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REPORT
ON
REGIONAL
MEDICAL
PROGRAMS
TO
THE
PRESIDENT
AND
THE
CONGRESS

*Submitted by
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Surgeon General
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*U.S. DEPARTMENT
OF HEALTH,
EDUCATION,
AND WELFARE*

June 1967

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**HEART DISEASE,
CANCER AND
STROKE AMENDMENTS
OF 1965**

On or before June 30, 1967, the Surgeon General, after consultation with the Council, shall submit to the Secretary for transmission to the President and then to the Congress, a report of the activities under this title together with (1) a statement of the relationship between Federal financing and financing from other sources of the activities undertaken pursuant to this title, (2) an appraisal of the activities assisted under this title in the light of their effectiveness in carrying out the purposes of this title, and (3) recommendations with respect to extension or modification of this title in the light thereof.

Public Law 89-239

Section 908

FOREWORD

This Report on Regional Medical Programs is required by Section 908 of Public Law 89-239, the Heart Disease, Cancer and Stroke Amendments of 1965. The significance of this requirement was highlighted by the Senate Committee on Labor and Public Welfare in its Report on the Heart Disease, Cancer, and Stroke Amendments of 1965:

The Committee views this requirement for accomplishments and recommendations for further development as an important and integral part of this legislation. This program provides the opportunities for major innovations . . . The impressive endorsements of the concept of the program give a basis for launching the program as soon as possible, but the final form in all its particulars is not, and cannot be clear at this time. Therefore, the need for careful and continuous reevaluation assumes a special importance for this program. This Committee urges that the program be administered at all times with a view toward the identification of productive modifications for submission to the Congress when the extension is considered in the future.

For the most part, this Report describes progress and experiences during the 20 months that have elapsed since the enactment of this legislation. This period encompassed

the time-consuming process of initiating organizations at both the national and regional levels, assembling key operating staff, and developing program guidelines.

These tasks have been accomplished with dispatch. However, the period of actual operations has been so limited that firm conclusions cannot yet be drawn concerning some of the issues emphasized in the Congressional directive.

On the other hand, the general shape and direction of program development has clearly emerged during this period. The quick and enthusiastic response it has received indicates that it can fill an important national need. The great opportunities this innovative program presents, and the critical issues with which it is confronted, have been brought into sharper focus.

To be certain that full consideration was given to all aspects of this initial Regional Medical Programs experience and to assist in forging the conclusions and recommendations in this Report, we sought views and advice of a wide range of individuals expert in medicine, health, and public affairs (Exhibit I). Last fall, I appointed a Special *Ad Hoc* Subcommittee of the National Advisory Council on Regional Medical Programs to help in the development of the Report (Exhibit II). A na-

tional conference of some 650 persons, representing a broad spectrum of health and related groups throughout the Nation, was held in January 1967 to discuss and exchange views on the development of this program. This conference provided the background for the initial drafting of the Report; the *Proceedings: Conference on Regional Medical Programs* have been published (PHS Publication No. 1682).

The essence of this Report, I am pleased to note, is that Regional Medical Programs have made a substantial and impressive beginning. But it is only the beginning. The task ahead is to bring to fruition a truly unique and promising venture designed to advance the effectiveness and quality of medical care available to those who suffer from cancer, heart disease, stroke and related diseases.

Critical issues remain, and effective regional programs are not yet completely realized. But as we enter the period of full operation, the prospects for success appear highly favorable.

Looking to the future, the single most important condition for further progress is to sustain the enthusiasm, vigor and cooperative spirit of the many individuals who have voluntarily undertaken this pioneering effort in the Regions throughout the country. To do this the national

commitment to this program must be clear.

If these conditions are met and the potential of the program is realized, health resources of the Nation will move forward, region by region, in building new patterns of collaboration, and people suffering from these diseases will receive the care they need, more promptly and more efficiently.

William H. Stewart, M.D.
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Health, Education, and Welfare

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 pro-

gram, 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 administra-

tion, 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 develop-

ment 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 sep-

arate 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 co-

operation 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 devel-

opment 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, rep-

resenting 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

TABLE 2

MEMBERSHIP OF ADVISORY GROUPS
FOR REGIONAL MEDICAL PRO-
GRAMS, JUNE 30, 1967¹

Category	Num- ber	Per- cent- age
TOTAL.....	1634	100
Practicing Physi- cians.....	356	22
Medical Center Officials.....	281	17
Members of Public..	260	16
Voluntary Health Agency Represent- atives.....	196	12
Hospital Admin- istrators.....	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.

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.

*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)

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)

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.

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 con-

cern, 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 con-

tinuing 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 con-

ditions. 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
<i>Patient care</i>	
Specialized Clinical Facilities.....	30
Disease Patterns.....	28
Patient Referral Patterns	28
Patterns of Services.....	25
Laboratory Services.....	25
Transportation Patterns.....	21
<i>Manpower</i>	
Physician Manpower.....	30
Nursing Manpower.....	29
Dental Manpower.....	25
Other Allied Health Manpower.....	26
<i>Training and education</i>	
Continuing Education Programs.....	28
Training Resources.....	28
Medical Library Resources..	26
Communications Patterns and Resources.....	26

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 prac-*

tioners 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 communi-*

cation 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 rec-

ommendation; 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 in-

formation 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, 1967¹

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

tain 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-

is 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 3 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 vari-

ety 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 beginning 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 Re-

gional 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 re-

lated 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 interrela-

tionships. 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-

rangements in meeting the needs of the people in the Region. The Law requires that these groups be broadly representative of the major health resources of the Region. It also insists that members of the public familiar with health needs be included. The Law makes their approval of applications for operational grants a condition of Federal grant support.

To carry out the full intent of the Law, the *Program Guidelines* and the National Advisory Council have stressed the importance of the continuing role for the Regional Advisory Group and the necessity for independence of its functions. As evidence that the advisory group is performing its role and is not a *pro forma* or subservient group, an annual report is required from the Advisory Group itself giving its evaluation of the effectiveness of regional cooperative arrangements.

The importance and composition of these Advisory Groups have been given further attention in a recent policy statement of the Secretary of the Department of Health, Education, and Welfare on "Medical Care Prices." This policy calls for special emphasis to be given to adequate and effective consumer representation in the administration of Regional Medical Programs. The Regional Advisory Groups are a logical locus for that representation.

Continuing Education for Patient Care

Continuing education is an essential component of Regional Medical Programs. It contributes in a most direct way to the primary purposes of the Regional Medical Programs. Improvements in patient care require the primary participation of practicing physicians and other members of the health team in their daily practice. Therefore, if the advances of biomedical research are to be made available to patients, the means must be provided continuously to update the performance of all health professionals and supporting personnel.

However, Regional Medical Programs are not exclusively nor even primarily a continuing education effort. Continuing education is one of a number of means of working toward their total objectives. Continuing education projects, no matter how meritorious, are supported from Regional Medical Program grant funds only when they are part of integrated, comprehensive approaches of enhancing regional capability for the diagnosis and treatment of heart disease, cancer, stroke, and related diseases.

The accelerating rate of advance in the biomedical sciences and related technology makes the problem

of keeping current increasingly difficult for all involved in health care. Regional Medical Programs are providing new opportunities to develop the essential linkages between education and practice, as an important means of diminishing professional obsolescence which is the inevitable consequence of rapid scientific advance. Studies of better ways of providing health services, demonstrations of patient care, and educational and training for all types of health personnel are joined together in a unified effort. In continuing education, as in other components of the program, attention is focused directly on the question, "Will this effort change behavior and will this change result, in fact, in the patient receiving the benefits of advances in heart disease, cancer, and stroke?"

Progress reports show Regional Medical Programs are proving to be a strong catalyst to the entire field of continuing education and training of the health professions. They are providing mechanisms for the cooperative relationships that can make continuing education more effective in improving patient care.

Latest Advances in Diagnosis and Treatment

Section 900(b) of Public Law 89-239 states that the Regional Medical

Programs are to help the medical profession and the medical institutions of the Nation make available to their patients "the latest advances in the diagnosis and treatment" of heart disease, cancer, stroke and related diseases. A narrow and rigid interpretation of this section would seriously hamper the effective accomplishment of the purposes of the program. Improved health for patients threatened or afflicted with these diseases requires emphasis on prevention and rehabilitation as part of diagnostic and treatment processes. It requires dissemination and widespread use of all relevant knowledge in order to achieve the benefits of the "latest advances."

The Public Health Service has encouraged the Regions to consider health functions as a continuum and not a set of isolated functions. This continuum involves the environment of research and teaching, where the latest advances in diagnosis and treatment are most readily introduced, as well as the other institutions and groups involved in preventing and caring for victims of these diseases. To overcome existing gaps, it is necessary to overcome problems of organization, distribution, manpower, cost, attitudes of the public or the health professions and evaluation of the effectiveness of activities in

changing the health status of the population.

Limitations on Institutional and Personal Commitments

A practical issue is raised by the initial authorization of the program on a 3-year exploratory basis. If the program is to succeed, institutions and organizations must commit themselves to participation in regional co-operative arrangements which may involve some lessening of their independence of function. Many of these institutions are under continuous financial pressures. Full commitments to new patterns of relationships involve changes in attitudes. For these reasons it is very difficult to obtain this full commitment on the basis of a limited authorization of the program.

Similar problems apply in recruiting talented manpower. High caliber people are reluctant to make career changes when the permanency of the program is under question. The degree of commitment already achieved in the initial phases of the program is the basis of hopeful expectations. However, it will be difficult to obtain a valid trial on which to base judgments of the ultimate effectiveness if the nature of the program authorization does not encourage voluntary

and serious commitments of institutions and personnel.

Relationships to Other Programs

The great trends of accelerating scientific advances and rising public expectations in health have generated many new activities and programs to stimulate and support concerted action for health across the Nation. Regional Medical Programs are part of the response to these forces. Other major actions relate to financing the costs of medical care, education for the health professions, delivery of mental health services in the community, strengthening public health services and planning and construction of hospitals and other facilities.

In the preamble to the most recent of the major Federal enactments, the Comprehensive Health Planning and Public Health Services Amendments of 1966 (Public Law 89-749), the Congress made the following statement of national health purpose:

"The Congress declares that fulfillment of our national purpose depends on promoting and assuring the highest level of health attainable for every person, in an environment which contributes positively to healthful individual and family living;

"that attainment of this goal depends on an effective partnership, involving close intergovernmental collaboration, official and voluntary efforts, and participation of individuals and organizations;

"that Federal financial assistance must be directed to support the marshalling of all health resources—national, State, and local—to assure comprehensive health services of high quality for every person, but without interference with existing patterns of private professional practice of medicine, dentistry and related healing arts."

The many and diverse health programs, both nationally and in the Regions, States and communities, all contribute to these goals. However various thrusts must be interrelated to achieve maximum impact and effectiveness. Utilizing resources wisely in the many promising avenues of health activity calls for planning and cooperation at many levels and the recognition of the preponderance of nonfederal financing for the total health function.

Two fundamental principles, both implicit in the Congressional declaration of purpose just cited, govern the Federal participation in health programs.

The first is a commitment to local, broadly based initiative and plan-

ning. A diversity of patterns and priorities, determined by the people of a Region, State, or community can help to match programs to particular needs. No master plan imposed by a central authority can be sensitive or responsive to the multiplicity of local conditions and requirements. Planning is to aid foresight and rational action, not dictate solutions.

The second is that decisions involving health involve the whole of society, not just a few public or private agencies. Rather all those affected by these programs—providers and consumers, public and private groups, educators and practitioners—must participate actively in decision making. Division and fragmentation impair progress and effectiveness.

These two principles are demonstrated with special clarity in two major new Federal programs designed to pull together a number of efforts whose impact has been diffused in the past: the Regional Medical Programs, and the Comprehensive Health Planning Program authorized by Public Law 89-749. The first seeks to stimulate the development of co-operative arrangements for programs directed toward enlarging the availability and enhancing the quality of care provided for major disease problems on a regional basis; the second seeks to stimulate effective planning

for the use of all existing resources and the sound further development of health resources by the States, metropolitan areas and local communities. The two programs are in concept complementary and mutually supportive.

A policy statement has been issued concerning these two programs which outlines general areas of relationship and support. (Exhibit XI) Practical operating methods under these concepts are now being refined. Discussions are taking place throughout the country, at the levels where the coordination must be put into practice. These are the most critical decisions of all, for, as Secretary Gardner has pointed out: "We are beginning to understand that much of the problem of coordination must be solved at the local level. If the Federal Government tried to coordinate all its programs at the Washington level, it would end up imposing a pattern on State and local government. More important, only State and local leadership has the knowledge of local needs and resources that will enable them to put all the programs together in a way that makes sense."

Arrangements are being made to insure close coordination between Regional Medical Programs and other Federal activities. Continuing liaison is maintained with the National Heart Institute, the National

Cancer Institute, National Institute of Neurological Diseases and Blindness, National Institute of General Medical Sciences, National Library of Medicine, National Center for Chronic Disease Control and the National Center for Health Statistics. Working relationships are being developed with the new Bureau of Health Manpower and plans are being made for collaboration with the proposed National Center for Health Services Research and Development. Similar cooperation is being developed with agencies outside the Public Health Service, such as the Vocational Rehabilitation Administration, the Veterans Administration and the Department of Housing and Urban Development. This partial listing of the programs whose missions relate to that of the Regional Medical Programs is an indication of the magnitude of the coordinating task.

The need for and responsibilities of Regional Medical Programs to identify the most effective ways of linking programs at the regional level are emphasized in the *Program Regulations and Guidelines*. These indicate, that in awarding grants, the Surgeon General will take into consideration "the extent to which the applicant or the participants in the program plan to coordinate or have coordinated the regional medical

program with other activities supported pursuant to the authority contained in the Public Health Service Act and other Acts of Congress including those relating to planning and use of facilities, personnel, and equipment, and training of manpower."

Relationship Between Federal and Nonfederal Financing

Regional Medical Programs can serve as an integrating force to bring to bear all the resources required to reduce the toll from heart disease, cancer, stroke and related diseases. Grant funds under Public Law 89-239 will necessarily provide only a very small fraction of the total funds necessary to meet all the identified needs. The costs of these diseases constitute a large portion of the Nation's \$43 billion health care expenditures. The full application of medical scientific advances in the diagnosis and treatment of heart disease, cancer, stroke and related diseases will require additional support from many public and private sources. Regional Medical Programs will in fact provide only a minor share of financing for the full range of activities relevant to accomplishing the purposes of the Law, even though formal matching requirements are limited to construction aspects of the programs.

Federal grant funds, while they can provide only partial support, must be adequate to stimulate the continuing technological and social innovations to translate the latest scientific advances into the daily practice of medicine at the community level. The "venture capital" for such innovative efforts must, in large measure, be supplied initially from public funds. The potential return is high and will accrue to individuals throughout the Nation. A relatively small amount of new money, wisely and flexibly applied and fully coordinated with related efforts, can help assure that benefits from the "cutting edge of science" are realized both now and in the future.

As noted previously the impact of this program on medical care costs has yet to be ascertained. If the benefits of this program do result in warrantable additions to health services costs, the extent to which such costs can be met by normal financing methods versus direct Federal support through Regional Medical Programs will require careful examination.

The Role of University Medical Centers

Public Law 89-239 does not specify the role of the university medical centers in the development of Regional

Medical Programs. Yet the nature of the functions to be carried out by the Regional Medical Programs has made the university medical centers a vital resource in most areas for accomplishing the objectives of the Law. In many Regions the university medical centers have played leadership roles in initiating the development of the Regional Medical Programs.

Some medical leaders have seriously questioned whether the university is an appropriate focus for the leadership of these cooperative efforts. These doubts are raised from several points of view: (1) Some medical school faculty members and administrators have concerns that Regional Medical Program responsibilities might divert medical school resources from carrying out their teaching and research functions. (2) Other health representatives have expressed concern that medical school leadership will result in domination or absorption of other health resources by the medical schools to serve their educational and research interests. (3) Questions have been raised from many sources about the capacity of university medical centers to expand their administrative frameworks to encompass the planning and administrative implementation of a major effort involving the

total health resources of the Region with an ultimate focus on improving the quality of patient care.

Since university medical centers have played prominent leadership roles in the initial development of most of the Regional Medical Programs, these concerns about diversion, dominance, and administrative capacity deserve careful attention. Solutions to these problems require new forms of relationships between the university medical centers and the other health resources of the Regions.

Coordination and Leadership

Various mechanisms are being tested for administering and coordinating regional efforts: (1) the development of new administrative frameworks within the university and formalized administrative relationships with the other primary health resources; (2) the use of executive coordinating committees representative of major health interests which can serve as decision-making bodies closely related to day-to-day operating problems, reserving for the large Regional Advisory Groups a more general advisory and policy-making function; (3) the utilization of existing nonprofit corporations as frameworks for administration of the

cooperative program; (4) the establishment of new nonprofit corporations with boards of directors representative of the major health interests and having as their major responsibility the planning and administration of the Regional Medical Program.

The creation of new administrative structures outside of the university medical center framework, as developed in a number of Regions, seem to offer a most attractive solution to the problems noted. These new entities, however, create other problems related to the provision of sufficient status and stability to attract the high caliber personnel required for the planning and administration of the Region Medical Programs. If these innovative approaches to the administration of cooperative health activities prove effective, they may be a useful mechanism for broader health purposes. They may, in fact, provide a useful prototype for relating the resources of the university to broader social needs without undue diversion of the university's attention from functions of teaching and research.

Regional Medical Programs will continue to contend with this array of problems listed, as they continue their development. The resolution of most of these matters will derive

from the increasing sophistication and experience gained in the course of full program operations. Others will require further evolution of national health policies and attitudes. Certain are dependent upon clear executive or legislative action and form the basis of the recommendations contained in the following section.

Conclusions and Recommendations

SECTION FIVE Conclusions and Recommendations

On the basis of the initial experience in the implementation of Public Law 89-239 certain conclusions and recommendations are indicated.

CONCLUSIONS

An effective beginning has been made in the creation of cooperative arrangements among the health resources on a regional basis for implementing the purposes of the Law.

The regional cooperative arrangements being established and the plans being developed and implemented show great promise for providing the benefits of the advances of medical science to persons threatened or afflicted with heart disease, cancer, stroke, and related diseases.

The Regional Medical Programs will be seeking to accomplish their mission during a time when many major problems beset our health professions and institutions. The Regional Medical Programs seem to provide a relevant and useful tool in the search for better solutions to these health problems.

The extension of this program and the indication of substantial further national support are needed, to sustain and nurture the individual and institutional commitments as well as the enthusiasm which give vigor and substance to the regional co-

operative arrangements. These initial efforts require an environment of stability and status in which permanent effective cooperation can flourish.

The initial progress provides solid evidence for continuing the program without modification of its essential nature and purposes.

A more effective means for meeting the special space needs generated by this program is requisite to the full achievement of the purposes of the legislation.

RECOMMENDATIONS

Extension of the Act

As discussed in the earlier sections of the Report, the sum of experiences in the development of Regional Medical Programs throughout the country demonstrates the validity and potential of these new cooperative arrangements in both planning and action. The needs are pressing and the opportunities promising for making available the benefits of medical research advances. The establishment of the Regional Medical Programs as continuing instruments in the health field will contribute significantly to the fulfillment of these opportunities.

Many groups and individuals initially expressed uncertainty and doubt

about the Regional Medical Program concept. Most have been reassured on the value of this approach as major regional interests have come together to determine locally the most appropriate and effective ways of moving the program forward in their Regions. Groups throughout the Nation are coming to recognize that through Regional Medical Programs, local planning, decision-making, initiative, and capabilities to meet the needs of patients with heart disease, cancer, stroke and related diseases can be enhanced significantly.

Individuals undertaking regional planning have reported that uncertainty about the program's future is a serious obstacle in recruiting well qualified persons for leadership and key staff positions. Some institutions and agencies have been reluctant to embark upon a course of action, whatever its promise and potential, without reasonable assurance that the program will be continued. Therefore, extension of the program will prevent a loss of momentum and enthusiasm already achieved and will provide a firm basis for strengthening and building upon the beginning efforts. The importance of this momentum and enthusiasm for the success of a voluntary cooperative endeavor should not be underestimated.

A 5-year extension should attract the long-term commitment of the kind and quality of people, and the full participation of all affected institutions which are essential to the program's success. This requirement calls for an authorization that, in both its duration and its level of funding, will indicate a national intent to maintain this effort until the job is done.

Funds for Regional Medical Programs can be a critical factor, even though they are only a small fraction of the total national expenditures for heart disease, cancer, stroke, and related diseases. For these funds, effectively used, can be a fulcrum in raising the quality of care generally throughout the country as well as in significantly enhancing the diagnosis and treatment of these diseases.

Experience gained thus far indicates that the annual cost of operation for each Regional Medical Program may be as much as \$10 million or more. There are several bases for this estimate. The initial operational grants and the plans being developed around the Nation indicate that there are myriad opportunities for improving the diagnosis and treatment of heart disease, cancer, stroke, and related diseases by bringing the latest advances into the daily practice of medicine in all parts of the Nation.

The number of potential participants—institutions, groups, agencies, and health personnel—is very great. All must contribute if the benefits of the programs are to be widely available to the population of the Nation.

Frequently, sophisticated and expensive equipment is required because of the high order of technological innovation entailed by many recent medical and related advances. This equipment will advance clinical, communication and computing services. Many technological innovations should be rapidly introduced to bring to patients the benefits of the advances. This will require effective regional planning with the cooperative involvement of full-range medical resources. It will also require sources of funding to be spent on the basis of regional priorities which do not have to compete with pressing needs of the individual institutions.

It is recommended that the program be established on a continuing basis.

New Construction of Essential Facilities

The original Administration proposal to the Congress in 1965 requesting legislative authority for Regional Medical Programs included grant assistance for construction of new as well as the renovation of existing

facilities. It thus identified the need for facilitating construction in the successful development of Regional Medical Programs.

In enacting Public Law 89-239, however, Congress amended that provision to limit construction authority to "alteration, major repair, remodeling and renovation of existing buildings" during the initial period of authorization. In so doing, the Report of the House Committee on Interstate and Foreign Commerce stated: "The lack of this authority for new construction should create no serious problems during the three years authorized in this legislation and when a request is made for extension of this legislation in the future, the committee will review this question again."

The lack of authority to assist new construction has not presented serious obstacles to the initial planning and development of Regional Medical Programs. Thus, the early judgments of the Congress have been confirmed. Experience, however, has identified several areas in which authority to assist new construction will be essential to the full development of Regional Medical Programs.

Specific construction needs essential to the work of Regional Medical Programs have been more clearly defined and documented during the initial planning phase. Information

obtained from Regional Medical Program Coordinators and key staff, Regional Advisory Group Members, and others involved with these programs at the regional level indicates that there are major needs in a number of areas. These inadequacies will hamper activities within the next several years as Regional Medical Programs move into the operational phase and their range of activities increases. The likelihood of significant limitations on Regional Medical Program activities from space shortages is increased by the overwhelming demand for new health facilities generally in the years immediately ahead. The demands of an expanded population and its desires for high quality medical care, the expansion of medical education facilities, and the backlog of demand for health research facilities all indicate very great competition for funds to finance the necessary facility expansion.

The types of construction needs described below, defined according to regional priorities, will have great difficulty in competing successfully with the immediate and overwhelming construction needs to house adequately the basic functions of the participating institutions. Construction of facilities needed for the purposes of the Regional Medical Program is likely to be delayed until these urgent institutional needs are met. Since the

lag between identifying a need for construction and the availability of the facility is so great, this competitive position might seriously delay the implementation of the Regional Medical Program.

It is also important that the types of needs cited below be given adequate consideration during the general expansion of health facilities of the Nation. Only then will the activities represented by them become an integral part of the functions of the medical institutions of the Regions:

□ *Space for continuing education programs and training purposes is urgently needed, including classrooms and conference room space, learning center facilities, and medical reference and audiovisual facilities.* This is the need most frequently cited by Regional Programs and other groups, such as the Association of Hospital Directors of Medical Education. It is particularly acute in community hospitals.

In the past there has been a paucity of operational support in both community hospitals and medical centers for continuing education activities. The same situation has been true with respect to capital expenditures. Most of the Nation's 7,000 hospitals, especially the smaller ones, simply do not have existing space that can be converted or renovated for educa-

tional purposes. The same holds true for most medical schools, most of which cannot significantly expand their present postgraduate education programs without additional space and facilities. In the past, as documented by the 1962 survey of the American Medical Association Council of Medical Education, continuing education programs have not been a major responsibility and interest of most medical schools; accordingly, the development of appropriate resources (including related facilities and space) was usually neglected.

In both community hospitals and medical schools, the pressures of rising expenditures for direct patient care have made it impossible to allocate sufficient funds to the continuing education activities that are essential to high quality care. Thus, the potential impact of continuing education and training programs in heart disease, cancer, stroke, and related diseases will be seriously hampered unless essential facilities are constructed.

□ *There is a critical need for additional space and facilities for patient care demonstration and training purposes.* Intensive care units, radium therapy facilities, and specialized surgical suites are, for example, often necessary in order to provide facilities

to demonstrate to practicing physicians, nurses, and allied personnel the use of these and similar advanced tools and techniques for diagnosis and treatment.

Only if physicians and the other members of the health care team learn how to utilize these advances "by doing," and have the required facilities available to them at the community level, will they be able to fully exploit the continuing education and training afforded them, and bring to their patients the full benefit of their learning.

Most community hospitals do not now have such facilities. In the case of older hospitals, adequate provision was not made for the inclusion of such specialized facilities because the underlying advances which make continuing education a necessity today had not yet been made; newer hospitals often were unable to include sufficient space for these purposes because of limited funds (public and private) available for initial construction. Developing these facilities on the basis of regional planning will permit great educational impact at minimal cost.

□ *Some community hospitals have need for additional space for new or expanded diagnostic laboratory facilities.* Both the introduction of new

diagnostic tests and procedures, and the fuller use by practitioners of existing tests, depend upon adequate hospital laboratory facilities. Such facilities will serve as teaching laboratories for medical technologists and other supporting personnel.

□ *The establishment of integrated data banks and communications systems for the storage and rapid transmission of diagnostic information, patient records, etc., requires space to house the computer and communications facilities. Similarly, television and radio transmission of continuing education programs will require new space and facilities.*

Most Regional Medical Programs are undertaking inventories of existing facilities for both educational and specialized clinical care activities relating to heart disease, cancer, stroke and related activities. These planning efforts are being closely coordinated with State and area-wide hospital planning agencies. Experience in administration by the Public Health Service of other recent programs, such as the construction of community mental health centers and mental retardation facilities, has developed patterns and procedures that can help assure necessary coordination of effort.

The construction of new facilities for Regional Medical Programs must

be limited to facilities that are essential, carefully selected, and designed to meet regional needs. Each such request will need to be approved by the Regional Advisory Group which represents the major health interests of the Region. This review and approval process will ensure that an excessive amount of attention and funds are not devoted to construction, and that no construction is undertaken exclusively or primarily for the benefit of any single institution or group in the Region.

Most community hospitals, medical schools, and other institutions would have serious or insurmountable difficulties in raising matching funds for construction of facilities needed for continuing education and demonstration essential to meet regional needs. The regional nature of the program may make it especially difficult for any individual agency to obtain substantial funds for this purpose. The current matching requirement of 10 percent applicable to renovation and alteration of facilities, requires a local commitment without impeding progress. A larger matching requirement at this time in the development of this pioneering new program could be self-defeating.

It is recommended, therefore, that adequate means be found to meet the

eds for construction of such facilities as are essential to carry out the purposes of Regional Medical Programs. Priority should be given to facilities required for continuing education, training, and related demonstrations of patient care, particularly community hospitals.

In meeting these needs, the following considerations should be taken into account:

1. Construction undertaken for Regional Medical Programs should be directly supportive of the operational programs and should be broadly distributed for maximum impact. This might be done by (1) limiting the amount available for construction to no more than 15 percent of the total appropriation for operational activities; and (2) restricting grants for such construction to no more than \$500,000 for any single project.
2. The special space needs of the program can be met either through additional authority to aid new construction as part of grants for Regional Medical Programs under Title IX of the Public Health Service Act or through other mechanisms, such as amendments to Title VI and Title VII of the Public Health

Service Act (Hospital and Medical Facilities and Health Professions Educational Facilities Construction Programs).

Support of Interregional and Other Supporting Activities

The present Act authorizes grants for the planning and operation of individual Regional Medical Programs. No consideration was given during the development of the legislation to support for other activities which might contribute to the implementation of the Regional Medical Programs. These activities include both cooperative efforts among several Regions and other activities supported centrally which make available to all or several Regions specialized skills and resources which are not generally distributed throughout the Regions.

The desirability for extensive cooperation among Regional Programs was foreseen. However, the extent of and rapidity with which cooperative arrangements among Regions would develop was not fully anticipated. Nor, in turn, was the corollary need for additional funding for this purpose apparent.

During the first year of the program, individual Regional Medical Programs devoted considerable attention to coordinating their efforts

with other Regions. Interregional cooperative efforts involving several Regions have already evolved in a number of areas throughout the country. In some instances, these arrangements are still informal; in others, interregional agencies are being established.

These interregional activities have arisen in response to real needs. Regions have identified a number of objectives that can be best served and activities carried out in this way. Among the principal potential benefits are the following:

- To facilitate communications among Regions, including exchange of information on approaches to and problems in planning and program development.
- To help in defining responsibilities and coordinating efforts in "interface" areas between Regions.
- To foster consistency in approaches to the conduct of planning studies.
- To achieve comparability in data collection and program evaluation.
- To develop and apply better and more comprehensive methods of program evaluation.
- To utilize more effectively skilled manpower, specialized facilities and resources.

To help achieve compatibility in communication networks and computer systems.

To plan and conduct joint epidemiological and research studies.

To develop jointly common educational programs and materials.

To orient and train staff personnel.

A somewhat similar situation has been identified with respect to certain specialized needs common to all or a number of Regions. The support of a limited number of facilities and programs is needed to develop techniques and prepare personnel to facilitate the work of individual Regional Medical Programs. The support of such activities in agencies that can serve a number or all of the Regions will avoid unnecessary delay and duplication of effort and make the best use of specialized facilities. Central support for these activities will enable the Division of Regional Medical Programs to make available to some regions skills and resources which are not available within the Region. This assistance at a crucial time in the development of a regional program could improve the quality and accelerate the pace of the region's activities.

For example, continuing education and training programs will require

significant numbers of specialized professional personnel (e.g., education specialists, communication and information specialists). Many of these categories of personnel are in scarce supply and the facilities in which they can be trained are limited.

There are also numerous studies and demonstrations that need to be carried out in such areas as motivation, learning theory and evaluation affecting both continuing education and other aspects of Regional Medical Programs. In many instances, these studies will call for resources in one Region to study these issues in a number of Regions. These interregional efforts, too, will substantially assist and expedite work of the individual Regional Medical Programs.

It is recommended that an effective mechanism be found for the support of interregional activities necessary to the development of Regional Medical Programs. This assistance will facilitate the work and implementation of individual Regional Medical Programs.

Referrals by Practicing Dentists

Section 901(c) of the Act provides that "no patient shall be furnished hospital, medical, or other care at any facility incident to research, training,

or demonstration activities carried out with funds appropriated pursuant to this title, unless he has been referred to such facility by a practicing physician."

In certain instances, in carrying out the programs authorized by the legislation, a dental practitioner may assume responsibility for the referral of a patient. For example, a patient with oral cancer may be diagnosed by a dentist and referred by him for treatment and rehabilitation. It is desirable to clarify the Law to cover this type of situation.

It is recommended that patients referred by practicing dentists be included in research, training and demonstration activities carried out as necessary parts of Regional Medical Programs. This modification is in line with the original intent of the legislation in this regard and would correct the original oversight.

Funding of Activities In Federal Hospitals

Veterans Administration and Public Health Service Hospitals in many areas have been involved in the planning of Regional Medical Programs. The participation of these institutions has been particularly helpful and desirable in light of their significant role in providing diagnosis and treatment services to many residents of the

Region. The effectiveness of the programs operated by Federal hospitals can be enhanced by close cooperation and sharing of effort and resources with other health facilities in neighboring communities.

The Congress recognized and endorsed this principle in enacting the Veterans Hospitalization and Medical Services Amendments of 1966, Public Law 89-785, enacted November 7, 1966. Among other provisions, this legislation authorized the Veterans Administration to enter into cooperative agreements for the sharing of medical facilities, equipment and information with medical schools, hospitals, research centers and others. The Law required that, to the maximum extent practicable, such programs should be coordinated with Regional Medical Programs. A somewhat similar provision is included for Public Health Service Hospitals in legislation now pending before the Congress.

While the staffs of Federal hospitals may now participate directly in planning Regional Medical Programs, those institutions are not eligible to receive funds from the grants authorized by Public Law 89-239. Thus, a technical modification is necessary to authorize Federal hospitals to receive such funds on the same basis as other hospitals. In this way, programs can be developed in these facilities when

such an approach is identified as the most desirable way to strengthen the total Regional Medical Program. As in the case of all other projects proposed for support as part of Regional Medical Programs, such requests must be part of the overall regional program and will need to be approved by the Regional Advisory Group and the National Advisory Council on Regional Medical Programs.

It is recommended the Federal hospitals be considered and assisted in the same ways as community hospitals in planning and carrying out Regional Medical Programs. This modification will, in effect, increase the flexibility, discretion and capabilities of Regional Programs.

Regional Medical Programs in Action

“One of the strengths of the bill is that it provides the flexibility necessary to accommodate the many different patterns of medical institutions, population characteristics, and organizations of medical services found in this Nation.”

*Excerpt from the Report of the
House Committee on Interstate and
Foreign Commerce on H.R. 3140
(P.L. 89-239)*

SUPPLEMENT Regional Medical Programs in Action

Regional Medical Programs are best defined by the particular actions and activities being undertaken across the country. In this Chapter, outlines of a number of individual Programs are presented.

□ Four reports summarize what has happened in the *planning* of the Iowa, North Carolina, Washington-Alaska, and Western New York Regional Medical Programs. They summarize salient developments in the preliminary and initial planning phases and the interaction among various institutions and groups that has occurred.

□ Two reports indicate the nature of the initial *operational* activities of the Intermountain and Missouri Regional Medical Programs. They highlight how these activities will benefit the practicing physician and his patients.

□ In addition, excerpts are presented from the *annual progress reports* of the 10 Regional Medical Programs for which the first grants were effective July 1, 1966—Albany (New York), Connecticut, Hawaii, Intermountain, Kansas, Missouri, North Carolina, Northern New England, Tennessee Mid-South, and Texas. These excerpts provide further insights into specific aspects of the Regional Programs.

Collectively these reports reveal, in some detail, the accomplishments and problems of individual Regional Medical Programs. It is through these individual efforts and actions that Regional Medical Programs will be more precisely defined and ultimately will serve the needs of the Nation's medical professions, institutions and patients.

PLANNING GRANTS

Iowa Regional Medical Program

The Iowa Regional Medical Program, like a number of others, is built on a significant base of past regional activities. Extensive interrelationships between hospitals and practitioners have developed over the last 50 years. By an interchange of patients, physicians throughout the State have become, in effect, integrated with the activities of the staff of the University of Iowa Medical Center. Continuing education programs have been developed over the last 30 years and include courses at the Medical Center, programs at community hospitals, and closed circuit television educational programs between the Center and a number of these hospitals. As a result, it has been possible to move forward in a num-

ber of directions since the receipt of a planning grant in December 1966.

Even with this previous experience of cooperative arrangements, however, there was need to plan for an Iowa Regional Medical Program. This preliminary planning involved cooperation between the Medical Center and three other major health planning groups—the Health Planning Council of Iowa, a voluntary agency organized to coordinate statewide health care planning; the Council on Social Agencies of Des Moines; and the Des Moines Health Planning Council. Other localities are also organizing planning groups that will be related to the Regional Medical Program.

The Regional Advisory Group, designated to guide the expanded effort now being embarked upon, is broadly representative of all of the Region's health professions and agencies. It includes the Dean of the College of Medicine, the Commissioner of Health, Past Presidents of the Iowa State Medical Society, Heart Association, Cancer Society and League for Nursing; also included are representatives of the Iowa Hospital Association, Society of Osteopathic Physicians and Surgeons, Dental Associations, Nursing Home Association, Nurses Association, State Department of Social Welfare, re-

habilitative groups, and members of the public. This Group has met seven times through March—or almost monthly since its creation in mid-1966.

The goals which the Iowa Regional Medical Program has set for itself, with the advice of the Regional Advisory Group, are to: (1) augment present education and training capabilities; (2) improve continuing education programs; (3) expand research programs; (4) broaden regional communication to promote dissemination and interchanges of knowledge and techniques; (5) develop programs for public education; and (6) develop demonstration units and systems.

To accomplish these goals, the Program has been organized into four sub-areas: an Education Program, a Research Program, a Comprehensive Patient Care Program, and a Communications Program.

Within the Education Program, for example, studies have been initiated to develop basic 2-year curricula for post-graduate education on heart disease, cancer and stroke. These curricula, once developed and tested, will be taught through a coordinated program of the College of Medicine and regional hospitals, utilizing live conferences and video-taped materials. Extension of this endeavor to

the community level for individuals or small groups of physicians using kinescope presentations is also contemplated.

Other planning activities or projects in the other program sub-areas have also been initiated. These involve a number of different agencies or groups. For example:

□ The Iowa State Department of Health is planning program elements which concern public health generally, professional and public communications, disease entity reporting and health manpower.

□ The University of Iowa Department of Economics is involved in research on the economic structure and performance of the medical care industry in Iowa. One of its first projects is the delineation of the Iowa Medical Care Region, considering economic and demographic factors, traditional service areas, and political boundaries.

□ The Iowa Central Tumor Registry is providing planning information and analysis guidance concerning disease registries.

At the same time, the participation of the Colleges of Dentistry, Nursing and Pharmacy of the University and other health care and educational institutions is being developed.

North Carolina Regional Medical Program

In North Carolina, as in many other states and regions in the country, planning for regionalized medical and health programs has been underway for over twenty years. However, limited resources and other local factors have resulted in incomplete implementation of these plans. Passage of the Regional Medical Program legislation provided an opportunity for North Carolina to move ahead quickly and build upon its past experiences in developing a Regional Medical Program.

The Program was established with the award of one of the first planning grants effective on July 1, 1966. Even before the legislation was signed into Law, the deans of the three medical schools in the State met with the President of the Medical Society to form an Executive Committee to make preliminary plans. The Executive Council of the Medical Society approved the plans for cooperation from which emerged a new, non-profit organization to carry out the purposes of the Program. The Association for the North Carolina Regional Medical Program was officially established in August 1966, and is made up of the three public and private medical schools in

the State, the University of North Carolina School of Public Health and the Medical Society of North Carolina. It has adopted Articles of Association, and established a Board of Directors which has been actively working with the Program Coordinator and Advisory Council.

To provide leadership and overall direction to its Program, North Carolina selected as Program Coordinator, Dr. Marc J. Musser, a physician with extensive experience in medical education, medical research and administration. His prior position as Deputy Chief Medical Director of the Veterans Administration and his previous 25 years as Professor of Medicine at the University of Wisconsin School of Medicine provided background and stature invaluable to the Program.

A 25 member Advisory Council, representing the major relevant health interests in the State, was organized to provide overall advice and guidance to the Program. Its Chairman is past president of the State Medical Society and its membership includes the Director of the State Board of Health, the Directors of the North Carolina Public Health Association, Heart Association, and Cancer Society, other voluntary associations, the current President of the State Medical Society, the State

dental, nursing, pharmaceutical, and other allied health professional associations, practicing physicians, the North Carolina Health Council, the deans of the three medical schools, a leading hospital administrator, and members of the public. They have met monthly since August 1966, and have conducted intensive reviews of project applications.

Subcommittees of the Council have also been organized to focus on and provide expertise in specific problem areas, such as heart disease, cancer, stroke and dentistry. Represented on these subcommittees are all the leading organizations and experts in the respective fields in North Carolina. For example, the Subcommittee on Cancer is composed of representatives from the Cancer Society, all the official relevant State agencies, practicing physicians, the experts from the North Carolina Division of the American College of Surgeons, the medical schools, and the State Medical Society. Their discussions immediately revealed the need for a state cancer registry which would augment, coordinate, and make more effective use of the several on-going independent cancer registries in the State. This led to recommendations of a project proposal which was submitted to the Advisory Council, coupling the resources of the Regional

Medical Program with the on-going cancer registry activities of the other health agencies. Financial contributions from many of the participating agencies were also anticipated as part of the Program.

In the field of heart disease a similar process took place which resulted in a feasibility study now underway to develop a regional plan for providing on-going educational services to coronary care units. Other programs underway in North Carolina include planning for a statewide diabetic consultation service; planning for education and research in community medical care; studies and surveys of education program needs and resources; surveys of relevant health professions needs and resources; and studies of patterns of illness and care.

The impact of the Regional Medical Program is already being felt in the health affairs of the State. With the State Medical Society taking an early leadership role in developing the program with the medical schools, practicing physicians are actively involved in the planning phase. The channels of communications which have opened up at all levels and among all health groups are quickly leading to fruitful discussions on a multitude of problems.

The Dean of Duke University School of Medicine described the phenomenon when he said: "Channels for cooperation for many endeavors have now been opened. Although we have talked together a great deal before, we now have available more effective channels of communications and financial resources to implement such programs, not only with other medical schools but also with all other health agencies." As the North Carolina program moves ahead, it will be a program conceived, designed and implemented by and for the people of the State. As one leading official of a voluntary health agency put it: "We hope to weave it so that it won't be your program, or my program, but our program."

Washington-Alaska Regional Medical Program

Although the Washington-Alaska Region previously had little regional health activity, Alaska, which has no large medical center, is naturally related to Washington by transportation, communication, economic and social ties and traditional patterns of medical referral and consultation. The joint Washington-Alaska Regional Medical Program is being developed on this basis.

Here, as in many other regions, there was widespread participation in the preliminary planning and preparation of an application. An initial conference, held only one month after Public Law 89-239 had been enacted, included some 35 members of the University of Washington Medical School faculty, approximately 50 practicing physicians, and representatives of the Washington Hospital Association, State Department of Health, and the Seattle-King County Department of Health.

Though the planning proposal that eventually resulted was formally submitted by the University of Washington Medical School, it had the approval of the Governors of both Washington and Alaska, the President of the University of Washington; the Washington and Alaska State Medical Associations, Dental Associations, Nurses Associations, and Heart Associations; the Washington and Alaska Divisions of the American Cancer Society; the Washington Health Department, Alaska Department of Health and Welfare and the Divisions of Vocational Rehabilitation in both States.

Many of the health institutions in the region are being involved in the Regional Medical Program. Representatives from virtually all of the 130 hospitals in the region have been con-

tacted. Interest has been expressed by the Heart Associations and the Cancer Societies of both Washington and Alaska; their programs of research, professional and public education, community service, traineeships and direct patient services will be coordinated in a joint effort.

The Program Coordinator for the Washington-Alaska Regional Medical Program, Dr. Donal Sparkman, assumed his position on March 1, 1966, six months prior to the beginning of the planning grant. Thus, the Program has had the benefit of overall administrative direction since its preliminary planning phase. Dr. Sparkman has had extensive experience in the practice of internal medicine, in teaching at the University's School of Medicine and with the State Department of Vocational Rehabilitation.

Other key staff, including a coordinator for Alaska, an associate director, a cardiologist, a hospital administrator, and a systems analyst, have been recruited since the Region's planning grant was awarded, effective September 1, 1966. In addition, a wide variety of consultants, including epidemiologists, statisticians, economists and communications specialists, are being utilized.

The Program strategy of the Washington-Alaska Region is to concentrate first on the following:

- Assess the existing disease problem in the region.
- Delineate resources and needs in patient care, education, training and research.
- Investigate the effectiveness of current programs and how they can be improved by regional planning and cooperative efforts.

Initial planning studies now underway are focused on identifying needs of physicians, particularly needs for continuing education and the best use of medical consultants visiting smaller communities. Particular attention is being given to physician manpower needs in Alaska as well as transportation and communication patterns in that part of the region.

Planning studies relating to the coordination of coronary care facilities and services, a post-graduate preceptorship program, and the establishment of a regional medical library system have also been inaugurated. Other planning studies soon to be initiated will concern methods of pooling data from cancer registries, a feasibility study of open channel television, a survey of physician and nurse participation and interests in con-

tinuing education, and the early detection and care of coronary disease.

Western New York Regional Medical Program

Western New York is a comparatively small and compact but heavily populated Region. It is essentially urban and dominated by metropolitan Buffalo. There had been relatively little regional and cooperative activity among the health resources and interests in this area in the past. Substantial and rapid progress has been made in creating a regional health organization and framework for decision-making since the enactment of Public Law 89-239.

The development and creation of a Western New York Regional Medical Program has been characterized from the very beginning by the widespread participation by nearly all of the major health institutions, groups, and agencies in the eight-county region covered by it (Allegheny, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, and Wyoming Counties in New York, and Erie County in Pennsylvania). The Regional Medical Program has been received by the practitioners, with unexpected enthusiasm following the well-publicized interest of the State University of New York at Buffalo (SUNYAB), Roswell Park Memorial Institute and

other major hospitals in the area to build on and strengthen the existing good relationships.

In November 1965, following passage of Public Law 89-239, an Interim Coordinating Committee composed of key people concerned with health and health care was formed to study the bill and "to promote as rapidly as possible regional interest in the establishment of a regional program" for heart disease, cancer, and stroke. The committee, as initially constituted, included the Dean of the Medical School, Director of Roswell Park, the Executive Director of the Western New York Hospital Review and Planning Council, the Past President of the Erie County (N.Y.) Medical Society, Erie County Health Commissioner, and the Regional Officer for Western New York of the State Health Department.

In January 1966 this committee called together representatives from the medical, hospital, and other health-related professions, practicing physicians and voluntary health agencies. From each of the eight counties came the health and hospital commissioners, the medical society representatives, chairmen of the Boards of Supervisors, the hospital administrators, and the American Cancer Society and Heart Association Chairmen. Individuals from social welfare

agencies, public health and nursing representatives, as well as education personnel were also present. A total of 78 persons representing 70 organizations, institutions, and groups attended.

This group, originally invited to participate in the formation of the program, evolved into the Regional Advisory Group. This was no simple task. For the first time in the history of Western New York, an assemblage from the above groups met *with a common objective*. In an atmosphere paralleling that of a town meeting, each force presented its particular point of view. As the day wore on, a unique spirit of understanding and cooperation evolved. It was unanimously agreed that *it is the patient who must benefit from the Law*. Wholehearted support was expressed for a Western New York Regional Medical Program.

Several meetings were held by the group during the spring of 1966. The outcome of these meetings was the formation of a new nonprofit organization called Health Organization of Western New York, Inc. (HOWNY) and the designation of its 111 member representatives as the advisory body.

Their initial grant application, looking toward the development of a sound and workable proposal, in-

corporated a six-point planning program.

- A coronary care unit feasibility study
- The feasibility of multiphasic screening in Western New York
- Health care team planning
- A medical communications study
- A planning survey for a local consultation program
- A health care manpower survey

By the time a planning grant was awarded in December 1966, some other important and parallel developments had also taken place.

- New channels of communication had been opened among the many diverse health institutions and groups in the region.
- A parallel organizational framework was established at the community level. Through these local advisory committees, broadly representative of the health interests in the communities and including public members, the intent and aims of Regional Medical Programs were more fully and accurately conveyed to the practicing physicians and others at the community level. In addition, communities had been prompted to examine their own needs.
- Perhaps most significant was the decided change in the attitude of

the practicing physicians in the region. Initially they had been quite wary and somewhat suspicious of the medical centers and the "cooperative arrangements" approach embodied by Regional Medical Programs. This view has altered with their increasing involvement in and better understanding of the program, so that now, in the judgment of many, including the Regional Advisory Group Chairman, who is himself a private practitioner, a majority of them support it.

Since the award of its planning grant, the Western New York Regional Medical Program has obtained a full-time Program Director, Dr. John R. F. Ingall, formerly an associate cancer research surgeon at Roswell Park. The Director has begun visits to all the medical communities, large and small, to explain the regional concept of the program and to stress the need for coordination. He aims personally to discuss with physicians and the health service agencies the aim of the Regional Medical Program to support all involved in giving medical care; the patient is most important and his needs can only be met by action in concert. The patient in turn, as consumer, is being informed by radio and television of the objectives of the Program. The health care manpower and coronary

care unit feasibility studies had already been launched prior to his appointment; the remainder of their proposed planning activities have gotten underway since then.

The HOWNY Board of Directors, with members from each of the participating counties—one representing the county medical society, the other usually from a health related field—as well as SUNYAB, Roswell Park, the Western New York Hospital Association, the area-wide hospital planning group, and official public health agencies, has already set up procedures for reviewing proposed pilot projects. These include, in addition to a number of tentative proposals generated by local communities, proposals for the establishment of a regional hematology reference laboratory and a regional blood bank communication system.

OPERATIONAL GRANTS

Intermountain Regional Medical Program

The initial operational activities of the Intermountain Regional Medical Program will provide the following opportunities to a medical practitioner in this Region (which encompasses Utah and parts of Colorado, Idaho, Montana, Nevada and Wyom-

ing) to improve the care of his patients:

- He will have available at his community hospital a communication network, including radio and television facilities, which will provide education programs and opportunities for interchange and discussion with consultants at the medical center.
- He will have available at his community hospital for himself, nurses and other personnel, a training program in the resuscitation of patients with heart disease, and the necessary equipment to make it possible to carry out these techniques. He will also have on call a medical consultant who has been specially trained to head hospital cardiopulmonary arrest alert programs.
- He may have tested at his hospital the feasibility of a system that transmits, in a 24-hour day operation, physiological information on heart disease patients to a computer facility in Salt Lake City and transmits promptly back to stations within his hospital information for diagnosis and treatment.
- He will be able to attend training courses in the intensive care of heart patients and will have available for consultation medical and nursing spe-

ialists who have completed such training.

He may participate in seminars led by local, regional and national experts in order to better understand trends which are influencing medical care practices as well as new methods of maintaining and extending his medical skills.

He will have available at his hospital both continuous 24-hour consultation by telephone and visits by special consultants knowledgeable in the latest information in the diagnosis and treatment of cancer.

Through the use of a computerized tumor registry, he will be able to analyze and compare his own cancer patients with local, regional and national standards.

Consultants will visit his hospital (if it is in a community with less than 10,000 persons) periodically, to assist him in the diagnosis and care of heart disease patients by working at the bedside of his patients.

He may apply for a special clinical traineeship in cardiology that will involve specialized training at 5 cooperating medical institutions in programs designed to meet the individual interests and problems of the participating physicians.

He will have available a communication and information ex-

change service that will provide information on the prevention and control of these diseases to public groups as well as to professional and allied health workers.

He, along with other health workers and members of the public, will have opportunities through a formal feedback system to communicate with the planners and leaders of the Regional Program to indicate his reactions, needs and recommendations for developing new program activities.

Missouri Regional Medical Program

The initial operational endeavors of this Program are "oriented toward maximizing the amount of diagnosis and care which can be delivered in the . . . community by the physician and the local medical resources while maintaining and improving the quality of medical effort. . . ." As the program is implemented in the future, a medical practitioner in the Missouri Region may have the following opportunities available to assist in the care of his patients:

He will benefit from the development and demonstration of a comprehensive health care system that is being tested in Smithville, a suburban-rural community north of Kansas City, with a view to eventual replica-

tion throughout the Region. This project is exploring the benefits to practicing physicians of having available automated clinical laboratory testing for multiphasic screening and a computer fact bank displaying the results to him audio-visually; an automated patient history system providing him with a patient's complete medical history before seeing the patient; an automated EKG service connected with the University Medical Center for rapid, accurate transmission, receipt and interpretation of electrocardiograms; specialists consultation from the medical center by telephone; and an integrated continuing education program at his hospital for himself and the allied health personnel supporting him.

He may, through the connection of his community hospital with the Medical Center's Department of Radiology and computer facility, obtain computer aided radiologic diagnosis that will help improve the accuracy and reliability of his diagnosis of bone tumors, gastric ulcers, and congenital heart disease.

He may, after a period of pilot testing and validation, have at his disposal an automated patient history acquisition system through which he can obtain a complete medical history of a patient before seeing him. Presently this requires an amount of

time not normally available to the busy practitioner.

He will, if the result of experiments being initiated are successful, have direct access by means of computer terminals in his office to a Computer Fact Bank providing the best and latest information concerning the diagnosis and care of stroke patients. This information will not only be available for application to individual patients while in the physician's office but will make possible discourse with the computer so that the experience constitutes an integral part of his continuing education.

He will have the use of a multiphasic screening center to be established to provide him and his patients with 11 blood chemistry tests, complete blood count, urinalysis, stool guaias, and Pap smear.

He and his colleagues in the Ozark area will have available at St. John's Hospital in Springfield, and later at other small hospitals, a refined and more comprehensive cardiovascular care unit that will demonstrate the feasibility of an intensive care program without house staff.

He and others will have available to them as a result of the establishment and sampling of population study groups, more current and accurate information about the true

rates of disease incidence and prevalence in the Region.

He and his patients will benefit from an operations research and systems design project aimed at (1) improving early detection of heart disease, cancer and stroke and (2) optimizing the utilization of the resources committed to these diseases in terms of the effectiveness of the medical services provided.

He and his patients will benefit from improvements in bioengineering techniques utilizing sensor-transducers for early detection of heart disease, cancer and stroke.

He and his patients similarly will stand to benefit from studies of the Program Evaluation Center, a multidisciplinary research unit of the Missouri Medical School, dealing with the problems of the distribution of health services and medical facilities. Priority will be given to developing instruments for evaluating the quality of care and level of health, both individual and community-wide.

His patients will be the ultimate beneficiaries of a communications research project aimed at better understanding public attitudes, opinions, and knowledge about heart disease, cancer, and stroke, in order to en-

hance prevention and early detection.

He and the community service agencies and others will be provided with a directory of the names, services and addresses of all medical and paramedical services in the State to facilitate the referral of patients between agencies and the full use of available resources.

EXCERPTS FROM ANNUAL PROGRESS REPORTS

Albany Regional Medical Program

"In our Operational Grant Application it was mentioned that 'there is no question but what the development of the Albany Regional Medical Program has produced very important effects, both in the surrounding medical communities and at the Medical Center. The predominant attitude is one of interest, enthusiasm and cooperation. Relative to need the program is ideally timed. An early addition of operational support should allow us to take full advantage of the momentum of our rapid initial progress. . . .'

"To this statement should be added the fact that the April 1, 1967, approval of our operational grant

request allows us to intensify the continuous planning activity as the conduct of our Pilot Projects reveals additional planning opportunities. We believe the most effective planning will result as we relate the planning to the conduct of our operational program. . . .

"However, since the initial projects of our operational program are not intended to result in a complete program, it will obviously be necessary to continue planning supplemental projects which will further increase the capability for diagnosis and treatment of heart disease, cancer and stroke. In particular, we contemplate extensive planning of continuing education and training for medical and allied health professions.

"The purpose of the Albany Regional Medical Program is to utilize research, education, training and demonstration care in an organized cooperative and effective approach to the prevention, detection and management of heart disease, cancer and stroke. Although leadership and the dissemination of scientific information are among the important responsibilities of the Medical College, the intent is to promote interrelationships among all relevant institutions, agencies and individuals in a manner which will produce a sustained

effort by the citizens of each local community. The intent is to strengthen community medicine and thus improve patient care. . . .

"The Albany Medical College was involved in a great deal of advanced planning in anticipation of its involvement in Regional Medical Programs. This resulted in extensive activities prior to the planning grant award. . . .

"Five mature experienced physicians were contacted relative to their interest in becoming full-time members of the Department of Postgraduate Medicine, which has the primary responsibility for the administrative direction of the Program. . . .

"The needed nonprofessional administrative personnel were sought and excellent individuals were acquired. One of these is now our Director of Community Information Coordinators. He has three coordinators working with him. These men are experienced former pharmaceutical house representatives who have proven their ability to relate well to physicians and be successful in their contacts with physicians. . . .

"Regional Medical Program staff have met with the administrators and staff of many of the hospitals in the Region. To date, 58 hospitals have

been contacted; and formal presentations on the Albany Regional Medical Program have been made to the medical staffs and/or boards of trustees of 25 of these. All of the latter have indicated, by vote, their desire to participate in the Program. . . .

"In general all of the hospital administrators, staff physicians, and board members have indicated their sympathetic agreement with the concepts of Regional Medical Programs. In some instances there were misconceptions about the Program based upon the Report of the President's Commission on Heart Disease, Cancer and Stroke; these were quickly and easily dispelled. The administrators and staff of many of the hospitals expressed the desire, long felt, for a closer working relationship with the Albany Medical College and Center, especially with respect to patient consultations with specialists; increased opportunities for continuing education in the physician's home community; assistance in updating their knowledge and ability to diagnose heart disease, cancer, stroke and related diseases; guidance and aid in the training of more nurses and other allied health personnel; and advice as to whether or not to engage in research activities as well as the nature thereof. . . .

PROGRESS REPORT ON SELECTED PLANNING PROJECTS

Project to Improve and Expand Cancer Detection and Therapy

"A major project preparation has been prepared, involving the efforts of physicians and administration at Vassar Brothers Hospital at Poughkeepsie, New York. The study is directed towards the objective of enabling more effective early diagnosis and treatment of cancer in the Poughkeepsie area. . . .

Vaginal Cytology Screening Program

"This project proposes to develop a model for cytological screening of all female patients in a given community for cervical cancer. Continuing study is underway to establish the most effective coordinated approach to the objective, combining the capabilities of the Regional Medical Programs with the opportunities which other State and Federal efforts provide. . . .

Multiple Hospital Prospective Cancer Investigation Program

"This project proposes to establish a sub-regional and eventually a regional approach to a prospective

cancer investigative program which would result in major dividends with regard to research, with regard to diagnostic and therapeutic procedures and with regard to general cancer education. . . .

Cardiopulmonary Laboratory Development

"It is proposed to establish a cardiopulmonary physiology and diagnostic laboratory at the Pittsfield Affiliated Hospitals, Pittsfield, Massachusetts. Such a laboratory would provide accurate diagnostic facilities in heart disease, diseases of the blood vessels and pulmonary disease. In addition, its establishment will lead to improved local physician continuing education in this field.

Cardiac Care Unit at Herkimer Memorial Hospital

"This project proposes the establishment of a firmly based Cardiac Care Unit building upon the hospitals existing embryonic 'homemade' one. Such a unit will permit nurse training in intensive coronary care in this locality."

Connecticut Regional Medical Program

"During the 'tooling up' phase, when the program objectives were

being set and the action program was being formulated, the primary work involved the RMP staff, the Planning Committee and the Regional Advisory Board. Good communications were maintained by frequent meetings, which were well attended, and by circulating full follow-up minutes. . . .

"The Planning Design, as finally adopted, is concerned with such fundamental elements as health personnel, facilities, and finances—and their effective blend into a coordinated regional medical program serving all the people of Connecticut. . . .

"It involved the creation of nine Task Forces to study specific components of the Connecticut health care system, to determine deficiencies, to chart action programs and ultimately to work for their implementation. A serious effort was made to have various segments of the health community represented on each Task Force, as well as to obtain a reasonable geographic distribution. Each includes representatives of various points of view appropriate to the topic under consideration, drawn from private practice, education, voluntary agencies, governmental service and the public at large. . . .

"These Task Forces are concerned with the (1) supply and distribution of physicians and dentists; (2) recruitment, training, distribution and

continuing education of nurses and other allied health professionals; (3) continuing education of physicians and dentists; (4) extended care facilities and programs; (5) university-hospital relationships; (6) the organization of special services within hospitals; (7) implementation of a state-wide library system; (8) financing of medical care; and (9) definition of the Connecticut region and its subregions. . . .

"The RMP staff is responsible for assembling the complete information on the health resources in Connecticut needed by each Task Force in its subject field in order to go about its work. To date, preliminary steps have been taken to ascertain what data is available through a number of established health organizations. Fortunately, the assembly of health information by such organizations as the State Health Department, the Connecticut Hospital Association, the Connecticut Hospital Planning Commission and others will provide much of the information needed. It remains, however, for the RMP staff to carry out some special studies and, ultimately, to compile much of the health resources data in a central profile.

"There have been many opportunities to discuss the Planning Design with boards of directors of health or-

ganizations, with hospital staffs and with many interested individuals, both from the medical and lay ranks. Thus, the potential of Regional Medical Programs is becoming known in a widening circle; and communications among various segments of the Connecticut health community are improving. . . .

"The Regional Advisory Board has assumed responsibility for the pivotal decisions relating to the development of the Program, e.g. the approval of the planning grant request, the appointment of the Planning Director, the adoption of the Planning Design and the appointment of the Task Force membership. . . .

"It is noteworthy that Regional Advisory Board members are now serving as Chairmen of eight of the nine Task Forces and that every Board member has a position on one of them. This means that Board members will be deeply involved in planning activities, that they will be in good positions to weigh proposals for the operating program one and two years hence, and that they will have the background knowledge needed to push their implementation. . . .

"The most difficult problems encountered to date are the following: (a) the complexity of the subject fields under study; (b) the weakness

of communication links between segments of the health system; (c) the shortage of experienced health planners and researchers in the delivery of health care; (d) the overlapping and uncertain jurisdiction of related health planning organizations; and (e) the shortness of time available to achieve measurable results.

"With regard to the complexity of the subject fields under study, it is pertinent that the Connecticut Regional Medical Program is probing questions which have perplexed leaders from the fields of medical education and medical care alike in recent and past years. There are no ready answers, for example, on how to provide family medical care to all citizens in the years ahead, or how to recruit and educate the necessary nurses and other supporting health personnel and make them a part of a true health team, or how to implement effective programs of continuing education for all health practitioners, etc. It is even difficult to structure planning studies to lead to the best solutions to these important issues. Yet, the Program has chosen to concern itself with those very issues in the health field which are of greatest concern to the people of Connecticut. . . .

"It is pertinent that in Connecticut, as elsewhere, there has been rela-

tively little contact in the past between the medical and social sciences in the universities. These need to work together to chart overall social progress in the health field. There has been a considerable 'town and gown' rivalry between clinicians in the university and community settings. There has been too little continuing contact in the past between health spokesmen from the educational and voluntary segments, on the one hand, and from local and state government, on the other. The planning efforts of the Connecticut Regional Medical Program depend in great measure on full collaboration between representatives of the health establishment drawn from education, from the voluntary community and from government. Some of the needed communications links are having to be forged as a part of the Connecticut Regional Medical Program planning process itself. . . .

"Despite the major problems encountered and the enormity of the task . . . a sound organizational framework for planning has been established; broad consensus has been reached on the program's planning design; and a large number of key leaders from the Connecticut health scene have become involved in the planning process.

Hawaii Regional Medical Program

"The assessment of the overall situation, and the establishment of communication with the participating agencies have been the major items of activity since November 1966, when a full-time Deputy Program Director (General W. D. Graham, M.D.) arrived in Hawaii. Informal conferences with members of the Regional Advisory Group and their represented agencies and with other participants have been held, and the status of the public, private, and voluntary programs in the health field have been studied.

"Local assessment, and the detailed consideration of the content and concepts of programs under way in other regions, lead to the conclusion that tangible progress in the program here is contingent upon projects in continuing education. There is at present no fully-staffed, on-going academic clinical teaching center in Hawaii. Those highly qualified personnel currently engaged in the training programs of the teaching hospital are engaged to full capacity, and are augmented by 'visiting professors'. By locating full-time teaching specialists in teaching hospitals, significant additional support for postgraduate training programs will result and will

bring these specialists in close touch with private practitioners. . . .

"Additional programs of particular interest are the Stroke Registry and the Facilities Studies. On March 1, 1967, exploration of the feasibility of the establishment of a Stroke Registry was begun. Consultations with physicians and with medical record librarians have progressed most satisfactorily. Field testing of methodology will commence about May 1, 1967, in selected hospitals. . . .

"The project for stroke rehabilitation education involves a plan to set up a training program for various categories of rehabilitation personnel at the Rehabilitation Center of Hawaii in Honolulu, at outlying hospitals on Oahu and on the neighbor islands, in order to augment stroke rehabilitation capabilities, which are at present at the full capacity of the Center staff.

"The goal of a facilities study by the Hawaii Heart Association is to determine equipment status in facilities which provide diagnosis and treatment to patients with heart disease. A questionnaire has been directed to hospitals and clinics and the returns will be preliminarily evaluated, using volunteer services. Collation, analysis, and subsequent development of the information will require RMP support, and will begin about June 1, 1967. . . .

"Planning is under way for a program directed toward the hematologic aspects of the care of heart, cancer and stroke patients. This will also have components of continuing education, consultative service and laboratory and investigational activity directed toward assisting physicians in diagnosis and patient care.

Intermountain Regional Medical Program

"Organized efforts to develop a Regional Medical Program for this Region began in the fall of 1965. Efforts were made early to enlist the interest and support of organized medicine. . . .

"In October 1965, Dean Castleton and Dr. Castle of the University of Utah School of Medicine met with the Utah State Medical Association Executive Committee to gain their interest and support for a regional program. Subsequent meetings were held with representatives of the Utah, Idaho and Nevada State Medical Associations, and county medical societies in Reno and Las Vegas, Nevada; Grand Junction, Colorado; Idaho Falls, Pocatello, Twin Falls and Boise, Idaho; and Butte, Great Falls and Billings, Montana. Meetings also were held with members of the hospital staff in all the major hospitals in the region. . . .

"On February 26, 1966, a regional workshop was held at the University of Utah Medical Center in Salt Lake City, which was attended by representatives from all six states involved in the proposed region and all professions, organizations and institutions concerned about heart disease, cancer and stroke. The purpose of the meeting was to begin to define a Region which could work together as a unit and to obtain ideas as to regional resources and needs, and how a program should develop. Ideas expressed at this meeting served as a foundation for the planning grant application submitted in May 1966 and awarded effective July 1, 1966. . . .

"Since July 1966, the major efforts in planning have been in recruiting a planning staff, establishing lines of communication with all elements within the region and with other regional programs in the country and developing systems for sustaining active interaction among these groups, explaining the purpose of the program to professional and lay communities, developing methods for collecting data relative to heart disease, cancer and stroke, identifying needs which can be met by Regional Medical Program legislation, and formulation of proper procedures for construction of pilot projects and methods for their review and ap-

proval by reacting panels and the Regional Advisory Group. . . .

"Progress has been made toward meeting all objectives outlined in the planning grant application, but none have been completed and will require an intensity of planning similar to what has been established within the last few months for at least another year. One major obstacle to more rapid progress within the region has been the slow process inherent in obtaining outstanding people to serve in key positions on the planning staff. Although the Intermountain Regional Medical Program has been particularly fortunate in obtaining an outstanding, dedicated, hardworking staff, the process of bringing them into a new program, allowing them time to understand the program and to define their role, has taken much longer than anticipated at the outset. In lieu of people with background and experience in developing the type of program outlined under Public Law 89-239, it has been necessary to recruit personnel with a variety of career commitments and ask them to make major changes in their careers in pursuing this new national program. . . .

"To meet some of the most pressing needs in initiating a Regional Medical Program, specific projects to provide training for personnel and to involve

certain institutions, organizations and individuals in an active way were identified early in planning. . . .

"The community profiles developed by the Intermountain Regional Medical Program are being used by the Mountain States Regional Medical Program and the community committees to be formed in Nevada, Wyoming, Idaho, and Montana, will serve as liaison to both programs overlapping these areas."

Kansas Regional Medical Program

"By the first of the year the position of Regional Medical Programs with relation to Public Law 89-749 and other efforts of the medical school had become somewhat clarified. Dr. Charles Lewis, professor and chairman of the Department of Preventive Medicine and Community Health, who had been active in both the planning grant body and in preparing the operational grant application, agreed to take full-time responsibility as director of the Kansas Regional Medical Program. He assumed this role on March 15, 1967. Since this time considerable progress has been made with regard to a principal staff and development of a formal organizational structure. . . .

"In addition, a Regional Medical Program office has been established

in the Wichita area. This was done since this metropolitan area contains 15.75 percent of the population of the state of Kansas as well as 357 physicians and 1,825 nurses. Mr. Dallas Whaley, the previous executive-secretary of the medical society in Sedgwick County (Wichita) was approached and hired. . . .

"In addition to the Regional Advisory Council, two additional groups have been appointed to serve as staff advisory committees. One of these is the Professional and Scientific Review Committee. This is made up of individuals nominated from various organizations and groups, such as the Heart Association, the Cancer Society, the state Medical Society, those from certain sections of the School of Medicine, etc. . . .

"The second group appointed is a physicians' panel. This is composed of a group of physicians selected by stratified random sampling with regard to geographic area, type of practice, and age. This panel of names will be submitted to the president of the Kansas Medical Society. . . .

"The Regional Advisory Council was recently enlarged with the addition of eight new members. This enlargement was accomplished in order to gain further representation of other non-health-related groups

within the state and also to increase representation from the Wichita area. . . .

"Considerable discussion has taken place with the Missouri Regional Medical Program regarding cooperative planning efforts, particularly with regard to data pooling and evaluation. Special attention and cooperative planning have been directed to the complex Kansas City metropolitan area which crosses the Missouri-Kansas State boundary and six county boundaries. . . .

"A special Metropolitan Kansas City Coordinating Committee has been established to advise and assist with the planning for this area. This committee, which is made up of representatives of both the Missouri and Kansas Regional Medical Programs, will consider all proposals of either Region which would have an impact in the greater Kansas City area. . . .

"An interregional conference on health manpower data recording and evaluation was held May 22-23, 1967, at the University of Kansas Medical Center. Representatives of the Oklahoma, Missouri, and Kansas Regional Medical Programs participated with outside experts. The purposes of this conference were (1) to define basic core information which must be recorded on all professionals (having decided what disciplines will

be covered) and to develop a common data base for the three Regions for the transmission and comparison of manpower data, and (2) to emphasize the importance of proper evaluation rather than developing artificial indices which mean nothing in terms of health delivery systems. . . .

"It should be noted that feasibility studies will soon be under way in the Wichita regional area. A group representing the hospitals and physicians of that area is now making plans to develop a non-profit corporation in order to seek non-federal financing from private industry to supplement funds from Regional Medical Program resources. . . .

"It is hoped by the first of September that manpower data recording for the state of Kansas will be almost complete. It is also projected that during the summer of 1967—several field investigations will be carried out on consumer and health professionals' attitudes toward current systems of health care. A probability sample of consumers will be interviewed, comparing their attitudes toward medical care. In addition, physicians, nurses, hospital administrators, etc., will be similarly consulted. The purpose of this is to describe the system in as many ways as possible and to correlate this with other information regarding parameters of health care, i.e., morbidity

and mortality data, utilization of beds, number of office visits, costs, etc. By comparing two or three different types of medical care systems in different parts of the state, we will have a better idea of the means by which we can evaluate changes and variations on the original theme of delivering health care to patients and improving the quality of care for those with heart disease, cancer, and stroke. . . .

"Another development which will be completed before the end of this planning year is the attempt to develop a health data bank. To this end the University of Kansas Medical Center, the Kansas Regional Medical Program, the Kansas State Board of Health, Kansas Blue Cross-Blue Shield, and Kansas Health Facilities Information Service, Inc., have all agreed to pool data on manpower, postgraduate training, resources for health care, facilities, utilization, morbidity, mortality, vital statistics, economic development, outpatient utilization of office visits, etc."

Missouri Regional Medical Program

"Under the leadership, guidance and direction of the Regional Advisory Council, planning for the Missouri Regional Medical Program and development of pilot projects for

implementation have proceeded simultaneously during the year. The Advisory Council, with advice from its Scientific Review and Liaison Subcommittees and the Metropolitan Kansas City Coordinating Committee, serves as the governing body, determines policies, and approves (or disapproves) and sets priorities among proposals for pilot projects. The Scientific Review Subcommittee advises the Council relative to scientific problems, including the merit of pilot project proposals. The Liaison Subcommittee serves as a two-way medium of communication between the member organizations and the Missouri Regional Medical Program. The Kansas City Metropolitan Coordinating Committee reports to the Advisory Councils of the Kansas Regional Medical Program and the Missouri Regional Medical Program and works to encourage cooperation and avoid duplication of pilot project proposals among institutions, hospitals and other agencies of Metropolitan Kansas City. All the organizations and institutions represented on these Committees have an active role in planning, and two have submitted pilot projects now under consideration and three are preparing pilot project proposals. . . .

"The Advisory Council made an early and crucial decision to place primary emphasis on maximum use

and refinement of present resources. This means learning more about the needs of practicing physicians and other health professions, the consumer, and State and local health resources. Missouri Regional Medical Program aims to assist the practicing physician in providing optimum patient care as close to the patient as possible, with equal access to any needed national resource. Accordingly, Missouri Regional Medical Program stresses prevention and early detection, continuing education, public education and information, and appropriate demonstrations of patient care. . . .

"The Missouri Regional Medical Program staff is confident that the splendid interest, concern and contributions of the Advisory Council are, in important part, related to its decision-making authority. (There appears to be evidence that the contributions of Regional Advisory Groups to a certain extent parallel their responsibility for decisions.) . . .

"Since July 1, 1966, the staff have taken steps to strengthen inter-agency cooperation and communications. The Program Coordinator and staff have made speeches at society meetings, meetings of other health profession organizations and lay groups. The staff has also conducted seven site visits with reference to pilot projects

proposed by various communities; has been in communication with six other communities relative to possible pilot projects; has consulted with numerous official health agencies and other organizations and individuals; has discussed plans, projects and activities with numerous visitors. . . .

"Thus far all agencies, institutions, organizations, and individuals asked to cooperate have responded favorably. . . .

"However, some practicing physicians need to be informed that Missouri Regional Medical Program is primarily patient oriented and not Medical Center oriented, and that Public Law 89-239 emphasizes cooperative arrangements, continuing education, and demonstrations of patient care within the present system of medical practice. . . .

"Missouri Regional Medical Program may face problems when agencies present pilot projects for funding and a choice must be made. However, we are developing Guidelines on which funding decisions will be based and explained to interested agencies. . . .

"The Missouri Regional Medical Program emphasizes the importance of evaluation of results. The Program Evaluation Center for the University of Missouri School of Medicine is being used to develop whatever measurement devices are required and to

apply them to the results achieved by various funded programs. The staff's activities have been spent in attempting to conceptualize comprehensive coordinated community health services in terms of 'schemes of action' rather than 'schemes of arrangement.' Thus, the model will be defined in such terms as access, communications, and end points. . . .

"Pilot projects proposed by Missouri Regional Medical Program include built-in evaluative mechanisms. . . .

"A study is being conducted in a rural Missouri community, Glasgow, approximately 40 miles from Columbia, to examine some of the decisions made and the systems used by members of this community in seeking medical care. . . .

"In keeping with the 'scheme of action' concept, this one has looked at (1) routes of access to care which have been used; (2) critical coordination and communication points in the systems used; and (3) endpoints or reference points in the health service system.

"Missouri Regional Medical Program will continue to coordinate its planning and pilot projects with other health and related programs. This applies especially to Public Law 89-749 and a new State law relating to State and regional comprehensive planning and community develop-

ment (including health). A new Office of State and Regional Planning and Community Development has been designated by Governor Hearnes for administration of these two laws in Missouri. In order to effect proper coordination between Missouri Regional Medical Program and the Office of State and Regional Planning and Community Development, a new senior staff position (Liaison Officer) has been established. . . .

"Up to this writing, Missouri Regional Medical Program has considered approximately 40 pilot project proposals. Of these, 27 were forwarded to the Division of Regional Medical Programs in the form of three operational grant applications. If current negotiations are confirmed, 15 of these will be initiated during April 1967, as follows:

Smithville Project

Communication Research Unit

Multiphasic Testing

Mass Screening—Radiology

Automated Patient History

Data Evaluation and Computer Simulation

Computer Fact Bank

Operations Research and Systems Design

Population Study Group Survey

Automated Hospital Patient Survey

Program Evaluation Center

Bioengineering Project

*Central Administration
Comprehensive Cardiovascular Care
Unit (Springfield)
Manual of Services*

"Staffing arrangements for these projects are underway and are expected to be completed in major part within the month."

North Carolina Regional Medical Program

"Very early in the consideration of the North Carolina Regional Program it became clear that in order to fully implement the provisions of Public Law 89-239, it was necessary to develop a core concept which would make possible the coordination and augmentation of an already large number of existing health activities, interests, and institutions and in the process enhance the ultimate effectiveness of each component element. This unifying conceptual strategy called for the mobilization, through comprehensive planning and cooperative enterprise, of all health care knowledge and resources for a concerted attack upon the problems of heart disease, cancer, stroke and related diseases. . . .

"The program has the unique opportunity of being in a position to bring together the talents of this hitherto widely diffused leadership

by exercising its own leadership to mount as concentrated and effective an assault upon heart disease, cancer and stroke as may be possible in terms of the resources of the State of North Carolina. On the basis of these premises the Regional Medical Program of North Carolina has evolved a decision-making mechanism which is both responsible and rational, and which will maximize the effectiveness of the wealth of leadership which is available. . . .

"Participating Organizations: The North Carolina Regional Medical Program has received the enthusiastic support of the participating organizations. Particularly outstanding have been the contributions of the North Carolina Heart Association and the North Carolina Division of the American Cancer Society.

"The staff of the Association for the North Carolina Regional Medical Program has devoted much time and energy to the orientation of health interests throughout the region in terms of the nature and objectives of the Regional Medical Program, and as it has been possible to identify appropriate functional roles, an increasing number of them have become active participants. This effort will continue to be a dominant feature of the Program since to a large extent its success will depend upon the

degree to which the skills and manpower represented by these interests can be mobilized. . . .

"The Planning Division has made good progress in assembling survey data essential for program planning and to provide overall baseline data against which future impacts may be gauged.

"One study which has been completed has explored the dimensions of an affiliation between the Memorial Mission Hospital at Asheville and the Bowman Gray School of Medicine. In addition to collecting data pertinent to this situation, this experience will serve to teach us how to organize and communicate the data needed to provide linkages between Medical Schools and community hospitals. Surveys have been made of practicing physicians in Buncombe County and of other staff members of the Asheville Hospital aimed at securing their ideas of the general utility of such an affiliation and their specific recommendations of what such an affiliation should strive to provide, especially in the way of continuing education.

"A report on this study was developed by the Planning Staff for the Association for the Regional Medical Program with the assistance and guidance of Memorial Mission Hospital, Bowman Gray School of Medi-

cine, the Buncombe County Medical Society and the State Medical Society. It includes a description of the characteristics of its patients and staff. Also included are ideas of key hospital personnel as to the desirability of developing the affiliation with the Bowman Gray School of Medicine, suggestions as to programs of continuing education, and suggestions as to what other elements might be included in an affiliation between the two facilities. It also includes the viewpoints of the county's physicians toward affiliation, continuing education, diagnostic resources and needs, and paramedical personnel needs through an analysis of questionnaires that were distributed to all Buncombe County physicians in February and March, 1967.

Diabetic Consultation and Education Service

"This study was begun January 1, 1967 and participants include representatives of Bowman Gray and Duke Medical Schools, the University of North Carolina School of Public Health, the State Board of Health, Community Board of Health, practicing physicians, and public health nurses.

The feasibility of a regional consultative service and an educational pro-

gram for diabetic patients is being tested. Scheduled clinics in community hospital or similar settings and also at the university medical centers are included. These activities will be supported by a home nursing service to assure proper follow up and sustained patient contact. The educational program will be directed to community groups of diabetic patients and will be coordinated with community health organizations. . . .

Continuing Education

"Data on the number and types of continuing education programs for professional and ancillary personnel, their geographical outreach and the numbers and characteristics of individuals attending is being collected through a monitoring system involving obtaining of registration forms from program chairmen. When this monitoring process was first initiated, the researchers attempted to gather data only from those organizational meetings with program content related to the categorical diseases. However, it was often difficult to draw a line between those meetings that either did or did not fall within this provision. As a result an attempt has and will continue to be made to monitor all of the major medical meetings unless the program content clearly

indicates no relevance to the RMP. In a statewide study of this nature an analysis of any part of the continuing education process becomes an analysis of the total on-going system. Consequently, the findings will be more relevant and meaningful if the widest possible representation of the education system is obtained."

Northern New England Regional Medical Program

"The Northern New England Regional Medical Program and core staff have been organized along functional lines—medical economics, education, information systems, disease prevention, and patient care services. All planning and program efforts, in turn, are organized according to a systems approach which provides continuous feedback of information and assessment of progress. . . .

"We have made good progress in determining the scope of participation of various health related groups in Regional Medical Programs. From the beginning we have made every effort to include representatives from all interested groups in our planning effort. . . .

"A number of steps have been taken to develop cooperative working relationships with health professions groups, hospitals, health

agencies, and other organizations concerned with health and welfare throughout the Region. . . .

"Determining the planning approach has been complex because we have attempted to shape our program in response to the requirements of the systems approach to planning. This approach provides for the application of advanced mathematical and computer techniques in analyzing alternative solutions to problems. It also includes cost-benefit studies. Some cost estimates of the training of allied health personnel and coronary care training for nurses have been made. Since there are no precedents, some experimentation has been necessary. . . .

"The development of a Model of Patient Care is the major initial planning effort. To develop the educational aspects of the Model, an Education Committee has been appointed which will be concerned with lay health education, continuing education for all health professionals, and basic education in the allied health professions. . . .

"A meeting held in February 1967 with representatives of some 25 organizations which operate a variety of health education programs was a first step in coordinating the existing health education programs with Regional Medical Program activities. . . .

"Since continuing professional education is an integral aspect of Regional Medical Programs, an *ad hoc* committee has been appointed for continuing education of allied health professionals with representatives from the Vermont Division of the American Cancer Society, the American Red Cross, the State Health Department, the Department of Physical Medicine and Rehabilitation of the College of Medicine, the Vermont Heart Association, the Vermont Pharmaceutical Association, the State Mental Health Department, the Office of Continuing Education of the College of Medicine and the Regional Medical Program's staff. This group has defined specific objectives for continuing education and is gathering information on existing activities and personnel needs for carrying on these activities. . . .

"The potential use of various modes of communication and transportation to augment continuing education programs is being explored. Two-way television connections between the Medical Center Hospital and community hospitals in the Region and the use of the University's airplane are two possibilities for future education program support. . . .

"Assessing basic education needs in the allied health professions has been a prime concern; and surveys have

been made to determine the numbers and types of such personnel in the Region. . . .

"Health education for the public has emerged as a top priority objective, and recruitment of a full-time information specialist to be responsible for this aspect of the Program is currently underway. . . .

"Dissemination of recently acquired medical information to the practicing physician has also been a concern of the Northern New England Regional Medical Program and our proposed Pilot Project in Coronary Care is an illustration of how we intend to accomplish this task. Through cooperative arrangements between health personnel at the Center and their counterparts in the region which are described in our proposal, we intend to promote application of the latest techniques in progressive coronary care at the local level. . . .

"The proposed Pilot Project in Progressive Coronary Care involves research related to the regional aspects of the management of coronary disease. One such study will be a determination of modifications in equipment and personnel requirements necessary to provide intensive coronary care in small community hospitals. Using the data collected through the Heart Inventory, which the Northern New England Regional

Medical Program is developing, it will be possible to identify other potential research projects related to various aspects of the incidence and treatment of heart disease. . . .

"Our planning efforts must necessarily take into account how transportation affects the delivery of health care. Thus, we currently are conducting with the State Medical Society a survey to determine which towns have emergency ambulance service, how it provided, and how effective it is."

Tennessee Mid-South Regional Medical Program

"Understanding of what the fundamental concept of a Regional Medical Program is and how to best develop and establish it in this region has proceeded steadily from the earliest discussions which led to the application for a planning grant. Inevitably, such understanding has developed in an evolutionary fashion since it is, in fact, a reflection of a growing awareness of the medical faculties of ways in which they can serve as resource agencies for improved medical care, and of practicing physicians that the primary aim of the program is to help them in the care of patients in their own local area. Similarly, the role of exist-

ing health agencies, public and voluntary, and of the wide spectrum of health personnel on which good health care depends so heavily has gradually come into focus like a picture on a screen as steps have been taken to promote discussion and planning for specific action to deal with real problems.

"This first progress report of the Tennessee Mid-South Regional Medical Program attempts to chronicle the widespread growth of understanding about its purposes and methods that has taken place in the past year. The basis for most of the achievements to date is the willingness of many persons, acting on their own behalf or that of their institutions and organizations, to study new approaches and to undertake new responsibilities to assure the continued improvement of medical care in the fields of heart disease, cancer and stroke. . . .

"In developing the strategy to be followed, the Director of the Tennessee Mid-South Regional Medical Program has sought consultation from Dean Batson (Director, Medical Affairs, Vanderbilt University), Mr. Kennedy, (Chairman of the Regional Advisory Group), and from Dr. Anderson (Chairman of the Faculty Group formulating policy for Meharry Medical College). It

seemed desirable to explore with the faculties of the two medical schools their interest in the general areas of continuing education, the training of affiliated health personnel, and various aspects of heart disease, cancer and stroke. Visits were made to key communities in the region which had given evidence that they were ready to develop cooperative arrangements. In addition, it was deemed essential to establish communication with the various voluntary and public health agencies in Nashville and other areas of the region. . . .

"On January 10, 1967, the Director met with a group of approximately 12 hospital administrators from the Nashville area. The group was knowledgeable about the objectives and procedures to be followed in developing a Regional Medical Program. They were greatly interested in finding out how the Regional Advisory Group would function and the basis for establishing priorities for projects which might come from a variety of sources. Questions were raised about the establishment of coronary care units in hospitals and particular inquiry was made about the eligibility of hospitals for funds to conduct renovation for projects of this kind. A discussion was held about the importance of building into the

design of projects a mechanism for evaluating their results. . . .

"On February 22, 1967, Dr. Faxon Payne, radiologist at the Jennie Stuart Memorial Hospital and Chairman of the Medical Society Committee for Regional Medical Programs for Heart Disease, Cancer and Stroke, arranged a meeting of the Director with the chiefs of medicine, surgery, pediatrics and pathology, with the Administrator of the hospital and several members of the Board of Trustees. It was apparent that the group was anxious to establish communication with the Regional Medical Program and was particularly interested in the field of continuing education. The potential of television and other communications media was discussed. The staff indicated that it would be greatly interested in having medical school faculty members come either for lectures or for periods of one or two days at a time. They expressed interest also in the possibility that a full-time chief of medicine might be appointed in order to help organize an educational program of some substance which could serve not only the Hopkinsville group but the 8 or 10 smaller hospitals which are located within a 10 to 15 mile radius of Hopkinsville. . . .

"A meeting was also held with the staff of the Erlanger Hospital in

Chattanooga on March 8, 1967. We discussed the problem created by the fact that Chattanooga serves areas not only in Tennessee but also in Northern Georgia. The Director assured the staff that the Regional Medical Program would in no way interfere with the relationships with established groups. We then discussed ways in which the hospital could proceed to become actively engaged in an operational project. The following suggestions were made—that a committee be appointed within the hospital to coordinate suggestions made by the various services and to cooperate with the already appointed committee of the medical society. The individual chiefs should be encouraged to draw up a rough draft of proposals relating to their own department. The Director indicated that the Regional Medical Program staff would work with the various groups to help refine the proposals, make sure that mechanisms for evaluating the projects were incorporated and that specific budgets relating to personnel, supplies, equipment, etc., were properly drawn. It appears likely that the Regional Medical Program will work through this group to establish an educational sub-center in this area anticipating that the group at the hospital will reach out into the surrounding areas to establish closer contact for the training purposes. . . .

“Similar developments are taking place at two hospitals in Nashville, St. Thomas, and Mid-State Baptist and in Knoxville and the Tri-City area. . . .

“In addition to visits with hospitals, the Director has met with many of the medical societies in the respective communities and they have now established liaison committees to consider ways and means of fostering activities under the aegis of the Regional Medical Program for Heart Disease, Cancer and Stroke. In most instances, it was found that these committees while expressing interest, had been unable to focus their efforts on specific programs. It was only through discussion of possible operational projects for which grant funds might be made available that the activities began to achieve some degree of substance. . . .

“Dr. Frank Perry, Associate Professor of Surgery, is coordinator for the Meharry faculty and will devote a major share of his time to exploration of continuing education programs for Negro physicians. He plans to coordinate his activities with the parallel efforts being made in continuing education by the faculty at Vanderbilt University. . . .

“Dr. Leslie Falk of the University of Pittsburgh School of Health, who is serving as chief consultant for the planning of a Neighborhood Health

Center sponsored by Meharry and funded through the Office of Economic Opportunity, believes that the Regional Medical Program could be of considerable value in supplementing the services that Neighborhood Health Center would ordinarily make available. . . .

“The demands made by the Regional Medical Program have focused the attention of the professors of medicine, surgery, and radiology at Vanderbilt University on the need to make a major revision in the facilities for diagnosis and treating patients with surgically correctible cardiovascular disorders. The evident strengths of the institution have not been used as effectively as they might, and the requirements for a penetrating assessment of the problem has been a beneficial experience.

“Planning is underway to determine how best to develop a rehabilitation facility to serve the needs of the region. A gift in the amount of \$2,000,000 from a Nashville family has insured the funds for construction. Intensive effort is needed, however, to coordinate the project for maximum involvement of faculty, community agencies and state and regional agencies. It is expected that the institution will serve important educational and research purposes. This appears to be an excellent vehicle for achieving regional ob-

jectives in an area where existing facilities and personnel are desperately needed. . . .

“Acquisition of information about the health resources of the region is underway and will be continued and expanded during the year. Using the resources of the biostatistical division of the Department of Preventive Medicine and Public Health of Vanderbilt University, data has been put on computer tape regarding physicians, nurses and the hospitals. Using this basic information, a health resources profile will be developed for each county and later certain counties will be grouped into areas to determine the characteristics of these larger areas. Demographic data will also be used as a basis for determining the size of the population to be served in the respective counties and areas. Valuable correlative data has also been obtained from the statistical division of the Tennessee Department of Health. . . .

“In cooperation with the Tennessee Nurses Association and the Tennessee League for Nursing, we are making a study leading to the preparation of a state-wide plan for nursing education. Cooperating in this endeavor will be Miss Anne Dillon, Head of the Statistical Division of the Tennessee Department of Public Health. The time seems ripe for just such a study to

help focus on the total problem of nursing.”

Texas Regional Medical Program

“The Project Director in Area I has conducted meetings with various educational health agencies. Meetings were held to determine methodology and to enlist the help of dedicated individuals interested in the goals of the Regional Medical Programs. Outside the Medical School community, the Council of Medical Society Representatives appears to be the most significant body to reach community physicians. Two meetings of the Council of Medical Societies Representatives have been attended by 28 physicians and 12 hospital administrators from 16 of the 44 County Medical Societies of Area I. There was a favorable attitude expressed toward the Regional Medical Program and a desire expressed for the need of the early development of an Intensive Care Unit Training Program for nurses and physicians. The involvement of hospital administrators, individually or through the Hospital Council, has been most worthwhile since the eventual improvement of health services must generate from the community hospitals. . . .

“There are many facts to be uncovered by making a survey of phy-

sicians. We need to know the future patterns of medical practice. The gradual shift of general practitioners into specialties and into population centers is leaving many areas without younger physicians. Several counties have no young men coming into their communities. In order to examine regional problems Area I has been divided into six divisions and studies are now underway to define the physician's role in each community. . . .

“Within the regular teaching program for medical students, residents, and interns at the University of Texas Southwestern Medical School and affiliated teaching hospitals there are conferences, seminars, lectures, and clinics that are maintained on a regular basis and are available for physicians interested in continuing postgraduate education. There are several institutional grants in both heart disease and cancer supported by Public Health Service grants. These programs are oriented to cooperate with the Regional Medical Programs. . . .

“Stroke: Significant programs are being developed in the medical school community, especially the Presbyterian Hospital, to develop a significant demonstration unit involving all of the disciplines of medicine necessary to bring this program into one cooperative effort. A total patient care program, including re-

habilitation, will have high priority in developing an operational program in the immediate future. . . .

“In Area II, many physicians were skeptical, suspicious, or hostile to the Regional Medical Program on initial contact. The hostile response, however, was not uniform. Many physicians, and a majority of many of the district and county medical societies, looked favorably and hopefully upon the program. They saw in it an opportunity for continuing education for themselves, for training of allied health professionals, for supplementary special medical care facilities, and other measures that may alleviate a feeling of isolation. . . .

“Certain difficulties have been encountered in Area III in communicating with peripheral points at which health care services are dispensed. Full-time personnel are still being sought for the professional positions now filled on a part-time basis. A full-time Assistant Planning Director will concentrate his efforts on hospitals and other health care centers. It is obvious that the circuit-rider technique must be employed to effect an appropriate response at the community level. . . .

“The feasibility study for developing a School of Allied Health Sciences has progressed very well. Emphasis will also be placed on studying mutual relationships that could

evolve from the collaborative efforts with the Galveston Community College. . . .

“The planning staff became acutely aware that the health practitioner and the hospital at the community level had little knowledge of the existence, the intent or the potential of Regional Medical Programs. Efforts to establish written communication proved less than satisfactory; therefore, a more direct approach was deemed essential. On February 25, 1967, the president of each county medical society in the Gulf Coast Area was invited to Galveston to enter into a dialogue on Regional Medical Programs. It was hoped that each of these individuals would return to their respective communities and would, in turn, create additional dialogue at the local level. Representatives from seven county societies, the Texas Medical Association and planning staffs from each of the several components of the Texas Regional Medical Program attended. While the physicians present represented only a small part of the geographic area, this meeting provided considerable information that verified the essentiality of a continuing interchange between a planning office and the health practitioner. The meeting also demonstrated the difficult task that lay ahead in establishing such a dialogue. . . .

Intensive Care Unit

"The planning director has collaborated with the administration of the University of Texas Medical Branch and the Medical Branch Hospitals in developing a modern intensive care training unit which will contain four beds for postoperative care of patients with cardiovascular disorders. The planning director is currently arranging for partial funding through non-federal sources. This unit will be developed in such a manner that will permit the training of nurses and physicians to man intensive care units in other hospitals. . . .

"Many interested individuals and groups are taking an active part in gathering information and are participating in studies, such as the Houston Area Hospital Personnel Association and Houston Dietetic Association. They have worked with the staff in designing questionnaires and gathering information. . . .

"The program is serving as a catalyst in encouraging dialogue and cooperation between institutions, interest groups, associations and individuals. Progress in carrying out planning studies and surveys is being made. Misconceptions and erroneous conclusions about the purposes and goals of the program are being corrected. Resistance to the program is

dissipating as further information is provided. . . .

"In the early phases of this program it is the primary objective of the Division of Continuing Education of the Graduate Medical School of Biomedical Sciences to determine how educational roles may be discharged within the framework of individual needs and goals, while at the same time providing practical and applicable information which will be both convenient and accessible to the physician and others who deliver health care, and which will ultimately result in better patient care. . . .

"An attempt will be made to convey the concept that the medical school not only awards an M.D. degree, but provides annual opportunities to appraise the practicing physician of current attitudes and techniques, to support the physician in his need for lifelong learning. . . .

Regional Training Program in Cardiovascular Disease

"The initial study of personnel available within the Medical Center for postgraduate training programs in the area of cardiovascular disease has been productive . . . initial considerations have led to plans for refresher courses lasting three to five days and providing for the participation of practicing physicians and

other health professionals in the conferences, clinics, and ward rounds of the Medical Center. . . .

"A study of the applicability of closed circuit television communication with one or a few local community hospitals is of considerable interest. This institution will participate with others in the region to prepare formal postgraduate training programs for television presentation. In addition, it is proposed to utilize this medium for individual consultations with patients who can then remain in a familiar environment with their own physicians. . . .

"A general planning study and survey has been undertaken in the allied health professions education field to identify needs, trends, problems, and resources necessary to implement grant proposals and program goals in advancing, through education, training and demonstrations, the care of heart-cancer-stroke patients. . . .

"In brief, findings indicate: a general awareness that a perilous shortage of allied health personnel exists in both numbers and quality . . . physicians want and need to delegate more to allied health personnel to free themselves to serve more patients . . . a closer liaison is evolving between educational institutions and hospitals in the education and training of all levels of allied health personnel. . . .

"At the Division of Allied Health Science at South Texas Junior College (Houston, Texas) feasibility studies are in process in the development of curricula in nursing, inhalation therapy, X-ray, medical records, physical and occupational therapy assistants, medical monitoring and electronics, ophthalmic assistants and dietary supervision. . . .

"At this writing, we have the prospect of a cooperative feasibility study for a multiphasic screening pilot project in conjunction with the Baylor University College of Medicine computer science program and the Department of Biomathematics of the University of Texas at Houston. This would involve a multiphasic automation and computer project in patient diagnosis. This would also bring into focus projects for continuing education of physicians in outlying hospitals and allied health education and training needs and programs. . . .

"A major introductory activity involved recognition and visitation of rehabilitation settings within the Texas Medical Center and in Houston community agencies. Programs in these institutions pertinent to the development of the Program were explored and an attempt was made to build with these institutions appropriate collaboration. These organizations include: the Methodist Hospital, the Ben Taub General Hos-

pital, the Physical Medicine and Rehabilitation Service of the Veterans Administration Hospital, Houston, the Visiting Nurse Association of Houston, the American Cancer Society, Harris County Unit, and Goodwill Industries. The Texas Woman's University, although relatively new, has a distinctive curriculum with early patient contact. The school is geared to agency collaboration and is constructively interested in Regional Medical Program participation. . . .

"At the University of Texas Dental Branch restorative dentistry is concerned with a number of cancer patients, and there is considerable experience with restoration of the mouth, face, nose and ears. Protheses including artificial eyes are fabricated. Closed circuit television has become a part of the teaching technique. . . .

"It is apparent that new methods and new techniques must be utilized to attract those who do not now participate in continuing education. . . .

"Progress in the first year of planning at the M. D. Anderson Hospital and Tumor Institute has been handicapped by lack of success in recruiting a full-time Physician Coordinator having the special combination of qualifications deemed essential to this important position. We have felt it expedient to evaluate the needed adjustments between the Texas Med-

ical Association, the various county medical societies, specific practitioners, hospital administrators and this cancer program which largely has been designed and planned through the University's biomedical units. It has been considered essential that understanding and agreement be attained in an atmosphere of good will in order to project further progress. Therefore, time has been required to make this adjustment and to reach a consensus as to goals. In the case of some existing activities, such as the cancer registry, there have been on-going programs under diverse auspices. Before a statewide registry can be projected, all aspects of existing programs must be reviewed to fit into the larger effort in an harmonious and agreeable fashion."

- I Preparation of Report
- II Ad Hoc Advisory Committee
- III Planning Grants
- IV Operational Grants
- V National Advisory Council
- VI Review Committee
- VII Consultants
- VIII Program Coordinators
- IX Review of Operational
Grants
- X Division Staff
- XI Relationships of Public Laws
89-239 and 89-749
- XII Public Law 89-239
- XIII Regulations
- XIV Selected Bibliography

EXHIBITS

EXHIBIT I

Steps in Preparation of the Surgeon General's Report to Congress on Regional Medical Programs

To assist in the preparation of the report required by Section 908 of Public Law 89-239, the Surgeon General appointed a Special Ad Hoc Committee of non-federal consultants. The nucleus of the committee was four members of the National Advisory Council on Regional Medical Programs. Eleven other persons with diverse backgrounds and interests in health and public affairs also joined the group. In addition, six other individuals with extensive experience in medical education and governmental administration agreed to serve as consultants to the Ad Hoc Committee. (The members of and consultants to the Committee are listed in Exhibit II.)

The Committee met five times. At the initial meetings, on September 16 and October 7, 1966, issues pertaining to the development and administration of Regional Medical Programs were presented and discussed. From these deliberations came a series of recommendations for the

steps to be followed in preparing the Report.

First, an outline of discussion items was prepared and reviewed at a meeting on November 7. From these, the key issues relating to the three areas specified for consideration in Section 908 of the Act and other aspects of the program were identified and analyzed.

Subsequently, a national forum was scheduled at which these issues were presented for consideration and reaction from health and related interests representing all sections of the country. This forum took the form of a Conference on Regional Medical Programs held in Washington (D.C.) on January 15-17, 1967. Nearly 850 medical, health and civic leaders were invited. This group included persons from both regions where planning activities were already underway and from other areas where proposals were still under development. In addition, many others with related interests received invitations. More than 650 persons attended the Conference.

Four Issue Papers were prepared by the Division of Regional Medical Programs and distributed in advance. Seven papers were presented at plenary sessions and two panel sessions were conducted. These presentations provided background for the 26 dis-

cussion groups of about 25 individuals each that met three times during the Conference. The results of this meeting are published in the *Proceedings: Conference on Regional Medical Programs*.

The wealth of information developed by the Conference was supplemented by letters and other material, voluntarily submitted by participants following the Conference. To gather additional information, the Division staff made a series of visits to on-going Regional Medical Programs and held discussions with Program Coordinators and others engaged in the development of regional activities. A "14-point" survey form was also distributed to all Program Coordinators for their use in forwarding up-to-date data on the status of their activities and plans. All of this material was analyzed and used in the preparation of this Report.

A preliminary draft of the Report was reviewed by the Ad Hoc Committee on March 10, 1967. It was subsequently revised in accordance with its recommendations and re-submitted to them on April 14. After consultation with the members of the National Advisory Council on Regional Medical Programs, the Report was submitted to the Secretary of Health, Education, and Welfare for transmission to the President and Congress.

 EXHIBIT II

Surgeon General's Special
Ad Hoc Advisory
Committee To Develop
the Report on Regional
Medical Programs to
the President and
the Congress

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EXHIBIT III

Planning Grants for Regional Medical Programs, June 30, 1967

REGIONAL DESIGNATION	ALABAMA	ALBANY, NEW YORK	ARIZONA	ARKANSAS
PRELIMINARY PLANNING REGION. ¹	Alabama	Northeastern New York and portions of Southern Vermont and Western Massachusetts	Arizona	Arkansas
POPULATION ESTIMATE 1965. ²	3,500,000	1,900,000	1,635,000	1,960,000
COORDINATING HEADQUARTERS.	University of Alabama Medical Center	Albany Medical College of Union University, Albany Medical Center.	College of Medicine University of Arizona	University of Arkansas Medical Center
GRANTEE. ³	Same. ⁵	Same. ⁵	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	January 1, 1967	July 1, 1966	April 1, 1967	April 1, 1967
PROGRAM PERIOD (YEARS).	2½	3	2¼	2¼
AWARD (AMOUNT AND YEAR).	\$318,046—1st	\$373,254—1st \$384,244—2nd	\$119,045—1st	\$360,174—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).	\$286,750—2nd \$143,375—3rd	\$252,486—3rd	\$287,000—2nd \$67,750—3rd	\$421,682—2nd \$97,300—3rd

¹ Preliminary regions for planning purposes as delineated in the original applications. State designations do not indicate they are coterminous with State lines. These preliminary regions may be modified on the basis of planning and experience.

² Population estimates include overlap between regions. As preliminary regional boundaries are evaluated and clarified during the planning process, inappropriate overlap will be eliminated.

³ 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.

⁴ Direct costs only.

⁵ Indicates the Grantee Agency and the Coordinating Headquarters are the same organization.

REGIONAL DESIGNATION	BI-STATE	CALIFORNIA	CENTRAL NEW YORK	COLORADO-WYOMING
PRELIMINARY PLANNING REGION. ¹	Eastern Missouri and Southern Illinois centered around St. Louis	California	Syracuse, N.Y., and 15 surrounding counties	Colorado and Wyoming
POPULATION ESTIMATE 1965. ²	4,700,000	18,600,000	1,800,000	2,300,000
COORDINATING HEADQUARTERS.	Washington University School of Medicine	California Committee on Regional Medical Programs	Upstate Medical Center, State University of New York at Syracuse	University of Colorado Medical Center
GRANTEE. ³	Same. ⁵	California Medical Education and Research Foundation	Research Foundation of State University of New York	Same. ⁵
EFFECTIVE STARTING DATE.	April 1, 1967	November 1, 1966	January 1, 1967	January 1, 1967
PROGRAM PERIOD (YEARS).	2¼	2¾	2	2½
AWARD (AMOUNT AND YEAR).	\$603,965—1st	\$1,511,381—1st	\$289,522—1st	\$361,984—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT AND YEAR).	\$547,989—2nd \$135,993—3rd	\$2,198,452—2nd \$961,982—3rd	\$211,206—2nd	\$326,114—2nd \$170,662—3rd

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REGIONAL DESIGNATION	CONNECTICUT	GEORGIA	GREATER DELAWARE VALLEY	HAWAII
PRELIMINARY PLANNING REGION. ¹	Connecticut	Georgia	Eastern Pennsylvania and portions of Delaware and New Jersey	Hawaii
POPULATION ESTIMATE 1965. ²	2,800,000	4,400,000	8,800,000	800,000
COORDINATING HEADQUARTERS.	Yale University Medical School and University of Connecticut School of Medicine	Medical Association of Georgia	University City Science Center	University of Hawaii College of Health Sciences
GRANTEE. ³	Yale University School of Medicine	Same. ⁵	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	July 1, 1966	January 1, 1967	April 1, 1967	July 1, 1966
PROGRAM PERIOD (YEARS).	3	2½	1	2
AWARD (AMOUNT AND YEAR).	\$406,622—1st \$338,513—2nd	\$240,098—1st	\$1,531,494—1st	\$108,006—1st \$119,122—2nd
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).	\$312,761—3rd	\$203,207—2nd \$104,749—3rd		

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REGIONAL DESIGNATION	ILLINOIS	INDIANA	INTERMOUNTAIN	IOWA
PRELIMINARY PLANNING REGION. ¹	Illinois	Indiana	Utah and portions of Colorado, Idaho, Montana, Nevada, and Wyoming	Iowa
POPULATION ESTIMATE 1965. ²	10,700,000	4,900,000	2,200,000	2,800,000
COORDINATING HEADQUARTERS.	Coordinating Committee of Medical Schools and Teaching Hospitals of Illinois	Indiana University School of Medicine	University of Utah School of Medicine	University of Iowa College of Medicine
GRANTEE. ³	University of Chicago	Indiana University Foundation	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	July 1, 1967	January 1, 1967	July 1, 1966	December 1, 1966
PROGRAM PERIOD (YEARS).	2	2½	2	2
AWARD (AMOUNT AND YEAR).	\$336,366—1st	\$384,750—1st	\$456,415—1st \$363,524—2nd	\$291,348—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT AND YEAR).	\$244,175—2nd	\$373,710—2nd \$152,295—3rd		\$230,218—2nd

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REGIONAL DESIGNATION	KANSAS	LOUISIANA	MAINE	MARYLAND
PRELIMINARY PLANNING REGION. ¹	Kansas	Louisiana	Maine	Maryland
POPULATION ESTIMATE 1965. ²	2,200,000	3,500,000	1,000,000	3,520,000
COORDINATING HEADQUARTERS.	University of Kansas Medical Center	Louisiana State Department of Hospitals.	Medical Care Development, Inc.	Steering Committee of the Regional Medical Programs for Maryland.
GRANTEE. ³	Same. ⁵	Same. ⁵	Same. ⁵	The Johns Hopkins University
EFFECTIVE STARTING DATE.	July 1, 1966	January 1, 1967	May 1, 1967	January 1, 1967
PROGRAM PERIOD (YEARS).	2	2	2	2
AWARD (AMOUNT AND YEAR).	\$197,945—1st \$293,080—2nd	\$490,448—1st	\$193,909—1st	\$518,443—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).		\$514,251—2nd	\$204,709—2nd	\$431,821—2nd

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REGIONAL DESIGNATION	MEMPHIS	METROPOLITAN WASHINGTON, D.C.	MICHIGAN	MISSISSIPPI
PRELIMINARY PLANNING REGION. ¹	Western Tennessee, Northern Mississippi, and portions of Arkansas, Kentucky, and Missouri	District of Columbia and 2 contiguous counties in Maryland, 2 in Virginia, and 2 independent cities in Virginia.	Michigan	Mississippi
POPULATION ESTIMATE 1965. ²	2,400,000	2,050,000	8,220,000	2,320,000
COORDINATING HEADQUARTERS.	Mid-South Medical Council for Comprehensive Health Planning, Inc.	District of Columbia Medical Society	Michigan Association for Regional Medical Programs, Inc.	University of Mississippi Medical Center
GRANTEE. ³	University of Tennessee College of Medicine	Same. ⁵	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	April 1, 1967	January 1, 1967	June 1, 1967	July 1, 1967
PROGRAM PERIOD (YEARS).	2¼	2½	1	2
AWARD (AMOUNT AND YEAR).	\$173,119—1st	\$203,790—1st	\$1,294,449—1st	\$322,845—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).	\$140,000—2nd \$54,825—3rd	\$169,658—2nd \$84,829—3rd		\$295,825—2nd

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REGIONAL DESIGNATION	MISSOURI	MOUNTAIN STATES	NEBRASKA-- SOUTH DAKOTA	NEW MEXICO
PRELIMINARY PLANNING REGION. ¹	Missouri	Idaho, Montana, Nevada and Wyoming	Nebraska and South Dakota	New Mexico
POPULATION ESTIMATE 1965. ²	4,500,000	2,200,000	2,200,000	1,000,000
COORDINATING HEADQUARTERS.	University of Missouri School of Medicine	Western Interstate Commission for Higher Education	Nebraska State Medical Association	University of New Mexico School of Medicine
GRANTEE. ³	Same. ⁵	Same. ⁵	Same. ⁵	University of New Mexico
EFFECTIVE STARTING DATE.	July 1, 1966	November 1, 1966	January 1, 1967	October 1, 1966
PROGRAM PERIOD (YEARS).	3	2	2	2 $\frac{3}{4}$
AWARD (AMOUNT AND YEAR).	\$398,556—1st \$324,254—2nd	\$876,855—1st	\$350,339—1st	\$449,736—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).	\$368,125—3rd	\$761,983—2nd	\$281,450—2nd	\$729,285—2nd \$545,491—3rd

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REGIONAL DESIGNATION	NEW YORK METROPOLITAN AREA	NORTH CAROLINA	NORTHERN NEW ENGLAND	NORTHLANDS
PRELIMINARY PLANNING REGION. ¹	New York City, and Nassau, Suffolk and Westchester Counties.	North Carolina	Vermont and 3 counties in Northeastern New York.	Minnesota
POPULATION ESTIMATE 1965. ²	11,400,000	4,900,000	550,000	3,600,000
COORDINATING HEADQUARTERS.	Associated Medical Schools of Greater New York.	Association for the North Carolina Regional Medical Program.	University of Vermont College of Medicine.	Minnesota State Medical Association Foundation
GRANTEE. ³	Same. ⁵	Duke University	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	June 1, 1967	July 1, 1966	July 1, 1966	January 1, 1967
PROGRAM PERIOD (YEARS).	2	2	3	2½
AWARD AMOUNT AND YEAR.	\$967,010—1st	\$435,851—1st \$600,944—2nd	\$316,186—1st \$377,701—2nd	\$370,904—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT AND YEAR).	\$961,957—2nd		\$234,872—3rd	\$469,080—2nd \$234,700—3rd

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REGIONAL DESIGNATION	OHIO STATE	OHIO VALLEY	OKLAHOMA	OREGON
PRELIMINARY PLANNING REGION. ¹	Central and Southern $\frac{3}{4}$ of Ohio (61 counties excluding Metropolitan Cincinnati area).	Greater part of Kentucky and contiguous parts of Ohio, Indiana, and West Virginia.	Oklahoma	Oregon
POPULATION ESTIMATE 1965. ²	4,500,000	5,900,000	2,500,000	1,900,000
COORDINATING HEADQUARTERS.	Ohio State University College of Medicine.	Ohio Valley Regional Medical Program.	University of Oklahoma Medical Center.	University of Oregon Medical School.
GRANTEE. ³	Same. ⁵	University of Kentucky Research Foundation	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	April 1, 1967	January 1, 1967	September 1, 1966	April 1, 1967
PROGRAM PERIOD (YEARS).	1	2	2	2 $\frac{1}{4}$
AWARD (AMOUNT AND YEAR).	\$109,417—1st	\$346,760—1st	\$177,963—1st	\$219,168—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).		\$232,371--2nd	\$136,168--2nd	\$171,998--2nd \$44,078--3rd

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REGIONAL DESIGNATION	ROCHESTER, NEW YORK	SOUTH CAROLINA	SUSQUEHANNA VALLEY, PENNSYLVANIA	TENNESSEE MID-SOUTH
PRELIMINARY PLANNING REGION ¹	Rochester, N.Y., and 11 surrounding counties.	South Carolina	24 counties centered around Harrisburg and Hershey.	Eastern and Central Tennessee and contiguous parts of Southern Kentucky and Northern Alabama.
POPULATION ESTIMATE 1965. ²	1,200,000	2,500,000	2,100,000	2,600,000
COORDINATING HEADQUARTERS.	University of Rochester School of Medicine and Dentistry.	Medical College of South Carolina.	Pennsylvania Medical Society.	Vanderbilt University School of Medicine and Meharry College of Medicine.
GRANTEE ³	Same. ⁵	Same. ⁵	Same. ⁵	Vanderbilt University.
EFFECTIVE STARTING DATE.	October 1, 1966	January 1, 1967	June 1, 1967	July 1, 1966
PROGRAM PERIOD (YEARS).	2 $\frac{3}{4}$	1	2	2
AWARD (AMOUNT AND YEAR).	\$306,985—1st	\$65,906—1st	\$263,530—1st	\$265,841—1st \$393,458—2nd
RECOMMENDED FUTURE SUPPORT (AMOUNT AND YEAR).	\$329,364—2nd \$259,900—3rd		\$249,550—2nd	

¹ Preliminary regions for planning purposes as delineated in the original applications. State designations do not indicate they are coterminous with State lines. These preliminary regions may be modified on the basis of planning and experience.

² Population estimates include overlap between regions. As preliminary regional boundaries are evaluated and clarified during the planning process, inappropriate overlap will be eliminated.

³ 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.

⁴ Direct costs only.

⁵ Indicates the Grantee Agency and the Coordinating Headquarters are the same organization.

REGIONAL DESIGNATION	TEXAS	VIRGINIA	WASHINGTON-ALASKA	WEST VIRGINIA
PRELIMINARY PLANNING REGION. ¹	Texas	Virginia	Alaska and Washington	West Virginia
POPULATION ESTIMATE 1965. ²	10,500,000	4,500,000	3,200,000	1,800,000
COORDINATING HEADQUARTERS.	University of Texas	Medical College of Virginia and University of Virginia School of Medicine.	University of Washington School of Medicine.	West Virginia University Medical Center.
GRANTEE. ³	Same. ⁵	University of Virginia School of Medicine.	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	July 1, 1966	January 1, 1967	September 1, 1966	January 1, 1967
PROGRAM PERIOD (YEARS).	3	2	2½	2½
AWARD (AMOUNT AND YEAR).	\$1,271,013—1st \$1,260,181—2nd	\$291,454—1st	\$266,248—1st	\$150,798—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ⁴ AND YEAR).	\$133,987—3rd	\$254,000—2nd	\$230,934—2nd \$241,795—3rd	\$175,250—2nd \$91,250—3rd

¹ Preliminary regions for planning purposes as delineated in the original applications. State designations do not indicate they are coterminous with State lines. These preliminary regions may be modified on the basis of planning and experience.

² Population estimates include overlap between regions. As preliminary regional boundaries are evaluated and clarified during the planning process, inappropriate overlap will be eliminated.

³ 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.

⁴ Direct costs only.

⁵ Indicates the Grantee Agency and the Coordinating Headquarters are the same organization.

REGIONAL DESIGNATION	WESTERN NEW YORK	WESTERN PENNSYLVANIA	WISCONSIN
PRELIMINARY PLANNING REGION. ¹	Buffalo, N.Y., and 7 surrounding counties.	Pittsburgh, Pa., and 28 surrounding counties.	Wisconsin
POPULATION ESTIMATE 1965. ²	1,900,000	4,200,000	4,100,000
COORDINATING HEADQUARTERS.	School of Medicine, State University of New York at Buffalo in cooperation with the Health Organization of Western New York.	University Health Center of Pittsburgh.	Wisconsin Regional Medical Program, Inc.
GRANTEE. ³	The Research Foundation of State University of New York	Same. ⁵	Same. ⁵
EFFECTIVE STARTING DATE.	December 1, 1966	January 1, 1967	September 1, 1966
PROGRAM PERIOD (YEARS).	2	2½	2
AWARD (AMOUNT AND YEAR).	\$149,241—1st	\$340,556—1st	\$344,418—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT AND YEAR).	\$117,626—2nd	\$260,484—2nd \$137,618—3rd	\$341,000—2nd

¹ Preliminary regions for planning purposes as delineated in the original applications. State designations do not indicate they are coterminous with State lines. These preliminary regions may be modified on the basis of planning and experience.

² Population estimates include overlap between regions. As preliminary regional boundaries are evaluated and clarified during the planning process, inappropriate overlap will be eliminated.

³ 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.

⁴ Direct costs only.

⁵ Indicates the Grantee Agency and the Coordinating Headquarters are the same organization.

EXHIBIT IV

Operational Grants for Regional Medical Programs, June 30, 1967

REGIONAL DESIGNATION	ALBANY, NEW YORK	INTERMOUNTAIN	KANSAS	MISSOURI
REGION.	Northeastern New York and portions of Southern Vermont and Western Massachusetts.	Utah and portions of Colorado, Idaho, Montana, Nevada, and Wyoming.	Kansas	Missouri, exclusive of Metropolitan St. Louis.
POPULATION ESTIMATE 1965.	1,900,000	2,200,000	2,200,000	2,400,000
COORDINATING HEADQUARTERS.	Albany Medical College of Union University, Albany Medical Center.	University of Utah School of Medicine.	University of Kansas Medical Center.	University of Missouri School of Medicine.
GRANTEE.	Same. ¹	Same. ¹	Same. ¹	Same. ¹
EFFECTIVE STARTING DATE.	April 1, 1967	April 1, 1967	June 1, 1967	April 1, 1967
PROGRAM PERIOD (YEARS).	2	2½	2	2
FIRST-YEAR AWARD.	\$914,627—1st	\$1,790,603—1st	\$1,076,600—1st	\$2,887,903—1st
RECOMMENDED FUTURE SUPPORT (AMOUNT ² AND YEAR).	\$750,000—2nd	\$1,162,049—2nd \$1,036,378—3rd	\$1,000,000—2nd	\$2,625,000—2nd

¹ Indicates that the Grantee Agency and the Coordinating Headquarters are the same organization.² Direct costs only.

EXHIBIT V

**National Advisory Council on
Regional Medical Programs**

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Professor
Cook County Graduate School of Medicine

Senior Attending Physician
Michael Reese Hospital
Chicago, Illinois

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Radcliffe College
Cambridge, Massachusetts

Gordon R. Cumming²
Administrator
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Sacramento, California

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Ruston, Louisiana

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Edmund D. Pellegrino, M.D.
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Stony Brook, New York

Alfred M. Popma, M.D.
Regional Director
Mountain States Regional Medical
Program
Boise, Idaho

Mack I. Shanholtz, M.D.
State Health Commissioner
State Department of Health
Richmond, Virginia

Robert J. Slater, M.D.²
Dean
College of Medicine

University of Vermont
Burlington, Vermont
Cornelius H. Traeger, M.D.
New York, New York

ex officio

William H. Stewart, M.D. (Chairman)
Surgeon General
Public Health Service
Bethesda, Maryland

**Liaison Members to
the National Advisory Council
on Regional Medical Programs**

*Liaison Member for National
Advisory Cancer Council*

Sidney Farber, M.D.³
Director of Research
Children's Cancer Research Foundation
Boston, Massachusetts

Murray M. Copeland, M.D.
Associate Director
M.D. Anderson Medical Hospital
and Tumor Institute
Texas Medical Center
Houston, Texas

*Liaison Member for National
Advisory General
Medical Sciences Council*

Edward W. Dempsey, Ph. D.
Chairman
Department of Anatomy
College of Physicians and Surgeons
Columbia University
New York, New York

*Liaison Member for National
Advisory Neurological Diseases
and Blindness Council*

A. B. Baker, M.D.³
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Division of Neurology
University of Minnesota
Minneapolis, Minnesota

A. Earl Walker, M.D.
Professor of Neurological Surgery
Johns Hopkins University
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*Liaison Member for National
Advisory Heart Council*

John B. Hickam, M.D.
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Department of Medicine
Indiana University Medical Center
Indianapolis, Indiana

*Liaison Member for the
Veterans Administration*

Benjamin B. Wells, M.D.
Assistant Chief Medical Director
for Research and Education in
Medicine
Department of Medicine and Surgery
Veterans Administration
Washington, D.C.

¹ Resigned January 1967.

² Membership terminated November 1966.

³ Appointment expired September 1966.

 EXHIBIT VI

 Regional Medical Program
 Review Committee

Mark Berke

*Director
 Mount Zion Hospital and
 Medical Center
 San Francisco, California*

Kevin P. Bunnell, Ph. D.

*Associate Director
 Western Interstate Commission for
 Higher Education
 Boulder, Colorado*

 Sidney B. Cohen¹
*Management Consultant
 Silver Spring, Maryland*

Edwin L. Crosby, M.D.

*Director
 American Hospital Association
 Chicago, Illinois*

George James, M.D. (Chairman)

*Dean
 Mount Sinai School of Medicine
 New York, New York*

Howard W. Kenney, M.D.

*Medical Director
 John A. Andrew Memorial Hospital
 Tuskegee Institute
 Tuskegee, Alabama*

Edward J. Kowalewski, M.D.

*Chairman
 Committee of Environmental Medicine
 Academy of General Practice
 Akron, Pennsylvania*

¹ Deceased, April 1967.

George E. Miller, M.D.

*Director
 Center for Medical Education
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Anne Pascasio, Ph. D.

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 Pittsburgh, Pennsylvania*

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 Tufts University
 School of Medicine
 President
 Bingham Associates Fund
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 Vanderbilt University
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*Assistant Secretary
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*Executive Director
 The Association for the Aid of
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John D. Thompson

*Director, Program in Hospital
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 Professor of Public Health
 School of Public Health
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Kerr L. White, M.D.

*Director
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 EXHIBIT VII

 Consultants to the
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 Medical Programs

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Alexander Anderson, M.D.
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Training Programs for Center of Medical
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William Anlyan, M.D.
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Norman T. J. Bailey, Ph. D.
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Cornell University Medical School and
Sloan-Kettering Institute for Cancer
Research
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Office of Intergovernmental Relations
and Urban Program Coordination
Department of Housing and Urban De-
velopment
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Storm Whaley
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Administration
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Paul N. Ylvisaker, Ph. D.
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New York, New York

Lawrence E. Young, M.D.
Chairman
Department of Medicine
School of Medicine
University of Rochester
Rochester, New York

EXHIBIT VIII

Program Coordinators for Regional Medical Programs, June 30, 1967

Regional Designation	Preliminary Planning Region	Program Coordinator	Regional Designation	Preliminary Planning Region	Program Coordinator
ALABAMA.	Alabama.	Benjamin B. Wells, M.D. University of Alabama Medical Center 1919 Seventh Avenue, South Birmingham, Alabama 32533	CALIFORNIA.	California.	Paul D. Ward Executive Director California Committee on Re- gional Medical Programs Room 302 655 Sutter Street San Francisco, California 94102
ALBANY, N.Y.	Northeastern New York, and portions of Southern Vermont and Western Massachusetts.	Frank M. Woolsey, Jr., M.D. Associate Dean Albany Medical College of Union University 47 New Scotland Avenue Albany, New York 12208	CENTRAL NEW YORK.	Syracuse, New York, and 15 surrounding counties.	Richard H. Lyons, M.D. Professor and Chairman Department of Medicine State University of New York Upstate Medical Center 766 Irving Avenue Syracuse, New York 13210
ARIZONA.	Arizona.	Merlin K. DuVal, M.D. Acting Dean University of Arizona College of Medicine Tucson, Arizona 85721	COLORADO- WYOMING.	Colorado and Wyoming.	C. Wesley Eisele, M.D. Associate Dean for Postgraduate Medical Education University of Colorado Medical Center 4200 East Ninth Avenue Denver, Colorado 80220
ARKANSAS.	Arkansas.	Winston K. Shorey, M.D. Dean, University of Arkansas School of Medicine 4301 West Markham Street Little Rock, Arkansas 72201	CONNECTICUT.	Connecticut.	Henry T. Clark, Jr., M.D. Program Coordinator Connecticut Regional Medical Program 272 George Street New Haven Connecticut 06510
BI-STATE.	Eastern Missouri and Southern Illinois centered around St. Louis.	William H. Danforth, M.D. Vice Chancellor for Medical Affairs Washington University 660 South Euclid Avenue St. Louis, Missouri 63110			

Regional Designation	Preliminary Planning Region	Program Coordinator	Regional Designation	Preliminary Planning Region	Program Coordinator
FLORIDA.	Florida.	Samuel P. Martin, M.D. Provost J. Hillis Miller Medical Center University of Florida Gainesville, Florida 32601	INDIANA.	Indiana.	George T. Lukemeyer, M.D. Associate Dean Indiana University School of Medicine Indiana University Medical Center 1100 West Michigan Street Indianapolis, Indiana 46207
GEORGIA.	Georgia.	J. W. Chambers, M.D. Medical Association of Georgia 938 Peachtree Street N.E. Atlanta, Georgia 30309	INTERMOUNTAIN.	Utah and portions of Colorado, Idaho, Montana, Nevada, and Wyoming.	C. Hilmon Castle, M.D. Associate Dean and Chairman Department of Postgraduate Education University of Utah Salt Lake City, Utah 84112
GREATER DELAWARE VALLEY.	Eastern Pennsylvania and portions of Delaware and New Jersey.	William C. Spring, Jr., M.D. Greater Delaware Valley Regional Medical Program 301 City Line Avenue Bala-Cynwyd, Pennsylvania 19004	IOWA.	Iowa.	Willard Krehl, M.D., Ph. D. Director, Clinical Research Center Department of Internal Medicine University Hospital University of Iowa Iowa City, Iowa 52240
HAWAII.	Hawaii.	Windsor C. Cutting, M.D. School of Medicine University of Hawaii 2538 The Mall Honolulu, Hawaii 96822	KANSAS.	Kansas.	Charles E. Lewis, M.D. Chairman, Department of Preventive Medicine University of Kansas Medical Center Kansas City, Kansas 66103
ILLINOIS.	Illinois.	Leon O. Jacobson, M.D. Dean, University of Chicago School of Medicine Chairman, Coordinating Com- mittee of Medical Schools and Teaching Hospitals of Illinois 950 East 59th Street Chicago, Illinois 60637			

Regional Designation	Preliminary Planning Region	Program Coordinator	Regional Designation	Preliminary Planning Region	Program Coordinator
LOUISIANA.	Louisiana.	Joseph A. Sabatier, M.D. Louisiana Regional Medical Program Clairborne Towers Roof 119 South Clairborne Avenue New Orleans, Louisiana 70112	MICHIGAN.	Michigan.	D. Eugene Sibery Executive Director Greater Detroit Area Hospital Council 966 Penobscot Building Detroit, Michigan 48226
MAINE.	Maine.	Manu Chatterjee, M.D. Merrymeeting Medical Group Brunswick, Maine	MISSISSIPPI.	Mississippi.	Guy D. Campbell, M.D. University of Mississippi Medical Center 2500 North State Street Jackson, Mississippi 39216
MARYLAND.	Maryland.	Thomas B. Turner, M.D. Dean, The John Hopkins University School of Medicine 725 Wolfe Street Baltimore, Maryland 21205	MISSOURI.	Missouri.	Vernon E. Wilson, M.D. Dean, School of Medicine University of Missouri Columbia, Missouri 65201
MEMPHIS.	Western Tennessee, Northern Mississippi, and portions of Arkansas, Kentucky, and Missouri.	James W. Culbertson, M.D. Professor and Cardiologist Department of Internal Medicine University of Tennessee College of Medicine Memphis, Tennessee 38103	MOUNTAIN STATES.	Idaho, Montana, Nevada, and Wyoming.	Kevin P. Bunnell, Ed. D. Associate Director Western Interstate Commission for Higher Education University East Campus 30th Street Boulder, Colorado 80302
METROPOLITAN WASHINGTON, D.C.	District of Columbia and 2 contiguous counties in Maryland, 2 in Virginia and 2 independent cities in Virginia.	Thomas W. Mattingly, M.D. Program Coordinator District of Columbia Medical Society 2007 Eye Street N.W. Washington, D.C. 20006	NEBRASKA-SOUTH DAKOTA.	Nebraska and South Dakota.	Harold Morgan, M.D. Nebraska State Medical Association 1408 Sharp Building Lincoln, Nebraska 68508

Regional Designation	Preliminary Planning Region	Program Coordinator	Regional Designation	Preliminary Planning Region	Program Coordinator
NEW JERSEY.	New Jersey.	Alvin A. Florin, M.D., M.P.H. New Jersey State Department of Health Health-Agriculture Building P.O. Box 1540, John-Fitch Plaza Trenton, New Jersey 08625	NORTHERN NEW ENGLAND.	Vermont and three counties in Northeastern New York.	John E. Wennberg, M.D. University of Vermont College of Medicine Burlington, Vermont 05401
NEW MEXICO.	New Mexico.	Reginald H. Fitz, M.D. Dean, University of New Mexico School of Medicine Albuquerque, New Mexico 87106	NORTHLANDS.	Minnesota.	J. Minott Stickney, M.D. Minnesota State Medical Association 200 First Street, Southwest Rochester, Minnesota 55901
NEW YORK METROPOLITAN AREA.	New York City, and Nassau, Suffolk, and Westchester Counties.	Vincent de Paul Larkin, M.D. New York Academy of Medicine 2 East 103d Street New York, New York 10029	OHIO STATE.	Central and Southern two-thirds of Ohio (61 counties, excluding Metropolitan Cincinnati area).	Richard L. Meiling, M.D. Dean, Ohio State University College of Medicine 410 West 10th Avenue Columbus, Ohio 43210
NORTH CAROLINA.	North Carolina.	Marc J. Musser, M.D. Executive Director North Carolina Regional Medical Program Teer House 4019 North Roxboro Road Durham, North Carolina 27704	OHIO VALLEY.	Greater part of Kentucky and contiguous parts of Ohio, Indiana, and West Virginia.	William H. McBeath, M.D. Director, Ohio Valley Regional Medical Program 1718 Alexandria Drive Lexington, Kentucky 40504
NORTH DAKOTA.	North Dakota.	Theodore H. Harwood, M.D. Dean, School of Medicine University of North Dakota Grand Forks, North Dakota 58202	OKLAHOMA.	Oklahoma.	Kelly M. West, M.D. University of Oklahoma Medical Center 800 N.E. 13th Street Oklahoma City, Oklahoma 73104

Regional Designation	Preliminary Planning Region	Program Coordinator	Regional Designation	Preliminary Planning Region	Program Coordinator
OREGON.	Oregon.	M. Roberts Grover, M.D. Director, Continuing Medical Education University of Oregon School of Medicine 3181 S.W. Sam Jackson Park Road Portland, Oregon 97201	SUSQUEHANNA VALLEY.	Block of 24 counties centered around Harrisburg and Hershey.	Richard B. McKenzie Executive Assistant Council on Scientific Advancement Pennsylvania Medical Society Taylor Bypass and Erford Road Lemoyne, Pennsylvania 17043
ROCHESTER, NEW YORK.	Rochester, New York and 11 surrounding counties.	Ralph C. Parker, Jr., M.D. Clinical Associate Professor of Medicine University of Rochester School of Medicine and Dentistry Rochester, New York 14620	TENNESSEE MID-SOUTH.	Eastern and Central Tennessee and contiguous parts of Southern Kentucky and Northern Alabama.	Stanley W. Olson, M.D. Professor of Medicine Vanderbilt University Baker Building 110 21st Avenue, South Nashville, Tennessee 37203
SOUTH CAROLINA.	South Carolina.	Charles P. Summerall, III, M.D. Associate in Medicine (Cardiology) Department of Medicine Medical College Hospital 55 Doughty Street Charleston, South Carolina 29403	TEXAS.	Texas.	Charles A. LeMaistre, M.D. Vice-Chancellor for Health Affairs University of Texas Main Building Austin, Texas 78712
			TRI-STATE.	Massachusetts, New Hampshire and Rhode Island.	Norman Stearns, M.D. Medical Care and Educational Foundation 22 The Fenway Boston, Massachusetts 02115

Regional Designation	Primary Planning Region	Program Coordinator	Regional Designation	Primary Planning Region	Program Coordinator
VIRGINIA.	Virginia.	Kinloch Nelson, M.D. Dean, Medical College of Virginia 200 East Broad Street Richmond, Virginia 23219	WESTERN NEW YORK.	Buffalo, New York and 7 surrounding counties.	Douglas M. Surgenor, M.D. Dean, School of Medicine State University of New York at Buffalo 101 Capen Hall Buffalo, New York 14214
WASHINGTON-ALASKA.	Alaska and Washington.	Donal R. Sparkman, M.D. Associate Professor of Medicine University of Washington School of Medicine Seattle, Washington 98105	WESTERN PENNSYLVANIA.	Pittsburgh, Pennsylvania and 28 surrounding counties.	Francis S. Cheever, M.D. Dean, School of Medicine University of Pittsburgh Flannery Building 3530 Forbers Avenue Pittsburgh, Pennsylvania 15213
WEST VIRGINIA.	West Virginia.	Charles L. Wilbar, M.D. West Virginia University Medical Center Morgantown, West Virginia 26506	WISCONSIN.	Wisconsin.	John S. Hirschboeck, M.D. Wisconsin Regional Medical Program, Inc. Room 1103 110 East Wisconsin Avenue Milwaukee, Wisconsin 53202

EXHIBIT IX

Review and Approval of Operational Grants

This exhibit outlines review and approval procedures for use in reviewing grants for the establishment and operation of Regional Medical Programs authorized by Section 904(a) of Title IX of the Public Health Service Act.

Background

These procedures were developed after extensive consideration of: (1) the philosophy and purposes of Title IX; (2) the initial experience in reviewing the planning grant applications awarded under Section 903; (3) consideration of the first operational grant proposals, including site visits to the regions involving members of the National Advisory Council on Regional Medical Programs and the Regional Medical Programs Review Committee; (4) preliminary discussion of the issues involved in the review of operational applications by the National Advisory Council on Regional Medical Programs at its November 1966 meeting; and (5) extensive discussion with both the Review Committee and the National Advisory Council concerning the ef-

fectiveness of these procedures during the actual review of the first operational applications. As a result of these considerations, the resulting review and approval process is to the greatest possible extent keyed to the anticipated nature of operational grant requests and to the policy issues inherent in the Regional Medical Programs concept.

Characteristics of Operational Grants

In designing this review process, attention has been given to the following characteristics of applications for Regional Medical Program grants: (1) complexity of the proposals with many discrete but interrelated activities involving different medical fields; (2) the diversity of grant proposals resulting from encouragement of initiative and determination at the regional level within the broad parameters provided in the Law, Regulations, and Guidelines; (3) the many different attributes of the overall operational proposals which need to be evaluated during the review process, including not only the merit of highly technical medical activities in the fields of heart disease, cancer, stroke, and related diseases but also the effect of the proposal on improved organization and delivery of health services and the degree of effective

cooperation and commitment of the major medical resources: (4) the relationships of the proposals to the responsibilities of many other components of the Public Health Service and other Federal programs; (5) the characteristics of these initial proposals as the first steps in the more complete development of the Regional Medical Program, guided by a continuing planning process.

Objectives of Review Process

The objectives sought in the development of this review process are based on a careful assessment of the goals of the Regional Medical Programs and how the achievement of those goals can be most effectively furthered by the process used in making decisions on the award of grant funds. Consideration of these basic policy issues led to delineation of the following objectives of the review process:

- The operational grant application must be viewed as a totality rather than as a collection of discrete and separate projects.
- The decision-making process for the review and approval of operational grants must be developed in a way that stimulates and preserves the essential goal setting, priority

determination, decision making and evaluation at the regional level.

During the review process the staff of the Division of Regional Medical Programs and the review groups must be concerned with the probability of effective implementation of the proposed activities in addition to the inherent technical merit of the specific proposals.

The review process must provide the opportunity for the reviewers to assure a basic level of quality and feasibility of the individual activities that will make an investment of grant funds worthwhile.

The review process must have sufficient flexibility to cope with the variety of operational proposals submitted, allowing for the tailoring of the review to the needs of the particular proposal.

The review process should enable the staff and reviewers to view a Regional Medical Program as a continuing activity, rather than a discrete project with time limits. Therefore, the review process should have continuity during the grant activity and should provide the opportunity to judge the development of Regional Medical Programs on the basis of results and evaluation of progress, in addition to the evaluation of the probable effectiveness of initial proposals.

Criteria

The basic criteria for the review of Regional Medical Program grant requests are set forth in the Regulations as follows:

“Upon recommendation of the National Advisory Council on Regional Medical Programs, and within the limits of available funds, the Surgeon General shall award a grant to those applicants whose approved programs will in his judgment best promote the purposes of Title IX. In awarding grants, the Surgeon General shall take into consideration, among other relevant factors the following:

“(a) Generally, the extent to which the proposed program will carry out, through regional cooperation, the purposes of Title IX, within a geographic area.

“(b) The capacity of the institutions or agencies within the program, individually and collectively, for research, training, and demonstration activities with respect to Title IX.

“(c) The extent to which the applicant or the participants in the program plan to coordinate or have coordinated the Regional Medical Program with other activities supported pursuant to the authority contained

in the Public Health Service Act and other Acts of Congress including those relating to planning and use of facilities, personnel, equipment, and training of manpower.

“(d) The population to be served by the Regional Medical Program and relationships to adjacent or other Regional Medical Programs.

“(e) The extent to which all the health resources of the region have been taken into consideration in the planing and/or establishment of the Program.

“(f) The extent to which the participating institutions will utilize existing resources and will continue to seek additional nonfederal resources for carrying out the objectives of the Regional Medical Program.

“(g) The geographic distribution of grants throughout the Nation.”

In utilizing these criteria in the review process, it was determined that the sequence of consideration of the various attributes of the proposal would be important if the objectives of the review process listed above were to be achieved. The review process, therefore, must focus on three general characteristics of the total proposal which separately and yet collectively determine its nature as a

comprehensive and potentially effective Regional Medical Program:

The first focus must be on those elements of the proposal which identify it as truly representing the *concept* of a regional medical program. The review groups have determined that it is not fruitful to consider specific aspects of the proposal unless this first essential determination concerning the core of the program is positive. In making this determination, considerations include such questions as: “Is there a unifying conceptual strategy which will be the basis for initial priorities of action, evaluation, and future decision making?” “Is there an administrative and coordinating mechanism involving the health resources of the regions which can make effective decisions, relate those decisions to regional needs, and stimulate the essential cooperative effort among the major health interests?” “Will the key leadership of the overall Regional Medical Program provide the necessary guidance and coordination for the development of the program?” “What is the relationship of the planning already undertaken and the ongoing planning process to the initial operational proposal!”

After having made a positive determination about this core activity, the next step widens the focus to in-

clude both the nature and the effectiveness of the proposed *cooperative arrangements*. In evaluating the effectiveness of these arrangements, attention is given to the degree of involvement and commitment of the major health resources, the role of the Regional Advisory Group, and the effectiveness of the proposed activities in strengthening cooperation. Only after the determination has been made that the proposal reflects a regional medical program concept and that it will stimulate and strengthen cooperative efforts will a more detailed evaluation of the specific operational activities be made.

If both of the two previous evaluations are favorable, the operational activities can then be reviewed, individually and collectively. Each activity is judged for its own intrinsic merit, for its contribution to the cooperative arrangements, and for the degree to which it includes the core concept of the Regional Medical Programs. It should also fit as an integral part of the total operational activities, and contribute to the overall objectives of the Regional Medical Programs.

Review Procedures

Below is a chart which describes the various steps in the review process

which will be applied to initial operational grant proposals from each region. The first four operational grant proposals were subject to the various steps of this process. Those steps were not carried out in precisely the order and sequence provided in this chart since the first four applications were used as a test situation for the development of this operational procedure. It is also likely that further experience will lead to appropriate modification of these procedures. The following comments may help to explain this review process, which has been agreed to by the Regional Medical Programs Review Committee and the National Advisory Council on Regional Medical Programs. The complexity of these grant requests and the steps in the review process which seems appropriate for their review will require as much as 6 months for the completion of the total review process in most cases.

Initial Consideration by Review Committee—The first steps of the review process involve preparation for the site visit which will be conducted for each operational grant application. The first consideration of the application by the Review Committee will be for the purposes of pro-

viding information and comments for the guidance of the site visit team, utilizing staff analyses of the planning grant experience, considerations of gross technical validity, policy issues raised by the particular application, and initial input on relationships to other Federal programs.

Site Visit—Initial experience has indicated that a site visit by members of the Review Committee and the National Advisory Council is essential for the assessment of the overall concept and strategy used by the Regional Medical Program in developing the operational proposal and for assigning priorities to specific projects included in the proposal. It also provides the opportunity to assess the probable effectiveness of cooperative arrangements and degree of commitment of the many elements which will be essential to the success of a Regional Medical Program. As the discussion above points out, favorable conclusions on these aspects of the Regional Medical Program must be reached before it is justifiable to begin the major investment of the time of the Division staff, technical reviewers in other parts of the Public Health Service, technical consultants, and the Division of Regional Medical Program review groups,

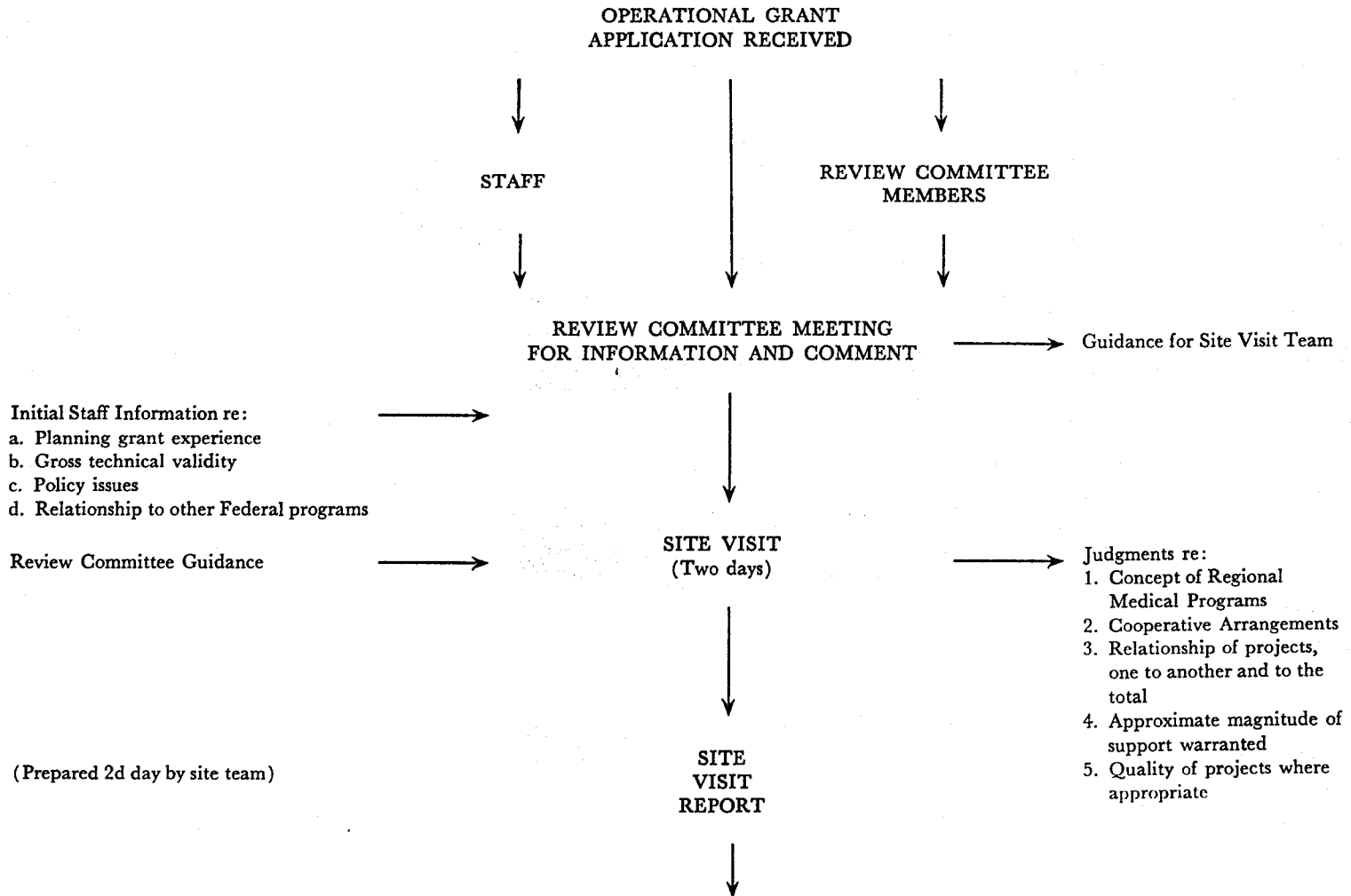
which is required for the assessment of the various components of the application. The site visit is not a substitute for the investment of this effort but provides the opportunity to evaluate the cooperative framework of the Regional Medical Program and the overall probability of the success of the proposed program.

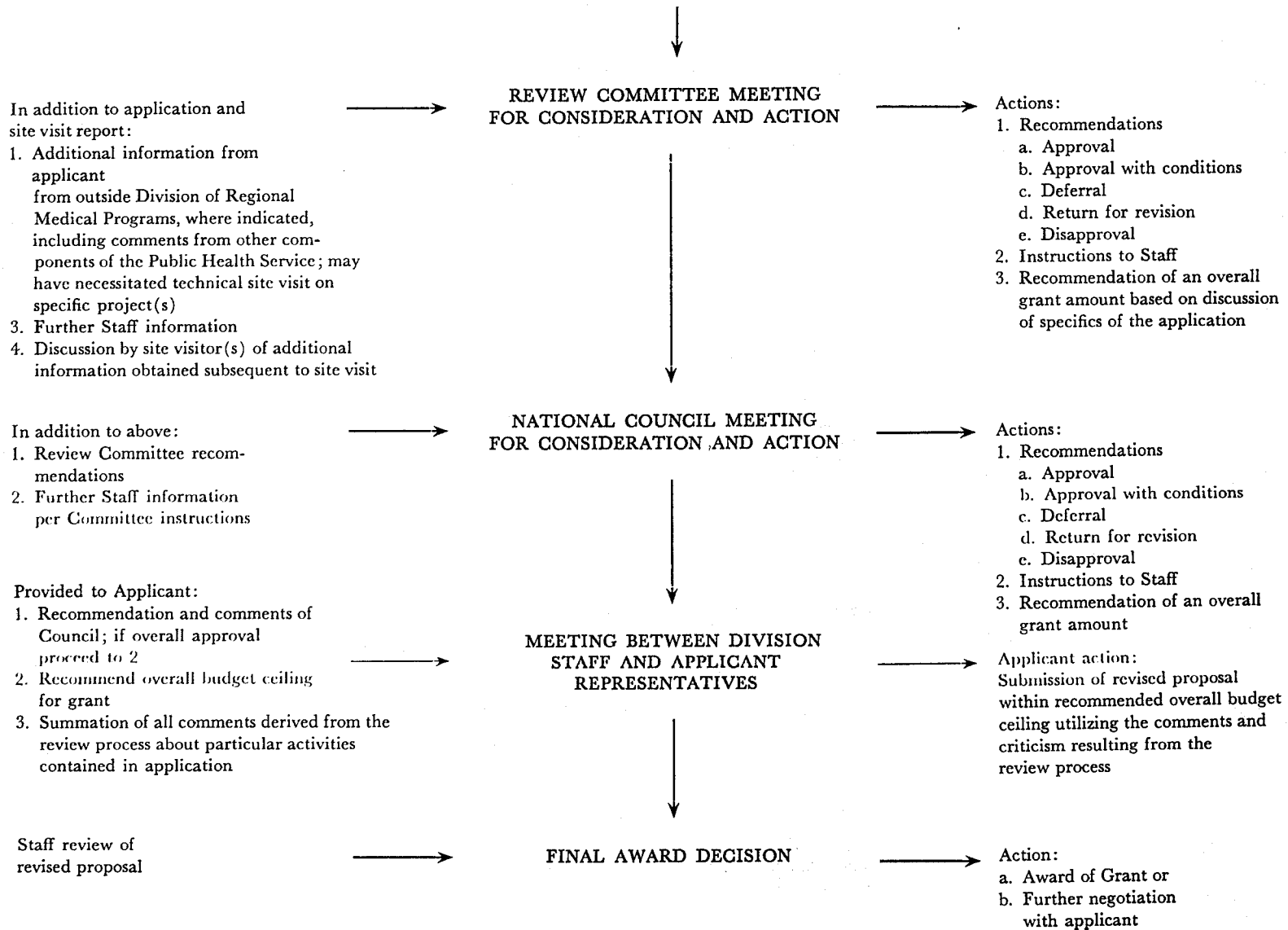
Intensive Analysis and Technical Reviews—If the site visit report justifies the investment of additional effort in the review of the application, the Division staff proceeds with an intensive analysis of the specifics of the application. This analysis provides the framework for obtaining specific comments from other components of the Public Health Service and other Federal health agencies with related programs, detailed comments from the various components of the Division of Regional Medical Programs staff, technical site visits on specific projects within the overall application when considered necessary, and for the assimilation of additional information from the applicant as a result of the site visit. The technical review of specific projects should not only evaluate the intrinsic merit of the project but should help to identify specific problems on any project which might prevent that

project from making a meaningful contribution to the objectives of the Regional Medical Program. Technical reviews also consider the justification for the particular project budget as presented. This aspect of the review process presents the opportunity to consider possible overlaps and duplications with other Public Health Service programs which can be a factor in determining how much support should be provided for the particular activity from the Regional Medical Program grant. The opportunity to raise these questions is not limited to Division of Regional Medical Programs staff initiative since copies of all applications are distributed to the interested National Institutes of Health, to all Bureaus of the Public Health Service, and to the National Library of Medicine at the time of receipt. Representatives from all these organizations are invited to meetings of the Review Committee.

Second Review by Review Committee and Recommendation for Action—The Review Committee considers all of the information available concerning the application. In addition to the application itself and the site visit report, a summary of all available information is presented to the Committee in a staff presenta-

Flow Chart Operational Grant Review and Approval Process





tion. The Review Committee then makes its recommendation concerning the application. Because of the complex nature of the applications, the Review Committee can divide its recommendation into several parts relating to different parts of the application. If there is an overall favorable recommendation on the readiness of the Regional Medical Program to begin the operational program, the Review Committee recommends an overall grant amount based on a discussion of the specifics of the application. This amount takes into consideration problems raised by technical reviewers, overlap with other programs, feasibility of the proposals, and other relevant considerations raised during the review process. While the overall amount recommended is based on discussion of the specific components of the total application, the recommendation does not in most cases include specific approval or disapproval of individual projects except when a project is judged to be infeasible, to be outside the scope of Regional Medical Programs, to be an undesirable duplication of ongoing efforts, or to lack essential technical soundness.

Review by National Advisory Council on Regional Medical Pro-

grams—The National Advisory Council considers the Review Committee recommendations. It has available to it the full array of material presented to the Review Committee and a staff summary of that material. Further information obtained by the staff on the instructions of the Review Committee may also be presented. The National Advisory Council makes the required legal recommendation concerning approval of the application, including recommendations on the amount of the grant. The Council may delegate to the staff the authority to negotiate the final grant amount within set limits. A recommendation of approval applies to all projects except when indicated by the Council, even though the grant amount recommended may be less than the amount requested because of the judgments applied during the review of the application or because of overall limitations of funds.

Meeting with Representatives of the Applicant—Following the National Advisory Council meeting, the staff of the Division meets with representatives of the applicant and presents to them the recommendation and comments of the Council. If the recommendation is favorable and the Division intends to award a grant, the

staff also presents the recommended overall budget ceiling for the grant along with a summation of all the comments derived from the review process concerning particular activities contained within the application, including criticisms of specific projects and comments about the budget levels proposed for specific projects. The staff also indicates if any projects included in the application are not to be included in a grant award because of Council recommendation or Division decision based on negative factors as discussed above.

Submission of Revised Proposal—On the basis of this meeting, the applicant submits a revised proposal within the recommended overall budget ceiling, utilizing in the revision the comments and criticisms and technical advice resulting from the review process. This step of the process requires the applicant to reconsider their priorities within the recommended budget level and to assume the basic responsibility for making the final decisions as to which activities will be included in the operational program. Unless a project has been specifically excluded from the approval action, the applicant may choose to undertake an activity even if doubts about the

activity were raised during the review process. The applicant includes such an activity with the understanding that the progress of the activity will be followed with special interest by the review groups and will be judged in the future on the basis of results.

Final Award Decision—Following staff review of the revised proposal, the final decision on the award is made by the Division Director. Additional negotiations with the applicant may also take place.

June 1967

EXHIBIT X

Principal Staff of the Division
of Regional Medical Programs.
June 30, 1967

The Office of the Director provides program leadership and direction.

Robert Q. Marston, M.D.
Director

Karl D. Yordy
Assistant Director for Program Policy
William D. Mayer, M.D.
*Associate Director for Continuing
Education*

Charles Hilsenroth
Executive Officer

Maurice E. Odoroff
*Assistant to Director for Systems
and Statistics*

Edward M. Friedlander
*Assistant to Director for Communications
and Public Information*

*The Continuing Education and Training
Branch* provides assistance for the quality development of such activities in Regional Medical Programs.

William Mayer, M.D.
Chief

Cecilia Conrath
Assistant to Chief

Frank L. Husted, Ph. D.
Head, Evaluation Research Group

The Development and Assistance Branch serves as the focus for two-way communication between the Division and the individual Regional Medical Programs.

Margaret H. Sloan, M.D.
Chief

Ian Mitchell, M.D.
Associate for Regional Development

The Grants Management Branch interprets grants management policies and reviews budget requests and expenditure reports.

James Beattie
Chief

The Grants Review Branch handles the professional and scientific review of applications and progress reports.

Martha Phillips
Chief

The Planning and Evaluation Branch appraises and reports on overall program goals, progress and trends and provided staff work for the Surgeon General's Report to the President and the Congress.

Stephen J. Ackerman
Chief

Daniel I. Zwick
Assistant Chief

Roland L. Peterson
Head, Planning Section

Rhoda Abrams
Acting Head, Evaluation Section

EXHIBIT XI

Complementary Relationships Between the Comprehensive Health Planning and Public Health Service Amendments of 1966 and the Heart Disease, Cancer, and Stroke Amendments of 1965

A Fact Sheet from the Office of the
Surgeon General, Public Health
Service, March, 1967

Public Law 89-749, the Comprehensive Health Planning and Public Health Services Amendments of 1966, establishes mechanisms for comprehensive areawide and State-wide health planning, training of planners, and evaluation and development efforts to improve the planning art. Public Law 89-239, the Heart Disease, Cancer, and Stroke Amendments of 1965, authorized grants to assist in the planning, establishment, and operation of regional medical programs to facilitate the wider availability of the latest advances in care of patients afflicted with heart disease, cancer, stroke, and related diseases. Public Law 89-239 has been in op-

eration for about a year. Public Law 89-749 is yet to be implemented.

The purposes of P.L. 89-749, described in Section 2(b) are: to establish "comprehensive planning for health services, health manpower, and health facilities" essential "at every level of government"; to strengthen "the leadership and capacities of State health agencies"; and to broaden and make more flexible Federal "support of health services provided people in their communities."

P.L. 89-749 asserts that these objectives will be attained through "an effective partnership, involving close intergovernmental collaboration, official and voluntary efforts, and participation of individuals and organizations. . . ." The Act establishes a new mechanism to relate varied planning and health programs to each other and to other efforts in achievement of a total health purpose.

The law has five major sections:

- Formula grants to the States for comprehensive health planning at the State level through a designated State agency;
- Grants for comprehensive health planning at the areawide level;
- Grants for training health planners;

- Formula grants to States for public health services;

- Project grants for health services development

The purpose of P.L. 89-239, as set forth in Section 900(b) of the Public Health Service Act, is "To afford to the medical profession and the medical institutions of the Nation, through . . . cooperative arrangements, the opportunity of making available to their patients the latest advances in the diagnosis and treatment of (heart disease, cancer, stroke, and related) diseases. . . ."

The process for achieving this purpose is to establish regional cooperative arrangements among science, education, and service resources for health care . . ." 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. . . ." (Section (a))

This law focuses on the cooperative involvement of university medical centers, hospitals, practicing physicians, other health professions, and voluntary and official health agencies in seeking ways to build effective linkages between the development of new knowledge and its application to the problems of patients. The law provides flexible mechanisms which em-

phasize the exercise of initiative and responsibility at the regional level in identifying problems and opportunities in seeking these objectives and in developing specific action steps to overcome the problems and exploit the opportunities.

The Public Health Service sees P.L. 89-239 and P.L. 89-749 as serving the common goal of improved health care for the American people along with other Public Health Service and non-Public Health Service grant programs such as community mental health centers, migrant health programs, air pollution control, programs for the training of health manpower, the neighborhood health centers under the Office of Economic Opportunity, the medical programs of the Children's Bureau, and State and local health programs. In the States and communities, P.L. 89-749 will provide a vehicle for effective interaction among these programs, recognizing as it does that the diversity of the various States and areas of the Nation is considerable, and that the specific relationships between and among programs will have to be worked out at these levels rather than through a specific Federal mandate.

The planning resources created at the State and local level under Public Law 89-749 are expected to afford valuable assistance in the achieve-

ment of the objectives of Public Law 89-239, other programs of the Public Health Service, and other health endeavors in each of the States. Public Law 89-749 provides, however no authority for these planning resources to impose their conclusions or recommendations on any other programs, Federal or non-Federal, except for activities carried out under Section (d) and parts of Section (e) of the Law which must be in accordance with the comprehensive State health plan developed by the State comprehensive health planning agency. The Public Health Service intends to stimulate effective interaction among these programs, recognizing that the diversity of the various States and areas of the Nation is considerable.

Both P.L. 89-239 and P.L. 89-749 provide flexible instruments for establishing productive relationships between these and other programs. The maintenance of this flexibility in the administration of the grant programs will permit each State and region to design and develop a relationship that is appropriate for its particular circumstances. Both programs call for a close private-public partnership. Both programs must place dependence on imaginative, reasonable local approaches to cooperation and coordination. Both programs recognize that they can only achieve

their full potential by the close and complete involvement of other components of the health endeavor. A vital partnership must be developed between the Federal government, the universities, local and State government, the voluntary health interests and individuals and organizations designed to develop creative action for health.

The Congress recognized the relationship of comprehensive health planning to other planning activities. The Report of the Senate Committee on Labor and Public Welfare (No. 1655, September 29, 1966) stated:

"The comprehensive planning of the State health planning agency with the advice of the council would complement and build on such specialized planning as that of the regional medical program and the Hill-Burton program, but would not replace them. . . ."

"The State health planning agency provides the mechanism through which individual specialized planning efforts can be coordinated and related to each other. The agency will also serve as the focal point within the State for relating comprehensive health plans to planning in areas outside the field of health, such as urban redevelopment, public housing, and so forth."

Characteristics of These Two Important Acts

The complementary relationship of the programs established by P.L. 89-239 and P.L. 89-749 to foster development of a "Partnership for Health" is illustrated by the following outline of some of their major elements.

Scope

P.L. 89-239: The Regional Medical Program. To identify regional needs and resources relating to heart disease, cancer, stroke, and related diseases and to develop a regional medical program which utilizes regional cooperative arrangements to apply and strengthen resources to meet the needs in making more widely available the latest advances in diagnosis and treatment of these diseases.

P.L. 89-749: The Comprehensive Health Planning Program. To establish a planning process to achieve comprehensive health planning on a Statewide basis which identifies health problems within the State, sets health objectives directed toward improving the availability of health services, identifies existing resources

and resource needs, relates the activities of other planning and health programs to the meeting of these health objectives, and provides assistance to State and local officials, private voluntary health organizations and institutions, and other programs supported by PHS grant funds in achieving the more effective allocation of resources in accomplishing the objectives.

Participants

P.L. 89-239: University medical centers, hospitals, practicing physicians, other health professions, voluntary and public health agencies, and members of the public. A regional advisory group representing these interests and playing an active role in the development of the regional program must approve any application for operational activities of the regional medical program.

P.L. 89-749: State agency designated by the Governor does the planning. State advisory council advises on the planning process. Membership must include more than half consumer representation. Membership will also include voluntary groups, practitioners, public agencies, general planning agencies, and universities.

The Process

P.L. 89-239:

- Establish cooperative arrangements among science, education, and service resources.
- Assess needs and resources.
- Develop pilot and demonstration projects, emphasizing flow of knowledge in uplifting the cooperative capabilities for diagnosis and care of patients.
- Relate research, training, and service activities.
- Develop effective continuing education programs in relation to other operational activities.
- Develop mechanisms for evaluating effectiveness of efforts in the provision of improved services to patients with heart disease, cancer, stroke and related diseases.

P.L. 89-749:

- Establish State and areawide health goals.
- Define total health needs of all people and communities within area served for meeting health goals.
- Inventory and identify relationships among varied local, State, national, governmental and voluntary

programs; regional medical programs, mental health, health facilities, manpower, medicare — so that these programs can be assisted in making more effective impact with their resources.

- Provide information, analyses, and recommendations which can serve as the basis for the Governor, other health programs and communities to make more effective allocations of resources in meeting health goals.
- Provide a focus for interrelating health planning with planning for education, welfare and community development.
- Strengthen planning, evaluation, and service capacities of all participants in the health endeavor.
- Provide support for the initiation, integration, and development of pilot projects for better delivery of health services; develop plans for targeting flexible formula and project grants at problems and gaps identified by the planning process.

Specific Planning Relationships

- There are a variety of ongoing health planning and community health organization activities. Many are supported in part by the Public Health Service, such as Regional Medical Programs (P.L. 89-239),

community mental health centers, areawide health facility planning, and the Hill-Burton programs. These activities are stimulating the creation of new relationships between health resources and functions as well as assisting in the creation of additional resources in the stimulation of more effective performance of functions for the purpose of achieving more effective attainment of identified health goals. Each of these programs requires participation not only by a broad range of health professionals but also by representatives of the consumers of health services. Each of these programs is dependent upon the interaction of the full range of relevant health interests, including those in the public sector and the private voluntary sector in achieving the particular program goals.

Comprehensive health planning (P.L. 89-749) is designed to provide assistance in the development of more effective relationships among such health programs and to provide a better basis for relating these programs to the accomplishment of overall health objectives at the State and local level. Based on similar principles of broad participation, it calls for the stimulation of all parties to contribute to the goal of insuring the availability of comprehensive health services to all who need them.

- Both regional medical programs and comprehensive health planning are intended to strengthen creative Federalism—more productive mechanisms for partnership and cooperation between the national, State and local levels of government, the public and voluntary private health activities, and the academic and health services environments. P.L. 89-749 will create planning resources at the State and local level. The information, analyses, and plans developed by these planning resources can provide invaluable assistance to State and local authorities, to voluntary health organizations and institutions, and to the other health programs involved in planning and developing the organization of health activities which are supported through other Public Health Service grant funds. This planning resource created under Section 314(a) will thus contribute to the more effective accomplishment of health objectives and the setting of priorities in achieving those objectives through the activities supported under the other sections of this Law. In addition, the resource will contribute to the determination of priorities for action not only by those with public responsibility and accountability for health services but also by the many other health organizations, institutions, and

personnel which bear the direct responsibility for the delivery of health services for most of the population. P.L. 89-749 recognizes that the accomplishment of improvements in the quality and coverage in health services, both personal and environmental, depends upon the voluntary participation and energies of both the private and public sectors of the health endeavor.

□ The planning, operational programs, and organizational frameworks being created under the Regional Medical Programs, community mental health centers, and area-wide health facility planning groups, including the advisory groups established for other programs such as the Regional Medical Programs, should serve as sources of strength and valuable assistance for the areawide and State-wide health planning councils created under P.L. 89-749 and for the planning resources created under this Law.

□ The broad range of health interests represented in Regional Medical Program planning efforts, along with other appropriate health interests, will be essential participants and contributors to the State health planning council and to the activities of the health planning agency. When the activities of that agency address

themselves to the problems of extending high-quality personal health services which fully benefit from the developments in new medical knowledge, the cooperative involvement of these health interests in both the Regional Medical Program planning and development and in the planning and evaluation activities under P.L. 89-749 will make an essential contribution to productive relationship between these activities.

□ The comprehensive health planning activities will use data available from many sources including that generated or analyzed by the Regional Medical Programs, particularly on health status of populations effected, health resources, and health problems and needs. The comprehensive health planning activities can also benefit from the experience obtained under the Regional Medical Programs which have represented an exploratory effort of considerable importance in developing an environment for concerted planning by many elements of the health endeavor and in the implementation, development and evaluation of new systems for the facilitation of the delivery of the benefits of medical advance in specific disease areas through more effective means of communication, education, training, organiza-

tion, and delivery of health services. Many of the planning and implementation activities under the Regional Medical Programs will have implications and applications to a broader range of health problems than heart disease, cancer, stroke, and related diseases. The mechanisms created by the Regional Medical Program can be useful in achieving the broad goals of comprehensive health stated under P.L. 89-749.

Training Health Planners

Section 314(c) of P.L. 89-749 authorizes grants to public or nonprofit organizations for "training, studies, and demonstrations," in order to advance the state of health planning art and increase the supply of competent health planners.

For the first years, emphasis will be placed on increasing health planning manpower. (Until now, Public Health Service effort has been limited to ad hoc short courses or in-service training.) This new activity will help meet a critical shortage faced by regional medical programs, medical centers, operating health agencies, as well as comprehensive health planning agencies about to be launched.

Operating Grants

Section 314(d) of P.L. 89-749 authorizes formula grants to State health and mental health authorities for comprehensive public health service. The Act brings together a group of previously compartmented or categorical Public Health Service grants. Grant awards will depend on a plan submitted by the health agency which reflects the way in which the State intends to use the funds as part of an effort to provide adequate Public Health Services. This plan, in turn, must be in accord with the State's comprehensive health planning.

Section 314(e), authorizing project grants for "health services development," broadens and consolidates a series of Public Health Service project grants, making possible Federal support for new and innovative projects, locally determined, to meet health needs of limited geographic scope or specialized regional or national significance; stimulating and initially supporting new programs of health services, and undertaking studies, demonstrations, or training designed to develop new or improved methods of providing health services. The first two of these categories of health service development grant

must conform to objectives, priorities, and plans of comprehensive State health planning.

With the exception of the statutory requirement that the programs supported by these grants must conform to comprehensive State health planning, P.L. 89-749 formula and project grants bear the same relation to the comprehensive health planning process as do, for example, the operational grants under regional medical programs, air pollution control, or community mental health center staffing.

The operational grants under P.L. 89-239 will support an interrelated program of activities which utilize regional cooperative arrangements to accomplish the objectives of that law in the fields of heart disease, cancer, stroke, and related diseases. The cooperative arrangements and the specific program elements are viewed by many regions as providing useful models for application to a wide spectrum of health problems which can be implemented through other means and which will have close relevance to the achievement of many of the activities supported under P.L. 89-749 and other health programs. Conversely, the regional medical programs can benefit from the planning and operational activities of

other health programs including those supported under P.L. 89-749. Other programs supported by Public Health Service funds such as mental health, migrant health, and air pollution can have the same type of productive interrelationship with the comprehensive health planning programs.

The Public Health Service has a responsibility to prevent waste of scarce resources through useless duplication. To assure the most effective interrelationship among these and other Public Health Service grant programs, the Public Health Service is currently developing informational, and review systems to promote effective coordination between all of its varied grant programs.

EXHIBIT XII

Public Law 89-239 89th Congress, S. 596 October 6, 1965 An Act

Heart Disease,
Cancer, and
Stroke Amend-
ments of 1965.

To amend the Public Health Service Act to assist in combating heart disease, cancer, stroke, and related diseases.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Heart Disease, Cancer, and Stroke Amendments of 1965".

SEC. 2. The Public Health Service Act (42 U.S.C., ch. 6A) is amended by adding at the end thereof the following new title:

"TITLE IX—EDUCATION, RESEARCH, TRAINING, AND DEMONSTRATIONS IN THE FIELDS OF HEART DISEASE, CANCER, STROKE, AND RELATED DISEASES

"Purposes

"Sec. 900. The purposes of this title are—

"(a) 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;

"(b) To afford to 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; and

"(c) By these means, to improve generally the health manpower and facilities

available to the Nation, and to accomplish these ends without interfering with the patterns, or the methods of financing, of patient care or professional practice, or with the administration of hospitals, and in cooperation with practicing physicians, medical center officials, hospital administrators, and representatives from appropriate voluntary health agencies.

"Authorization of Appropriations

"SEC. 901. (a) There are authorized to be appropriated \$50,000,000 for the fiscal year ending June 30, 1966, \$90,000,000 for the fiscal year ending June 30, 1967, and \$200,000,000, for the fiscal year ending June 30, 1968, for grants to assist public or nonprofit private universities, medical schools, research institutions, and other public or nonprofit private institutions and agencies in planning, in conducting feasibility studies, and in operating pilot projects for the establishment of regional medical programs of research, training, and demonstration activities for carrying out the purposes of this title. Sums appropriated under this section for any fiscal year shall remain available for making such grants until the end of the fiscal year following the fiscal year for which the appropriation is made.

"(b) A grant under this title shall be for part or all of the cost of the planning or other activities with respect to which the application is made, except that any such grant with respect to construction of, or provision of built-in (as determined in accordance with regulations) equipment for, any facility may not exceed 90 per centum of the cost of such construction or equipment.

"(c) Funds appropriated pursuant to this title shall not be available to pay the cost of hospital, medical, or other care of patients except to the extent it is, as determined in accordance with regulations, incident to those research, training, or demonstration activities which are encompassed by the purposes of this title. No patient shall be furnished hospital, medical, or other care at any facility incident to research, training, or demonstration activities carried out with funds appropriated pursuant to this title, unless he has been referred to such facility by a practicing physician.

Definitions

"Sec. 902. For the purposes of this title—

"(a) The term 'regional medical program' means a cooperative arrangement among a group of public or nonprofit private institutions or agencies engaged in research, training, diagnosis, and treatment relating to heart disease, cancer, or stroke, and, at the option of the applicant, related disease or diseases; but only if such group—

"(1) is situated within a geographic area, composed of any part or parts of any one or more States, which the Surgeon General determines, in accordance with regulations, to be appropriate for carrying out the purposes of this title;

"(2) consists of one or more medical centers, one or more clinical research centers, and one or more hospitals; and

"(3) has in effect cooperative arrangements among its component units which the Surgeon General finds will be adequate for effectively carrying out the purposes of this title.

"(b) The term 'medical center' means a medical school or other medical institution involved in postgraduate medical training and one or more hospitals affiliated therewith for teaching, research, and demonstration purposes.

"(c) The term 'clinical research center' means an institution (or part of an institution) the primary function of which is research, training of specialists, and demonstrations and which, in connection therewith, provides specialized, high-quality diagnostic and treatment services for inpatients and outpatients.

"(d) The term 'hospital' means a hospital as defined in section 625(c) or other health facility in which local capability for diagnosis and treatment is supported and augmented by the program established under this title.

"(e) The term 'nonprofit' as applied to any institution or agency means an institution or agency which is owned and operated by one or more nonprofit corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual.

"(f) The term 'construction' includes alteration, major repair (to the extent permitted by regulations), remodeling and renovation of existing buildings (including initial equipment thereof), and replacement of obsolete, built-in (as determined in accordance with regulations) equipment of existing buildings.

Grants for Planning

"SEC. 903. (a) The Surgeon General, upon the recommendation of the National Advisory Council on Regional Medical Programs established by section 905 (hereafter in this title referred to as the 'Council'), is authorized to make grants to public or nonprofit private universities, medical schools, research institutions, and other public or nonprofit private agencies and institutions to assist them in planning the development of regional medical programs.

"(b) Grants under this section may be made only upon application therefor approved by the Surgeon General. Any such application may be approved only if it contains or is supported by—

"(1) reasonable assurances that Federal funds paid pursuant to any such grant will be used only for the purposes for which paid and in accordance with the applicable provisions of this title and the regulations thereunder;

"(2) reasonable assurances that the applicant will provide for such fiscal control and fund accounting procedures as are required by the Surgeon General to assure proper disbursement of and accounting for such Federal funds;

"(3) reasonable assurances that the applicant will make such reports, in such form and containing such information as the Surgeon General may from time to time reasonably require, and will keep such records and afford such access thereto as the Surgeon General may find necessary to assure the correctness and verification of such reports; and

"(4) a satisfactory showing that the applicant has designated an advisory group, to advise the applicant (and the institutions and agencies participating in the resulting regional medical program) in formulating and carrying out the plan

for the establishment and operation of such regional medical program, which advisory group includes practicing physicians, medical center officials, hospital administrators, representatives from appropriate medical societies, voluntary health agencies, and representatives of other organizations, institutions, and agencies concerned with activities of the kind to be carried on under the program and members of the public familiar with the need for the services provided under the program.

Grants for Establishment and Operation of Regional Medical Programs

"SEC. 904. (a) The Surgeon General, upon the recommendation of the Council, is authorized to make grants to public or nonprofit private universities, medical schools, research institutions, and other public or nonprofit private agencies and institutions to assist in establishment and operation of regional medical programs, including construction and equipment of facilities in connection therewith.

"(b) Grants under this section may be made only upon application therefor approved by the Surgeon General. Any such application may be approved only if it is recommended by the advisory group described in section 903(b) (4) and contains or is supported by reasonable assurances that—

"(1) Federal funds paid pursuant to any such grant (A) will be used only for the purposes for which paid and in accordance with the applicable provisions of this title and the regulations thereunder, and (B) will not supplant funds that are otherwise available for establishment or operation of the regional medical program with respect to which the grant is made;

"(2) the applicant will provide for such fiscal control and fund accounting procedures as are required by the Surgeon General to assure proper disbursement of and accounting for such Federal funds;

Records.

"(3) the applicant will make such reports, in such form and containing such information as the Surgeon General may from time to time reasonably require, and

will keep such records and afford such access thereto as the Surgeon General may find necessary to assure the correctness and verification of such reports; and

"(4) any laborer or mechanic employed by any contractor or subcontractor in the performance of work on any construction aided by payments pursuant to any grant under this section will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a—276a-5); and the Secretary of Labor shall have, with respect to the labor standards specified in this paragraph, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 5 U.S.C. 133z-15) and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c).

*National Advisory Council on Regional Medical Programs**Appointment of members.*

"SEC. 905. (a) The Surgeon General, with the approval of the Secretary, may appoint, without regard to the civil service laws, a National Advisory Council on Regional Medical Programs. The Council shall consist of the Surgeon General, who shall be the chairman, and twelve members, not otherwise in the regular full-time employ of the United States, who are leaders in the fields of the fundamental sciences, the medical sciences, or public affairs. At least two of the appointed members shall be practicing physicians, one shall be outstanding in the study, diagnosis, or treatment of heart disease, one shall be outstanding in the study, diagnosis, or treatment of cancer, and one shall be outstanding in the study, diagnosis, or treatment of stroke.

Term of office.

"(b) Each appointed member of the Council shall hold office for a term of four years, except that any member appointed to fill a vacancy prior to the expiration of the term

for which his predecessor was appointed shall be appointed for the remainder of such term, and except that the terms of office of the members first taking office shall expire, as designated by the Surgeon General at the time of appointment, four at the end of the first year, four at the end of the second year, and four at the end of the third year after the date of appointment. An appointed member shall not be eligible to serve continuously for more than two terms.

Compensation.

"(c) Appointed members of the Council, while attending meetings or conferences thereof or otherwise serving on business of the Council, shall be entitled to receive compensation at rates fixed by the Secretary, but not exceeding \$100 per day, including traveltime, and while so serving away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

Applications for grants, recommendations.

"(d) The Council shall advise and assist the Surgeon General in the preparation of regulations for, and as to policy matters arising with respect to, the administration of this title. The Council shall consider all applications for grants under this title and shall make recommendations to the Surgeon General with respect to approval of applications for and the amounts of grants under this title.

"Regulations

"Sec. 906. The Surgeon General, after consultation with the Council, shall prescribe general regulations covering the terms and conditions for approving applications for grants under this title and the coordination of programs assisted under this title with programs for training, research, and demonstrations relating to the same diseases assisted or authorized under other titles of this Act or other Acts of Congress.

"Information on Special Treatment and Training Centers

"Sec. 907. The Surgeon General shall establish, and maintain on a current basis, a list or lists of facilities in the United States equipped and staffed to provide the most advanced methods and techniques in the diagnosis and treatment of heart disease, cancer, or stroke, together with such related information, including the availability of advanced specialty training in such facilities, as he deems useful, and shall make such list or lists and related information readily available to licensed practitioners and other persons requiring such information. To the end of making such list or lists and other information most useful, the Surgeon General shall from time to time consult with interested national professional organizations.

Report to President and Congress

"Sec. 908. On or before June 30, 1967, the Surgeon General after consultation with the Council, shall submit to the Secretary for transmission to the President and then to the Congress, a report of the activities under this title together with (1) a statement of the relationship between Federal financing and financing from other sources of the activities undertaken pursuant to this title, (2) an appraisal of the activities assisted under this title in the light of their effectiveness in carrying out the purposes of this title, and (3) recommendations with respect to extension or modification of this title in the light thereof.

"Records and Audit

"Sec. 909. (a) Each recipient of a grant under this title shall keep such records as the Surgeon General may prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such grant, the total cost of the project or undertaking in connection with which such grant is made or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such records as will facilitate an effective audit.

"(b) The Secretary of Health, Education, and Welfare and the Comptroller General of

the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipient of any grant under this title which are pertinent to any such grant."

SEC. 3. (a) Section 1 of the Public Health Service Act is amended to read as follows:

"SECTION 1. Titles I to IX, inclusive, of this Act may be cited as the 'Public Health Service Act.'"

(b) The Act of July 1, 1944 (58 Stat. 682), as amended, is further amended by renumbering title IX (as in effect prior to the enactment of this Act) as title X, and by renumbering sections 901 through 914 (as in effect prior to the enactment of this Act), and references thereto, as sections 1001 through 1014, respectively.

APPROVED OCTOBER 6, 1965, 10:15 A.M.

Legislative History:

House Report No. 963 accompanying H.R. 3140 (Comm. on Interstate and Foreign Commerce).

Senate Report No. 368 (Comm. on Labor and Public Welfare).

Congressional Record, Vol. 111 (1965):

June 25: Considered in Senate.

June 28: Considered and passed Senate.

Sept. 23: H.R. 3140 considered in House.

Sept. 24: Considered and passed House, amended, in lieu of H.R. 3140.

Sept. 29: Senate concurred in House amendments.

EXHIBIT XIII

Regulations

Regional Medical Programs

March 18, 1967

SUBPART E—GRANTS FOR REGIONAL MEDICAL PROGRAMS

(Added 1/18/67, 32 FR 571.)

AUTHORITY: The provisions of this Subpart E issued under sec. 215, 58 Stat. 690, sec. 906, 79 Stat. 930; 42 U.S.C. 216, 299f. Interpret or apply secs. 900, 901, 902, 903, 904, 905, 909, 79 Stat. 926, 927, 928, 929, 930, 42 U.S.C. 299, 299a, 299b, 299c, 299d, 299e, 299i.

54.401 APPLICABILITY.

The provisions of this subpart apply to grants for planning, establishment, and operation of regional medical programs as authorized by Title IX of the Public Health Service Act, as amended by Public Law 89-239.

54.402 DEFINITIONS.

(a) All terms not defined herein shall have the meaning given them in the Act.

(b) "Act" means the Public Health Service Act, as amended.

(c) "Title IX" means Title IX of the Public Health Service Act as amended.

(d) "Related diseases" means those diseases which can reasonably be considered to bear a direct relationship to heart disease, cancer, or stroke.

(e) "Title IX diseases" means heart disease, cancer, stroke, and related diseases.

(f) "Program" means the regional medical program as defined in section 902(a) of the Act.

(g) "Practicing physician" means any physician licensed to practice medicine in

accordance with applicable State laws and currently engaged in the diagnosis or treatment of patients.

(h) "Major repair" includes restoration of an existing building to a sound state.

(i) "Built-in equipment" is equipment affixed to the facility and customarily included in the construction contract.

(j) "Advisory group" means the group designated pursuant to section 903(b)(4) of the Act.

(k) "Geographic area" means any area that the Surgeon General determines forms an economic and socially related region, 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; presence and distribution of educational, medical and health facilities and programs, and other activities which in the opinion of the Surgeon General are appropriate for carrying out the purposes of Title IX.

54.403 ELIGIBILITY.

In order to be eligible for a grant, the applicant shall:

(a) Meet the requirements of section 903 or 904 of the Act;

(b) Be located in a State;

(c) Be situated within a geographic area appropriate under the provisions of this subpart for carrying out the purposes of the Act.

54.404 APPLICATION.

(a) *Forms.* An application for a grant shall be submitted on such forms and in such manner as the Surgeon General may prescribe.

(b) *Execution.* The application shall be executed by an individual authorized to act for the applicant and to assume on behalf of the applicant all of the obligations specified in the terms and conditions of the grant including those contained in these regulations.

(c) *Description of program.* In addition to any other pertinent information that the Surgeon General may require, the applicant shall submit a description of the program in sufficient detail to clearly identify the nature, need, purpose, plan, and methods of the program, the nature and functions of the participating institutions, the geographic

area to be served, the cooperative arrangements in effect, or intended to be made effective, within the group, the justification supported by a budget or other data, for the amount of the funds requested, and financial or other data demonstrating that grant funds will not supplant funds otherwise available for establishment or operation of the regional medical program.

(d) *Advisory group; establishment; evidence.* An application for a grant under section 903 of the Act shall contain or be supported by documentary evidence of the establishment of an advisory group to provide advice in formulating and carrying out the establishment and operation of a program.

(e) *Advisory group; membership; description.* The application or supporting material shall describe the selection and membership of the designated advisory group, showing the extent of inclusion in such group of practicing physicians, members of other health professions, medical center officials, hospital administrators, representatives from appropriate medical societies, voluntary agencies, representatives of other organizations, institutions and agencies concerned with activities of the kind to be carried on under the program, and members of the public familiar with the need for the services provided under the program.

(f) *Construction; purposes, plans, and specifications; narrative description.* With respect to an application for funds to be used in whole or part for construction as defined in Title IX, the applicant shall furnish in sufficient detail plans and specifications as well as a narrative description, to indicate the need, nature, and purpose of the proposed construction.

(g) *Advisory group; recommendation.* An application for a grant under section 904 of the Act shall contain or be supported by a copy of the written recommendation of the advisory group.

54.405 TERMS, CONDITIONS, AND ASSURANCES.

In addition to any other terms, conditions, and assurances required by law or imposed by the Surgeon General, each grant shall be subject to the following terms, conditions, and assurances to be furnished by the grantee. The Surgeon General may at any time approve exceptions where he finds that

such exceptions are not inconsistent with the Act and the purposes of the program.

(a) *Use of funds.* The grantee will use grant funds solely for the purposes for which the grant was made, as set forth in the approved application and award statement. In the event any part of the amount paid a grantee is found by the Surgeon General to have been expended for purposes or by any methods contrary to the Act, the regulations of this subpart, or contrary to any condition to the award, then such grantee, upon being notified of such finding, and in addition to any other requirement, shall pay an equal amount to the United States. Changes in grant purposes may be made only in accordance with procedures established by the Surgeon General.

(b) *Obligation of funds.* No funds may be charged against the grant for services performed or material or equipment delivered, pursuant to a contract or agreement entered into by the applicant prior to the effective date of the grant.

(c) *Inventions or discoveries.* Any grant award hereunder in whole or in part for research is subject to the regulations of the Department of Health, Education, and Welfare as set forth in Parts 6 and 8 of Title 45, as amended. Such regulations shall apply to any program activity for which grant funds are in fact used whether within the scope of the program as approved or otherwise. Appropriate measures shall be taken by the grantee and by the Surgeon General to assure that no contracts, assignments, or other arrangements inconsistent with the grant obligation are continued or entered into and that all personnel involved in the supported activity are aware of and comply with such obligation. Laboratory notes, related technical data, and information pertaining to inventions or discoveries made through activities supported by grant funds shall be maintained for such periods, and filed with or otherwise made available to the Surgeon General or those he may designate at such times and in such manner as he may determine necessary to carry out such Department regulations.

(d) *Reports.* The grantee shall maintain and file with the Surgeon General such progress, fiscal, and other reports, including reports of meetings of the advisory group convened before and after award of a grant

under section 904 of the Act, as the Surgeon General may prescribe.

(e) *Records retention.* All construction, financial, and other records relating to the use of grant funds shall be retained until the grantee has received written notice that the records have been audited unless a different period is permitted or required in writing by the Surgeon General.

(f) *Responsible official.* The official designated in the application as responsible for the coordination of the program shall continue to be responsible for the duration of the period for which grant funds are made available. The grantee shall notify the Surgeon General immediately if such official becomes unavailable to discharge this responsibility. The Surgeon General may terminate the grant whenever such official shall become thus unavailable unless the grantee replaces such official with another official found by the Surgeon General to be qualified.

54.406 AWARD.

Upon recommendation of the National Advisory Council on Regional Medical Programs, and within the limits of available funds, the Surgeon General shall award a grant to those applicants whose approved programs will in his judgment best promote the purposes of Title IX. In awarding grants, the Surgeon General shall take into consideration, among other relevant factors the following:

(a) Generally, the extent to which the proposed program will carry out, through regional cooperation, the purposes of Title IX, within a geographic area.

(b) The capacity of the institutions or agencies within the program, individually and collectively, for research, training, and demonstration activities with respect to Title IX.

(c) The extent to which the applicant or the participants in the program plan to coordinate or have coordinated the regional medical program with other activities supported pursuant to the authority contained in the Public Health Service Act and other Acts of Congress including those relating to planning and use of facilities, personnel, and equipment, and training of manpower.

(d) The population to be served by the regional medical program and relationships

to adjacent or other regional medical programs.

(e) The extent to which all the health resources of the region have been taken into consideration in the planning and/or establishment of the program.

(f) The extent to which the participating institutions will utilize existing resources and will continue to seek additional non-federal resources for carrying out the objectives of the regional medical program.

(g) The geographic distribution of grants throughout the Nation.

54.407 TERMINATION.

(a) *Termination by the Surgeon General.* Any grant award may be revoked or terminated by the Surgeon General in whole or in part at any time whenever he finds that in his judgment the grantee has failed in a material respect to comply with requirements of Title IX and the regulations of this subpart. The grantee shall be promptly notified of such finding in writing and given the reasons therefor.

(b) *Termination by the grantee.* A grantee may at any time terminate or cancel its conduct of an approved project by notifying the Surgeon General in writing setting forth the reasons for such termination.

(c) *Accounting.* Upon any termination, the grantee shall account for all expenditures and obligations charged to grant funds: *Provided,* That to the extent the termination is due in the judgment of the Surgeon General to no fault of the grantee, credit shall be allowed for the amount required to settle at costs demonstrated by evidence satisfactory to the Surgeon General to be minimum settlement costs, any noncancellable obligations incurred prior to receipt of notice of termination.

54.408 NONDISCRIMINATION.

Section 601 of Title VI of the Civil Rights Act of 1964, 42 U.S.C. 2000d, provides that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Regulations implementing the statute have been issued as Part 80 of the Title 45, Code of Federal Regulations. The regional medical programs pro-

vide Federal financial assistance subject to the Civil Rights Act and the regulations. Each grant is subject to the condition that the grantee shall comply with the requirements of Executive Order 11246, 30 F.R. 12319, and the applicable rules, regulations, and procedures prescribed pursuant thereto.

54.409 EXPENDITURES BY GRANTEE.

(a) *Allocation of costs.* The grantee shall allocate expenditures as between direct and indirect costs in accordance with generally accepted and established accounting practices or as otherwise prescribed by the Surgeon General.

(b) *Direct costs in general.* Funds granted for direct costs may be expended by the grantee for personal services, rental of space, materials, and supplies, and other items of necessary cost as are required to carry out the purposes of the grant. The Surgeon General may issue rules, instructions, interpretations, or limitations supplementing the regulations of this subpart and prescribing the extent to which particular types of expenditures may be charged to grant funds.

(c) *Direct costs; personal services.* The costs of personal services are payable from grant funds substantially in proportion to the time or effort the individual devotes to carrying out the purpose of the grant. In such proportion, such costs may include all direct costs incident to such services, such as salary during vacations and retirement and workmen's compensation charges, in accordance with the policies and accounting practices consistently applied by the grantee to all its activities.

(d) *Direct costs; care of patients.* The cost of hospital, medical or other care of patients is payable from grant funds only to the extent that such care is incident to the research, training, or demonstration activities supported by a grant hereunder. Such care shall be incident to such activities only if reasonably associated with and required for the effective conduct of such activities, and no such care shall be charged to such funds unless the referral of the patient is documented with respect to the name of the practicing physician making the referral, the name of the patient, the date of referral, and any other relevant information which

may be prescribed by the Surgeon General. Grant funds shall not be charged with the cost of—

(1) Care for intercurrent conditions (except of an emergency nature where the intercurrent condition results from the care for which the patient was admitted for treatment) that unduly interrupt, postpone, or terminate the conduct of such activities.

(2) Inpatient care if other care which would equally effectively further the purposes of the grant, could be provided at a smaller cost.

(3) Bed and board for inpatients in excess of the cost of semiprivate accommodations unless required for the effective conduct of such activities. For the purpose of this paragraph, "semiprivate accommodations" means two-bed, three-bed, and four-bed accommodations.

54.410 PAYMENTS.

The Surgeon General shall, from time to time, make payments to a grantee of all or a portion of any grant award, either in advance or by way of reimbursement for expenses to be incurred or incurred to the extent he determines such payments necessary to carry out the purposes of the grant.

54.411 DIFFERENT USE OR TRANSFER: GOOD CAUSE FOR OTHER USE.

(a) *Compliance by grantees.* If, at any time, the Surgeon General determines that the eligibility requirements for a program are no longer met, or that any facility or equipment the construction or procurement of which was charged to grant funds is, during its useful life, no longer being used for the purposes for which it was constructed or procured either by the grantee or any transferee, the Government shall have the right to recover its proportionate share of the value of the facility or equipment from either the grantee or the transferee or any institution that is using the facility or equipment. The Government's proportionate share shall be the amount bearing the same ratio to the then value of the facility or equipment, as determined by the Surgeon General, as the amount the Federal participation bore to the cost of construction or procurement.

(b) *Different use or transfer; notification.* The grantee shall promptly notify the Surgeon General in writing if at any time during its useful life the facility or equipment for construction or procurement of which grant funds were charged is no longer to be used for the purposes for which it was constructed or procured or is sold or otherwise transferred.

(c) *Forgiveness.* The Surgeon General may for good cause release the grantee or other owner from the requirement of continued eligibility or from the obligation of continued use of the facility or equipment for the grant purposes. In determining whether good cause exists, the Surgeon General shall take into consideration, among other factors, the extent to which—

(1) The facility or equipment will be devoted to research, training, demonstrations, or other activities related to Title IX diseases.

(2) The circumstances calling for a change in the use of the facility were not known, or with reasonable diligence could not have been known to the applicant, at the time of the application, and are circumstances reasonably beyond the control of the applicant or other owner.

(3) There are reasonable assurances that other facilities not previously utilized for Title IX purposes will be so utilized and are substantially the equivalent in nature and extent for such purposes.

54.412 PUBLICATIONS.

Grantees may publish materials relating to their regional medical program without prior review provided that such publications carry a footnote acknowledging assistance from the Public Health Service, and indicating that findings and conclusions do not represent the views of the Service.

54.413 COPYRIGHTS.

Where the grant-supported activity results in copyrightable material, the author is free to copyright, but the Public Health Service reserves a royalty-free, nonexclusive, irrevocable license for use of such material.

54.414 INTEREST.

Interest or other income earned on payments under this subpart shall be paid to the United States as such interest is received by the grantee.

EXHIBIT XIV

Selected Bibliography

I. Selected Historical Documents and National Reports

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