try to eradicate the disease. Nothing is being spent now because the disease is eradicat ed.

It was very difficult to get that \$26 million from the United States, and yet that investment is being repaid every 32 days and will be repaid every 32 days henceforth.

It is not a bad investment. I think in many areas of preventive medicine we do have the opportunity to make an impact of comparable scope. It is more difficult to measure, but I think the impact is as great.

I think we must realize that in the area of preventive medicine and health promotion—and we realize in academia that we have to reach out into the community to reach people who are not now ill—we need to reach people before they come to a physician's office seeking help.

I think I would say that the patient who is seen in the office of one of our colleagues in curative medicine can only be regarded as a failure of we in public health.

Fortunately, our job is to effectively put out of business our colleagues in curative medicine by preventing the disease.

Regrettably, we have many failures at this particular point in time I would say that, in fact there is a great deal yet to be known about what we can do and how we do it and how we reach out to the people concerned.

I would suggest at this time that what is needed is the uniquely different cooperative effort on the part of public and private agencies and especially including the academic institutions

I would suggest at this time that there are comparatively few academic institutions which are really addressing the question of health promotion and disease prevention.

The schools of public health, a few departments of community medicine, and I think there are very few beyond that.

I think we need in this country a network of centers for health promotion and disease prevention based on the academic work.

We know, insofar as the educational component is concerned, that in document after document, from the National Academy of Sciences to the recent studies of health personnel, there is a lack of personnel at every level in every key category. This is documented again and again.

Second, so far as new approaches are concerned, we know today of the vast array of chemical substances in the marketplace. We know the problems of toxic waste dumps. Yet we know very little about many of the effects that are there. We know very little about what to do to prevent some of the problems.

There is a world of work and research to be done, as Secretary Schweiker so aptly pointed out.

Finally, there is a real need for those of us in the academic world to work with those in the private agencies and the public agencies in operating programs to learn from doing, if you will. As we practice medicine and as we practice surgery in medical schools, we feel the need. I think there is a great importance in practicing public health. I think, as Dr. DeBakey has highlighted hypertension programs, we must note that this has received high priority and many private physicians are doing a good deal about it.

Frankly, we are failing. There is comparatively little being done now, contrasted to what should be done and could be done. This really reflects on our ability and our knowledge of the strategies to reach out to those populations where the problem is the greatest to identify those needing the treatment and to assure that they get the continued treatment.

I would regret to say that although the academic institutions are important. I think there is a chasm today between the academic units and the community programs.

1 think this reflects a factor of funds. Dr DeBakey has referred to this in part.

In the medical schools today, faculty and residents take care of patients. This is partly reimbursed through the medicare/medicaid and other third-party insurance mechanisms.

No method today provides for the funding for the prevention of disease.

Our funding mechanisms are fully geared to the payment of the curative aspects of disease and not for prevention.

Thus for many of us, and myself in a school of public health, we find it difficult to find the funding to support our faculty and to support our research and to support our students, simply because of this difference in our orientation.

I would submit, Senator Hatch, that I think a new approach is needed in this field. I think we need much more than good words. I think we do need definitive approaches. I think one of the basic elements of this could be an evolving network of academic centers for health promotion and disease prevention which do work with State and local agencies, voluntary agencies, and work in a cooperative mode with them with a different method of financing and funding of these activities to provide this as an inducement on the scene.

Thank you.

[The prepared statement of Dr Henderson and responses to questions sent to him follow:]

# STATEMENT

#### OF

D. A. Henderson, M.D., M.P.H. Dean, School of Hygiene and Public Health Johns Hopkins University

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# THE COMMITTEE ON LABOR AND HUMAN RESOURCES U.S. SENATE

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### *HREVENTIVE MEDICINE AND HEALTH PROMOTION*

Washington, D.C. July 16, 1981 TESTIMENT - SENATE LABOR AND Iduman RESOURCES Com. July 158 1 "PREVENTIVE MEDICINE AND HEALTH PROMOTION"

The Responsibility of Academic Institutions to Preventive Medicine and Health Promotion

The nation's health bill for the treatment of illness and for rehabilitation has been rising dramatically, but with only marginal incremental improvement in the overall health of its citizens. Health promotion and disease prevention programs have been increasingly heralded as being more cost-effective and tentative initiatives have been fostered. Just how tentative, however, is illustrated by the fact that the <u>increase</u> in Medicare-Medicaid expenditures each year now exceeds the total expenditure by the federal government for all public health service programs. A better strategy and a more determined commitment are needed.

The principal programs in preventive medicine and health promotion necessarily are concerned with groups and populations of people, primarily with people who do not voluntarily come to a physician's office seeking help. To take these programs into the community requires a unique, cooperative effort of disparate public and private organizations, both those identified as health agencies as well as community-based action groups. Strong academic centers with similar concerns are vital. Yet, only a handful of academic institutions, most notably the schools of public health and some departments of community medicine in medical schools, have so far played significant roles in helping to devise and to implement programs, in identifying new strategies and in educating leaders in the field. Their role is pivotal but, if we are to observe a real impact on the state of the nation's health, their activities must be greatly expanded and their community orientation better focused. The development of a national network of academic centers for health promotion and disease prevention would serve this purpose. Such centers would appropriately be charged with the responsibility for undertaking a three-part program of activities involving education of program leaders and staff, participation in operative programs with relevant public and private agencies and research to assess progress, to identify and measure risks and to devise new means to prevent disease.

#### The Professional Staff

The professional staff of such centers would necessarily differ greatly from the professional staff of a clinical department in a medical school. The professional staff of medical school departments understandably and appropriately is almost exclusively comprised of physicians. Although clinical specialists are today often deeply involved in implementing preventive programs, their orientation, training and practice is related to sick persons seeking relief. Their frame of reference and indeed their rewards are not related to the absence of disease in a population, be it their own community, their county or their state. Conversely, the success in preventive medicine is assessed by events which do not happen - by the numbers who might have become sick or disabled but who did not. To the extent which public health professionals fail in their efforts, clinical medicine becomes of greater importance.

The development and implementation of effective programs for the prevention of disease and the promotion of health requires professionals with many different types of training working closely as a team - statisticians and epidemiologists to determine possible causes of disease and the effects of programs to prevent them - engineers, chemists, physicists, toxicologists and biologists to assess possible environmental hazards and to devise cost-effective measures to reduce such risks - behavioral scientists and sociologists to determine community attitudes and to devise strategies and plans to assure participation in programs - economists and lawyers to consider alternative strategies and to develop policies which might be effectively implemented. Academic units of this scope and diversity are few in number and woefully inadequate in numbers of staff.

#### Educational Activities

The dearth of professional staff in the field of public health and preventive medicine has been documented in report after report ranging from studies by the Graduate Medical Education National Advisory Committee to those of the National Academy of Sciences. In notably critical supply

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are physicians trained in preventive medicine, epidemiologists, biostatisticians, toxicologists and engineers. Only the most modest efforts have so far been made to alleviate the manpower shortage. At the same time, our understanding of risks, of new and effective methods for intervention and of techniques for organization of community services, is rapidly changing. However, surprisingly few programs of continuing education are offered for those who are now actively engaged in disease prevention and health promotion activities. This is in stark contrast to the field of medicine, for example, in which continuing education programs are offered regularly and in many different locations. In part, this reflects the paucity of resources available to academic institutions for developing programs. In part, it reflects the lack of resources available to local agencies for in-service training of staff and the inability of the generally less well-paid professional staff in preventive medicine to finance their own continuing education program. In brief, a substantial effort will be required to educate requisite manpower and to provide for their continuing education in a rapidly evolving field.

### Research

Effective programs in health promotion and disease prevention require knowledge of the causal factor or factors of disease and disability and knowledge of the most effective means to prevent exposure of the individual to the risk. For example, our understanding of the relative risks of the hundreds of new products now being used in this chemical age is still elementary; methods to discourage use of tobacco, alcohol and drugs are still discouragingly ineffective; screening and treatment programs for such as hypertension and cervical cancer have hardly begun to realize their potential. Much more could now be done to promote health and prevent disease but quite literally, we have only taken the first hesitant steps in a continent of potential opportunities still to be explored. Here, academic institutions, employing professionals trained in many different diciplines have a critical role to play in exploring cause and effect in research programs extending from basic biological changes to changes in groups in the total population.

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#### Professional Practice

Professional groups in academic institutions who are concerned with health promotion and disease prevention need constantly to practice their profession, no less than surgeons in a department of surgery need constantly to practice their skills. In doing so, they are better able to teach by keeping in touch with community reality, to communicate new knowledge and techniques to those likewise engaged in public and private agencies, and to make observations which offer new insights or suggest new lines of population-based or laboratory research.

For effective programs in health promotion and disease prevention, it is essential that such activities be conducted in communities throughout the country. A simple, federally-mandated set of approaches will not suffice. Environmental problems differ greatly from one area to another, as do the populations of people living there. A problem and/or a solution in one area may or may not be applicable in another environment. Reno, Nevada and Cumberland, Maryland, clearly constitute different populations with different problems and different social attitudes. Regrettably, there remains today what may be characterized as a chasm between the academic institutions and state and local health agencies which is only rarely bridged. Until this chasm is bridged effectively and extensively, I foresee only limited progress being made in prevention programs. To achieve this will require that, by some manner, funds be identified to permit academic institutions, their faculty and students, to become involved in programs and the faculty, in turn, will need to appreciate that involvement in operating programs is essential to their professional academic careers. Notably, this is a problem which medical schools have faced and dealt with successfully. Patients in academic centers are cared for by faculty and students and payment for this care supports both faculty and resident staff in medical centers. In the field of public health and preventive medicine, there are examples of similar relationships, but they are far too few and the impact much too limited. Provision in federal, state, local and private agency program budgets for joint academic institutions and public/private sector initiatives in the delivery of services directed toward health promotion and disease prevention is a most urgent need.

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### Conclusion

The past decade has witnessed a remarkable resurgence of interest in health promotion and disease prevention. The need for such programs is voiced with increasing urgency. Special impetus to this effort was given by Assistant Secretary Cooper's "Forward Plan for Health" and by the 1976 National Conference in Preventive Medicine. Definitive steps to implement even a few of the many recommendations have yet to be taken. If we are serious in our intent, and the continuing spiral in medical care costs demands that we be so, special efforts will have to be made. Essential to the process is an expanding knowledge of what can and should be done and competent personnel to undertake the task. In any initiative such as this, academic institutions represent the essential foundation.

## DAH/vrwb



#### THE JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIBNE AND PUBLIC HEALTH

Office of the Dean

September 3, 1981

The Bosorable Grrin G. Match United Status Separts Committee on Labor and Human Resources Washington, D.C. 20510

Dear Senator Hatch:

] as happy to respond to the several questions which have been posed subsequent to the hearings on Preventive Hedicine and Health Promotion. By responses are attached.

May I commend you and the Secretary on the interest you have taken in this field. Clearly, if we are to make significant progress in improving the health of our population, visionary initiatives in the field of disease prevention and health promotion are requirite. What has been achieved to date offers only a hint of the possible. At the same time, it must be appreciated that purely voluntary initiatives and wellmeaning injunctions will not result in significant achievements. Additional federal expenditures will be required. However, if we note, in perspective, that the increase mant year in expenditures for the largely curative and rehabilitative Medicare-Medicaid progress accord the total budget of the Public Health Service, I find it difficult to draw any other conclusion but that we can't efford not to direct additional resources to prevention, even at the expense of budgets for treatmast.

Sincerely yours.

D.A. Henderson, M.D., M.P.H. Dean

DAS/eca

Enclosure

615 North Wolfe Street, Baltimore, Maryland 21205

#### **ssponse** to Questions

fully effective, comprehensive disease prevention and health promotion morginam will necessarily require the active participation of many differrat groups and individuals ranging from community leaders and workers > vipluritary organizations to industry, labor, city and state health repartments and others. Disease prevention and health promotion rograms inevitably must differ significantly from programs of curative medicine. This is often not well understood. The former requires that realthy or apparently healthy people be approached and persuaded of the need to submit to screening programs and immunization, of the need to change their lifestyles and of the need to alter the environment within which they live. Although there is a defined sickness-care structure to take care of people who become ill, there is at present no definitive structure to set in motion an effective and comprehensive disease pre-There are some effective vention and health promotion program. initiatives which embrace entire communities and there are many fragmented voluntary afforts, sone well conceived and some based on wholly improved or even erroneous beliefs.

Changes in lifestyle are an important, although not the univ, component of a program of disease prevention and health premittion. Community leaders and workers can and should play an important leadership role in promoting, advecating and facilitating lifestyle thangs. However, policies and alternative stretegies for such change must be soundly established, community leadership must be previeted guidance and training and systems for continuing evaluation of the success of the effort must be established. Academic centers could play a pivotal, central role in this affort. If this is not done, one can confidently forecast a series of ill-coordinated, often poorly conceived measures which will be more specifically directed to the middle and upper classes and not at the groups at highest risk, many of whom are the disadvaltaged.

If we are serious in our intent to diminish the incidence of sickness, disability and premature death, a coherent plan and strategy is mandatory, its foundation must be different and broader that bit of the observat-care system, sithough the medical bimmutily must play a role.

Because their is no model system to serve as a pattern, I would propose that perhaps ten Centers for Dispace Proventian and mealth Promotion de established (alternatively), the name Cenders for Health Andochin might be less cumbersome). Such Centers would be charged with the responsibility for establishing a close working partnership with state and local health agencies, volumbery organizations and community leaders in their respective areas, with developing comprehensive and agreed-upon strategien, with assessing the effect of elternative sprencies and, ultimately, with assessing the effect of elternative programs. In brief, a partnership of government, equipming and private agreed is a foreigen. At the federal level, the Centers for Disease Contror hould provide a central focus for this effect.

to far as Funding of the academic centers is concerned. I believe this should be reparted as a logical component of expenditures for Madicare and Medicald, which are now heavily committed to sickness-cars. In fact, the increase next year in costs of Medicare and Medicald exceed the entire budget of the Public Health Service. Would it not make sense to increase our commitment to prevention, even to the extent of sarmarking a percentage of Medicare-Medicald funds to prevent illness rather than directing almost the whole of these funds to the provision of services in the sickness-care system?

The CHAIRMAN. Thank you so much, Dr. Henderson.

We are very happy to have our own Dr. Jim Mason here with us. We are looking forward to what you have to say, Jim.

We recognize the great work you do out in Utah.

#### STATEMENT OF JAMES O. MASON, M.D., EXECUTIVE DIRECTOR, UTAH DEPARTMENT OF HEALTH

Dr. Mason. Thank you, Senator Hatch.

It is an honor to be asked to participate in this hearing.

I believe the reason I was asked to speak is to show that health promotion and disease prevention really work and to use Utah as an illustration of that success.

We talk so frequently about what could happen. What we want to say today is that it has happened. It saves lives; it prevents disability and handicapping conditions; and disease prevention and health promotion saves money.

I would like to try to briefly illustrate how that has occurred.

Americans have worked hard to create a standard of living which is the envy of the world. However, we may have worked too hard. Current indicators point to the American lifestyle as the cause of over 50 percent of the years of life lost by death before age 65.

In Utah, approximately 44 percent of the years of life lost by premature death can be traced directly to lifestyle factors.

Of the three leading causes of death in Utah-cancer, heart disease, and motor vehicle accidents-lifestyle accounted for 37 percent, 52 percent, and 69 percent, respectively, of years of life lost before age 65.

In my written testimony, I have provided a series of charts. I am not going to spend time, because of the need to move on, in talking about each of these charts; but I would like to just make several pertinent points with regard to each one of them.

First of all, with regard to chart 1: We show that lifestyle is the No. 1 enemy, in terms of preventing disease and promoting good health, in Utah.

In chart 2, we show the allocation of resources between the various causes of death. The allocation of Federal and State funding in Utah toward lifestyle-enhancing programs, however, is in no way commensurate with the significance of this component as a cause of premature death and preventable death.

Lifestyle in Utah affects 44 percent of the causes of death; yet only 5 percent of State resources and 1.2 percent of Federal resources go to this area of concern.

On the other hand, real or theoretical improvement in the medical care establishment-the hospitals, the nursing homes, and the