LETTERS

Health Care Crisis

The fashion this season is to talk about the health care crisis (*1*); four years ago, style dictated discussion of the health manpower crisis (*2*). The attempt to solve both of these crises has led to the definition of job roles for new types of health professionals and the development of programs to train them (*3*) as well as the creation of new medical schools and the expansion of enrollments at existing schools [Table 6 in (*4*)]. Recently the development of a new program to train Ph.D.'s in the life sciences as physicians was reported in *Science* (*5*).

This response seems quite similar to the outpouring of interest, energy, and funds with which this nation met the technology gap and the scientific-engineering manpower crisis of the Sputnik era (*6*). Once again, hearings are held in the nation's capital, programs are proposed, legislation is enacted, projects are funded. A backward glance at the fruits of the response to the earlier crises may prove instructive.

Because science was stressed in the elementary school, improved via new curricula (BSCS biology, PSSC physics, Chem-Study chemistry) in the high school, encouraged by summer stipends at the college level, and supported extensively by grants and fellowships at the graduate and post-doctoral levels, many students who might have entered other fields chose to become scientists (*7*). Colleges and universities, supported by grants from the federal government via the National Science Foundation and the Department of Defense, expanded their science staffs and enrollments, developed teaching and research programs in such fields as high-energy particle physics and molecular genetics, and moved laboratories from the basements of old buildings to the top floors of new science centers. Of course, building faculties and facilities took time.

Now there is an overabundance of Ph.D.'s in all fields, especially the sciences (*8*). While the job outlook for scientists and engineers is the worst in twenty years (*9*), the production of new Ph.D's in these very fields is just reaching its peak. It appears that there has been a tremendous waste of both money and manpower because of an overresponse to what was perceived as a crisis.

Let us turn to the health field. It currently takes 10 years for a first-year medical student to enter the health manpower pool; it takes 5 to 10 years to plan and staff a new medical school before it can accept its first class. The training of other kinds of health professionals is less extensive but may still require 3 to 4 years beyond high school or college. It may be true that more doctors are needed; it is apparent that doctors are useful to people in a very real and personal sense, unlike other highly trained professionals; it is clear that we could always export doctors to countries with health personnel shortages. The time, effort, and expense involved in training doctors and other health professionals, however, compel me, like Cassandra on the threshold, to sound a warning against proceeding too far too fast. The rapid increase in enrollments in the health professions has been documented (*10*); it would be almost criminal to again encourage our youth to enter a lengthy program of specialized training if, when they completed the course, they were to find that the prize they had sought had vanished.

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As a member of the AAAS and a physician in active practice in a relatively rural environment, I feel that it

is time to look at the other side of the "health crisis" coin.

Those of us who are serving the public in actual practice are virtually unanimous in criticizing existing government health care programs for their failure to improve our ability to provide better medical care to the recipients.

These government programs are characterized by bureaucratic inefficiency from top to bottom. Although the amount of paper work involved has not increased, there has not been much improvement. The abundance of paper work contributes appreciably to the cost per patient of health care and is disillusioning to even the most altruistically motivated idealists, who would rather spend their efforts ministering to the needs of the sick than rendering reports to Caesar.

At the same time, inadequate funding combined with inflation are reducing the material rewards by which the providers of health care are persuaded to render services to recipients of government aid. Often this results in retroactive refusal by government agencies to pay for services that were apparently authorized.

In addition, more and more people are coming to believe that "medical care is a right." This portion of our population makes increasingly irresponsible demands on our overtaxed system in the form of minor complaints that formerly would not have resulted in a visit to the hospital or to the doctor's office.

Whereas all of us in practice are well aware of deficiencies in the health care that is available to a small segment of our population, certain political leaders have made extravagant claims and promises, which can only be interpreted as having been made for political gain. The inflated expectations brought about by these politicians, together with the defective administration of existing programs and inadequate funding, may actually be reducing the quality of medical care available to some people in the United States.

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Seeking Employment

In view of the current crisis in employment opportunities for Ph.D. scientists it is interesting to note both the number and profile of those interested