

**EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF SCIENCE AND TECHNOLOGY POLICY  
WASHINGTON, D.C. 20506**

**THE JOHN R. HOGNESS LECTURE**

**D.A. HENDERSON, M.D., M.P.H.**

**Associate Director for Life Sciences**

**Association of Academic Health Centers  
1991 Annual Meeting**

**Napa, California**

**October 5, 1991**

## INTRODUCTION

I have enjoyed being with you over the past two days and having had the opportunity to contemplate real problems and real challenges. It is said, for those of us at the White House, that only a mythical world exists beyond the Washington Beltway. However, I have come to believe that this mythical "disconnect" between Washington and the real world is somewhat overstated. Never have I been inundated with so much information provided by so many groups and in such detail on so many subjects. The exercise is called "Instant Library." And I should not like to endeavor to enumerate the countless delegations which seek to offer detailed briefings on the most arcane of subjects. What one misses is a continuity of time to contemplate broader, cross-cutting issues of the nature addressed in this conference. Your invitation to participate is thus most welcome. Parenthetically, I would note that Dr. Burt Lee, the President's physician, had also planned to join you and asked that I extend his personal regrets. A certain high-ranking government official preempted his services.

A word about the Office of Science and Technology Policy (OSTP) may be in order given the fact that when Dr. Allan Bromley, the President's Science Advisor, asked that I meet with him to explore an appointment, I myself had no more than a hazy notion as to what it was or did.

The origin of the OSTP dates back to a day in 1957. At the time, Sputnik began slowly orbiting the earth broadcasting 'the East is Red.' Rightly or wrongly, U.S. prestige was considered to be at stake and a massive effort in science was seen to be needed. President Eisenhower appointed James Killian as a science adviser and a special President's council was created.

Subsequently, both Eisenhower and Kennedy valued and utilized the counsel of scientists but then the Office began a roller coaster ride both in size and respect. Johnson did not much trust scientists and Nixon did not trust them at all. Nixon abolished the Office.

During the Ford years, the Office was re-established in legislation. It called for a Director and four Associate Directors to be nominated by the President and confirmed by the Congress. The office under Frank Press expanded during the Carter years but under the Reagan Administration it once again waned to the point that by 1988, it consisted of less than 15 persons and was little heard from.

The Bush Administration abruptly reversed its fortunes. It reasoned that scientific progress was vital to the future of the country, that a long-term investment in science was critical to the nation and that, as a corollary, math and science education had to be strengthened. Dr. Allan Bromley, a greatly respected

head the office. He was also made Assistant to the President -- thus, for the first time, making the Science Advisor one of the President's inner circle. Four Associate Directors were nominated and confirmed -- these positions also being filled for the first time. There is one each for industrial policy, for physics and space issues, for international affairs and for life sciences. Jim Wyngaarden, as you may know, held the position in life sciences before going to the National Academy. The Office now consists of more than 40 persons.

New as it is, the Office's scope and mission is still being defined and I would not now want to enumerate all of the issues with which we are already engaged. They include oversight for the Human Genome Project, more time than I care to think about devoted to that document with the sexy title -- "A-21" -- i.e., indirect costs, and misconduct in science. A major interagency review is now in progress to examine the status of our biotechnology program and possible initiatives for the future. Each week, the agenda grows longer as it is recognized that the life sciences are represented in the Executive Office at the level they are.

The generic theme, however, is the strengthening of our science enterprise through longer-term strategic interagency planning. And, believe it or not, there really is cooperation among agencies!

However, the genesis of my appearance today dates from an earlier incarnation when I was still a Dean at Hopkins and in that capacity was meeting regularly with an AHC panel discussing concerns about the health care system and the potential, as I saw it, of a more prominent role for AHC members in advancing the evolution of our health care system. It was proposed that I share some of these thoughts with a broader audience at your annual meeting. Reluctantly, I agreed, although I had not anticipated that these rumors would be dignified as the John Hogness Lecture. Since agreeing to participate, other events transpired in my life which eventuated in my appointment to the White House with concerns for Science Policy -- not, at least as yet, for health care policy. Thus, what I have to say are personal reflections and do not represent White House thinking, although some would argue that that term is, at best, an oxymoron anyhow.

## ACADEMIC HEALTH CENTERS AND THE HEALTH OF THE NATION

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

As the John Hogness lecturer this year, it is a special honor and a pleasure for me to pay due and special tribute to a long-time and greatly respected friend, a creative intellect, an innovator, a builder, an international statesmen for medicine and health care. John's achievements are, in part, memorialized in the stature and scope of the University of Washington itself, in the existence of the Institute of Medicine which he served as founder and as its first president and, indeed, in the stature of this Association of Academic Health Centers. Despite his many accomplishments, he has remained a thoughtful and unassuming friend, counselor and physician. Thus, I take special pleasure in being asked to give this lecture which bears his name.

The rising storm of anguish and concern regarding our health care system does not need to be rehearsed yet again today. You know it well and, yesterday, Stuart Altman eloquently reviewed the salient concerns. The only new numbers which I would like to cite were released by HCFA at the end of August. They forecast for the coming decade a 2 1/2 fold increase in health care expenditures -- rising from \$670 billion in 1990 to \$1.6 trillion in the year 2000; and an increase in the percentage of our gross

national product devoted to health care from 12% to more than 16%. This assumes, of course, that no meaningful measures are imposed to control costs. This is a doubtful assumption, at best. Every conceivable solution is now being offered by experts, politicians and dilettantes of every stripe and persuasion although without evidence as yet of an emerging consensus as to what is to be done or could be done. Two words which are frequently used in this context are, as you know, "managed care" with all of the diverse interpretations and difficulties which that phrase may bear.

Should we really expect significant change in the health care system over the coming decade? Or is the current Sturm und Drang only an echo of earlier debates which have seemed to boil to the surface every decade or so, only to subside again after generating modest, sometimes little more than cosmetic changes in the system? Much is currently being written about alternative health policies in our professional medical literature and many alternatives are being discussed in professional meetings. From countless personal discussions, however, I sense that most of our medical colleagues do not, at heart, expect more than cosmetic changes. And they may be correct.

My own sense, for what it is worth, is that there are quantitative, major differences between the present climate and a climate which prevailed only a decade ago. Illustrative of contemporary views is a Roper poll conducted earlier this year

which assessed degrees of public optimism regarding a number of social issues. Most notable was the fact that optimism about the future of "our health care system" was rated next to the bottom of the list. The only category faring more poorly was the degree of optimism about our ability to get along with Arab nations. Several surprising issues fared far better -- e.g. the perceptions of moral and ethical standards in the country and our political system for electing leadership. And, as Blendon has discovered in other surveys, 89% of those queried report that they want major reform of the health system.

This is public disquiet of unprecedented proportions although dismissed, I know, by many of our colleagues as consumer unhappiness with the system but not with their own doctor or hospital. A generally underrated new player on the scene, however, is private industry for which health care benefits represent a major and growing expense which is beginning to seriously impact competitiveness. This is a new phenomenon. Many corporations now spend an amount equivalent to one-fourth of their net earnings on health care and during 1990, those health care costs rose 21%! Less than a decade ago, health benefit issues were consigned to the personnel department. Today, corporate vice-presidents are involved.

I would not hazard to speculate as to the shape or extent of changes which we should expect but it seems to me that major



structural changes are a certainty and are perhaps imminent. There are too many pressures from too many constituencies.

What has surprised and distressed me as I peruse various plans and programs is the lack of discussion or consideration as to the implications which a serious restructuring of the health care payments system might have for academic health centers. Perhaps the centers are more resilient and robust than I perceive them to be. My perception, however, is that most are substantially reliant on a flow of income from patient services. The costs of such services, for a variety of understandable reasons, are, as you know, appreciably higher than in community hospitals. Few of the proposed cost-containment measures seriously consider this issue. Even today, some of the larger, self-insured industries are mandating less costly options than academic health centers for hospitalization of their employees. This is a growing trend. The result, if it continues, could be a disproportionate decrease in the volume of and revenues from patient services, especially surgical and diagnostic procedures, your principal base of financial support. At the same time, tuition revenues, at least in the private sector, appear to be reaching near maximum possible levels and the costs and difficulties of providing suitable residency training are proving ever more problematical. There are other problems as well -- reimbursement for AIDS patients and cocaine affected newborns; sharply constrained state budgets and increasing state mandates;

I need not go on but then there appears to be little relief in sight.

Reaching consensus as to how we as a nation can provide adequate access to quality health care at a cost which we as a nation are willing to pay is complex enough without having to consider the impact which the various schemes might have on but one component of the whole system -- the academic health centers. I can only surmise that this accounts for the limited attention given to the issue. However, what concerned me before coming to Washington and what now concerns me much more is an all too likely scenario that a point is eventually reached where there is a broad enough consensus that there is a crisis and that the system needs a radical "fix" and needs it quickly. What may follow, as has occurred in other instances, is a veritable feeding frenzy of instant experts with little sense of the intricate complexities of an established, long-evolving system. They are determined to cut the Gordian knot with a few well-directed draconian measures and they do so. I have watched the process this year, all too close at hand, as efforts have been made to "fix" the indirect cost problems associated with research grants and contracts. Both in the Executive Office and in Congress, the debates on this issue included significant numbers of influential instant experts intent more on instant action than reasoned discussion and understanding of a similarly complex and long-established research system. Should we reach that

indeterminate crisis point in dealing with health care costs and the system, I fear that a similar scenario might be reenacted.

But are the centers that important to us? This would seem to be an unnecessary question because the answer would seem so obvious but it seems to me we would be better served if the questions were regularly posed and answers provided. Quite simply, as I see it, academic health centers constitute virtually the whole of our educational system for health care; by far, the largest component of our basic biomedical research enterprise; and the provider of a substantial proportion of non-reimbursed or under-reimbursed health care for the urban poor. One might assume that these critical factors would inevitably have to be taken into account in devising any new health care scheme, but how many of the array of proposed scenarios inadequately explore, let alone mention, these fundamental considerations.

The message I offer is that the academic health centers, in the interests of their own well-being, if not for our collective well-being, need now to take a much more proactive role as a principal in current debates and in beginning to fashion prototypical solutions for a health system which inevitably will undergo major change -- but the hour is late.

What should the role of the Academic Health Centers be? I have struggled, as I know you have, to identify a rational framework for charting future directions for the health system

and, within this, appropriate roles for the academic health center. In doing so, I found it helpful to develop a series of premises. Perhaps they are all too obvious but basic premises regarding present mission and alternatives for the future need to be stated.

1. The academic health centers must and should sustain their role as the principal locus for the education of health professionals. This may seem obvious but it bears repeating. There simply are no other options.
2. The academic health centers must and should continue as the primary foundation for basic biomedical and clinical research. Again, there are no real options, at least in the near term.
3. The academic health centers must and should continue to provide leadership in advancing the standards of health care and in developing new ones. This is axiomatic if the centers are to sustain both their educational and research missions.

These promises alone make the clear statement that the vitality of the AHCs must be a central, not a peripheral concern for any solutions devised.

Premises as to the future directions for health care are more debatable but, for what they may be worth, these are mine:

1. Increasing public dissatisfaction with access, cost and quality of health care will lead to fundamental as contrasted to cosmetic changes in payment schemes as well as in the organization and management of the health care system. What forms these will take remains to be defined but highly probable are a growing array of cooperative government-private sector arrangements.
  
2. That there will be increasing programs and resources assigned to disease prevention/health promotion activities, only some of which will be provided in the traditional curative care setting. The majority will be provided in various types of community-based programs, e.g., programs for prevention of substance abuse, injuries, lead poisoning, teen-aged pregnancy and AIDS; as well as occupational and mental health programs. The year 2000 "Health Objectives for the Nation" will begin to be monitored more closely at local, state and national levels and will be utilized increasingly in planning and resource allocation. Such efforts are now underway in a variety of areas. With increasing attention to cost-benefit comparisons of different interventions, these initiatives will assume ever greater importance.

3. That meaningful health care cost constraints must ultimately devolve upon some form of community-rated scheme involving large defined populations. Such schemes will ultimately have to incorporate some form of community decision process with respect to allocation of resources, provision of services and access to care. In stating this premise, it is important to recall to you that our experience to date, nationally and internationally, has thus far failed to identify any alternative approach which significantly constrains costs within some agreed upon bounds.
  
4. That substantial changes in the health care system are best achieved by area-wide or state-wide initiatives so as to better cope with the substantial differences which exist in the sociocultural fabric of the nation. This recognizes that our experience to date with federally designed and mandated programs has not been salutary. In a subject area so complex as the provision of health care, a rigid national mold would seem singularly inappropriate. This assumes, of course, that sufficient time and flexibility is granted to permit the growth and development of appropriate systems of differing character.
  
5. Given these anticipations of change in the system -- specifically, increased community-based interventions, greater quantification of costs and results and a heightened emphasis on prevention and health promotion -- there will be

a need for increased numbers of professionals who are knowledgeable of the biological sciences and who are trained as well in the quantitative sciences and in social science areas, such as economics, policy, ethics and management. Actively engaged, practicing epidemiologists, health economists and statisticians are in notably short supply. Without greater strength in these areas, one can only envisage health systems designed and largely operated by other professional groups now in much more adequate supply -- such as lawyers and graduates of MBA programs. Perhaps they might prove to be effective architects of a new system but I have reservations and would not like to see us hazard the experiment.

I personally have difficulty in conceptualizing an alternative, plausible road map into the future other than as I have stated. Although I suspect that many of you now see other more plausible, short-term scenarios, I doubt they are very different when projected into a medium term future.

How might we proceed? It seems to me that we should begin the necessarily complex process of building toward comprehensive population-based community-wide health services for defined areas. Such a task would inevitably require broad participation by both public and private entities, including voluntary organizations. Who is to provide leadership for such an effort? Few State, city or local health departments have either

competence or the necessary prestige to undertake such a task. Professional associations are too narrowly based and certainly are not structured to undertake such a function. It is difficult to conceive of any private enterprise being able to undertake such a task.

What about academic health centers? By and large, they command both prestige and respect throughout a wide area; they are already administratively structured to deliver large volumes of service, at least to patients, utilizing both public and private funds; and by virtue of size, if for no other reason, they command substantial political clout. Would it not make sense for academic health centers to redefine their mission to one which addresses the health of the community in which they are situated, however that community is defined?

In proposing such a shift in mission, I am not advocating that the centers co-opt all other health bodies within the area. Rather I believe they should serve as conveners, stimulants, leaders to a constellation of groups. I believe they should consider the possibility of conjoint academic center/government service programs, appropriately funded, which could subsume a broader comprehensive responsibility for orchestrating the delivery of curative/preventive/health promotion programs throughout the whole of a community. Finally, I would propose that they extend the scope of both the research and educational



missions to address a broadened agenda of issues and to provide the requisite manpower.

To fulfill this role will require added levels of competence. Broader expertise in a range of disciplines, in addition to medicine, would be required but these are not alien to the mature academic health center. These would include, of course, individuals with knowledge and skills in preventive medicine. Persons trained in health policy/economics/management would be mandatory but they are required in any case if an academic center expects to play a role in shaping its own destiny. Epidemiologists and biostatisticians would be needed to develop information systems, to assess community health, for technology assessment and to monitor quality. In fact, however, no academic center today, whether deeply engaged in research or not, can afford to be without such skills. Issues of ethics and the law are increasingly a part of health care delivery and professionals in these areas are already intrinsic to many academic centers.

Aside from expertise in fields which even now should be a part of an academic health center, there will be a need for persons with skills in the development and management of community-based programs. It will require persons with skills in marketing and merchandising, again, skills which are increasingly found in academic centers.

Professionals in environmental health and occupational medicine should be added to this list but, indeed, many centers already have divisions of occupational medicine which are now a necessity for a comprehensive Center.

If an academic health center were to undertake an initiative such as I have suggested, certainly not an inconsequential task, what should be its intellectual and administrative locus? Should it be in a department in the School of Medicine? Experiences to date with Departments of Community Medicine or Social Medicine have proved disappointing. Most have failed to thrive, appointments and promotions committees have proved difficult for social scientists and few have received much support in an environment which prizes curative skills. Should it be in a School of Public Health? In principle, this might make sense but most schools have deputed themselves more as graduate than professional schools and have generally disparaged activities which would be labelled as "service programs." This is in contradistinction to medical schools which have traditionally embraced the service activities of curative care. Should it be a free-standing center reporting to the director of the academic center? While this offers certain advantages in the oversight and execution of the service component of the program, it is not an optimal environment for developing a sound and necessary research base and teaching program. Perhaps some new hybrid needs to be created. This problem need not be sorted out now. It will resolve in time.

Let me conclude by pointing out that you, as directors of the Academic Health Centers hold a special trust as custodians of the foundation, the heart of our health system -- the heart of our health system for education, for biomedical research and for assuring the health of the community. You bear a special obligation to provide needed leadership in appraising the future and in fashioning a new paradigm. It is a different role than that to which many of you are accustomed but it is one which I am confident you individually and as a group could discharge admirably.