The Medicaide program has been nearly bankrupt for several years.

Under the Administration's new health insurance program, increasing costs would not drain the federal till as they would under the Kennedy scheme. Rather, they would add to the rates paid by individuals and their employers for the required private insurance. But whether the bills are picked up by individuals, private insurance companies, or the federal government, inflationary costs remain a detriment to adequate medical services. Thus, both the Kennedy and the Nixon bills call for some forms of cost control.

The Nixon program would transfer the regulation of health insurance companies from the states to the federal government and would institute some as yet unspecified controls over doctors' and hospital fees. HEW spokesmen, however, have indicated that such controls are unlikely to exceed those used in the continually inflating Medicare program. The Nixon plan might thus lead to constantly rising insurance costs.

Cost controls under the Kennedy plan would be more stringent. The government would pay hospitals only on the basis of predetermined annual budgets. All doctors electing the fee-for-service method of payment would be limited in their total income to the amount that the same number of doctors would be paid if they had elected to be paid on a prepayment basis.

Aid to Medical Education and Redistribution of Medical Services. Both the Administration proposal and the Kennedy bill would encourage medical practice in rural and slum areas and increase the number of physicians and paramedical personnel being trained. The Kennedy bill, however, offers few specific proposals. Rather, it would establish a Resources Development Fund of up to 5 percent of the total health insurance program ($2 to $4 billion) to improve the overall quality of medical service. This money would be used to aid medical education, fund various experiments in health care delivery, and develop medical services in areas where they are scarce.

To meet the medical needs of rural and slum areas, Nixon offered three proposals in his health message, including a $22 million program of direct federal subsidies to prepaid group practices in these areas. In areas still short of services, the government would operate outpatient clinics similar to those now financed by the Neighborhood Health Centers program. To further add health manpower to scarcity areas, Nixon asked for $10 million to finance the Emergency Health Personnel Act of 1970. That act, passed with little public notice at the end of the last Congress, allows the Secretary of HEW to recruit doctors into the Public Health Service in order to serve in areas of the country with physician shortage. And since time spent in the Public Health Service substitutes for military duty, there should be no shortage of volunteers.

In order to bolster the quality of services in scarcity areas, Nixon asked the Congress for $40 million next year for the construction of Health Education Centers. Conceived by the Carnegie Commission on Higher Education, such centers would be satellites of local medical schools, built around an existing community hospital or clinic.

Also in the health message, the President requested that government support for the training of allied health personnel be increased from its current level of $20 million to $29 million next year, with $15 million earmarked for the training of physicians' assistants.

To encourage the output of M.D.'s, the President indicated that the government would shift most of its support of medical schools to a form of payment in which the school receives money on the basis of the number of students it graduates (capitation grants). He also asked Congress for an additional $60 million to increase capitation grants to medical schools from the current level of $2400 per head to $6000 per head.

—ROBERT J. BAZELL

Stanford School of Medicine (III): Varieties of Medical Experience

In the late 1950's Stanford medical school broke with convention by lengthening the regular 4-year course for the M.D. degree to 5 years. A decade later Stanford switched to an elective system which offers the medical student an option of acquiring his M.D. in about 3 years.

This reversal was seen by many as representing a swing away from a research bias in the Stanford curriculum and toward a greater stress on clinical training and community service. The shift occurred during a period when social and political awareness was growing at Stanford and at other medical schools, but the causes of the shift were too complex to be attributed simply to a surge in medical populism.

Improved teaching in the sciences in high school and college produced a better prepared and more scientifically sophisticated incoming medical student. And the fact that almost all new M.D.'s go on to specialty training these days means that medical schools no longer need concentrate on producing physicians ready to enter practice after a year's internship.

Medical schools have also been faced with the task of preparing their graduates for a proliferating variety of careers in academic medicine, medical administration, and group and private practice. Stanford's 5-year plan, in fact, was devised in part to break the lockstep system of medical education and to allow a variety of study plans.

The key to flexibility under the 5-year program was to have been a block of open time in both the basic science and clinical training programs. The idea was that the student would spend about half the assigned time at any stage learning what the department or teaching group felt was important and the other half pursuing his special medical interests.

The Stanford plan developed an essential pattern of 3 years of basic sciences and 2 years of clinical training. Students complained that there was no early, meaningful exposure to patients, and there were a lot of wry, local jokes about Stanford offering the "DNA degree."

What was ambiguous from the start was whether open time was to be devoted to elective courses or was to be

really free time. With Stanford's strength in basic research, there was a perhaps inevitable emphasis on research experience for the medical student. As one former medical school administrator put it, "The kids saw the free time as an opportunity to get out into the community; the faculty saw it as an opportunity to get the kids into the lab."

For all these reasons and because of the accelerating increase in medical knowledge, it was becoming more difficult for the faculty to agree on core material for the curriculum. Bernard W. Nelson, associate dean for student affairs, who watched the process from this special perspective, thinks the fact that the faculty could not agree on a body of knowledge essential to the training of a physician hastened an overhaul of curriculum. But the major factor in bringing about modification, he suggests, was the better preparation of students—with a resulting dissatisfaction with the heavy emphasis on basic sciences. The students who benefitted especially from the 5-year plan proved to be a relatively small, research-oriented group but by the mid-1960's student complaints were growing about the unevenness of teaching and the limitations of the free-time options.

Revision Necessary

By 1966 it became clear that a major effort at revision of the curriculum was necessary. The existing curriculum committee was disbanded and a new, blue-ribbon committee formed. Robert A. Chase, chairman of the department of surgery, who served on this new committee on medical education, recalls that at first the group made another attempt at developing the ideal core curriculum, but soon gave that up. A consensus developed in the committee that a totally elective system would provide the best chance of achieving the original aims of the Stanford plan. The major aims had been to make medical education more like graduate education by creating a preceptor-student relationship between the faculty member and medical student and to open alternative "pathways" through medical school to fit graduates for the differing roles played by physicians today.

To qualify for a degree under the elective system the student had to satisfy the requirements of 4000 hours of instruction laid down by California law, pass all the sections of the National Board examinations, and satisfy school requirements on clinical competence. There was no legislation of which courses the student had to take, and a flexible pass-fail grading system was prescribed.

The changeover to the elective system was made in 1968 with less opposition than might have been anticipated. Some observers say that a general acceptance by faculty of the difficulty of establishing a viable core curriculum did much to move the faculty to acquiesce.

The flexibility provided by the 5-year plan is preserved under the elective system. Students may complete the M.D. course in about 3½ years, but they may also take 4, 5, or 6 years.

In the theoretical model of the new plan it was essential that faculty advisers maintain close contact with students, helping them to plan their studies with close reference to the student's background and career goals. In practice, the advisory system appears not to have developed as planned, and many students, in fact, seem to obtain the advice they need from their peers.

The elective system has not, as a matter of fact, ushered in an era of wild improvisation in curriculum at Stanford. Anything but, it seems. Nelson and others observe that the students have proved quite conservative in curriculum matters. If anything, the trend is toward a heavier concentration on traditional medical school studies.

For the faculty, the elective system creates a new market situation and, because there are no captive audiences, a potential ego problem. The results seem to be mixed. On the one hand, faculty members are offering courses in what most interests them and what they feel is most important, and there is some indication that the quality of teaching has improved. On the other hand, as one faculty member said of his colleagues, "People are allowed to do what they damn well please without regard to what it does to total education." Some students complain that faculty members don't take the trouble to integrate material and give it continuity.

The elective system was adopted at a time when the demand for social relevance in medical education was growing. At a research-oriented medical school like Stanford the idea went somewhat against the grain, but during the later years of the decade a number of things were done to advance the claims of "social medicine." Probably the most significant event was the arrival in 1969 of Count Gibson who, while at Tufts, had been involved in setting up trailblazing community health centers in Boston and Mound Bayou, Mississippi. Gibson came to Stanford to establish a division of community medicine in the department of preventive medicine. Stanford soon had links with three Office of Economic Opportunity–sponsored health centers. These were in Palo Alto, whose inhabitants are predominantly low income black people; in Alviso at the foot of San Francisco Bay, with a largely Mexican-American population; and in King City in a rural area.

Another "Outreach" Program

Another form of "outreach" program was established at Livingston, about a 2-hour drive from Stanford in agricultural Merced County. An unusual plan for a group practice based on a partnership between the medical school and people living in the area evolved when the town's only physician, an overworked Stanford alumnus, gave up his practice and turned over his office facilities to the medical school for use as a clinic. Livingston is not a poor community, and what has developed is a unique group practice staffed by medical school faculty members, residents, and medical students serving an economically heterogeneous population defined by high school district lines.

The community medicine program at Stanford is in its early stages and has not yet, for example, developed residencies, master's, or doctoral programs. The future of the program would seem to depend on how seriously the medical school pursues experimentation with the forms of delivery of medical care.

Participation in community health projects is, of course, not the only way in which students and faculty members have expressed the impulse toward greater political and social engagement. But until the Cambodia incursion last spring, few Stanford medical school students or faculty members had been actively involved in protest actions which had erupted on the Stanford campus fairly frequently. The events of last spring, however, led to the organization of a Stanford Medical Community for Peace involving students, faculty, and staff in a variety of nonviolent political activities, on and off campus, against the war.

Jeff Brown, president of the medical

school student body at the time, observed that one effect of the Cambodia crisis was to raise in a nontheoretical way the "question of the responsibility of the medical student and physician to the profession and society." Many students and faculty members were willing to suspend professional training during the Cambodia reaction, but there was a free choice of whether to carry on with classes or to engage in political activity. Brown noted that there was some friction between groups. "Those who were heavily involved in political activity sacrificed education and resented those who did not." Brown says the experience forced consideration of the "fundamental question of the relation of medicine to the rest of society. Is it the responsibility of the physician to get involved in politics, education, mental health programs, social criticism?" After Cambodia the price of involvement was better understood, and some faculty members think the passion for activism was tempered.

This year's student body president, John Battista, says that organized political activity at the medical center has gone downhill since the peak period during Cambodia, but he feels that the upheaval of the spring did "teach the necessity for the medical school to have a superordinate goal."

The role of medical students in establishing goals and setting policy for the medical school has increased substantially in recent years. Students serve on many committees but complain that they still have relatively little impact on such basic issues as budget and admissions. The size of the entering class was increased from about 65 to 75, and 10 places were allotted for admission of minority students on special terms. A separate admissions subcommittee was established to deal with these applicants, and a dispute has simmered over whether the special committee should have acceptance powers or should revert to an advisory capacity, as the faculty last year voted.

If the power of students, including graduate students, interns, and residents, is still limited, their influence is considerable. This influence is exercised less through the formal apparatus of student government than by the weight of their background, attitudes, and choices. The intellectual quality of Stanford applicants is very high—about 3000 applicants for 77 places in the entering medical school class last year. Medical students, graduate students, and interns and residents tend to come from the country's elite institutions where the index of social and political consciousness is highest, and Stanford, like other elite medical schools, tries to live up to its students' expectations.

It would be an error to regard Stanford medical students as a homogeneous lot. Battista, for example, thinks his classmates fall into three fairly distinct categories. First, there are the "competitive" types aiming at a rather standard medical school experience followed by the best possible specialty training and, probably, careers on rather traditional lines. Next are a smaller group, whom Battista calls "individualistic," who are attracted by Stanford's reputation in biomedical research and are headed for careers in research or, at any rate, in academic medicine. Finally, there is a new breed of medical student interested in community medicine and committed to entering practice as a member of a group. It was characteristic of students of this persuasion that a number of them wanted to start a national campaign to refuse to serve in a fee-for-service system.

Interest in Social Issues

Stanford's 5-year plan, especially in the early 1960's, seems to have attracted a group of students who, typically, were very bright but lacked the conventional premedical training and med' student orientation. Many of them had particular interest in the social and behavioral sciences and social issues, and the longer training period made it possible for them to follow these interests while at the same time training as physicians.

The elective system seems to have had most effect on this group. One administrator observed, "We're getting fewer social relations types from Harvard and more scientifically oriented types." Administrators deny an assertion by some students that the admissions office is showing a new partiality to the conventionally prepared and motivated applicant. An increase in the numbers of applicants with backgrounds in the physical sciences and engineering, a fair number with Ph.D.'s, is noted, but the reasons for this have not been adequately analyzed.

In this area, as in others at Stanford, the trends are hardly clear. Stanford set out more than a decade ago with the primary objective of achieving excellence in training medical scientists and specialists. As preceding articles have suggested, the school's development has shown a decided unevenness, but by ordinary criteria, and particularly in postgraduate areas, its performance has been impressive. At the same time, Stanford's program for training M.D.'s has had shortcomings. The medical curriculum has been under almost constant revision, and David Korn, chairman of the pathology department, expresses a fairly general view when he says, "We're in an evolutionary phase. Maybe we overshot. I don't feel that we're necessarily on the optimal path in curriculum." The elective system, however, seems to be regarded by a majority as the best hope for maintaining genuine flexibility in the curriculum.

A matter of real concern at the moment at Stanford among many faculty members, especially basic science researchers like Arthur Kornberg, is that the demand for social relevance will cause a shift in resources and emphasis away from research.

Retrenchment in research funding has had an undeniable impact on Stanford, but there seems little danger of NIH's going out of business or of Stanford losing its competitive edge in garnering research grants.

The real problem at Stanford is not to avoid the extremes of becoming a research institute, on the one hand, or a staffing agency for storefront clinics, on the other. It is to find better ways to provide students with varieties of medical experience, which will prepare them to meet the multiple responsibilities imposed on physicians today, and to enable them to improve the ailing American medical care system.

To do this at Stanford means altering the way decisions are made. The effect of federal support so far has been to create departmental fiefdoms, to relegate the dean to the role of mediator and power broker, and to put the premium and priority almost uncritically on growth.

What has happened at Stanford and at other medical schools is put in longer perspective by Joshua Lederberg, who thinks, "It is no longer possible to follow a policy of maximum growth." He traces a basic flaw in the relation between the federal government and the medical schools to the fact that "we never had a mandate to pursue a balanced program of medical training, research, and service." In the long run, only federal funds and a change in federal policy can foster such a balance.—JOHN WALSH