Summary

Regional Medical Programs have made an impressive beginning. But it is only a beginning. Much is yet to be done. Many problems and issues are yet to be resolved. However, if the future is marked by the same enthusiasm and cooperation and our national commitment is sustained, a major change may well be wrought in the workings of American medicine. This change will benefit the health professions and bring great benefits to the American people.

SECTION ONE Summary

In October 1965 President Johnson signed Public Law 89-239, the Heart Disease, Cancer and Stroke Amendments to the Public Health Service Act, authorizing grants to help establish Regional Medical Programs to combat heart disease, cancer, stroke, and related diseases.

This program had its origin in the recommendations of the President's Commission on Heart Disease, Cancer and Stroke, presented in December 1964. Its ultimate goal, like that of the Commission itself, is to help make the best in modern medical science readily available to all people who suffer or are threatened by these major diseases.

To accomplish this purpose, Public Law 89-239 proposes the establishment of direct and continuous linkages between the patient, his physician, his community hospital, and the Nation's centers of scientific and academic medicine. It seeks to unite the health resources of the Nation, region by region, in close working relationships which will speed the transmission of scientific knowledge and methods to the people whose lives depend upon them.

The first stages in the development of the Regional Medical Programs are now well underway. As of June 30, 1967, planning is moving forward in 47 Regions with the support of planning grants; the 47 first year awards total about $20 million, and 10 second year awards about $4 million. (Exhibit III) The geographic Regions encompassed in these awards contain about 90 percent of the Nation's population. The beginning stages of program operations have begun in 4 Regions with the support of grants totaling $6.7 million. (Exhibit IV) Additional applications for grants to support planning covering the remainder of the country are now under review or development.

On this record, progress in the development of Regional Medical Programs is substantial. It is particularly impressive when viewed in the context of the initial tasks that had to be performed. These included the creation within the Public Health Service of a new administering organization and the assembling of staff. Program guidelines had to be developed and promulgated; criteria and mechanisms for review of grant applications had to be established. The many issues and problems presented by this new departure in Federal health action were widely and intensively discussed with individuals from all parts of the country. In each Region, initial tasks included working out the bases for developing regional cooperation among major health interests, designing the planning program, appointing and convening the Regional Advisory Group, and recruiting staff.

The initial experience described in this Report demonstrates the program's potential for improving the health of the American people. To fulfill this potential, the following recommendations are clearly indicated:

☐ *The program should be established on a continuing basis.* There is every indication that the approach authorized by Public Law 89–239 is valid and promising. Extension of the program, building upon the initial planning and pilot projects, will lead to realization of its potential and will contribute significantly to the attack on these major diseases.

☐ *Adequate means should be found to meet the needs for construction of such facilities as are essential to the purposes of Regional Medical Programs.* A limited amount of new construction has been found to be essential to achieve the purposes of the Programs; priority needs are educational facilities, particularly in community hospitals. Authority to assist the construction of new facilities, which was requested in the initial bill in 1965, was set aside during the consideration of the bill in the Congress. This modification should be carefully designed, in amount and administration, to meet the special requirements of Regional Medical Programs and to enhance cooperation with related programs.

☐ *An effective mechanism should be found to assist interregional and other supporting activities necessary to the development of Regional Medical Programs.* This assistance will facilitate the work and implementation of individual Regional Medical Programs.

☐ *Patients referred by practicing dentists should be included in the research, training and demonstration activities carried out as necessary parts of Regional Medical Programs.*

☐ *Federal hospitals should be considered and assisted in the same way as community hospitals in planning and carrying out Regional Medical Programs.*

Underlying this program and the recommendation for its extension is the broad national concern over the extent to which new medical knowledge and technology is brought rapidly and effectively into use in health services and medical care throughout the Nation. The legislation proposes regional frameworks for accelerating this transfer. It envisions two-way flows of useful science and technology between academic and scientific centers and agencies and individuals who

deliver medical care in the local communities of the country.

To accomplish these purposes, the Law authorizes the award of grants for the planning and then for the operation of regional arrangements, designed to stimulate new patterns of cooperative action among physicians, hospitals, university medical centers, public and voluntary health agencies. Each regional arrangement should help to create a coordinated program encompassing research, training and continuing education, patient care demonstrations and related activities. Its goal is to advance the accessibility and the quality of health services available throughout the region for heart disease, cancer, stroke and related diseases.

The emphasis in this program, reflecting the legislative background from which it emerged, is on local initiative and local planning. This approach is intended to sustain the essentially private and voluntary character of American medicine. At the same time, it permits the use of Federal funds to stimulate and support innovative approaches to common problems under local leadership.

An advisory group, representing the regional health interests in each Region, including those of the consumers of service, is required by law as an essential step in the development of a Regional Program. Thus the character of the individual programs will vary as they reflect the differing needs, resources, and patterns of relationships.

The experience gained in the year since the first grant was made has provided considerable evidence that new cooperative arrangements can be developed among institutions and individuals involved in health and medical affairs. Regional groups representing a wide variety of interests and functions have come together in an unprecedented fashion to plan and work cooperatively on common needs and goals. Over 1,600 individuals, including physicians, medical educators, hospital administrators, public health officials and members of the general public are serving on Regional Advisory Groups. They are performing an important role in the planning and development of the individual Regional Medical Program. It seems reasonable to anticipate that workable mechanisms for accomplishing the goals of the Heart Disease, Cancer and Stroke Amendments of 1965 will progressively emerge based on these initial cooperative efforts.

There are, however, uncertainties and problems still to be resolved in the further evolution of this program. In part these questions arise out of the diversity and complexity of forces that characterize the American health scene. Some of the questions are generated by the particular terms of the legislation under which the program operates. Still others emerge from certain broad changes which are inherent in the further development of these programs.

Significant among these questions are the following:

☐ Can the character, quality and availability of health and medical care services in the area of heart disease, cancer, stroke and related diseases be significantly and measurably modified?

☐ Are the regional administrative entities developed for these programs viable and durable over a long period of time?

☐ Can voluntary professional and institutional compliance be obtained in the efficient disposition and use of critical manpower, facilities and other resources on a regional basis?

☐ How will the activities generated under Regional Medical Programs affect medical care costs and influence the extent to which such costs can be met by normal financing methods versus direct support through Regional Medical Programs?

☐ What long-term relationships should be established to assure that Regional Medical Programs complement other Federal health programs, particularly the Comprehensive Health Planning Program initiated under Public Law 89–749?

☐ How can local programs overcome lack of space to carry out certain of the activities and functions being engendered by Regional Medical Programs, particularly space for training and continuing education?

In addition, it has been difficult thus far to obtain more than a tentative commitment from many institutions and individuals because of uncertainties over the national intention and the limited duration of authorization for grants for Regional Medical Programs. Assurances of longer support are essential to maintaining the vigor and achieving the objectives of this program.

Many of these issues and problems will be resolved in the future conduct of the program. Others will require either executive or legislative action.

Regional Medical Programs have made an impressive beginning. But it is only a beginning. Much is yet to be done.

The Essential Nature

"The objective of this legislation is to build from strength and to provide those mechanisms which can link the source of strength with the needs of the community . . . We would hope that the proposed new program could have its greatest innovative effect . . . as a significant new extension of the capability of existing programs in bringing to bear on patient needs the benefits of scientific medicine."

Excerpt from the Report of the Senate Committee on Labor and Public Welfare on S. 596 (P.L. 89–239).

SECTION TWO The Essential Nature

BACKGROUND

The Report of the President's Commission on Heart Disease, Cancer and Stroke in 1964 was the immediate stimulus for the legislation that became Public Law 89–239. That report, issued in December of 1964, made a series of recommendations aimed at the development across the nation of regional complexes of medical facilities and resources. These would function as coordinated systems to provide specialized services for the benefits of physicians and patients in the several geographic areas.

In the longer perspective, however, the Regional Medical Program concept is the result of many ideas and trends that have evolved over a period of years. These include some of the social, economic, and scientific changes affecting all of modern society, as well as developments in the delivery of medical and health services.

The progress of science has exerted a powerful force for change. Since World War II great strides have been made in extending the frontier of medical knowledge and capability through research. This advance has greatly strengthened the armamentarium of medicine available to contend with the problems of health and disease. It is providing a fundamental impetus for progress in health, stimulating intensified efforts to bring the benefits of science to all the people.

Along with great benefits, these advances have brought new problems. Increasing specialization has become necessary for mastery of rapidly advancing knowledge and technology. While specialization has raised levels of expertise, it has also increased the fragmentation of services, thereby complicating the process of delivering medical care. At the same time the advance of science threatens the heavily burdened physician with rapid obsolescence of knowledge. This threat in turn raises new problems in communication and education. New patterns of relationships, systems of service, and mechanisms are critically needed in medicine, as in other fields, to cope with and exploit advances of science for the well-being of the people of the Nation.

Other important forces have also contributed to the conditions and needs which set the stage for Regional Medical Programs. Many factors have raised the public's expectation for health: the rising economic capability of the Nation, the higher general level of education of the public, the record of success in the control of the major communicable diseases, and other social progress. In addition, national concern has focused on the special problems of disadvantaged groups and areas not sharing fully in the overall progress. Efforts to meet these demands for services have been complicated by manpower and facility shortages and increases in costs of medical care.

More efficient and effective use of health services has been sought through regionalization for many years. It has also been viewed as a means to broaden the availability of high quality health services. In 1932, the Committee on the Costs of Medical Care focused attention on this approach. In the same year, the Bingham Associates Program of the Tufts University-New England Medical Center initiated the first comprehensive regional medical effort in the United States. About 15 years later, similar ideas were included in the Report of the Commission on Hospital Care and were, in turn, reflected in the Hospital Survey and Construction Act of 1946 (Hill-Burton Program). While other regionalization plans have been advocated and attempted from time to time, these efforts were largely isolated and limited.

Efforts to achieve regional organization of private and voluntary health services have not been notably successful. The reasons vary, but in general they reflect the difficulties of inducing common action among separate and independent components of the health enterprise, and the lack of financial resources in sufficient amounts and duration to assure continuing stability.

The present day circumstances of the practice of medicine and the delivery of health services may provide more suitable conditions for the growth of the regional approach. The physician is the part of a complex system involving closely related facilities and ancillary services. The hospital has become the central institution in the community medical scene. Prepayment plans and group health programs contribute to coordination and common action. Federal programs committed to social progress provide a pervasive force for action.

Thus the regional concept emerged again in a new form, in the major recommendations of the President's Commission on Heart Disease, Cancer and Stroke which proposed the development and support of "regional medical complexes". This proposal called for substantial and sustained Federal support as an essential condition of success.

THE ESSENTIAL NATURE

President Johnson, at the signing of Public Law 89–239 on October 26,

1965, said, "Our goal is simple: to speed miracles of medical research from the laboratory to the bedside."

The bill he signed into Law on that occasion, the Heart Disease, Cancer and Stroke Amendments of 1965, stated the same goal in slightly different terms: ". . . to afford to the medical profession and the medical institutions of the Nation . . . the opportunity of making available to their patients the latest advances in the diagnosis and treatment of [heart disease, cancer, stroke and related diseases] . . ."

To accomplish these goals, P.L. 89–239 authorized a 3-year, $340 million program of grants for the planning and establishment of Regional Medical Programs. These grants provide support for cooperative arrangements which would link major medical centers—usually consisting of a medical school and affiliated teaching hospitals—with clinical research centers, local community hospitals, and practicing physicians of the Nation. Grants are authorized for planning and feasibility studies, as well as pilot projects, to demonstrate the value of these cooperative regional arrangements and to provide a base of experience for further development of the program.

The objectives of the legislation are to be carried out by, and in cooperation with, practicing physicians, medical center officials, hospital administrators and other health workers, representatives from appropriate voluntary health agencies and members of the public. The law specifies that there shall be no interference with patterns or the methods of financing of patient care, or professional practice, or with the administration of hospitals.

Because this broad range of cooperation is the central concept of Regional Medical Programs, each program is required to establish an advisory group representing the various health resources of the region and including consumer participation. This group has the important function of assuring full collaboration and advising all the participating institutions in planning and carrying out the program.

The ultimate objective of Regional Medical Programs is clear and unequivocal. The focus is on the patient. The object is to influence the present arrangements for health services in a manner that will permit the best in modern medical care for heart disease, cancer, stroke and related diseases to be available to all. The scope of the program is nationwide, encompassing the great cities, suburbia, and rural areas.

The program design inherent in Public Law 89–239 derives from a series of basic concepts:

☐ *The best in modern diagnostic and treatment methods is not readily accessible to many Americans suffering from or threatened by heart disease, cancer, stroke, and related diseases.*

☐ *There is need for increasing interaction between the diagnostic and therapeutic capability in the major medical centers, where an effective interplay between research, teaching, and patient care can bring rapid and effective application of new medical knowledge, and the medical capability in many community settings.*

☐ *The progress of science will continue to increase the complexity of making available to all the potential benefits of modern medicine.*

☐ *The complete realization of these potential benefits requires the cooperative involvement of the full range of each region's medical and related resources.*

☐ *The diversity of local health needs and resources calls for the assumption of responsibility by each region for the design of a pattern of collaborative action best suited to its own special circumstances.*

The role of the Public Health Service in developing this broad program design is defined in the Congressional declaration of purpose:

"Through grants, to encourage and assist in the establishment of regional cooperative arrangements among medical schools, research institutions, and hospitals for research and training (including continuing education) and for related demonstrations of patient care in the fields of heart disease, cancer, stroke, and related diseases . . ."

Thus, Public Law 89–239 represents a Federal investment in regional initiative. It invites and supports the creation of new patterns of cooperative action among physicians, allied health workers, hospitals, medical centers, universities and research institutions, public and voluntary health agencies, and the consumers of health services.

THE CONDITIONS AND QUALITIES EMPHASIZED

Regional Medical Programs put into practice the principle that essential responsibility and power for the improvement of health services should be exercised locally. The basic policy of the program is designed to encourage innovation, adaptation and action at the regional level.

Freedom and flexibility to do those things necessary to achieve the goals

of each program has been provided. The achievement of any one objective of a Region may require a combination of activities, such as research, specialized training of allied health personnel, continuing education of physicians, experimentation to find the best methods to achieve desired results, and demonstration of the most effective patient care. The Law does not allow support of isolated projects, however meritorious, whether they be in continuing education, research, patient care demonstrations, cooperative arrangements or training. Thus the success of a Regional Program will depend upon how effectively the Region brings to bear its unique combination of institutions, agencies and organizations to define and meet its own needs and opportunities.

Critical to future progress is the willingness of members of the medical profession to accept their full share of leadership in this effort. Equally important is the willingness of university schools of medicine to become involved in cooperative efforts to apply the fruits of research efforts. Similar challenges and new responsibilities are presented to hospital administrators, health officers, voluntary health agencies, schools of public health, and the allied health professions.

New systems are being sought amid diverse geographic and social circumstances that will make available to all the people medical services for heart disease, cancer and stroke and related diseases that are excellent in quality and adequate in quantity, while preserving the diversity and largely private character of our medical care process. The responsibility of achieving these desirable ends does not devolve upon Regional Medical Programs alone. They must operate in conjunction with other programs having related objectives. But Regional Medical Programs, properly developed, can serve as a keystone of a structure which will permit the delivery of the type of medical care services desired by all.

In accomplishing this goal, it is essential to find ways to harmonize the values of personal and scientific freedom with the demands for efficient use of resources and nationwide availability of services. Regional Medical Programs offer the private and public institutions and the health professions of the country opportunities to demonstrate that, on a voluntary cooperative basis, given adequate resources and flexibility to use them, it is possible to work out effective regional and local systems to bring the benefits of scientific progress to all.

When the Regional Medical Programs are fully developed across the nation, they will help to assure every individual, wherever he lives, that:

☐ His physician has readily available the knowledge, skills and technical support that permit early diagnosis of these diseases and prompt initiation and appropriate follow through for the most effective known preventive or curative action.

☐ His community hospital is equipped and staffed to provide the full range of services his condition requires, or is part of a system which makes this range of services available to him.

In short, every person whose life and well-being may be in jeopardy from one of these diseases should have the full strength of modern medical science available to him through the cooperative efforts of the medical and related resources of the region in which he lives. These are the goals to which Regional Medical Programs are dedicated.

Activities and Progress

". . . the Surgeon General . . . shall submit . . . a report of the activities . . . together with (1) a statement of the relationship between Federal financing and financing from other sources . . . (2) an appraisal of the activities assisted . . . in the light of their effectiveness. . . ."

Public Law 89-239

Section 908

SECTION THREE Activities and Progress

REPORT OF ACTIVITIES

During the 21 months from the time Public Law 89–239 came into being until June 30, 1967, 47 Regions received grant funds to aid their planning activities and 4 of these Regions also initiated the operational phase of their Regional Medical Programs. (Exhibits III, IV) These programs received awards of about $24 million for planning and $6.7 million for operations. (Table 1) The regional areas to which the awards for planning relate contain about 90 percent of the Nation's population.

Additional applications for grants to support the planning of Regional Medical Programs covering the remainder of the country are under review or development. Overall, a total of about 54 Regional Medical Programs are anticipated. It is likely that by the late summer or early fall of 1967 Regional Medical Programs covering the entire country will be either in the initial planning or initial operational stages.

Progress in the development of Regional Medical Programs thus far must be measured against the tasks involved in launching a new and innovative venture dependent to a very high degree upon local enterprise. The establishment of many new relationships and activities has been required. Moreover, this development has taken place in a time of widespread manpower shortages and in conjunction with parallel demands from many other health programs, such as Medicare and Medicaid. In this context the progress reflected by the present state of activity represents a considerable achievement in a relatively short time. How this was accomplished provides a gauge of the direction and potential for the future.

The Initiating Actions

Shortly after the Law was signed by President Johnson on October 6, 1965, the Division of Regional Medical Programs was established at the National Institutes of Health. To direct its activities, Dr. Robert Q. Marston accepted the invitation to leave his post as Dean of Medicine and Vice Chancellor of the University of Mississippi and become Associate Director of the National Institutes of Health. Prior to the arrival of Dr. Marston, Dr. Stuart Sessoms, Deputy Director of the National Institutes of Health, was responsible for the development of plans and policies for the new program.

The Supplemental Appropriation Act of 1966 provided initial funding for the program, making available $24 million for grants and $1 million for the Division for fiscal year 1966. The Department of Health, Education, and Welfare Appropriation Act of 1967 provided $43 million for grants and $2 million for the Division for fiscal year 1967.

The National Advisory Council on Regional Medical Programs, established by the Law, was named from outstanding experts in heart disease, cancer and stroke, plus top leadership in medical practice, hospital and health care administration and public affairs. (Exhibits V, VI) It met for the first time in December 1965 to advise on plans and policies. In early February 1966, the Council met again to review and approve the preliminary issue of the *Program Guidelines*. Quickly printed, this publication was given its initial distribution in March.

During the spring of 1966, about 20 applications for planning grants were received and reviewed by the initial review groups and the National Advisory Council. By July 1, 10 grants were recommended for approval and awarded. Between July and December 1966, approximately 40 applications were reviewed. Many were returned for revision or additional information. Twenty-four were approved and funded. As a result, 1966 ended with a total of 34 Regional Medical Programs receiving awards for planning programs, representing areas that included some 60 percent of the population of the country. The first applications for operational grants had also been submitted.

Subsequently, in February 1967, the first four operational and 10 additional planning applications were recommended for approval by the National Advisory Council. At the Council meeting in May, five additional planning applications were recommended for approval. In June, continuation grants were awarded to 10 Regions for the second year of planning.

Broad Participation in Planning

The promptness and manner with which program proposals were developed reflect the interest this new program has generated in the national health scene and give heartening evidence of the willingness of diverse interests in the health field to cooperate in this new framework. The interest and enthusiasm generated throughout the country is the result of a number of factors, not the least of which was widespread participation of many individuals and groups, both in the formulation of policies at the national level and in setting up and planning their own Regional Medical Programs.

TABLE 1

AWARDS FOR PLANNING AND OPERATIONS OF REGIONAL MEDICAL PROGRAMS, JUNE 30, 1967

	Number	Amount
TOTAL	61	$30, 946, 907
Planning Awards	57	$24, 277, 174
For 1st Year Activities	47	19, 822, 153
For 2d Year Activities	10	4, 455, 021
Operational Awards	4	$6, 669, 733
For 1st Year Activities	4	6, 669, 733

About one hundred consultants aided the new Division by providing advice and counsel on various aspects of the Program during the initial period. These advisors represented a broad cross-section of the leaders in American medicine and health fields. They devoted intensive efforts to the review of Program proposals and grant applications. Some of these people sat on technical review groups. Others contributed their thinking to the development of such specialized activities as continuing education, community health planning, systems analysis, data collection, communications, evaluation, and the preparation of this Report. (Exhibit VII)

Activities in the Region

Similarly, in the Regions, the widespread participation of concerned individuals as members of Regional Advisory Groups and as Coordinators and staff is infusing the Programs with vitality and character. Over 1600 individuals are participating as members of Regional Advisory Groups. Membership in these groups ranges from 12 to 111, averaging 32. The members include a variety of professional backgrounds and representation of a broad cross-section of institutions and organizations. (Table 2.)

In fulfillment of the intent of the program, the major health agencies of the regions have been involved in the development of these Regional Medical Programs. All of the Nation's existing medical schools and their affiliated hospitals and most of the schools under development have participated. In virtually every program, representatives of State medical societies, health departments, cancer societies, heart associations, hospital associations or hospital planning agencies have taken part.

In addition, many programs have already developed links with university resources outside the medical schools and with other State and local private and public agencies having related interests. Examples of these are Schools of Dentistry, Nursing, Social Work, Business Administration, Education and Public Health and Departments of Vocational Rehabilitation, Welfare, Education, and Hospitals. Community Councils, planning councils, Blue Cross and similar groups are also being involved in many instances. Representatives of Veterans Administration and Public Health Service Hospitals are also frequent participants.

TABLE 2

MEMBERSHIP OF ADVISORY GROUPS FOR REGIONAL MEDICAL PROGRAMS, JUNE 30, 1967 [1]

Category	Number	Percentage
TOTAL	1634	100
Practicing Physicians	356	22
Medical Center Officials	281	17
Members of Public	260	16
Voluntary Health Agency Representatives	196	12
Hospital Administrators	170	10
Other Health Workers	142	9
Public Health Officials	122	7
Other	107	7

[1] *Includes 51 Regions, of which 47 had received planning grants and 4 had applications under review.*

Regional Organizations

Several kinds of institutions have assumed responsibilities as coordinating headquarters for Regional Medical Programs. Since the legisla-

tion does not designate these agencies, they must be decided upon by the various institutions and interests participating in the development of the Programs. The agency so selected acts for all involved in these cooperative programs.

Among the 47 Regions receiving planning grants, 28 university medical schools have assumed responsibilities as coordinating headquarters. Seventeen are private nonprofit agencies, 10 of which were newly organized for this purpose, 5 are medical societies, and 2 are multi-institutional agencies. One State and one interstate agency have also undertaken this task. (Table 3)

TABLE 3

COORDINATING HEADQUARTERS AND GRANTEES FOR REGIONAL MEDICAL PROGRAMS, JUNE 30, 1967

Type of Agency	Coordinating headquarters	Grantees [1]
TOTAL	47	47
Universities	28	33
State	23	25
Private	5	8
Nonprofit Agencies	17	12
Medical Societies	5	6
Newly Organized Agencies	10	3
Other Agencies	2	3
State and Interstate Agencies	2	2

[1] *The grantee differs from the coordinating headquarters when the Region requested this arrangement or the latter agency did not have the capability to assume formal fiscal responsibility.*

Program Coordinators and Staff

The Program Coordinators and Directors holding key leadership positions in the administration of the Regional Medical Programs come from a variety of backgrounds. About half previously held important positions in medical education, such as university vice-presidents, medical school deans and professors. Others have come from private practice of medicine and from positions of administrative leadership in hospitals. The rest previously held key roles in voluntary health and governmental agencies. (Exhibit VIII)

These coordinators are building staffs with a wide range of competencies. As of June 30, 1967, there were some 600 staff people working in these programs. These include over 300 professional workers with training in medicine, hospital administration, and other health disciplines as well as in related fields such as statistics, economics, sociology, systems analysis, education, communications and public relations. Special coordinators or consultants for heart disease, cancer and stroke are commonly included.

Nature of Preliminary Planning Regions

The applications for Regional Medical Programs planning grants have defined the geographic areas in which the initial planning efforts will be focused. It has been recognized that these definitions are preliminary and will be refined during the planning process and by operating experience.

The individual Regions have ranged in population from less than 1 million to over 18 million. (Table 4) The median is 2.6 million persons. Collectively, the preliminary planning regions encompassed in programs now in being or proposed cover the entire country. Gaps in geographical coverage, which was an early concern, have not materialized in the initial planning proposals.

TABLE 4

NUMBER OF PERSONS IN PRELIMINARY PLANNING REGIONS FOR REGIONAL MEDICAL PROGRAMS

Population range	Regions [1]
TOTAL	51
Less than 1,000,000	4
1,000,000–2,000,000	10
2,000,000–3,000,000	14
3,000,000–4,000,000	5
4,000,000–5,000,000	8
More than 5,000,000	10

[1] *Includes 51 Regions, of which 47 had received planning grants and 4 had applications under review.*

In 30 cases, the preliminary planning regions approximate State lines, due principally to the existing responsibilities of many of the key groups participating in the preparation of the initial planning grant application. Inasmuch as none of the Regions is bound by State lines, many of these preliminary definitions are likely to be modified on the basis of criteria more specific to health needs.

In 11 Regions, the initial Region includes parts of 2 or more States

and in 10 it is part of a single State. Some regions primarily cover urban metropolitan areas. Others follow lines previously established for planning health facilities.

Planning Activities

The planning activities of each Regional Medical Program are directed at the design of operating programs and the steps for their establishment. Initial planning activities have generally been of four major types:

☐ *Organization and staffing for planning and coordination*

☐ *Strengthening relationships and liaison among institutions and individuals throughout the Region*

☐ *Development of planning data*

☐ *Preparation of designs for pilot operational programs*

A principal effort in the planning of Regional Medical Programs is the careful study and analysis of many relevant factors: demographic and biostatistical characteristics of the Region, the manpower and facilities resources, the adequacy of and needs for specialized clinical facilities and problems of manpower supply and distribution. Surveys of training and library resources, on-going continuing education programs and unmet educational needs are also receiving widespread attention.

The patterns of occurrence of heart disease, cancer, stroke and related diseases are also being studied by many regions. Most are analyzing patient referral patterns and existing methods of providing diagnostic, treatment and laboratory services. Present and possible communication and transportation patterns relating to these services are also receiving widespread attention. These planning studies have, in most instances, been based on previous data collection efforts and have, in turn, contributed to the development of cooperative arrangements among the participating organizations.

About one-half of the planning applications proposed the undertaking of specific feasibility studies aimed at assessing the workability and utility of particular program elements. Many are exploring better ways of advancing educational and training activities. Particular attention is being given to improvements in continuing education programs for both practicing physicians and allied health personnel. The effectiveness of telephone, radio and television networks in linking community hospitals to university medical centers is being investigated under differing local conditions. Methods of carrying out demonstrations of patient care and applying evaluation procedures are also being tested.

In addition to analytical activity, planning for Regional Medical Programs involves major efforts directed toward the strengthening of the relationships and communications among health and related agencies within the Region. Various approaches are being used to further these cooperative relationships. The establishment of working task forces and committees, the conduct of conferences and workshops, and the employment of liaison personnel are common. Numerous programs are scheduling conferences at community hospitals and with other local groups to explain and discuss the purposes and nature of the prospective Regional Program. Working together in planning and initiating planning and feasibility studies has been found to be one of the most effective methods of establishing and implementing common objectives.

Although each Regional Medical Program is in many ways unique, some flavor of what Public Law 89–239 means in action is revealed by reports of certain programs that are

[1] *As reported by individual Regional Medical Programs.*

TABLE 5

MAJOR PLANNING STUDIES UNDER WAY OR PROJECTED BY 44 REGIONAL MEDICAL PROGRAMS, MARCH 1, 1967

Subject Under Study	Regions
Patient care	
Specialized Clinical Facilities	30
Disease Patterns	28
Patient Referral Patterns	28
Patterns of Services	25
Laboratory Services	25
Transportation Patterns	21
Manpower	
Physician Manpower	30
Nursing Manpower	29
Dental Manpower	25
Other Allied Health Manpower	26
Training and education	
Continuing Education Programs	28
Training Resources	28
Medical Library Resources	26
Communications Patterns and Resources	26

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presented as a supplement to this Report. What is happening in six Regions is discussed against a background of previous activities. In addition, excerpts from the first annual reports submitted by ten Regions that received grants as of July 1, 1966 are also presented.

Operational Activities

The four grants that have been made for operational programs are based largely on planning activities started prior to the passage of Public Law 89–239 (Exhibit IV). During the consideration of the legislation, it was recognized that there were several areas of the country where considerable effort had already been directed toward improved regional relationships among health resources. In these places sufficient planning had already been accomplished so that operational activities could be initiated early.

In the beginning stages these operational programs will encompass four principal types of activities:

☐ *Application of the latest knowledge and technology to improve capabilities for diagnosis and treatment.*

☐ *Specialized training and continuing education to enable health practitioners to use these capabilities most effectively in treating patients.*

☐ *Use of modern communication technology.*

☐ *Research on and exploratory development of new methods for the organization and delivery of high quality services for patients with heart disease, cancer, stroke and related diseases.*

Each Region will have differing requirements and approaches toward upgrading its capabilities for the diagnosis and treatment of heart disease, cancer, stroke and related diseases. In general, the designs of the initial Regional Medical Programs provide for the following specific kinds of activities as examples of the basic ingredients of comprehensive operating programs:

☐ *The exchange of personnel between medical centers and community hospitals and the provision of consultation and other assistance to practicing physicians by medical center and other specialized personnel.*

☐ *Continuing education programs for medical practitioners and allied health workers, at both local facilities and medical centers including the development of learning centers at community hospitals and communication systems joining medical centers and community hospitals.*

☐ *The development and demonstration of improved methods and arrangements for providing detection, diagnostic, treatment and rehabilitation services including such activities as:*

Demonstrations of coronary care in teaching and community hospitals.

Expansion of cerebral vascular diagnostic resources.

Demonstrations of improved methods of utilizing computers in monitoring physiologic data and in providing data for the use of practicing physicians and hospitals.

☐ *Development of information programs to further communications, understanding, and cooperation among the institutions, organizations and individuals of the Region.*

The Review Process

The review of applications for operational grants has been designed to ensure careful consideration of the strategy and soundness of the proposal for a Regional Program. Many Regional Advisory Groups have established subcommittees to analyze the validity and significance of proposals prior to their review and recommendation; these committees draw upon both community and academic resources. In line with the specifications of the Law, the Regional Advisory Group itself must approve all applications for operational funds.

The review process at the National Institutes of Health involves technical review by both expert nonfederal consultants and the staff of the Division and other offices with relevant expertise prior to action by the National Advisory Council. This process is focused on evaluating the organization and conceptual strategy of the Regional Programs and making available the benefits of expert professional analysis of project proposals. It seeks to preserve for each Region a large measure of the responsibilities and opportunities for deciding on priorities for action. A detailed statement of the review process is contained in Exhibit IX.

SUPPORTING ACTIVITIES OF THE DIVISION OF REGIONAL MEDICAL PROGRAMS

As support for Regional Programs, a number of activities have been undertaken by the Division of Regional Medical Programs to develop needed information and resources which can facilitate regional program development. (Exhibit X)

Continuing Education

A conference in September 1966 of 16 leaders in the continuing education of physicians and allied health personnel identified needs critical to the development of more effective activities in this field. The meeting documented a national shortage of professional health workers capable of conducting and evaluating programs in continuing education. To help meet this need, a contract was developed with the Center for the Study of Medical Education at the College of Medicine of the University of Illinois to study the feasibility of expanding graduate programs leading to a degree of Master of Education and also short term training programs in the area of continuing education. In addition, other university groups have submitted proposals for assistance to extend their programs in these fields. In January and May 1967 representatives from six universities, including staff from schools of medicine and education, met to examine possibilities of expanding programs to train educational manpower.

The Division staff has also worked closely with national organizations to broaden resources in continuing education. They include committees of the American Medical Association, the National Board of Medical Examiners, the Association of American Medical Colleges, American Public Health Association, American Physical Therapy Association, Association of Hospital Directors of Medical Education, Inter-University Communications Council (EDUCOM) and other professional and public groups.

Systems Analysis

The use of systems analysis has been encouraged in Regional Medical Program activities as an integral component of program development. Exploratory efforts have been undertaken to make broader use of systems analysis skills in studying specific problems of improving medical service. As part of this effort, the Division has entered into a contract with the Department of Industrial Engineering of the University of Michigan to study how to apply operations research and systems analysis methods to problems of regional medicine.

Data Collection

Conferences of specialists met in March and May of 1967 to identify and discuss data available for planning and evaluation of Regional Medical Programs and problems of data collection. By taking advantage of available data, Programs can avoid duplication of effort and thereby concentrate on studies of cooperative arrangements and other issues and needs unique to Regional Programs.

Listing Facilities

Section 908 of Public Law 89–239 requires the Division to ". . . establish and maintain a list or lists of facilities . . . equipped and staffed to provide the most advanced methods and techniques in the diagnosis and treatment of heart disease, cancer or stroke. . . ." As a first step to fulfill this requirement, the Division has contracted with the American College of Surgeons for its Commission on Cancer to undertake a study of appropriate standards to provide the highest level of diagnosis and treatment of cancer patients. Such standards may then be useful as measures by which medical care institutions of the country can evaluate their own capabilities, and by which the individual Regional Medical Programs can estimate where additional support may be needed.

Disseminating Information

A device for sending periodic reports to the Regions has been established to disseminate to Program Coordinators and other interested persons information and data affecting the development of Regional Programs. This medium will also help speed the exchange of reports of significant progress and problems among the Regions.

FINANCING FROM OTHER SOURCES

Substantial contributions have been made to the development of Regional Medical Programs by hundreds of individuals and institutions throughout the country. Leading officials of medical schools, hospitals, research institutions, voluntary health agencies and members of the public have devoted effort and resources to plan for these new programs. In many areas, local funds have been made available specifically to aid in the initial planning. For example, in Vermont, the State legislature appropriated $10,000 to help defray planning expenses. In Oregon the University Medical School, the State Medical Association, and the members of the Regional Advisory Group donated $6,000. The Mountain States Regional Medical Program received a grant of $13,700 from a private foundation.

Altogether, it is estimated that through March 1, 1967, more than $1.5 million in cash and services has been contributed to the planning

TABLE 6

ESTIMATED AMOUNT OF FUNDS FROM NON-FEDERAL SOURCES FOR PLANNING REGIONAL MEDICAL PROGRAMS, THROUGH MARCH 1, 1967[1]

Region	Total	Cash	Services
TOTAL	$1,497,300	$287,800	$1,209,500
Alabama	21,200	3,800	17,400
Albany, N. Y.	96,800	24,500	72,300
Arizona	2,800	100	2,700
Arkansas	5,100	600	4,500
Bi-State	13,200	1,500	11,700
California	.....	(2)	.....
Central New York	12,000	6,000	6,000
Colorado-Wyoming	.....	(2)	.....
Connecticut	33,800	.....	33,800
Florida	7,500	.....	7,500
Georgia	2,300	900	1,400
Greater Delaware Valley	174,500	70,100	104,400
Hawaii	6,900	.....	6,900
Illinois	48,000	3,000	45,000
Indiana	76,900	4,500	72,400
Intermountain	53,500	5,000	48,500
Iowa	19,500	11,100	8,400
Kansas	125,000	.....	125,000
Louisiana	.....	(2)	.....
Maine	16,200	1,500	14,700
Maryland	7,000	.....	7,000
Memphis	20,000	9,700	10,300
Metropolitan Washington, D.C.	2,000	300	1,700
Michigan	4,500	.....	4,500
Mississippi	15,000	9,000	6,000
Missouri	$48,900	$3,900	$45,000
Mountain States	15,000	13,700	1,300
Nebraska-South Dakota	9,000	1,400	7,600
New Jersey	17,800	12,000	5,800
New Mexico	25,200	5,700	19,500
New York Metropolitan Area	11,000	1,000	10,000
North Carolina	38,100	.....	38,100
North Dakota	.....	(2)	.....
Northern New England	134,200	10,000	124,200
Northlands	30,900	5,400	25,500
Ohio State	37,200	6,600	30,600
Ohio Valley	10,600	2,100	8,500
Oklahoma	50,000	.....	50,000
Oregon	18,000	6,000	12,000
Rochester, N.Y.	53,500	40,900	12,600
South Carolina	3,000	1,500	1,500
Susquehanna Valley	6,000	.....	6,000
Tennessee-Mid South	20,400	3,400	17,000
Texas	82,000	10,000	72,000
Tri-State	.....	(2)	.....
Virginia	25,000	.....	25,000
Washington-Alaska	4,000	.....	4,000
West Virginia	11,000	1,000	10,000
Western New York	38,300	2,100	36,200
Western Pennsylvania	7,000	1,000	6,000
Wisconsin	37,500	8,500	29,000

[1] *As reported by individual Regional Medical Programs.* [2] *Not reported.*

development of Regional Medical Programs from non-Federal sources. A listing of these amounts, by Region, is set forth in Table 6.

Procedures are being developed and implemented in the Regions so that these cooperative programs are financed from a variety of sources. In some areas, total responsibility for the support of the activities will be assumed by local funds after an initial period of study, testing and demonstration. In many Regions, voluntary agencies and foundation funds are being enlisted.

At this stage in the development of Regional Medical Programs, it is not possible to ascertain the longer term relationships of Federal and non-Federal funding of the activities under this program or to assess the nature of their impact upon medical service costs. If this program is successful in developing needed additional elements in the community health scene that are parts of improved services, the extent to which these services can be financed through regular cost and payment processes or other local funding mechanisms and the extent to which permanent or temporary Federal assistance will be required are issues that will call for critical examination as the program progresses.

AN APPRAISAL OF THE ACTIVITIES ASSISTED IN THE LIGHT OF THEIR EFFECTIVENESS

Only a tentative appraisal of the effectiveness of Regional Medical Programs in carrying out any of the established objectives is possible this soon after enactment of the legislation. On the basis of this limited period of observation there seems to be clear evidence that overall progress has been substantial. The prospects for the future are positive and auspicious.

The first objective of the Regional Medical Programs is "the establishment of regional cooperative arrangements." Accomplishment in respect to this objective has been outstanding. As noted above, the health interests of the Regions as well as related agencies and members of the public have come together in an unprecedented fashion to consider the most appropriate local ways of meeting identified needs under this program. Maintaining the continued commitment of these groups with diverse goals and interests to continue to work together in establishing and implementing Regional Medical Programs will be crucial.

The second purpose of Regional Medical Programs specified in the legislation is "to afford the medical profession and the medical institutions of the Nation, through such cooperative arrangements, the opportunity of making available to their patients the latest advances in the diagnosis and treatment of these diseases." Much of the planning effort is focused on identifying the types of "opportunities" that are most appropriate and practical to provide and strengthen capabilities. As reported above, a broad spectrum of potential approaches to this objective are being explored in planning, feasibility studies and pilot projects. Progress to date indicates that the basic concept of looking to regional groups for ideas and initiative is well founded.

The third purpose specified in the Law is "to improve generally the health manpower and facilities available to the Nation. . . ." Regional planning holds the potentiality of accomplishing this objective also. Better ways of utilizing and training health manpower, including many types of allied personnel, are also being explored. More efficient methods of extending the effectiveness of existing and new facilities, through sharing and cooperation, are being initiated.

Most importantly, Regional Medical Programs themselves are developing resources and procedures for continuing evaluation. A principal strength of these programs is the opportunity to build up resources for continuous evaluation; this is particularly appropriate and necessary in light of the concentration on innovation and experimentation. Evaluation mechanisms are generally being established as part of the planning process so that essential baseline data will be accumulated and capabilities developed to assess continuing progress and problems. In this way, the Regional Programs will be better able to modify their direction and speed, on the basis of actual experience, and progressively improve their effectiveness.

The long-term effectiveness of Regional Medical Programs will be demonstrated by evidence of advancement in the quality of services for these diseases, by extensions in periods of productive life, and by reduction in mortality and morbidity. Initial progress has established a promising foundation for such gains. These goals will not be accomplished quickly or easily, however. The full fruition will depend, in largest part, upon the continuing commitment of regional health resources, the successful recruitment of high quality personnel, and the sound support of operating programs.

Issues And Problems

SECTION FOUR Issues And Problems

The initial experience with Public Law 89–239 has raised a number of issues and problems which face the Regional Medical Programs as they seek to achieve the ultimate purposes of the Law. The prospects for progress toward the objectives of the legislation and the rate of that progress can only be realistically assessed when they are measured against the magnitude of the challenges. Thus a clear understanding of the issues and problems encountered thus far is essential to evaluating the initial progress described in the report. This understanding also provides the setting for the conclusions drawn and recommendations made.

Some of these issues and problems are derived from the particular characteristics of the health care activity in this country and the dynamics of its growth and change. Other issues derive more specifically from particular provisions of Public Law 89–239. These latter problems have special relevance to the policies already developed and bear directly on the recommendations for its extension and modification. Many of these issues and problems are interrelated in a complex manner. They reflect the general problem of reconciling national needs and objectives with the values, patterns of action and the diverse interests that exist in the community health setting.

Regional Medical Programs and the General Problems of the National Health Scene

The fundamental principles and processes of health activities in this Nation have generated immediate issues for the conduct of Regional Medical Programs. These conditions have imposed certain constraints. They have affected and will continue to affect the manner and extent to which these programs may contribute to better health.

Voluntary Health System

Health activities in this country are predominantly private and voluntary in nature. With some exceptions, such as treatment of the mentally ill, the medical program of the Veterans Administration, and the care of indigents, most medical care in the United States is not a direct governmental responsibility. Recent years have seen a rapid rise in the provision of public funds for a broad range of health activities; however, the terms and conditions under which these funds are provided have sought to preserve the voluntary and private nature of United States health care.

Specific provisions of Public Law 89–239 and its legislative history reflect this prevailing pattern by stressing the voluntary, cooperative nature of the Regional Medical Programs. These programs, therefore, face the challenge of influencing the quality of services without exercising administrative control over current health activities. To achieve its objectives, each Regional Medical Program will have to undertake many activities which require the active involvement of a variety of medical institutions, personnel, and organizations. Such activities include reaching a consensus on the distribution of specialized facilities and manpower required to meet the needs of heart, cancer and stroke patients at the most reasonable cost; determining the character and conduct of continuing education programs that utilize the resources of both university medical centers and community hospitals; and applying technological innovations such as techniques for diagnosis and patient monitoring using centralized computer facilities.

Such decisions must be made within the regional setting. Indeed they are already being made by many of the Regional Medical Programs. To do so in the context of the voluntary medical system, the Regional Medical Programs must establish and maintain a sufficient consensus of the major medical interests concerning the means being used to achieve the objectives of the program. The importance of this consensus gives special significance to the progress already achieved in establishing what the Law calls "regional cooperative arrangements."

Evidence of this progress is considerable. However, it is still too early to assess the effectiveness and stability of these mechanisms when they are faced with difficult decisions. The first steps cannot be considered definitive, but it is reasonable to assume that the goals of the Regional Medical Programs could not be achieved in a voluntary medical system without the progress toward the necessary consensus that is now underway.

Leadership is obviously of vital importance in achieving voluntary cooperation. The Law does not specify the source of leadership for the Regional Medical Programs. This has permitted leadership to develop in a variety of ways. Flexibility in the choice of the leadership focus has been cited by several regions as a key to achieving the necessary consensus of the major health interests. This flexibility, however, carries with it the risk that decision-making mechanisms may develop which are not strong enough to deal with important prob-

lems and issues. For this reason the review of grant applications is concerned not only with the development of workable cooperative arrangements but also with the effectiveness of decision-making mechanisms and leadership.

Magnitude and Complexity of Our Total Health Resources

Another characteristic of health activities in this country which complicates the development of any new health program is the magnitude and complexity of the health resources. Such gross statistics as 288,000 active physicians, over 600,000 nurses, 7,000 hospitals, 100 schools of medicine and osteopathy, and a total annual health expenditure of approximately $43 billion give some indication of the magnitude of the total health endeavor. The ultimate goal of Regional Medical Programs is to have an impact on the health of patients threatened or afflicted with these diseases. Its accomplishment will eventually involve a staggering number and variety of health resources.

To the magnitudes of this universe must be added the complexity of increasing specialization of personnel and facilities, acceleration of change in the nature of medical practice due to the advances of science, social and economic changes, and the variety of patterns of medical care. A program concerned with the wider availability of advances in heart disease, cancer, stroke, and related diseases will inevitably encounter the full range of this complexity. Thus the facts of this size and complexity raise many problems for the development of the Regional Medical Programs.

The diversity of health resources, together with the relative lack of organized relationships among them, presents each Regional Medical Program with a formidable task in establishing regional cooperative arrangements and carrying out operating programs. As a consequence planning will involve the establishment of priorities of action and careful phasing in the development of the program. Selectivity and phasing are made necessary by limits on resources, other institutional commitments, the need to gain acceptance by health personnel, and the importance of careful testing of new mechanisms. This necessity for phasing, however, will place strains on the arrangements for the voluntary cooperation necessary for the Regional Medical Program. Unless participants in the program accept the necessity for selective action and phased development, it seems unlikely that the regional cooperative arrangements will survive in a voluntary form.

On the one hand both patients and health resources will need to recognize that the Regional Medical Programs cannot solve all the problems in these disease fields. Neither can they become a mechanism for paying for each medical institution's priority needs identified on an isolated basis.

On the other hand each Regional Medical Program will need to develop a plan which illustrates both to the potential participants and to their patients, the rationale for selection of priorities and phasing of program. It will need to generate confidence in the fairness and capability of the decision-making process for making the necessary program determinations, and the relevance of program plans and activities to the needs of the people in the entire Region.

It is still too soon to say that all the Regional Medical Programs being planned and established will meet these tests. There is early evidence, however, that initial steps are being taken which will enable the Regional Medical Programs to do the job.

Manpower Limitations

The Regional Medical Programs are being planned and carried out during a period characterized by shortages of health manpower necessary to provide high quality health care to an expanding population. The Public Health Service has assumed a major role in assisting in the expansion of the supply of trained health manpower. This is being done through many programs including construction of training facilities, scholarships, training grants, and other forms of training support.

However, most of these programs have been implemented in the last several years. Their impact in terms of increased training capacity is only begining to be felt. Meanwhile the needs continue to increase and are accelerated by the implementation of large scale programs of health care financing such as Titles XVIII and XIX of the Social Security Act.

Manpower shortages are relevant to the Regional Medical Programs in several ways. First, they place a constraint on the rate of implementation of some program activities. This is already being reflected in the difficulties some regions are experiencing in acquiring the initial planning staff. There is keen competition for manpower with planning and leadership capabilities. The manpower constraint also applies to the setting of priorities and the rate of progress of operating activities. This

constraint has been cited by some of the Regional Medical Programs as a major factor in establishing priorities for action.

Manpower limitations also affect Regional Medical Programs by increasing the relative emphasis given to training activities in both the planning and operational phases of the Regional Medical Programs. Manpower shortages are real, and high priorities are being assigned to training activities to help meet these shortages. It seems likely therefore that the emphasis on training activities will be greater in the initial stages than in later periods. This likelihood could create the false impression that the Regional Medical Programs are primarily training programs.

A third relevant aspect of manpower limitations could be the assignment of higher priority to activities which increase the efficiency of manpower utilization. These would include: (1) the development of new techniques for diagnosis and treatment that increase the productivity of existing manpower; (2) the development of new types of manpower; and (3) the more efficient division of labor among different levels of manpower and among the several parts of the regional framework. The use of operations research and systems analysis in the development of Regional Medical Programs may contribute to development of new ways to use health manpower. Applications of these analytical and management tools are already under development in a number of regions. The Regional Medical Programs may create an environment and a mechanism for exploring many approaches to the efficient use of health manpower, as well as the opportunity to evaluate those new approaches under many different conditions. The future evaluation of the effectiveness of Regional Medical Programs should take into account their contributions to the solution of these manpower problems.

Data Gathering and Evaluation

The lack of objective data and methods for using data may hamper the launching of programs which require planning, selection of target objectives, priority setting, and evaluation of effectiveness in terms of the ultimate objective of better health for persons threatened with heart disease, cancer, stroke and related diseases. Techniques are not highly developed for acquiring and analyzing data which provide the basis for measuring cause and effect in terms of improved patient care. As in many other areas of activity, the Regional Medical Programs will have to develop and modify techniques as the programs are initiated. They will not be able to rely entirely upon established data-gathering and analytical mechanisms. Initially, the assessment of needs and the choice of program strategies will depend heavily upon informed judgment. Regional Medical Programs will need to strike the difficult balance between the initiation of activities on the basis of informed judgment about effects on patient care, on the one hand, and the continued refinement of the data base which will essentially permit redirection of effort based on objective analysis of experience.

Increasing Cost of Medical Care

The general public is deeply concerned about the rapid and continuous rise in the cost of medical care. The Secretary of Health, Education and Welfare has indicated the importance of due attention to moderating the price of medical care in developing Regional Medical Programs. The measuring of cost against benefits is very difficult in health care. Inadequate knowledge of the effects of changes in alternative methods of diagnosis and treatment render an accurate cost- benefit assessment practically impossible with current data and techniques. However, useful approximations can be developed in some areas. The techniques of operations research and systems analysis being used by some Regional Medical Programs can be helpful in making these assessments.

The major determinants of medical care costs seem to be beyond the scope of Regional Medical Programs. Nonetheless, Regional Medical Programs can contribute to the efficiency of program implementation and to a greater awareness of the cost implications of improved medical care. They can provide (1) definitions of needs, resources, and program activities through a planning process which includes all major elements of the health-care system; (2) development of cooperative decision-making frameworks that may speed acceptance of efficient means of delivering care; (3) opportunities to explore and evaluate the usefulness of new technologies and new types of health personnel which will contribute to the more efficient improvement of the quality of patient care. The Regional Medical Programs will need to make cost analysis an integral part of program planning and evaluation.

Regional Diversity

The diversity of this Nation is reflected not only in the health problems

and resources but also in the patterns of medical care in the various Regions. The problems and appropriate responses in a sparsely settled rural area with difficulties in attracting physicians and transporting patients over long distances are very different from those in the crowded metropolitan areas with both great concentrations of medical resources and pressing needs, particularly in the core city slums.

Perhaps because of the relative simplicity of the medical resources, Regional Medical Programs seem to be developing more rapidly in predominantly rural areas and smaller cities. Paradoxically, it has been particularly difficult to develop the initial steps toward effective Regional Medical Programs in the metropolitan areas where the greatest concentration of medical talents and facilities is to be found. Their added complexities begin with the large populations to be served. They include also high concentrations of disadvantaged groups. These complications are multiplied by the large numbers of institutions, including medical schools, hospitals, and other health agencies and their long-standing habits of autonomy and even rivalry. Added to these difficulties are the multiple social, economic, and political complexities that characterize modern urban life.

Consequently, the development of effective cooperative arrangements has been especially difficult in the largest cities. It has proved more difficult to develop a meaningful focus of leadership which can provide the basis for cooperative action. The juxtaposition of great resources and great needs not only creates significant opportunities but also generates real tensions. The mechanisms which evolve for the metropolitan areas may prove to be quite different from the more simple models appropriate for less complex Regions. Voluntary cooperation in such an urban environment will be put to a stern test. Planning for Regional Medical Programs is now underway in all these areas, however, and the new patterns of relationships and responsibilities are being explored to overcome these special metropolitan problems.

The Regions are now facing the challenge of creating under these diverse circumstances an administrative framework which not only serves the objective of regional cooperation but also provides sufficient focus of administrative responsibility to permit effective decision-making and program operation. This framework must provide sufficient authority and responsibility for good management by the full time program staff with day to day operating responsibilities. At the same time it must preserve a meaningful and continuing policy role for the Regional Advisory Group with its broadly representative base. The multiple administrative patterns which are emerging in the regions would seem to be an appropriate response to diverse situations. The effectiveness of the various patterns remains to be tested. How the various Regions manage to cope with their diverse situations will probably bring about a different rate of development of Regional Medical Programs and will lead to wider variations in the approaches developed by the various regions than would be appropriate if the patterns of medical care were more uniform throughout the Nation.

This diversity, and the development of appropriate strategies in response to diversity, make more difficult the communication of a generalized concept of a Regional Medical Program. They complicate the development of responses to needs perceived at the national level. They hamper the widespread use of new techniques and approaches developed in one set of circumstances.

On the other hand this diversity is one of the strong arguments for the flexibility in the provisions of the authorizing legislation. Given the facts of this diversity in the early stages in the development of the program, it seems too early to reassess the appropriateness of this flexible approach. Comparative evaluations of specific program accomplishments over a period of years offer the opportunity to refine techniques and approaches.

ISSUES ASSOCIATED WITH THE LAW

Understanding Program Purposes

From the time the legislation to authorize these grants was first introduced in January 1965, there has been some misunderstanding about the nature and purposes of the program. This misconception was based largely upon the mistaken idea that the objective of the law was to build a national network of Federal centers to give care to heart disease, cancer, and stroke patients. To help clear up this misunderstanding, the Congress made changes in the legislation to further emphasize local initiative and involvement of practicing physicians, community hospital administrators, and the many other relevant interests including the public.

In spite of these efforts to clarify understanding of the purposes and mechanisms of the Regional Medical Programs, fears and misunderstandings were a major impediment to be overcome in initiating the

Programs. Speeches, articles, and the *Program Guidelines* issued by Division of Regional Medical Programs emphasized the utilization of existing institutions and manpower resources, the participation of practicing physicians, the necessity for planning and implementation at the regional level, the cooperation of all major health interests and the ultimate common focus of all activities on improving the care of patients.

Progress in understanding has been made. However, tendencies toward fragmentation and insularity of health activities in this country have made it more difficult to overcome apprehension and suspicion. Clearly, the initial achievement of trust and its reinforcement through action is an essential ingredient of success.

The steps taken thus far can be judged successful in the context of the difficulty of the task. It would be misleading either to underestimate this difficulty or to assume that the programs can be carried out without a significant level of common understanding. It is expected that understanding will grow through experience in working together.

Categorical Nature of the Program

Public Law 89–239 is directed at "heart disease, cancer, stroke, and related diseases." These disease problems, which cause more than 70 percent of all deaths in the United States and afflict millions more, constitute an appropriate nucleus for the development of effective broadly based regional cooperative arrangements.

Because of the tremendous scope of these disease problems, they have a major impact upon the total range of personal health services. To plan effectively for heart disease, cancer, and stroke, and related diseases, it is often necessary to consider the entire spectrum of resources available for personal health services. For example, effective programs of continuing education must be based on broad analyses of the capabilities and interests and attitudes of medical and allied practitioners toward all types of continuing education activities; only in this way can the particular role and place of programs concerned with specific categorical diseases be determined.

The criteria governing the award of a Regional Medical Program grant are whether or not the activities in the program are necessary for achieving the established statutory objectives and whether they reflect a coherent whole centered upon advancing the quality and availability of services in the areas of heart disease, cancer, stroke and related diseases. The approach is practical—are the activities to be undertaken an integral and essential part of a coordinated effort to advance the attack on heart disease, cancer and stroke and related diseases? Review procedures, including the Regional Advisory Groups and the National Advisory Council on Regional Medical Programs and related technical committees, evaluate applications against this standard.

Regional reports indicate many activities supported under and essential to the development of Regional Programs will contribute to other health goals. It would not be possible to achieve the legislative objectives efficiently if attempts were made to sort out the fractions of indirect effect. In some instances, activities which have a more general impact extending beyond the specific problems of heart, cancer, stroke and related diseases may need to be supported because they are essential to the achievement of the purposes of Regional Medical Programs. Without the full support of these basic activities by Regional Medical Programs, important underpinnings of the attack on heart disease, cancer, and stroke and related diseases would be missing. An example of this situation is the financing of personnel and equipment needed for educational purposes which are basic to specific educational programs for heart disease, cancer, stroke and related diseases.

Moreover, the cooperative arrangements and relationships initiated through Regional Medical Programs provide mechanisms that should be useful in dealing with other health problems. If regional cooperation is effective in meeting problems of heart disease, cancer, stroke and related diseases, it can also be useful in accomplishing other health ends. A number of Regional Medical Programs have already indicated an interest in working on other health problems, enlisting other sources of support for this work.

Definition of the Region

Public Law 89–239 provides considerable latitude for the definition of "regions . . . appropriate for carrying out the purposes" of the Act. However, the Surgeon General has the responsibility for insuring that all parts of the country are served and that inappropriate overlap is avoided.

An early policy decision was to place initial responsibility for delineating the "Regions" upon local groups developing the planning applications. It was foreseen that many considerations would need to be

taken into account in arriving at these decisions, and that their relative weight would vary in different areas. The *Program Guidelines* provided that the Regions should be:

"an economically and socially cohesive area taking into consideration such factors as present and future population trends and patterns of growth; location and extent of transportation and communication facilities and systems; and presence and distribution of educational and health facilities and programs. The region should be functionally coherent; it should follow appropriate existing relationships among institutions and existing patterns of patient referral and continuing education; it should encompass a sufficient population base for effective planning and use of expensive and complex diagnostic and treatment techniques."

It was recognized that original definitions would necessarily be preliminary and might be modified by findings from planning studies, refinements in criteria and changing conditions.

Therefore, one principal objective of the initial planning is a more precise definition of the preliminary planning Regions. The award of the planning grant has been the beginning of the effort to determine the most appropriate current interrelationships. It seems likely that a number of Regions will be modified.

No single definition of a Region can serve all of the program's purposes with equal effectiveness. Therefore, determination of any Region is a judgmental balancing of benefits and liabilities. Consultation among neighboring Regions, as between Missouri and Kansas, helps to identify the most effective division of responsibilities. In some areas it may be best for individual hospitals and groups to participate in different aspects of several programs. In addition, continuing arrangements for interregional cooperation will help to serve the effectiveness of individual Regions.

Achieving Widespread Participation

Public Law 89–239 and its legislative history emphasize involvement of medical centers and practicing physicians in Regional Medical Programs. This emphasis has stimulated the active participation of the medical schools and the leadership of physician organizations. The statutory requirements for membership on the regional advisory groups has extended participation to leaders of other major health organizations and agencies.

In the development of many of the applications for planning grant funds, participation was largely concentrated in this limited group of leaders because of the necessity to work out the initial acceptance of regional cooperative arrangements among representatives of the major health interests. However, the award of planning grants has provided the funds and staff time to mount concerted efforts to extend the scope of participation. Reports from the Regions indicate that programs and proposals are now being discussed with members of health professions, institutions, and members of the public at large through workshops, meetings at community hospitals, conferences with other local groups and medical societies, and through State conventions of health organizations.

However, in many Regions there still remains the substantial job of reaching many interested health practitioners and other local groups. In some areas limitations of manpower and time have not yet permitted sufficient investment in the complex and time-consuming activity of developing new mechanisms for cooperation. The pace of progress is slowed by the frequent lack of experience in working together on the part of organizations and institutions which have been accustomed to a considerable degree of autonomy.

Achieving wider participation and communication also requires in some cases the modifying of attitudes based on prior experiences, misunderstandings of the purposes of the program, and fears of domination and control by the large medical centers. In some regions the split between "town" and "gown," frequently the source of past tensions, has to be overcome. The progress reports, however, present encouraging evidence that the program is, in fact, bringing the necessary groups together, Region by Region. True collaboration will generally involve stress, trial and error for each Region to arrive at the most suitable procedures and mechanisms to meet its needs.

Role of the Regional Advisory Groups

The composition and role of the Regional Advisory Groups has received considerable attention both within the Regions and in the review of grant applications. This concern is justified by the attention given in the Law and the legislative history, which stressed the importance of these groups as mechanisms for both achieving and monitoring the effectiveness of regional cooperative ar-