Medical Education: Carnegie Panel Urges Expansion, Acceleration

The Carnegie Commission on Higher Education's latest report* is subtitled "Policies for Medical and Dental Education," but it propounds a set of interrelated ideas for the recasting not only of health manpower training but of the whole system of health care delivery in the United States. The commission, for example, recommends a 50 percent increase in the number of students entering medical school and a substantial shortening of the period of medical training, but it places equal emphasis on the development of a network of "health education centers" allied to medical schools as a means of improving health care throughout the country.

The report received considerable attention in the press when it was released and in some places was heralded as another Flexner report—the allusion being to the landmark report on medical education in the United States and Canada by Abraham Flexner in 1910, which led in a remarkably few years to the disappearance of proprietary medical schools and the ascendancy of modern, science-based medical education.

The Carnegie Commission invites the comparison in its report by citing Flexner, but does it not by presuming to don his mantle but by asserting that today "medical and dental education are undergoing more constructive self-examination than they have since the Flexner report in 1910—and more self-examination is going on than in any other field of higher education. The second great transformation of medical education and research is now under way, and the United States, once again, will greatly benefit."

It should be noted that the reference to Flexner is double-edged since it is the sweeping success of the Flexner reforms that created some of the problems now afflicting the health care system.

What Flexner called "reconstruction" meant a sharp reduction in the number of medical schools by means of the accreditation process and actions of the state medical boards and, in the surviving schools, an upgrading of faculty and an overhaul of curriculum with emphasis on laboratory sciences and clinical instruction.

As a direct result of the Flexner reforms, specialization and research increasingly dominated academic medicine. Advances in medical science and technology have made the academic medical center increasingly important, and a growing proportion of physicians make careers in teaching, research, and administration in medical centers that exercise limited influence on the general quality of health care in their areas.

As the report puts it, "The Flexner, or *research* model . . . , looked inward to science in the medical school itself. It is a self-contained approach. Consequently, it has two weaknesses in modern times: (1) it largely ignores health care delivery outside the medical school and its own hospital, and (2) it sets science in the medical school apart from science on the general campus. . . . The self-contained Flexner model thus leads to expensive duplication and can lead to some loss of quality."

In writing its prescription the Carnegie Commission demonstrates the special concern for equal educational opportunity which has been a common factor in its recommendations for change in other sectors of higher education. In setting its goals—which fall into two rough categories, manpower and organization of health delivery services—the commission assumes that expansion of national health insurance in the near future will exert heavy pressure on existing resources and make decisive action in the current decade imperative.

The commission urges that the number of medical school entrants be increased from the estimated 10,800 in the current year to about 16,400 by 1978. To accomplish this the commission recommends that existing medical schools reduce the period of training for the M.D. degree from 4 to 3 years and that nine new medical schools be established. The commission feels that a minimum class size of 100 medical students is desirable. The report recommends that many of the new places created in this decade should be filled with women and minority students.

To further reduce the time that elapses between the student's embarking on his medical training and his entering practice, the commission also suggests that residency training be cut from 4 to 3 years.

Efforts at shortening the length of medical training are afoot in many places. There seems to be fairly general agreement that the better science instruction in high school and college today makes feasible a telescoping of premedical or predental and professional school science education. The 3-year medical school, while still regarded as something of an experiment, is already in operation at Dartmouth and a few other places and seems likely to become a fairly widely available option. A suggestion in the Carnegie Commission report which may appeal to medical schools disposed to foster greater flexibility in health care education is for creation of a "midpoint degree," after which the student could opt to be a candidate for the M.D. or Ph.D. or to take employment as a teacher or as a medical assistant or associate.

There are, of course, arguments against acceleration. The most familiar is the one that medical men need more exposure to the liberal arts and social sciences, not less. The medical school curriculum itself is a perpetually disputed compromise which is difficult to alter and agonizing to reduce.

In postgraduate medical education there would appear to be slightly greater leeway, since the virtual universality of specialty training today has deprived the internship of its traditional function. The American Medical Association (AMA) has, in fact, approved elimination of the internship; no internships will be approved after 1975 unless integrated with residency training. At the same time, however, the inexorable growth of medical knowledge and the sophistication of techniques have created pressures to extend residency training in most specialties.

So severe does the Carnegie Commission believe the shortage of medical manpower to be that, even if its recommendations for a 50 percent increase in medical school entrant places and a 20 percent increase in dental school entrant places were implemented, the commission thinks a rel-

* *Higher Education and the Nation's Health* (McGraw-Hill, New York, 1970; $2.95).

atively greater increase in the training of paramedical personnel is necessary. The present ratio of physicians to allied health personnel is estimated at 1 to 10 and the commission says this ratio should be substantially increased.

To achieve the expansion of health care education that it recommends, the Carnegie Commission acknowledges that greatly increased financial support is necessary and that the federal government will be required to play the principal role. The report sets forth several recommendations for aid to both institutions and individuals.

The commission calls for a program of federal medical and dental education grants to students from low-income families. The grants would range up to a maximum of $4000 a year according to a formula that would scale the grants according to the student's family resources. For students from families with higher incomes, the commission urges that loans be made available to all who need them. An "Educational Opportunity Bank" is proposed to service these loans. A key feature of the arrangement would be that borrowers would pledge to repay a percentage of his gross annual income for a fixed period of years after graduation. The amount repaid would thus vary with income and the repayment scheme would provide some incentive for those in modestly paying public service work.

Forestalling Tuition Boosts

The commission recognizes that a grant and loan system could easily encourage boosts in tuition charges and discusses such countermeasures as federal support through federal cost-of-instruction supplements to medical schools and the creation of a system of uniform tuition charges.

While giving it relatively brief mention in the report, the commission does acknowledge the value of a vigorous biomedical research program and, in fact, predicates its general discussion of medical education on the assumption that a strong research program will continue. The commission favors giving research a sort of guaranteed annual wage by seeking an understanding that biomedical research would continue to receive its current percentage of the gross national product (0.042 percent).

The price tag the commission puts on its recommendations would add $272 million to the estimated $275 million in federal funds being spent on scholarships and loans and institutional support for medical and dental schools in the current year. By the end of the decade the total annual cost would be about $727 million, assuming conversion of all medical schools to 3-year programs, or $900 million otherwise.

A key concept in the commission's design for reformed health care delivery is that medical schools, which the report calls "university health science centers," not only take responsibility for the training of physicians, dentists, nurses, and other health care personnel, but also cooperate with other community agencies in improving health care in the area. Complementary to the health science centers and linked to them would be a network of "health education centers" strategically located to serve sparsely populated rural areas and urban areas where health care is inadequate. These centers would provide patient care on a referral basis. Residents and M.D. candidates would be assigned to the center and a variety of educational programs would extend the resources of the university science center to communities which need them. The commission asks creation of 126 of these health education centers, for which there are already, apparently, a number of prototypes.

The Carnegie Commission, headed by its chairman, Clark Kerr, is now about halfway through its planned 4-year comprehensive study of higher education. The new report, although it is timely and deals with a highly important subject, represents something of a side trip for the members of the commission, who, despite their considerable talents and distinctions, are not experts on medical education and health care. The report, in fact, pointedly acknowledges the debt of the commission to its advisory committee on medical education and, especially, to Mark S. Blumberg, former director of health planning at the University of California, and Robert Tschirgi, professor of neuroscience at the medical school of the University of California, San Diego. On the committee were such movers and shakers in medical-policy affairs as Robert Glaser, dean of the Stanford Medical School, Philip R. Lee, former assistant secretary of Health, Education, and Welfare, now chancellor of the University of California medical center in San Francisco, and James A. Shannon, former National Institutes of Health director, now at Rockefeller University.

The main ideas in the report represent, as a matter of fact, a kind of consensus developed and refined over the past decade in long-running discussions among medical school administrators and faculty, medical economists and sociologists, government administrators, and foundation officials. The commission's recommendations would probably find favor with a majority inside the establishment in academic medicine and would be at least acceptable to many younger physicians who strongly favor experimentation with new forms of health care delivery and deeper involvement in community medicine. One drawback is that there are two establishments in American medicine—represented, respectively, by academic medicine and the AMA—and there is evidence that large numbers of physicians in private practice are indifferent or hostile to the sort of changes espoused in the commission's report.

A Comprehensive Plan

The report, however, could become a major point of reference because the commission, its advisers, and staff have managed to see the problem whole and to put into the public domain a clearly stated analysis of the problems and what approaches a comprehensive, if expensive, plan for meeting them. Their timing is excellent.

The analogy with the Flexner report breaks down, however, if only because Flexner had the cards stacked in his favor. The proprietary schools were in disrepute, and Flexner's detailed indictment of them settled their fate. The model for reform in medical education existed at Harvard and Johns Hopkins and for biomedical research at the Rockefeller Institute. Flexner had the support of the more solid sectors of the medical profession who were weary of the sectarian squabbles of the day and of the unseemly scramble for patients with their less-qualified colleagues. The Flexner reforms also had the millions of the big philanthropists behind them, particularly of Rockefeller and Carnegie. The only flaw in the Flexner logic, it seems, was the assumption that, if only medical education were reformed, medical care would take care of itself.

It hasn't worked out that way. The cost of reform will be billions, not millions, and the inertia in the system is infinitely greater. Flexner ignited a marvel of voluntary reform. Today it would take that plus epic action by Congress to change the medical map.

—JOHN WALSH