Preparing to Serve — NHSC Scholarships and Medical Education

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TITLE IV, "Student Assistance, National Health Service Corps," seemed no more than sensible and logical when the Health Professions Educational Assistance Act of 1976 (Public Law 94–484) was being shaped and debated. The bill as a whole, of course, was embroiled for 2½ years in tumultuous debate and negotiation between Congress and the medical education establishment over Title V, "Grants for Health Professions Schools"—capitation grants—and the quid pro quos that would be required (*1*). But title IV proceeded relatively serenely and was accepted as a matter of course.

And why not? The National Health Service Corps (NHSC), initiated by the Emergency Health Personnel Act of 1970, had become popular in the Congress as a reasonable solution to a long-standing problem: the geographic maldistribution of physicians. Likewise, the Public Health and National Health Service Corps Scholarship Training Program, enacted in 1972, was popular as a device to help needy students finance their way through medical school, as well as a means to fill the ranks of the Corps. So, (*a*) major increases in the size of the Corps and in the scholarship program seemed only natural to the authors of the 1976 act. Furthermore, it seemed reasonable (*b*) to plug the loophole that let those scholarship holders who could afford to, to pay back the money as if it were a loan and avoid serving in the Corps at all. Thus, a penalty of triple the amount provided by the Government would now have to be paid to escape the service commitment of 1 year for each year of scholarship support. The remaining provisions seemed likewise simple and logical —for instance, (*c*) an automatic deferral of service to allow 3 years of specialty training followed the tradition of the Berry Plan (the deferred residency program for the Armed Forces), and (*d*) giving scholarships preferentially to beginning medical students rather than to those further along with their studies would help ensure that no one would be turned away from medical school because of financial hardship. In all, title IV seemed a judicious strengthening of a successful program, an incremental advance requiring little debate.

But was it really so simple, so incremental? Or will the history of the Health Professions Educational Assistance Act of 1976 be yet another case of legislative irony, where bitter debate on complex proposals centered on issues that later seemed less consequential than those that were ignored?

The answer to this question may well be yes. It is now becoming clear that title IV in fact created a radically new type of program in the American experience, the full consequences of which are just now becoming apparent. As a result, the NHSC and the NHSC Scholarship Program will soon be facing unforeseen problems, and the stakes have been dramatically raised, for this

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formerly peripheral program has now become the centerpiece of a national strategy to serve the underserved. A failure now would constitute a substantial blow to efforts to distribute health care more equitably. On the positive side, the Corps and the Scholarship Program together in their expanded forms offer an unusual opportunity for substantial benefit, not only to the communities served, but for our systems of medical care delivery and medical education as well.

The burden of this essay is to show how the new scholarship program is indeed unique, to discuss what is required for it to succeed, and to explore the implications of its success or failure.

How the Program Is Unique

The NHSC Scholarship Program is much larger than other similar programs. Currently, 5,700 medical and osteopathic students hold scholarships. By mid-1980, more than 8,300 students and deferred residents will be anticipating their future obligations to the medically underserved. While these numbers are still small compared with the total number of medical students enrolled nationally, in 17 schools more than 10 percent of the students hold scholarships and in 5 schools more than 20 percent do. Further, planners in the Department of Health, Education, and Welfare expect the program to expand substantially in future years.

The amounts of money involved are likewise unprecedented. With tuitions rising so quickly, awards to some persons will amount to more than $60,000. This academic year (1979–80) the average award to students of medicine is nearly $12,000.

The certainty of the obligation is also unprecedented. With such large sums being received under terms that effectively prohibit cash repayment, a significant number of entering students will be certain, as never before, how they will spend their first (typically) 4 years in practice. They will know—not from their later years of training, when the socialization process is well advanced, when specialty choice has been tentatively made, when the future career is beginning to come into focus—but from before the first day of medical school and throughout their medical education, under what auspices and toward what mission they will be practicing medicine once training is completed.

Finally, the service itself differs from that of most other Federal physicians, who serve military personnel, Native Americans, and other Federal beneficiaries, or do research or epidemiologic investigations within a highly centralized administrative structure. By contrast, most NHSC physicians serve civilians, ordinary Americans who happen to live in an area designated as underserved. Further, their practice settings, which tend to be small in scale, are similar to (and quite often part of) the private sector. While the NHSC physicians' salaries and general directions come from the Federal Government, they have considerable autonomy in arranging their practices and lives, and exercising their responsibilities. All this is new, and significantly so.

Consider, then, the implications of these differences for the psychology of the scholarship recipients and the sociology of the institutions they attend. A new element is being introduced into the traditional professional socialization process. Whereas for most students and residents there is a progression of role models from the familiar family doctor to academic superstars and thence to private practice in a specialty, the scholarship recipients can be certain that their first practice situation will differ from all of these. The process of medical socialization will change not only from experience in the Corps, but from anticipation of this service. As a result, the anxieties of students may have a different source, and their perceptions of the skills they will need may be different. Particularly in the schools where the numbers of scholarship recipients will be substantial, the demands of the students (both stated and unstated) will be altered.

Their feelings toward money will be different, since a combination of family finances, part-time work, and small loans and scholarships from the academic institutions will no longer suffice, and they will see their debts, albeit on paper only, mount quickly and precipitously. Their feelings toward and perceptions of Government will be different, since they will be involved fairly closely with it from the first, as it bestows benefits and exacts commitments, and treats them either sensitively or impersonally. And their allegiances might well be different, since they will deal intimately with not one but two large institutions that they can love and hate, their medical school and the Government.

It seems quite possible, then, that the psychology of many medical students and the sociology of some institutions will undergo change and strain. But what will be the tone of these changes? It will make a great deal of difference for the medical schools, the Corps and, ultimately, for the people served, whether the prospective term of service and the educational experience that precedes it are viewed by the students as an intolerable burden, a tolerable burden, or an opportunity for personal and professional growth. Thus, some changes in the educational process will be necessary to assure a successful outcome, and the scale of the Scholarship Program and the stategic importance of the NHSC compel the attention of the educational institutions and of the Federal Government to support them as they respond.

Mission of the NHSC Physicians

Responding to the challenge of the NHSC Scholarship Program requires recognition of its mission and that of the National Health Service Corps itself. If the mission is well-construed and recognized by all parties concerned, it should be possible both to structure the practice settings so that they address the challenges well and to provide the NHSC physicians with the skills needed in those settings.

By definition, all the Corps assignments are to the medically underserved. Yet it is important to realize that communities with severe shortages of physicians also tend to suffer from a more general lack of health services. Common deficiencies include few preventive services, low levels of health education generally, inadequate home health care, no Planned Parenthood chapters, no sex education in the schools, and no emergency medical technician training programs. In recent years, especially since the Lalonde report (*2*), it has become increasingly clear that since medical care is only one determinant of health, this list of associated deficiencies cannot be ignored. If balanced growth of health services is not sought, and only the amount of medical care increases, the practitioners will be called upon to deal with problems inappropriate to their most highly developed practitioner skills, with resulting waste and frustration.

What are the NHSC physicians to do? They must practice high quality medicine as a first priority, to be sure. Medicine is their basic expertise, the source of their credibility, and it is needed in the places where they are assigned. But do they simply hang out a shingle and treat those who show up with individual medical interventions? In that case, they would be leaving to others the general task of safeguarding and fostering the health of the community. And if the NHSC practices don't take on this task, who will? No one probably, since perhaps the most basic of all the deficiencies that plague underserved communities is a lack of health leadership.

How much better it would be for all concerned if medical services were to be provided in a context that took account of the community's overall needs for health services! The question is, can the NHSC assignees, while practicing medicine, help to meet their communities' nonmedical health needs as well? Although this task is not a usual one for a practicing physician, there is a long tradition of community-minded physicians who have accomplished it in their own individual ways. When John Snow was concerning himself with pollution at the Broad Street pump, he was of course in practice (*3*). Projects in developing countries have combined medical treatment with community programs for many years (*4,5*). And in this country, there is increasing evidence that community-responsive practice has been developing in both urban and rural areas since the 1960s (*6*). Indeed, many of these examples have emerged in current NHSC assignments (*7*), and others can be found in practices affiliated with the Rural Practice Project, where extensive activities in screening, health education, school health, and in developing new community health resources and programs are being carried on through the leadership of practicing physicians (*8,9*). Community-responsiveness is not easy, but it is possible and indeed increasingly prevalent. Thus, it seems to us a realistic goal for the NHSC practices to become community-responsive.

If community-responsiveness is desirable and a realistic goal, what attitudes and skills must be inculcated in the NHSC practitioners for their practices to be community-responsive? First, the practitioners must be conscious of "community," accepting the notion that their patients come from some larger denominator of people. Whether the community is defined as a county, a town, a neighborhood, all migrant farm worker families within a prescribed area, a group of people sharing the same health problems, or simply the collectivity of the practice's clients, the practitioners must be able to conceive of the health of that community of persons as their responsibility to some degree. Second, they must be able to conceive of programs to meet the health needs of their community that may involve the practice in activities that go beyond one-to-one medical care. And thirdly, the practitioners must be able to exercise health leadership, both within and from their practices. In many medical shortage areas the practicing physicians are the community's health leaders whether or not they acknowledge it, and a part of their professional responsibility is to help articulate and define what is needed and to lead in solving the problems. They do not usurp the positions of health planners or institutional administrators, although these officials carry responsibilities that practitioners must share. And we do not suggest that the NHSC physicians become their communities' medical statesmen, a role conferred ordinarily on wiser, more experienced heads. But clearly, to recognize the health needs of a community of people, especially as the people themselves see the needs, and to mobilize the resources necessary to address such needs, responsible leadership from the physicians who practice in that community is essential.

If these are the needed abilities, we must then ask how they can be nurtured in the NHSC scholarship holders.

Training for Community-Responsiveness

Clearly, some special training is necessary. It is unreasonable to think that the same preparation that suffices in readying students for the most common current career pattern—specialty practice in offices and hospitals in cities and suburbs (*10*)—will do for meeting the needs of medically disadvantaged inner city or rural communities. The scholarship holders will need to feel that the challenge they will face is worthwhile and, if they prepare, they have a good chance of meeting it successfully. These needs call for thorough preparation in community consciousness, program conception, and leadership.

Because of the lead time provided by the Scholarship Program, such preparation is now possible. And since the scholarship holders will be undergoing stages of development in the medical education career that are fairly well known, it should be possible to map out a program of educational interventions with some sensitivity to their likely effectiveness at each stage (*11*). Several types of activities and learning opportunities might be included at the various stages of the medical training continuum. A few of these can be provided by the NHSC directly. Most, however, must be taken on by the medical schools and residency training programs in which these future physicians to the underserved are enrolled.

More important than the precise content of an educational program is commitment to the goals it addresses. If the goal of challenging and nurturing a sense of community responsibility and leadership potential in young physicians remains constant from the outset and is acknowledged equally by Government and the institutions of medical education, then community-responsiveness in the National Health Service Corps and equity of service for all Americans can be brought much closer to reality.

The Prerequisites for Change

Clearly, this is a big order. Is it possible? We see three major prerequisites to implementing the program we are suggesting: (*a*) it would require development of a strong educational effort in areas that are relatively unfamiliar to most medical educators, (*b*) it would require cooperation between the NHSC and the academic medical centers, and (*c*) new legislative authority would be needed. Let us consider each requirement briefly.

(*a*) Is there now sufficient understanding and experience from which a solid educational program can be derived? The undergraduate years of medical school are a time for motivation, forming attitudes, and laying a knowledge base that will guide later training. As evidenced in the accompanying papers, many good ideas on how to accomplish these goals have already been generated. Another large data base also deserves attention. Many activities carried on in the 1960s by the Student Health Organizations and later by the American Medical Student Association effectively instilled an early motivation and a sense of mission toward community-oriented medical practice (*12–24*). Although these activities—speaker forums, summer projects, conclaves, journals—have received little attention from medical educators, perhaps because as learning experiences they were not concerned with imparting specific clinical skills or biomedical knowledge, their educational value was substantial (*25–29*).

The graduate years of medical education are a time to focus more exactly on the acquisition of skills in program conception and medical leadership. Here again, experience is available. Although residents in many programs lack opportunity to acquire the nonclinical skills they will need as community-responsive practitioners, there are important exceptions—programs with a sufficient body of experience to stand as examples. One is the Residency Program in Social Medicine at Montefiore Hospital in New York City. For 9 years this program has been training residents concurrently in the clinical and social areas of medicine (*30,31*). In addition, there are now sufficient examples of successful community-responsive practices in underserved areas, both urban and rural, so that training requirements can be readily derived from analyzing the experience of these practices. Many of them can serve as training sites as well. In sum, then, the necessary motivation and training for the scholarship holders seem not at all beyond our current conceptual capabilities.

(*b*) Can the NHSC and the medical schools cooperate? A basic conflict pervades much of the dealing between academic medical centers and the Federal Government. The academics attack Federal programs as restrictive, heavy-handed, and unimaginative and call for "flexible funds reliably available at each school because the multiple programs and creative initiatives are too complex to depend entirely on budgeted, restricted funds and because local problems are too variable to be solved by one prescribed formula" (*32*). Government officials think the medical schools take advantage of leeway to co-opt programs. Both sides, of course, are right.

But in this conflict, important incentives exist on each side to encourage cooperation and compromise. The Federal agencies have a strong incentive to enlist the aid of the medical schools. The NHSC staff cannot do the job alone and they know it. Most importantly, the scholarship students are *at* the medical schools, and

local adaptation of any program of preparation is essential.

At a time when it is becoming difficult for the Federal Government to find a rationale for continuing general institutional support for medical education (*33*), the schools may also be more receptive to Federal missions. Further, judging by their past behavior, medical schools are at all times willing to take on new programs as they see an opportunity to improve their status in the informal medical school hierarchy (*34*). The numbers of medical school faculty who are concerned with training physicians for primary care are increasing (these are the same physicians who will carry out the program of the NHSC). These faculty might welcome the prospect of becoming involved with the Federal Government in preparing their trainees to serve the underserved, especially as this mission would tend to support their side of the tension that now exists within many medical schools over the place of primary care training (*35*).

(*c*) The incentives just described may be necessary, but they are probably not sufficient to ensure cooperation. The burden is on Government to act, and the fact that the Scholarship Program is lodged in one agency, the Health Resources Administration, and the NHSC in another, the Health Services Administration, hampers any initiative that might emerge from HEW. The push must therefore come from Congress, the originator of the NHSC (*36*) and still its chief proponent. In a sense Congress is responsible for the policy gap left by the 1976 law: titles V and VIII (for capitation grants and project grants for family medicine and primary care residencies) assure that more primary care physicians will be produced and title IV covers their redistribution to underserved locations, but no provision of the act assures that these physicians will be prepared with the skills and sensitivities they need for carrying out their responsibilities to their communities. If the predominant forces in Congress that supported the growth of the Scholarship Program and the NHSC are as interested now in assuring its stability and the quality of its service, then the possibility of actually filling the gap with legislation is good.

The Larger Impact of the NHSC

It is now the nation's declared policy to provide a great deal of medical care to underserved areas via the National Health Service Corps. Since the NHSC will, in the future, recruit virtually all of its personnel from among those who have received scholarships, and both the NHSC and most of its future physicians can therefore anticipate their future connection for half a decade before actual service, it becomes possible to intervene educationally while these physicians to the underserved are still in training. We argue that such intervention is essential, not only to keep morale high and to provide an opportunity for the scholarship holders to identify positively with the NHSC, but also to help them acquire certain knowledge, skills, and sensitivity that they would otherwise not have and which will be necessary for success in their posts. Both the training of the scholarship holders and the orientation of the NHSC practices should focus not only on the delivery of excellent primary care, but on "community-responsiveness," which requires that the physicians have an understanding of the concept of "community," an ability to conceive programs, and the skill to exercise responsible health leadership.

What we propose is possible, though clearly not simple, or without cost. But the stakes are remarkably high. The Scholarship Program and NHSC now constitute a major bulwark of Federal policy and a major new area of Federal impact. Failure in this program would have profound effects on future Federal programs in medical care and medical education, and would severely compromise future programs to serve the underserved.

Further, the Scholarship Program and NHSC could have an important influence on medical practice in the country at large. A sizable population of physicians—a critical mass—will be delivering care with a set of incentives and (potentially) training that differ markedly from those of traditional private medicine. These practices themselves would constitute a change in the way a significant portion of American health care is delivered. In addition, the NHSC participants might well carry many of their NHSC practice patterns to other settings, and others might copy these patterns. In sum, the effect on American medical practice could be substantial.

Finally, with such an impact on health care delivery, there must be an impact on medical education as well. Medical education is what it is because practice opportunities and requirements are what they are. As one component in this system changes, it will influence the other to change (and will respond to counterpressures, in turn). To the extent that the NHSC actually changes practice requirements and opportunities, it can influence and change medical education; to the extent that medical education finds the changes that the NHSC generates are inconvenient, it will act to inhibit change. But if the Corps and the Scholarship Program can work directly with medical education and within the medical training continuum, they will not only be protecting and promoting the direct changes in practice that the community-responsive approach represents, they will

also form a powerful force for change in medical education that no movement without concurrent changes in the practice world could match. In other words, even though change in medical education is not the prime objective of the NHSC or the Scholarship Program, their potential for bringing such change in the direction of community-responsive primary health care is greater than any purely educational movement we could imagine.

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