Assuring the Nation's Health Resources

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"THE IDEAL RELATION BETWEEN FEDERAL AND STATE governments in public health work," stated Assistant Surgeon General Allan J. McLaughlin in a speech on June 7, 1919, "should be such as to insure the covering between them of the entire field of public health. All gaps should be covered by one or the other jurisdiction, and, in the twilight zones, there should be the most complete understanding of a frank policy which would preclude overlapping, duplication, or conflict" (*1*).

McLaughlin was talking to the Conference of the State and Provincial Boards of Health in Atlantic City, long before gambling was legal at the local casino and in a time that seems to us now as being much more simple. To cover the field of public health today, we have to add local governments, the health professions, the third-party payers, the hospital establishment, and the consumers to our list if we are to put together an intelligent program for developing and deploying health resources.

This collaborative relationship is necessary because the almost continual development of new and more complex technologies in the health field, coupled with an ever-increasing demand for more services and better health care, is bringing the nation to grips with the issue of how much are we willing to spend to continue receiving this extremely high quality care. That also is a basic issue which concerns the Health Resources Administration and that permeates most of the agency's programs.

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At times the Health Resources Administration (HRA) reminds me of the Dutch boy with his finger in the dike. We might be inundated if we relax even briefly on tackling the Nation's health care resources problems and maintaining or strengthening the distribution, supply, use, quality, and cost effectiveness of those resources. Yet, our efforts and concerns with these activities always threaten to divert our attention from the job of improving the health care system and the health status of the American people, which is what HRA actually must strive to do. In reaching for our objectives of improving the health care system and individual health status, we find we often are moving in the face of market forces that have to be resisted.

The programs and concerns of HRA are diverse, touching nearly all facets of the American health care system, including the economic and demographic characteristics affecting health care delivery and the development of sound and reasonable plans for the future. The implementation of three major pieces of legislation (the National Health Planning and Resources Development Act of 1974, the Nurse Training Act of 1975, and the Health Professions Educational Assistance Act of 1976) gives HRA the opportunity to develop a national health planning capability geared to the promotion of equal access to quality care at a reasonable cost and to the development of the manpower, facilities, and other resources that are required for a health care system to deliver that care effectively.

Health Planning

The National Health Planning and Resources Development Act (Public Law 93–641) has been de-

scribed by some as one of the most significant pieces of health legislation in this decade. Its influence is being felt now in the American health care system, and its impact in the next few years may effect significant changes which will improve that system.

The aim of the health planning program—to assure equal access to quality health care at a reasonable cost—is difficult and challenging. Its achievement will require a fine balancing of values that often conflict with one another. As the costs of health care increase and the total portion of resources that our nation is able to devote to health care reaches a potential leveling-off point, it becomes increasingly more difficult to design a health system with the appropriate balance between access to services, quality of care, and the costs involved.

Our system is out of balance. Too many Americans do not have access to quality care, and our health care costs have been mushrooming out of control. Despite the dramatic technological advances in the medical field, despite a massive infusion of both public and private funds into the health sector in the past few years, and despite an unprecedented increase in the numbers of health professionals trained to provide health care, many areas and population groups still do not have quality care available and accessible. These groups simply have not shared fully in the benefits of recent medical and social progress. We have recognized these problems for a number of years and have known that we needed to reorganize and redistribute our resources. We have been involved in a number of programs addressing these issues, but there is still a persistent maldistribution of both services and resources (including manpower), particularly in many rural and inner-city areas.

Our recent efforts to correct these deficiencies are being sabotaged by the increasing costs of health care. There has been a startling rise in the total amount of resources going into the health sector. From an investment of $39 billion in 1965 (less than 6 percent of the gross national product), the health care field has grown to the point where it consumed some $165 billion last year. By fiscal year 1983, according to economic predictions, the nation's annual spending for health care will reach an astronomical $310 billion—some 10 percent of the GNP. And if the rising curve of expenditures is not changed drastically, by the year 2000 the country will be stunned by a bill of more than $1 trillion, or 11 to 12 percent of the GNP (*2*).

An increasing proportion of our health care resources is going into inpatient care for acute illnesses. Over the years, our health system has been geared to curative measures and increasing use of inhospital care. It has provided expensive care by using our technological advances, while neglecting less expensive alternatives such as prevention, primary care, and ambulatory, intermediate, and home care. There simply have not been enough incentives in our reimbursement system to hold down costs; consequently, acute hospital costs and the accompanying medical services are absorbing an exaggerated share of the resources available.

While many areas are still without adequate care, other areas have facilities and services that are underutilized, and additional services and facilities are being developed that are unnecesary. The high inflation rate in the health care industry (some 9.5 percent annually over the past 3 years) is due in large measure to excess and underutilized hospital beds, the proliferation of expensive equipment, the duplication of services and resources, and excessive consumer and provider demand.

Growing demands for services make it difficult to allocate our finite resources properly, but we must do so, since there is no question that our resources are limited. We have reached a point where we must contain the rapid rate of increase in hospital and medical costs, or we may not have enough resources to devote to the achievement of other goals related to improvements in health status—disease prevention and health promotion, better access to services, and increases in the quality of care—all goals that need to be achieved if we are to have a more balanced health care system.

Another major issue of concern is whether the system of health planning authorized by Public Law 93–641 will be viable in our pluralistic system. Can the program that tries to integrate participation of local, State, and national interests work in our health system? Will the overwhelmingly vital element of voluntary participation on the local level grow into a constructive voice for reason and restraint, or will it be swayed to constantly require continued expansions in our health care system with no consideration for costs?

If restraint is to be accomplished, local citizen participants will be called upon to say "No" from time to time, and their decisions may not be popular with a number of factions. They may have to say "No" to building a new hospital unit that would add beds to an already overbedded area. They may have to say "No" to putting a major radiation therapy unit or an expensive diagnostic tool in one

hospital, when underused equipment of this type is available at another hospital a few miles away. They may have to say "No" to the development of other resources or services which the community cannot fully support or which duplicate resources or services already existing nearby. All of these actions, so necessary for effective health planning and resources development, require a partnership of consumers and providers and a responsible State effort to formulate rational policies while working within broad national guidelines.

Planning Structure Set

The essential components of the planning structure authorized by Public Law 93–641 are in place and operational. Areawide health planning is underway in 213 health planning areas, including 205 Health Services Areas served by Health Systems Agencies (HSAs) and 8 so-called 1536 areas—those States, territories, and the District of Columbia that under Section 1536 of the planning act are exempt from designating health service areas and are eligible for combined grants for both areawide and State planning.

All 56 State Health Planning and Development Agencies (SHPDAs) also are funded and operational, and most States have their Statewide Health Coordinating Councils (SHCCs) in place as well. The National Council on Health Planning and Development is actively functioning and is playing an important role in both policy and guideline development.

The National Guidelines for Health Planning, called for by Public Law 93–641, have been issued (*3*), as have a myriad of other guidelines and regulations required for various activities of the State and local agencies. These national guidelines are not designed to dictate the Federal conditions for health planning participation, but rather to provide State and local agencies with the basis for acting forcefully to control excess capacity in the health care industry as well as for designing a more rational system of supply, distribution, and organization of health resources.

It is fundamental to the health planning program that a careful balance be maintained between national, State, and local interests. Although the local health plans are to take into account and to be consistent with the national standards, they also are to be responsive to the unique needs and resources of the area. States have a similarly important role in analyzing statewide needs to determine how the guidelines apply to circumstances involving State government and the welfare of the State as a whole. Perhaps the most far-reaching effect of the national guidelines relates to the basic principle involved—the establishment of standards by which to measure the efficiency and effectiveness of the health delivery system. Health services and health facilities are not to be developed by whim or by chance, but on the basis of measurable community need and use.

Guidelines and plans alone, however, are not really enough to effect the changes we must make in our health care system. We need to foster educational activities for self-development: our planning staffs, HSA boards, and committees have to join the local and State officials concerned with and involved in the planning structure and have to become more aware of the complexities of the health care system, the economic aspects of health care, and the methods and components of the planning process as tools for improving the system.

We have to find ways to help the consumer make the intelligent decisions that very often are difficult and that may run counter to the short-term desires of the community. To do this, we need to establish a broad and effective educational program for consumers so that they will become well-informed on the health care system—its costs, its problems, and its results. They must be aware of the resources available in their own communities, of the issues surrounding the initiation of new services, and of the need to curtail duplication and inefficiency while still maintaining quality care. Only with well-informed consumers can we reap the full benefits of sound consumer judgment and effective consumer participation in our health plans. We also need the full participation in the health planning process of practicing physicians and other health care providers in the community to ensure that our planning decisions on health services are medically sound. These decisions must be reasonable and feasible and should not conflict with the practices and procedures essential for quality health care. At the outset, providers can be expected to fight for their autonomy, and consumers will fight for greater control of provider services. Through educational activities, a partnership must evolve that will effect the compromises needed to achieve our goals without sacrificing either the quality or an appropriate quantity of service. Without strong participation and support from both consumers and providers, it is unlikely that we will achieve the long-range goals we envision for health planning.

There is also the need for HSAs to assemble and analyze data on their areas—solid information about health resources, facilities, services, manpower, and expenditures. These data are available in communities from a number of sources, public and private.

HSAs have to locate the sources and pull the information together into an overall analysis of the community. The HSA health plans must provide enough baseline data to adequately justify the decisions being made, and those decisions must reflect the actual situations in the community.

We cannot afford to look only at hospitals and hospital care, even though some 40 percent of health care costs are attributed to this phase of health service. We need more long-term solutions—a reorientation toward prevention and new incentives in the delivery system—if we are to control costs while at the same time enhance the quality of care. In this effort, we should have the support of the majority of the American public. According to a study conducted by pollster Louis Harris earlier this year, most Americans believe that more emphasis should be devoted to preventive medicine even if this means that less money would be available for other services (*4*).

To reach our goals, we have to identify where the problems exist and figure out ways to solve them there, whether they are in physicians' offices, clinics, community agencies, or homes.

Certificate of Need

An important part of Public Law 93–641 is a mandate that all States develop a Certificate of Need (CON) law to assure that only those services, facilities, and organizations that are found to be needed are offered and developed within the State. While some States have had CON laws since the late 1960s, this is the first time all States have been required to institute such programs. The Certificate of Need law attempts to prevent the blatant duplication of services and facilities that exists in some locations, for example, two hospitals within 5 minutes of each other offering identical high technology services and neither hospital operating near capacity or even at a minimum load for maintaining quality standards.

The Certificate of Need laws will vary from State to State, some only meeting minimum Federal requirements, but all will include the requirements for approval of any new construction or significant capital expenditures. The CON section of the Federal law augments the Capital Expenditure Review provision (Section 1122) of Public Law 92–603, the 1972 amendment to the Social Security Act that encouraged States to participate in Capital Expenditure Review programs. These review programs were designed to make certain that reimbursement for depreciation under Federal payments (Medicare, Medicaid, and Maternal and Child Health) was made in line with the then-designated planning agencies' approvals.

The Section 1122 program currently is conducted under voluntary agreements between the Department of Health, Education, and Welfare (DHEW) and 34 of the States. It requires that a health facility may not make a capital expenditure of more than $100,000 without State planning agency approval. Facilities that go ahead with such projects without approval lose a portion of their Medicare and Medicaid funds. The value of this program and the potential value of a nationwide CON program are demonstrated by a recent tabulation which shows that nearly $154 million of unnecessary hospital construction and capital equipment purchases were blocked during fiscal years 1973 through 1976. Under Public Law 93–641, all States will have to have their own CON programs in operation by 1980 or lose certain Federal health funds coming into the State. Some 41 States currently have such a program. When all States have adopted approved CON programs, there will be no further need for the voluntary Section 1122 program.

But even with the CON programs, local and State agencies will be subjected to tremendous pressure when their restraining actions conflict with the long-standing philosophy in most communities that bigger and better is the best.

Health Facilities

The second major part of Public Law 93–641 (Title XVI) replaced the older medical facilities construction program that was best known as Hill-Burton.

Between 1947 and 1975, some 12,000 health facility construction and modernization projects were assisted under the grants and loan programs of Hill-Burton. These involved 7,700 hospital facilities of all types (including long-term care facilities in general hospitals), 585 nursing home facilities, 1,400 hospital outpatient facilities, 1,400 public health centers, and 1,000 others (including rehabilitation facilities, laboratories, and some 300 loan projects). Hill-Burton grant assistance totaled about $4.2 billion, which was the Federal portion of the total project construction costs of more than $15 billion. Some 460,000 beds, of which 370,000 were authorized for general hospitals, were either newly constructed, modernized, or replaced during the period. About 41,000 beds were authorized for nursing homes. Thus, the total number of beds involved in all types of construction was nearly 501,000.

Under Title XVI of the planning act, funds are authorized predominantly for modernization of medical facilities, construction of new outpatient or ambulatory facilities, and conversion of existing medical facilities to provide new health services.

Sacred Heart Hospital, Eau Claire, Wis. (Berners, Schober & Kilp, architects and engineers). Between 1947 and 1975, same 12,000 health facility construction and modernization projects were aided under the Hill-Burton Program

Implementation of Title XVI is tied systematically to the entire health planning program, which was not the case in previous facilities-oriented legislation. This not only has the advantage of enhancing the rational development of resources, but also provides the planning side of the program with further financial and political significance. For example, the State agency must have an approved State Medical Facilities Plan that is approved by the SHCC and is consistent with the State Health Plan. Although a separate document, the State Medical Facilities Plan is considered to be a more specific facilities-oriented part of the State's plan for improved health. It also is the only plan established under Public Law 93–641 that requires the approval of the Secretary of Health, Education, and Welfare.

The conceptually sound features of the program have been, to an extent, an impediment to the distribution of funds appropriated for the purposes of Title XVI. Until the planning structure is in place, most of the provisions of Title XVI cannot be implemented. The major exception is a project grant program authorized by section 1625, which provides some funds for the modernization of public medical facilities. Overall, though, Title XVI clearly indicates that Congress was concerned with providing resources to encourage the implementation of the Health Systems Plans. Public Law 93–641 was not designed to create a "paper planning process," although there is some indication that a paper planning process is evolving in some States and in some areas.

Most areas of the country have excess hospital beds, and a sizable number of the beds need modernization. Because of the excess beds, Federal construction assistance programs appropriately have been reduced, and the funds that are available are largely targeted to addressing the modernization needs and enabling existing facilities to meet local life-safety codes and accreditation requirements. Future construction grants will be tied more to community needs spelled out in the health plans. HRA's programs also will continue to encourage closing of unneeded beds and facilities and their conversion to needed facilities, such as ambulatory care units.

Local planning agencies, however, are going to be faced with the hard decisions of determining, on the basis of community needs and resources, the facilities that should remain open and those that should be converted to other uses. More and more, Federal, State, and local agencies must address the problems of intensity of care, too, and encourage institutions and facilities to do more with the resources they have.

One other HRA program tied to health facilities is our Energy Action Program, which helps formulate and implement effective energy management policies and techniques in health institutions, and which encourages these facilities to find alternative energy sources.

During the past 3 years, the Energy Action Staff (EAS) of HRA has conducted seven regional energy management conferences for hospital officials and other health officials and has presented papers and assisted in many State and area energy conferences and training courses. It has produced films, manuals, and other publications relating to energy management in the health care field. It sponsored the first energy-use survey of the nation's hospitals (*5*), a survey revealing that some 76 percent of our hospitals rely on natural gas, either alone or in combination with other fuels, for their principal energy source. Yet natural gas is the fossil fuel most experts predict is in the shortest supply. In cooperation with the Department of Energy, the EAS recently has contracted with a number of health facilities to conduct demonstration projects on the use and effectiveness of solar energy for water and space heating. Additional demonstration contracts are scheduled to be awarded within the next year.

Planning in the Days Ahead

There are a number of reasons to believe that our health planning program can succeed where others have failed. First, there is an increased public awareness of the need for health planning and resources

development. The public media are devoting increasingly more space and time to reporting in considerable detail the costs of medical and health care, including some positive as well as negative results of Federal, State, and local efforts to contain them. More people seem to recognize the problems of escalating costs and maldistribution of resources and are willing to do something about them. Most Americans are dissatisfied with what they see as the excessive cost of hospital care. They believe that the rise in physicians' fees and hospital charges cannot be justified by the improvement in the quality of care.

Another reason for possible success is that the present legislation gives the planning agencies some "clout" in the Certificate of Need programs, Capital Expenditure Review, and the responsibility for review and approval of Federal health grant and contract funds. In the future, the agencies also will exert influence through the review of the appropriateness of existing institutional services. Still other reasons are the emphasis given to the acquisition and use of empirical data, the emphasis on a population-based approach to planning, and the requirement that health plans describe and characterize the status of the entire health system and include specified, quantified goals. Under this approach, planning agencies will be able to observe how changes in one part of the system affect other parts.

Unanswered, however, is the question of whether the health care system will continue to exert political and social pressures to deter planning agencies from effecting changes that might alter the system and redirect goals.

While there are still a number of unresolved policy issues surrounding national health planning efforts, it is reasonable to assume that health planning in some form will be with us for a long time.

Health Manpower

Planning health manpower strategies for the next few years is a far more complex process than it was 15 years ago when the Health Professions Education Assistance Program was initiated in DHEW. At that time there was a shortage of health manpower in almost every professional category, and the emphasis of the HPEA program was on expanding the output from professional schools to alleviate the shortages being felt.

Under the stimulus of Federal funding, there was an unprecedented expansion of U.S. health professions training facilities. During the decade ending in 1976, 41 new health professions schools, including 28 schools of medicine and osteopathy, were opened.

The number of registered nurses in the United States is expected to rise to about 1.5 million in 1990, almost triple the 1960 figure. Capitation and Special Project Grants have assisted schools in improving their educational programs

The annual number of graduates from health professions schools rose some 84 percent—and that included also an 84 percent increase in medical and osteopathic graduates—from 8,148 in 1967 to 14,969 in 1976. The ratio of active physicians per 100,000 population increased from 147 in 1966 to 177 per 100,000 in 1975. By 1990, we estimate that the nation will have 241 active physicians per 100,000. Fears of a physician shortage began to be replaced in the mid-1970s by concerns about a possible surplus.

A similar situation exists in the nursing field. Enrollment in nursing programs almost doubled in the 1965–75 period, rising from 136,000 to 250,000. The number of registered nurses is expected to rise to about 1.5 million in 1990, almost triple the 1960 figure. The ratio of registered nurses may reach 625 per 100,000 population in 1990, and that is more than double the 1960 figure. Comparable increases are reported for most other health professions as well.

Despite this sizable expansion of the U.S. health work force, however, the geographic distribution of health manpower appears to have worsened, especially in rural and inner-city areas. The scarcity of services has been intensified by increasing specialization among practitioners and a corresponding decrease of practitioners engaged in primary care and family medicine. We have just prepared a list of shortage areas in the United States and find that 2,985 areas lack adequate health care personnel (*6*). One-sixth of the U.S. population live in these areas.

When Congress in the closing days of the 94th Session approved the Health Professions Educational Assistance Act of 1976 (Public Law 94–484), the Federal emphasis on health manpower training and education was redirected significantly. This Act, which

was amended during 1977 by the Health Services Extension Act (Public Law 95–83, Title III) and the Health Professions Education Amendments (Public Law 95–215), authorized appropriations totaling $2.8 billion for the 4-year period covering fiscal years 1977 through 1980. It continues into the next decade the authority to support health professions, allied health, and public health training.

This Act and its amendments reflect a basic change in outlook toward the nation's health manpower problems. The main emphasis is not on further expansion of enrollment in health professions schools, but on the types of practitioners being trained and on where they will practice. New initiatives are authorized to encourage young practitioners to go into shortage areas, and the law also expresses congressional concern about the influx of foreign-trained physicians and the quality of their training.

Although there almost certainly will be amendments to the manpower authorities authorized by Congress, we doubt that the general emphasis during the next few years will change markedly from that expressed in Public Law 94–484. HRA's position in developing manpower strategies for the early 1980s is to maintain room for maneuvering in case unforseen circumstances cause the manpower picture to change. It is essential that the Federal Government not become locked into untenable positions that might later prove inconsistent with the situation at hand.

Thus, we are giving considerable attention to sorting through a whole range of issues and options, seeking to devise a comprehensive strategy and also to provide sound and sensible input to legislative proposals. We recognize, of course, that HRA and the other components of DHEW are not the only ones concerned with manpower strategy and legislation. The educational and training institutions and the large special interest groups outside the Federal Government are as vitally concerned as we are but are often not an integral part of the health planning process. Many of them are well organized and staffed, however, and will have an impact on the development of legislation, since they already have established channels directly to Congress. It is reasonable to assume that in the ultimate legislation the views and strategies of all these participants, inside and outside of the Federal Government structure, will be considered.

One issue we are studying is the possible linkage of education with the national health planning program now underway. Increased rationalization of the U.S. health care system certainly suggests the need for explicit attention to the integration of the planning for health manpower and service delivery. Historically, such integration has tended, at best, to occur only sporadically and in a nondirected fashion. We have not been successful in linking manpower and facility requirements, sometimes overbuilding in one case and underbuilding in the other.

Several factors have contributed to the polarity that has arisen between manpower and services. One of these has been the tendency for service delivery planning to be dominated by those oriented to health service facilities. Another has been trends in government that have seemed to reinforce separate streams of funding and activities for educational facilities and service delivery facilities. Still another is the fact that unlike Federal support for education generally, Federal support for health professions schools has been provided directly to the educational institutions themselves.

The health planning process, with the implementation of Public Law 93–641, provides a golden opportunity to advance the integration of education and of service delivery. A key issue here is the potential role of State governments in this linkage, specifically in connection with Federal funding of health professions education. A stronger role for State government currently is evolving in the implementation of delivery system planning, and the role of the States on the educational side also is likely to be enhanced sharply in the future.

Several factors point to the merits of increasing the State role in funding health professions education. First, there has been, through Federal efforts, a tendency to concentrate disproportionately on physicians and the most highly trained professionals, creating an imbalance that is costly and difficult to manage. Federal support has largely bypassed the State, boards of regents, and sometimes even the universities, and often has gone directly to the professions schools, departments within the schools, and individual faculty members. Such a process may well decrease the potential for the changes in emphasis that a State may need if it is to improve the health of its citizens.

The service delivery system, in which the State has a dominant role, also affects employment markets, since it is the institutions within the States that offer the greatest opportunity for health professional employment. The State also may be in the best position to support manpower education, which is sensitive to State licensing and other practice laws, to pecularities such as the existence of a single medical or dental school in the State, and to important health variances that are the consequences of envi-

ronmental differences or other factors which produce different disease patterns from State to State.

An initial step in increasing State participation might be Federal funding of State projects to create a climate for thinking about such an integration. In the past, HRA has funded selected projects at the State level to develop and test linkages among educational and service delivery agencies.

A more ambitious step might be the funding of State governments for implementing the planned integration of manpower education and service delivery. Another approach might be the adoption of a Certificate of Need program for the establishment or expansion of major training programs; the CON would be undertaken by SHPDAs with the criteria for approval set up in cooperation with the appropriate statewide educational planning bodies. The program design for such an approach clearly would require careful structure, particularly to ensure that the outcome of training programs would be responsive to area and State needs. Obviously, providing Federal educational funds to State governments, in contrast to providing them directly to educational institutions, would represent a substantial change in the health field. It is, however, one of a possible number of options that should be discussed.

Related issues would have to be considered in exploring such an approach. One would be the implications resulting from any shift in the locus of control over funds. Questions also arise as to whether all or only selected health disciplines should be considered. Any proposed changes should reflect careful examination of a broad range of regulatory or market options. Attention also should be focused on explicit rationales for Federal involvement under any of the possible situations and on whether health professions education should be an exclusive State and private sector responsibility.

Participation of Minorities

We are trying to do a better job in creating more opportunities for minorities to have successful careers in the health professions. Federal support in this direction is an ongoing, high-priority commitment. What is at issue, however, is what the most appropriate and effective means for implementing this objective is.

Evidence suggests that Federal initiatives in this area so far have been rather limited, particularly when all disciplines are considered, and in the case of medical education, when all schools are considered (that is, beyond the Howard and Meharry Medical Schools whose enrollments are comprised predominantly of minority students). There has been a past tendency to consider remedies on an ad hoc, single institution basis, instead of taking a more comprehensive approach.

Nursing student at Howard University Hospital, Washington, D.C., being instructed in use of the microscope. HRA is trying to create more opportunities for minorities to have successful careers in the health professions

The percentage of minorities in medical school enrollments has been declining. In 1974–75, minorities accounted for 1,473 first-year students, or 10 percent, and in 1977–78, for 1,450 first-year students, or 9 percent. The recent Bakke decision of the Supreme Court will force further attention to these issues and further discussion of affirmative action plans to address the problems.

Some of the ideas being proposed in various sectors may represent only partial, or even counterproductive, solutions. Promoting more institutions to deal with the education of minorities requires a more careful look at both the social and financial issues involved. Consideration should be given to a range of options that points to a more permanent and consistent approach. One of these is to consider incentives such as grants to strengthen institutions, scholarships at both undergraduate and graduate levels, and student loans. Conceivably, the choices may not be limited to going with one option or another. For practical purposes, they may involve a combination of several approaches, with much larger Federal support than in the past. In any case the entire question needs more open deliberation and discussion if we are to devise a strategy aimed at identified and specific goals.

Institutional Support

For the past several years, the Federal Government has provided financial assistance to schools that train health professionals through a formula grant program based on capitation or the number of students enrolled at the various schools. During fiscal years 1965–77 some $1.4 billion in formula grant funds were awarded to more than 1,300 health professions schools, nurse training facilities, allied health professions training facilities, and public health training schools. The largest share of this money, $1.07 billion, has gone to 390 health professions schools—schools of medicine, osteopathy, dentistry, optometry, pharmacy, podiatry, and veterinary medicine—of which $890 million went to medicine, osteopathy, and dentistry.

In view of decisions by this and previous Administrations to phase out capitation programs for health professions schools, alternative approaches need to be considered. Currently, the focus is on increases in special project programs and student support. For example, added funds have been suggested for support of primary care training, and increased scholarships for National Health Service Corps and disadvantaged students have been considered. We need, however, to look at long-term needs whenever we are considering proposals for short-term assistance.

Special project grants from fiscal years 1965–77 have totaled some $650 million, with the bulk—more than $422 million—going to the health professions schools and nearly $380 million of the total going specifically to schools of medicine, osteopathy, and dentistry. But special projects are not intended as an institutional support mechanism, and there is no strong evidence that they are an effective device for obtaining sustained support for education activities (that is, for actually increasing the numbers of health professionals). The value of special projects lies in stimulating innovations such as curriculum change and continuing education programs. The project mechanism may be useful in obtaining product-oriented outcomes, such as when the Federal Government invests funds to get certain measurable results that tie in with national priorities. We are not sure, however, that enough attention has been given to the implications of this view of special projects.

We need to consider a variety of student support options that complement or reinforce existing approaches, and we need to strengthen our ongoing evaluation of present strategies, especially in the area of guaranteed student loans.

Another question we must consider concerns the current rate of capitation phaseout. There still is some question as to whether or not complete elimination of all capitation support is desirable. Health professions institutions should have an appropriately phased capitation withdrawal schedule that will enable them to anticipate and implement the necessary fiscal base conversions. There may be cases, for example, schools of public health, in which a selective retention of capitation programs is an appropriate Federal approach.

Public Health

The role of schools of public health in itself is another issue that should be addressed. Are the educational programs in these schools relevant to societal needs in our rapidly changing health care system and are the schools turning out health professionals geared to the "real world" of public health?

One way to make progress toward solving present and future public health problems should be to apply relevant technical, scientific, or medical knowledge. Health professionals should be able to plan and develop alternative policies, make wise choices among them, and carry out the policies selected—all in an environment in which resources are limited and in which many large and complex organizations with different and conflicting goals are involved in any course of action. We need people who possess skills in policy analysis and management, as well as knowledge about one or more substantive public health areas.

We should prepare students for careers either in health planning and regulation or in the administration of health programs and institutions. The Health Resources Administration is supporting the Graduate Program in Health Policy and Management at the Harvard School of Public Health, which is built around a first year consisting largely of core courses and a second year consisting primarily of electives. The program's curriculum has a strong analytic and quantitative orientation, a summer internship program, and a required year-long tutorial field experience in the second year that is designed to give students ample opportunity to apply the techniques learned in the academic part of the program. Feedback concerning the program's relevance to "real world" problems has been built by this emphasis on field work and by the establishment of a clinical faculty composed of practicing health care executives. The program is trying to use the total resources available within the university to provide students with an educational experience integrating

knowledge and skills from a variety of disciplines.

Another issue centers around the National Health Service Corps, and in manpower strategy deliberations, careful thought should be given to expected and desirable outcomes of the NHSC program. The numbers of NHSC personnel in place during the 1980s will represent a quantum leap from present conditions. Up to now, however, the role of the NHSC has been more or less limited to a trouble-shooting capacity, an approach that is more consistent with its present size than with the magnitude of the program envisioned in future years. The use of the NHSC mechanism as a means of strengthening and rationalizing the health care delivery system deserves consideration and debate. Furthermore, the potential interrelationships between the NHSC, Area Health Education Centers, and the health planning process should be given more attention. Nor has sufficient attention been given to the distribution of NHSC personnel by discipline. At this time, by provisions in the law, physicians and dentists constitute 90 percent of the Corps. There is a question whether we have made maximum use of the potential of the remaining 10 percent, and also whether it is desirable to continue the 90 to 10 percent ratio.

The medical residency requirement likewise needs reconsideration as one of several options to remedy imbalances in medical specialization and to increase the number and proportion of primary care practitioners. Since the enactment of Public Law 94–484, the Graduate Medical Education National Advisory Committee (GMENAC) has been set up to advise the Secretary on the medical specialization question, and this organization is preparing an approximation of individual specialty requirements, as well as residency goals for selected specialists. In preparing its recommendations, GMENAC is looking carefully at the needs of the population for specialty medical care services and at the contributions of physician assistants and nurse practitioners to the medical care system. The committee also is studying the financing of graduate medical education, as well as the impact of undergraduate medical education on the choice of specialities and the ways this might influence geographic distribution of specialists.

Consistent with the views mentioned earlier, we need to examine a variety of options for effecting change. Applying a certificate of need concept to the medical residency is one alternative; the use of a voluntary approach, with restrictive regulatory measures on a standby basis, is another. Incentives for training primary care practitioners in settings removed from the immediate hospital environment is still another approach. The choice of the mechanism or the combination of mechanisms to use is not simply a case of whether access to services or cost containment objectives will dominate the rationale for changing the distribution of medical specialties. In the case of access, we need to determine access to what? Do we need access to all services or to certain basic services and subspecialty services in some cases? Do we effect cost containment actions to the point where they impede the delivery of quality health care? The end result will obviously require compromises on both issues.

There are a number of variables we should take into account in any of our projections. Unforeseen events, new laws, changing patterns of health care delivery, new technological advances, and a variety of other happenings could affect our projections. The whole manpower issue, however, is too critical to the health care system to let it be be decided by speculation or preconceived ideas. The long-term effects have to be considered carefully, and a certain measure of flexibility has to be provided so we can "roll with the punches" if the need arises.

The ultimate success of our efforts to develop and put into place the resources that can serve our needs in the future will depend on how well we can make the many facets of our health planning structure work well together. We will see whether our health care system, which in the past few decades has been characterized by rapid development of resources, can evolve into a system that can devise methods to constrain and rationalize those resources.

It would be at least one small measure of success if we could, as Assistant Surgeon General McLaughlin stated in 1919, make the diverse parts of our system work to "preclude overlapping, duplication, or conflict."

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