The Partnership in Dental Health

By NELSON A. ROCKEFELLER

WHEN the Department of Health, Education, and Welfare officially came into existence last April 11, it lifted the vital health, education, and social welfare functions of the Federal Government to Cabinet rank. For the first time in our national history, these social responsibilities are represented at the highest council tables of our Government. Health, education, and social welfare have become an integral part of the considerations of the President's official family.

I think this is a logical outgrowth of President Eisenhower's beliefs which center around deeply held convictions concerning the dignity and worth of the individual. His actions in the field of social welfare are a striking example of this humanitarian philosophy.

To him, as to all of us, the problems of peace and war, of international freedom and stability, come first; for there is no individuality for Americans who are threatened by war or tyranny. Next are economic stability and growth at home—the ingredients without which individual growth is impossible. These are the cornerstones of President Eisenhower's foreign and domestic policies—freedom and peace on the international front, and economic stability and growth on the domestic front.

Mr. Rockefeller is Undersecretary of Health, Education, and Welfare. He presented this address, here somewhat condensed, before the 94th annual meeting of the American Dental Association at Cleveland, Ohio, September 29, 1953.

But there is a third element, an element which is encompassed in the broadest meaning of the term, "social welfare." The President has shown in his deep awareness of the fact that all three are inseparably formed together in a free society. The individual develops to his fullest capacity as a member of society only with the background of the best possible educational training. He must enjoy good health—physically and mentally. He must be secure in the knowledge of his protection in the event of extreme hardship, diability, and old age.

The Common Goal

In the field of dentistry and related subjects, the interests of the Department of Health, Education, and Welfare and of the American Dental Association touch at many points. The Department works with many professional associations toward the common goal—better health for each of our citizens. The Department works, of course, in different ways, using different resources and under different patterns of authority. But the objectives are shared objectives and many of the problems are mutual ones.

The Department, as you know, recognizes dental health as a matter of tremendous national importance. We are aware of the many complex and interrelated factors involved—manpower shortages, inadequate appreciation of the significance of dental health, the staggering backlog of accumulated dental needs, and economic barriers to dental care and services.

In this community of interests it is possible

to identify at least three sets of problems which are matters of immediate concern to the dental profession as well as to Government.

First, and perhaps foremost, is the problem of dental education and the needs of dental schools.

Secondly, there is the need for research in the various aspects of dentistry.

Finally, there are the problems involved in the application of scientific knowledge. In other words how can we make sure, within the framework of American principles of free choice, that the benefits of modern research and modern resources reach the majority of the people?

Before considering each of these issues in greater detail, it might be well to redefine the dental health responsibilities which are vested in the Federal Government. The Department operates under laws passed by the United States Congress. This is a basic fact too often misunderstood by the health experts and the public with whom the Department cooperates. As a Federal agency, the Department can do only what the law authorizes. A voluntary or professional health organization, as well as the private practitioner, can do anything the law—and their code of ethics—does not forbid. The distinction is an extremely important one and must be understood to appreciate the interactions of government and private agencies.

Most public dental health services today are provided by local governments. Federal responsibility is limited to research and experimentation, consultation, demonstrations, and, in some instances, to financial participation through research grants and through grants-in-aid to the States and local communities. Through these grants the Public Health Service and the Children's Bureau assist in the development and support of State and local dental health programs. The grants are administered by the localities according to their own needs and patterns. In theory and practice, therefore, the States and the Federal Government act as partners, each contributing to the job of improving the health of the American people.

The basic authority for the bulk of the Department's dental health activities is Public Law 755, passed by the Congress in 1948. This law, as you know, created in the Public Health Service a National Institute of Dental Research. It directed the Public Health Service to "conduct, assist, and foster researches, investigations, experiments, and studies relating to the cause, prevention, and methods of diagnosis and treatment of dental disorders and conditions"; to "promote the coordination" of dental research; to provide fellowships and traineeships to qualified young research workers in dentistry; and to "cooperate with the State health agencies in the prevention and control of dental diseases and conditions."

The Problem of Dental Education

The Nation's dental schools are in or are confronted with serious financial difficulties. A recent estimate of the need, based on data collected jointly by your Council on Dental Education and the Public Health Service, indicates that the schools require $43 million for construction to relieve overcrowded classrooms, expand clinics, and develop research programs; $6.9 million to purchase equipment; and, not counting amounts reported as deficits, an additional $8.2 million for adequate annual operations. Many schools rely excessively on part-time staffs, especially in the clinical departments.

Unless the financial status of dental schools is improved, the problem will have grave consequences for the quality and quantity of dental service in the future. More adequate support of dental schools seems clearly indicated to forestall any deterioration in dental education.

Potential sources for these funds, which need more exploration, are gifts from individuals and foundations and from industry. Recently, American industry has taken an active part in supporting the medical research effort of the Nation. It is an extremely significant and praiseworthy development. Members of the dental profession themselves, in the interests of good citizenship and the advancement of their high calling, can do much to enlarge the support of dental schools from all these sources.

The problem of dental education is basically, however, the problem of the university schools of dentistry. Here, the dentists of the future receive their basic training and education. Adequate facilities, resources and teaching per-

sonnel are necessary for both research and education in the field of dentistry. Continuing efforts must be made to provide adequate support to dental schools and institutes of research, because it is from these institutions that scientific advances in dental health will be made. The quality of dental care in the future, as in the past, will stem from these advances in both research and education and from their translation into preventive dentistry and dental practice.

Within the State and regional communities can be found the energy, the resources, and the know-how to solve these problems. It is not the job of local government alone; or of the local society alone; or of the practicing dentist alone; or of local philanthropy and civic enterprise. All of these groups and agencies, working together must—and can—find the answers.

The role of the Federal Government in the field of professional education is primarily one of fact-finding and analysis, stimulation and guidance. Federal subsidy or compulsory national health insurance is not the solution.

Expanding Dental Research

The problem of expanding dental research is related to, and, in part, a consequence of the financial crisis in dental education. The American Dental Association recognized early the potentialities of research in terms of dental health benefits to the Nation. With funds derived from its membership, it supported the establishment of fellowships at the National Bureau of Standards, the Armed Forces Medical Museum, and the National Institute of Dental Research.

These modest investments have paid rich dividends. For example, the research undertaken cooperatively by the American Dental Association and the National Bureau of Standards has developed processes and materials which have been widely adopted by industry. The research output of this program is followed eagerly by scientists of other nations, and it has had worldwide application.

Since the passage of Public Law 755, the Federal Government has been able to help in this field. Dental research in the Department of Health, Education, and Welfare now ranges from basic physiological work to analyses of dental practices and of administrative patterns of organizing dental care.

Research studies include work on oral bacteriology and diseases of the soft tissue. Through the use of the electron microscope, the National Institute of Dental Research has advanced our understanding of the nature of dental decay and of the cell structure of dental tissue.

Another Departmental study is the Public Health Service's investigation of the use of chair-side dental assistants to increase the productivity of the individual dentist as well as the total output of dental services. Many dentists are already availing themselves of the services of trained assistants with decided effect.

The Public Health Service's 14-story Clinical Center at Bethesda, Maryland—which combines facilities for basic laboratory research and large-scale clinical observations—has set the stage for a fully integrated study of the major health problems of man. The Center contains facilities for research in the clinical aspects of dentistry and will enable our dental scientists to conduct studies on patients, with the help of basic research developed in earlier years. Projects are already under way in the study of oral tumors. Others are contemplated in the prevention, diagnosis, and treatment of dental diseases. Our aim in this research—as, indeed, in most of the Department's research—is to find and make available to the private practitioner the tools and techniques which will enable him to do a better job.

Probably the best known research is that which established a relationship between the amount of fluoride in water supplies and the extent of dental decay, and the subsequent and continuing work on the prevention and control of dental decay through fluorides.

But Public Health Service research has gone beyond the dental effects of fluorides. Data have been accumulated on the general effects of fluorides on the functioning of the body, and we are acquiring considerable engineering and chemical information on the water fluoridation process. In fact, one recent finding has been the demonstration in the laboratory that even under extraordinary conditions of mineral or

dietary stress, fluorides in the recommended concentrations do not become toxic.

The Public Health Service is continuing its own research and is watching closely the work of others in this field. We intend to leave no stone unturned in our constant vigilance to protect the public health and safety of the people of this country. I am delighted to see, in view of our findings and those of other research workers, that the American Dental Association has taken the lead in this field of public health. Research offers seemingly limitless possibilities in the control and prevention of dental diseases. The Federal Government has played, and will undoubtedly continue to play, a significant role in dental research.

The challenge to the profession is clear. Knowing the seriousness of dental disease and its costly impairments to health, the profession must seek to stimulate new interest on the part of individuals, foundations, and industry in the problems of dental health. There are many avenues for research which hold great promise that can and should be explored.

The Application of Scientific Knowledge

The application of valid research findings must be hastened, and the best possible dental care must be available to all people.

Our earliest knowledge of dental needs stems from a survey of 1½ million children which the Public Health Service carried out in collaboration with the American Dental Association in 1933–34. I cite this not only as the earliest instance of cooperation between our organizations, but also as a particularly good example of the kind of teamwork in which we believe. The Public Health Service worked closely with some 8,000 local dentists, with State and city departments of health and education, and with State and local dental societies.

As to the Nation's unmet dental needs, the best available evidence suggests that despite the universal occurrence of dental disorders, less than one-third of the population receives anything approaching adequate dental care each year. Although more than $1 billion was spent for this care by Americans in 1952, it remains true that many millions of our citizens are either receiving no care or, at best, very limited services.

The opportunity to secure dental care is a fundamental need of every individual. The ideal of dental care for all, however, cannot be realized immediately. Good sense suggests that we place greater reliance upon local initiative and interest. Aggressive support and participation by the community are essential ingredients.

Various experiments have been undertaken which demonstrate the almost limitless potentialities of this idea. Consider, for example, how one small community in Minnesota, with no resident dentists, made dental care available to all children, regardless of income or geographic location. A revolving fund from contributions by families of the community was set up. Interest-free loans to needy families were made for the purpose of financing children's dental care. The families have free choice of any 1 of 6 private practitioners in the county, who provide the care in the school dental office of the community. This is a dramatic example of how a local community voluntarily mobilized its resources to meet a local need.

One largely rural State, North Carolina, recognizing the need for additional dental manpower, appointed a dental college committee as long ago as 1921 to press for the establishment of a dental school within the State. The concrete results of that effort will appear in 1954, when the school graduates its first class. The yearly addition of 40 to 50 dentists will appreciably increase the supply and tend to equalize the distribution within the State. In addition, this State has displayed energy in organizing treatment of underprivileged children by private practitioners and has given thought to scholarship assistance to residents to attend dental school.

These are but two examples among thousands of what can be done through local leadership to provide adequate support for dental care in accordance with the need at the community level. It is a great challenge—a unique opportunity for initiative and imagination in the service of one's fellow men.