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HISTORY OF REGIONAL MEDICAL PROGRAMS
(Public Law 89-239)

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HISTORY OF REGIONAL MEDICAL PROGRAMS
(Public Law 89-239)

On October 6, 1965, the President signed Public Law 89-239. It authorizes the establishment and maintenance of Regional Medical Programs to assist the Nation's health resources in making available the best possible patient care for heart disease, cancer, stroke and related diseases. This legislation, which will be referred to in this History as The Act, was shaped by the interaction of at least four antecedents: the historical thrust toward regionalization of health resources; the development of a national biomedical research community of unprecedented size and productivity; the changing needs of society; and finally, the particular legislative process leading to The Act itself.

The concept of regionalization as a means to meet health needs effectively and economically was not new. During the 1930's, Assistant Surgeon General Joseph W. Mountin was one of the earliest pioneers urging this approach for the delivery of health services. The National Committee on the Costs of Medical Care also called attention in 1932 to the potential benefits of regionalization. In that same year, the Bingham Associates Fund of Maine initiated the first comprehensive regional effort to improve patient care in the United States. This program linked the hospitals and programs for continuing education of physicians in the State of Maine with Tufts University School of Medicine and, through that school, to the other university centers of Boston. Advocates of regionalization next gained national attention more than

a decade later in the report of the Commission on Hospital Care and in the Hospital Survey and Construction (Hill-Burton) Act of 1946. Other proposals and attempts to introduce regionalization of health resources can be chronicled, but a strong national movement toward regionalization had to await the convergence of other factors which occurred in 1964 and 1965.

One of these factors was the creation of a national biomedical research effort unprecedented in history and unequalled anywhere else in the world. The effect of this activity was and continues to be intensified by the swiftness of its creation and expansion: at the beginning of World War II the national expenditure for medical research totaled \$45 million; by 1947 it was \$87 million; and in 1967 the total was \$2.257 billion -- a 5,000 percent increase in 27 years. The most significant characteristic of this research effort is the tremendous rate at which it is producing new knowledge in the medical science, an outpouring which only recently began and which shows no signs of decline. As a result, changes in health care have been dramatic. Today, there are cures where none existed before, a number of diseases have all but disappeared with the application of new vaccines, and patient care generally is far more effective than even a decade ago. It had become apparent in the last few years, however, that new and better means must also be found to convey the ever-increasing volume of applicable research results to the day-to-day use of the practicing physician as well as to the growing complexities in medical and hospital care. Included in this latter group are physician specialization, increasingly intricate and expensive types of diagnosis and treatment, and the most effective distribution of scarce health manpower, facilities, and other related resources. The

degree of urgency attached to the need to cope with these issues is heightened by an increasing public demand that the latest and best health care be made available to everyone. This public demand, in turn, is largely an expression of expectations aroused by awareness of the results and promise of biomedical research.

In a sense, the national commitment to biomedical investigation is one manifestation of the third factor which contributed to the creation of Regional Medical Programs: the changing needs of society -- in this case, health needs. The decisions by various private and public institutions to support biomedical research were responses to this societal need perceived and interpreted by these institutions. In addition to the support of research, the same interpretive process led the Federal Government to develop a broad range of other programs to improve the quality and availability of health care in the Nation. The Hill-Burton Program which began with the passage of previously mentioned Hospital Survey and Construction Act of 1946, together with the National Mental Health Act of 1946, was the first in a series of post-World War II legislative actions having major impact on health affairs. When the 89th Congress adjourned in 1966, 25 health-related bills had been enacted into law. Among these were Medicare and Medicaid to pay for hospital and physician services for the Nation's aged and poor; the Comprehensive Health Planning Act to provide funds to each state for non-categorical health planning and to support services rendered through state and other health activities; and Public Law 89-239 authorizing Regional Medical Programs. For the text of Public Law 89-239, see Appendix 1.

The Report of the President's Commission on Heart Disease, Cancer, and Stroke, issued in December 1964, focused attention on societal needs and led directly to the introduction of the legislation

authorizing Regional Medical Programs. Many of the Commission's recommendations were significantly altered by the Congress in the legislative process but The Act was clearly passed to meet needs and problems identified and given national recognition in the Commission report and in the Congressional hearings preceding passage in The Act. Some of these needs and problems were expressed as follows:

- . A Program is needed to focus the Nation's health resources for research, teaching and patient care on heart disease, cancer, stroke and related diseases because together they cause 70 percent of the deaths in the United States.
- . A significant number of Americans with these diseases die or are disabled because the benefits of present knowledge in the medical sciences are not uniformly available throughout the country.
- . There is not enough trained manpower to meet the health needs of the American people withing the present system for the delivery of health services.
- . Pressures threatening the Nation's health resources are building because demands for health services are rapidly increasing at a time when increasing costs are posing obstacles for many who require these preventive, diagnostic, therapeutic and rehabilitative services.
- . A creative partnership must be forged among the Nation's medical scientists practicing physicians, and all of the Nation's other health resources so that new knowledge can be translated more rapidly into better patient care. This partnership should make it possible for every community's practicing physicians to share in the diagnostic, therapeutic and consultative resources of major

medical institutions. They should similarly be provided the opportunity to participate in the academic environment of research, teaching and patient care which stimulates and supports medical practice of the highest quality.

- . Institutions with high quality research programs in heart disease, cancer, stroke, and related diseases are too few, given the magnitude of the problems, and are not uniformly distributed throughout the country.
- . There is a need to educate the public regarding health affairs. Education in many cases will permit people to extend their own lives by changing personal habits to prevent heart disease, cancer, stroke and related disease. Such education will enable individuals to recognize the need for diagnostic, therapeutic or rehabilitative services, and to know where to find these services, and it will motivate them to seek such services when needed.

During the Congressional hearings on this bill, representatives of major groups and institutions with an interest in the American health system were heard, particularly spokesmen for practicing physicians and community hospitals of the Nation. The Act which emerged turned away from the idea of a detailed Federal blueprint for action. Specifically, the network of "regional centers" recommended earlier by the President's Commission was replaced by a concept of "regional cooperative arrangements" among existing health resources. The Act established a system of grants to enable representatives of health resources to exercise initiative to identify and meet local needs within the area of the categorical diseases through a broadly defined process. Recognition of geographical and societal diversities within the United States was the main reason for

this approach, and spokesmen for the Nation's health resources who testified during the hearings strengthened the case for local initiative. Thus the degree to which the various Regional Medical Programs meet the objectives of The Act will provide a measure of how well local health resources can take the initiative and work together to improve patient care for heart disease, cancer, stroke and related diseases at the local level. The Act was intended to provide the means for conveying to the medical institutions and health professions of the Nation the latest advances in medical science for diagnosis, treatment, and rehabilitation of patients afflicted with heart disease, cancer, stroke, or related diseases--and to prevent these diseases. The grants authorized by The Act are to encourage and assist in the establishment of regional cooperative arrangements among medical schools, research institutions, hospitals, and other medical institutions and agencies to achieve these ends by research, education, and demonstrations of patient care. Through these means, the programs authorized by The Act are also intended to improve generally the health manpower and facilities of the Nation.

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 \$42 million for grants and \$2 million for the Division for fiscal year 1967.

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 Division of Regional Medical Programs was established in February 1966. A listing of the chief staff of the Division in the spring of 1968 is Appendix 2 of this History.

The National Advisory Council on Regional Medical Programs, established by the Law, was named from outstanding experts in heart disease, cancer and stroke and from the leaders in medical practice, hospital and health care administration and public affairs. The Council met with Dr. Marston 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 first issue of the Program Guidelines. Quickly printed, this publication was given its initial distribution the following month. Members of the National Advisory Council as well as the members of the Review Committee who do thorough review of projects and make recommendations to the Council prior to Council consideration and action are listed in Appendix 3.

During the spring of 1966, some 20 applications for planning grants were received and reviewed first by initial review groups selected from among the country's health leaders, and then by the National Advisory Council. By July 1, the first 10 planning grants were recommended for approval, and immediately awarded. Between July and December 1966, another 40 applications were reviewed. Many of these were returned for revision or additional information to conform with the requirements of The Act. Twenty-four of these were approved and funded

so that when 1966 ended, a total of 34 Regional Medical Programs had received awards for planning programs. These Regions represented areas that included some 60 percent of the population of the country. The first applications for operational grants had also been submitted by that date.

In February 1967, the first four operational and 10 additional planning applications had been through the review process and 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, the first continuation grants were awarded to 10 Regions for the second year of planning.

By the end of 1967, the total of Programs in the planning state had increased to 53 and included the entire country with the exception of Puerto Rico. Also, by that time four more operational grants had been made for a total of eight. By July 7, 1968 Puerto Rico had its planning grant bringing the total Regional Medical Programs to 54 of which 23 had become operational. In terms of dollars expended these activities represented some \$75 million--\$41 million in planning funds and \$34 million to support operational activities. A chronology has been developed to show the time sequence in the development of the Programs. It is Appendix 4 of this History.

In terms of people, Regional Advisory Groups are comprised of hospital administrators, public health officials, practicing physicians, voluntary health agency representatives, medical center and medical school officials and other members of the public. A pie chart was developed to show the overall distribution and numbers of these categorical Groups

in April 1968 and is included as Appendix 5. In July of 1968 the overall total of individuals on Regional Advisory Groups had risen to 2,034. Subcommittees of these Groups involved another 3,132 persons.

On the staffs of the 54 Regional Medical Programs in July there was also a total of 1,539 full and part-time people involved in planning activities and another 908 involved in operational activities throughout the country. Appendix 6 lists the 54 Regions and the Program Coordinator or Director of each. It also gives a visual representation of the approximate geographical locations of the Regions. Appendix 7 is a Directory of Regional Medical Programs compiled in April 1968 which gives more detailed information on each Regional Medical Program, including preliminary planning area, estimated population covered, coordinating headquarters, Program Coordinators and Directors, Chairmen of the Regional Advisory Groups, and amounts of planning and operational grants and their effective starting dates.

The 54 Regions encompassing the Nation's population had been formed by organizing groups using functional as well as geographic criteria. These Regions now include combinations of entire states (e.g. the Washington-Alaska Region), portions of several states (e.g. the Intermountain Region which includes Utah and sections of Colorado, Idaho, Montana, Nevada and Wyoming), single states (e.g. Georgia), and portions of states around a metropolitan center (e.g. the Rochester Region which includes that city and 11 surrounding counties). Within these Regional Programs, a wide variety of organization structures have been developed, including executive and planning committees, categorical disease task forces, and community and other types of sub-regional advisory committees.

In accordance with The Act, Regions first received planning grants from the Division of Regional Medical Programs, and then a growing number were awarded operational grants to fund activities planned with initial and subsequent planning funds. These operational activities provide the direct means for Regional Medical Programs to accomplish their objectives. Planning not only moves a Region toward operational activity, but is a continuing means for assuring the relevancy and appropriateness of operational activity. It is the effects of the operational activities, however, which are beginning to produce results by which Regional Medical Programs are being judged.

In July of 1966 there was a second printing of the Guidelines. These were up-dated in July of 1967, and revised again in May of 1968.

Two significant events during the first two years of the Program's existence were the National Conference held January 15-17, 1967, and the Conference-Workshop of January 17-19, 1968.

The first meeting had been called by the Division of Regional Medical Programs to obtain information from a representative group of knowledgeable individuals, which could be used in the preparation of the required Report on Regional Medical Programs to the Congress (PHS Publication No. 1690), and further to provide an interchange of information on the planning of the Programs. Devoted principally to the problems of definition and elaboration of the concepts of cooperative arrangements local initiative, and evaluation, that first meeting as reported in its Proceedings: Conference on Regional Medical Programs (PHS Publication No. 1682) did much to characterize the Programs in their early stages.

The January 1968 Conference-Workshop grew out of a specific request of the Program Coordinators at their meeting of June 1967. Planned by the Program Coordinators themselves, it was significant in content and purpose, and marked a milestone in the development of Regional Medical Programs. Its stated purpose was to provide those directly involved in developing Regional Medical Programs with the opportunity of exchanging ideas and information which would be of benefit in the further implementation of the Programs at the regional level. The focus was on on-going activities in the Regions, particularly as they related to quality and availability of health care for heart disease, cancer, stroke, and related diseases. All Regions were invited to present papers on their activities and ideas; to submit exhibits which reflected their activities, and to participate actively in panel discussions. The invitation resulted in the presentation of 60 representative papers and some 40 exhibits and virtually every invited speaker accepted the opportunity to discuss the major issues of the Conference-Workshop. All of this material was reproduced in the Proceedings: Conference-Workshop on Regional Medical Programs, (PHS Publication No. 1774).

A key figure in the development of both meetings was Dr. Stanley W. Olson, former Dean of Baylor University Medical School. In 1967, as a consultant to the Division of Regional Medical Programs, he organized the Conference and acted as its chairman. In 1968, as Coordinator of the Tennessee Mid-South Regional Medical Program and Chairman of the Coordinators' Steering Committee, he worked closely with Dr. John A. Gronvall of the Mississippi Medical Center in developing the Conference-Workshop. It was this extensive experience with Regional Medical Programs that was a strong factor in his subsequent selection by the Secretary of Health, Education, and Welfare and President Johnson as

successor to Dr. Robert Q. Marston when Dr. Marston was named to head the new Health Services and Mental Health Administration created as part of the 1968 reorganization of the Department of Health, Education, and Welfare.

The previously mentioned Report on Regional Medical Programs to the President and Congress was another landmark in the History of Regional Medical Programs. Required by Section 908 of Public Law 89-239 this publication was noteworthy as it records the accomplishments of the Program from its beginning until June of 1968 and it recommended the further development of the Program and extension of it beyond the June 30, 1968 limit set in The Act. In addition to its value together with both Conference Proceedings as a source of reference and history it served an important legislative function. Prepared by the Surgeon General of the Public Health Service, it was submitted to the President through the Secretary of the Department of Health, Education and Welfare, and was transmitted by the President to the Congress on November 9, 1967. His letter transmitting the Report to the Congress was at once encouraging and exhortative when it said, in part : "Because the law and the idea behind it are new, and the problem is so vast, the program is just emerging from the planning state. But this report gives encouraging evidence of progress -- and it promises great advances in speeding research knowledge to the patient's bedside." Thus in the final seven words of the President's message, the objective of Regional Medical Programs is clearly emphasized.

As this History is being written, the legislation extending Regional Medical Programs is in conference between the House and the Senate. Information on the Programs, developed as part of the testimony of the hearings, provided the Congress with a good understanding of the progress of the Programs both specifically and in selected areas. This information is

contained in Appendix 8. With a series of minor amendments developed to meet the needs of the growing Programs, it is expected that the legislation will be passed to permit the continued development of the Regional Medical Programs as part of the country's forward movement toward providing the highest possible quality of medical care to all of its citizens.

APPENDIX 1
PUBLIC LAW 89-239

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, Stroke, and Related Diseases 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

"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 patient care or professional practice, or with terms, or the methods of financing, of par-

groups or agencies engaged in research, training, diagnosis, 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 for carrying out the purposes of this section and one or more hospitals related 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 demonstration 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 inure, 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.

"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 for effectively carrying out the purposes of this title.

"(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 furnished incident to 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.

"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, 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 for carrying out the purposes of this section and one or more hospitals related 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 demonstration 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 inure, 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 local 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 regional medical program) in formulating and carrying out the plan for the establishment and operation of the 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 establishments 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 in 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-5); and

the Council, shall be entitled to receive compensation at rates fixed by the Secretary, but not exceeding \$100 per day, including travel time, 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. 75b-2) for persons in the Government service employed intermittently.

"National Advisory Council on Regional Medical Programs"

Appointments 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.

"(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 eligible to receive compensation at rates fixed by the Secretary, but not exceeding \$100 per day, including travel time, 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. 75b-2) for persons in the Government service employed intermittently.

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, 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 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 as listed 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, to 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.'"

"The Act of July 1, 1944 (58 Stat. 882), 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 9, 1965, 10:15 A.M.

Legislative History:

House Report No. 968 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.

APPENDIX 2

DIRECTORY OF THE DIVISION OF REGIONAL MEDICAL PROGRAMS

DIRECTORY OF
DIVISION OF REGIONAL
MEDICAL PROGRAMS

OFFICE OF THE DIRECTOR

Immediate Office:

Robert Q. Marston, M.D. Director.
Karl D. Yordy Deputy Director.
Margaret H. Sloan, M.D. Associate Director for Organizational Liaison.
Maurice E. Odoroff Assistant to Director for Health Data.
Leroy G. Goldman Program Policy Specialist.
Eva M. Handal Committee Management Officer.
Elizabeth F. Fuller Secretary to Director.

Office of Executive Officer:

Charles Hilsenroth Executive Officer.
Nicholas G. Cavarocchi Financial Management Officer.
Robert L. Quave Administrative Officer.
Norman E. Prince, Jr Personnel Officer.
Anna V. Windsor Budget Analyst.
Lorraine H. Hughes Administrative Assistant.
Mary J. McCormack Office Services Supervisor.

Office of Communications and Public Information:

Edward M. Friedlander Assistant to Director for Communications and Public Information.
Frank Karel III Public Information Officer.
Judith J. Fleisher Public Information Specialist.
Ellen D. Carter Public Information Specialist.
Simone D. Biren Editor.

OFFICE OF ASSOCIATE DIRECTOR FOR PLANNING AND EVALUATION

Stephen J. Ackerman Associate Director for Planning and Evaluation.

Planning Branch:

Roland L. Peterson Chief.
Thomas Kinser Program Analyst.
Theodore L. Kountz, Jr. Program Analyst.
Lyman G. Van Nostrand Program Analyst.

Evaluation Branch:

Rhoda Abrams Program Analyst.
Arthur B. Hiatt, Jr. Program Analyst.
Suzanne G. Paul Program Analyst.
Laura J. Shouse Program Analyst.
Mary A. Teller Program Analyst.
Edward S. Walsh Program Analyst.

Statistics and Analysis Branch:

Mary V. Geisbert Public Health Analyst.
Loren D. Hellickson Public Health Analyst.
Leah Reanick Public Health Analyst.
Jackie M. Rosenthal Statistical Assistant.

OFFICE OF ASSOCIATE DIRECTOR FOR OPERATIONS

Richard B. Stephenson, M.D. Associate Director for Operations.

Operations Staff:

Ira R. Alpert Operations Officer.
Robert C. Anderson Operations Officer.
Vincent J. Carollo, M.D. Operations Officer.
John R. Hamilton, III, M.D. Operations Officer.
Robert M. O'Bryan, M.D. Operations Officer.
Alphonse Strachocki Operations Officer.

Grants Management Branch:

James Beattie Chief.
Thomas J. McNiff Grants Management Officer.
Gerald L. Teets Grants Management Officer.
George F. Hinkle Grants Management Officer.
Arthur Curry Grants Management Specialist.
Donald M. Fox Grants Management Specialist.

Grants Review Branch:

Martha L. Phillips Chief.

Grants Review Section:

Peter A. Clepper Public Health Advisor.
Robert E. Jones Public Health Advisor.
Patricia K. McDonald Public Health Advisor.
Harold F. O'Flaherty Scientific Grants Assistant.
Jessie F. Salazar Public Health Advisor.

Grants Operations Section:

Lorraine M. Kytlic Head.

OFFICE OF ASSOCIATE DIRECTOR FOR
PROGRAM DEVELOPMENT AND RESEARCH

Richard F. Manegold, M.D. Associate Director for Program Development
and Research.

Continuing Education and Training Branch:

Alexander M. Schmidt, M.D. Chief.
Phyllis E. Carnes, Ph. D. Education Specialist.
Veronica L. Conley, Ph. D. Education Specialist.
Cecilia C. Conrath. Assistant to Chief.
David W. Golde, M.D. Training Consultant.
Frank L. Husted, Ph. D. Head, Education Research Group.
Elsa J. Nelson. Health Services Officer.
Herbert O. Mathewson, M.D. Training Consultant.
Marjorie L. Morrill. Public Health Advisor.
Rebecca R. Sadin. Public Health Advisor.
Sarah J. Silsbee. Public Health Advisor.
Jack J. Schneider, M.D. Training Consultant.
John C. Tapp, M.D. Training Consultant.
Charlotte F. Turner. Education and Training Specialist.

Regional Health Services Branch:

Philip A. Klieger, M.D. Head, Clinical Programs Section.

APPENDIX 3

LISTING OF NATIONAL ADVISORY COUNCIL AND REVIEW COMMITTEE

NATIONAL ADVISORY COUNCIL

| | | |
|--|---|--|
| E. L. CROSBY, M.D. Director American Hosp. Assoc. Chicago, Ill. | J. R. HOGNESS, M.D. Dean, School of Med. U. of Washington Seattle, Wash. | E. D. PELLEGRINO, M.D. Director of the Med. Ctr. State U. of New York Stony Brook, N.Y. |
| M. E. DEBAKEY, M.D. Prof. and Chairman Dept. of Surgery Baylor U. Houston, Tex. | J. T. HOWELL, M.D. Executive Director Henry Ford Hosp. Detroit, Mich. | A. M. POPMA, M.D. Regional Director Mountain States Regional Medical Program Boise, Idaho |
| H. G. EDMONDS, Ph.D Dean, Graduate Sch. No. Carolina College Durham, N.C. | C. H. MILLIKAN, M.D. Consultant in Neurology Mayo Clinic Rochester, Minn. | M. I. SHANHOLTZ, M.D. State Hlth. Comm. State Dept. of Hlth. Richmond, Va. |
| B. W. EVERIST, JR., M.D. Chief of Pediatrics Green Clinic Ruston, La. | G. E. MOORE, M.D. Director, Roswell Park Memorial Institute Buffalo, N.Y. | W. H. STEWART, M.D. (Chairman) Surgeon General Public Health Service |

REVIEW COMMITTEE

| | | |
|---|---|---|
| G. JAMES, M.D. (Chairman) Dean, Mount Sinai School of Med. New York, N.Y. | P. M. MORSE, Ph.D. Director, Operations Research Ctr. Mass. Inst. of Tech. Cambridge, Mass. | D. E. ROGERS, M.D. Prof. and Chairman Dept. of Med. School of Med. Vanderbilt U. Nashville, Tenn. |
| H. W. KENNEY, M.D. Medical Director John A. Andrew Memorial Hosp. Tuskegee Institute Tuskegee, Ala. | A. PASCASIO, Ph.D. Assoc. Research Prof. Nursing School, U. of Pittsburgh Pittsburgh, Pa. | C. H. W. RUHE, M.D. Assistant Secretary Council on Med. Ed. American Med. Assoc. Chicago, Ill. |
| E. J. KOWALEWSKI, M.D. Chairman, Committee of Environ. Med. Acad. of Gen. Practice Akron, Pa. | S. H. PROGER, M.D. Prof. and Chairman Dept. of Med. and Physician-in-Chief Tufts N.E. Med. Ctr. Pres., Bingham Assoc. Fund Boston, Mass. | R. J. SLATER, M.D. Executive Director The Assoc. for the Aid of Crippled Children New York, N.Y. |
| G. E. MILLER, M.D. Director, Off. of Research in Med. Educ. Coll. of Med., U. of Ill. Chicago, Ill. | | J. D. THOMPSON Prof. of Public Hlth. Yale U. Med. School New Haven, Conn. |

April 1968

APPENDIX 4

CHRONOLOGY OF REGIONAL MEDICAL PROGRAMS

CHRONOLOGY

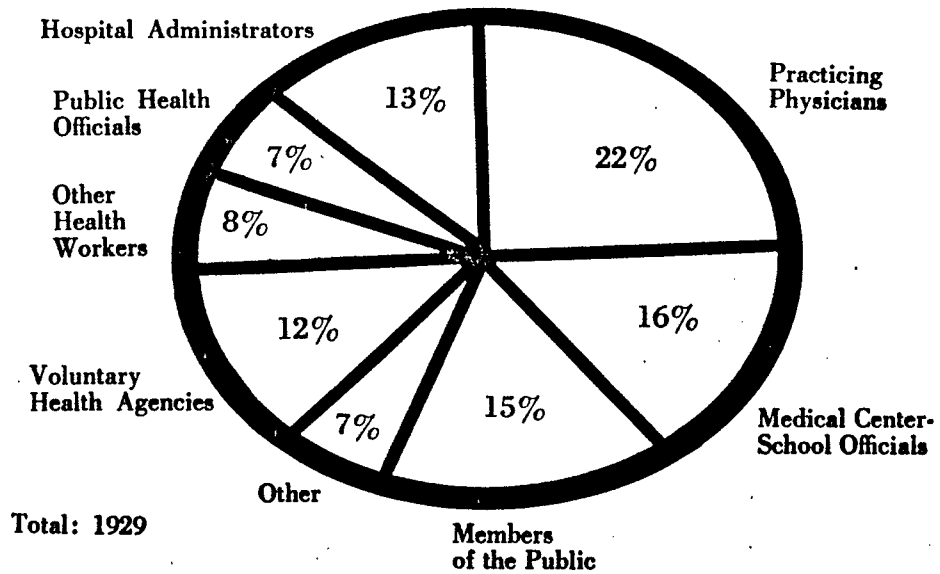
| | EVENTS | ACTION |
|-----------------------|---|---|
| 1964 DECEMBER | Report of the President's Commission on Heart Disease, Cancer, and Stroke | |
| 1965 FEBRUARY TO JULY | Congressional hearings | |
| OCTOBER | Enactment of P.L. 89-239 | |
| DECEMBER | National Advisory Council meeting | Initial policies and Guidelines reviewed |
| 1966 FEBRUARY | Establishment of Division Publication of preliminary Guidelines National Advisory Council meeting | Policy for review process and Division activities set |
| APRIL | Review Committee meeting National Advisory Council meeting | 7 planning grants awarded |
| JUNE | Review Committee meeting National Advisory Council meeting | 3 planning grants awarded |
| JULY | Publication of Guidelines Review Committee meeting | |
| AUGUST | National Advisory Council meeting | 8 planning grants awarded |
| SEPTEMBER | First of 5 meetings of <i>Ad Hoc</i> Committee for Report to the President and Congress | Report material discussed |
| OCTOBER | Review Committee meeting | |
| NOVEMBER | National Advisory Council meeting | 16 planning grants awarded |
| 1967 JANUARY | Review Committee meeting National Conference | National views & information for Report provided |
| FEBRUARY | National Advisory Council meeting | 10 planning and 4 operational grants awarded |
| APRIL | Review Committee meeting | |
| MAY | National Advisory Council meeting | 5 planning and 1 operational grant awarded |
| JUNE | Report to the President & Congress | |
| JULY | Review Committee meeting | |
| AUGUST | National Advisory Council meeting | 2 planning grants awarded |
| OCTOBER | Review Committee meeting | |
| NOVEMBER | National Advisory Council meeting | 2 planning and 3 operational grants awarded |
| 1968 JANUARY | Conference Workshop | Regional activities and ideas presented |
| FEBRUARY | Review Committee meeting National Advisory Council meeting | 5 operational grants awarded |

APPENDIX 5

REGIONAL MEDICAL PROGRAMS REGIONAL ADVISORY GROUPS

REGIONAL ADVISORY GROUPS

The activities of Regional Medical Programs are directed by fulltime Coordinators working together with Regional Advisory Groups which are broadly representative of the medical and health resources of the Regions. Membership on these groups nationally is:



APPENDIX 6
MAP OF REGIONAL MEDICAL PROGRAMS AND
LISTING OF PROGRAM COORDINATORS



REGIONS AND PROGRAM COORDINATORS OR DIRECTORS

- 1 ALABAMA**
B. B. Wells, M.D.
U. of Ala. Med. Ctr.
1919 7th Ave. S.
Birmingham, Ala. 35233
- 2 ALBANY, N.Y.**
F. M. Woolsey, Jr., M.D.
Assoc. Dean
Albany Med. Coll.
47 New Scotland Ave.
Albany, N.Y. 12208
- 3 ARIZONA**
D. W. Melick, M.D.,
Coll. of Med.
U. of Arizona
Tucson, Ariz. 85721
- 4 ARKANSAS**
W. K. Shorey, M.D.
Dean, Sch. of Med.
U. of Arkansas
4301 W. Markham St.
Little Rock, Ark. 72201
- 5 BI-STATE**
W. H. Danforth, M.D.
V. Chan. for Med. Affairs
Washington U.
660 S. Euclid Ave.
St. Louis, Mo. 63110
- 6 CALIFORNIA**
Paul D. Ward
655 Sutter St. #302
San Francisco, Calif. 94102
- 7 CENTRAL
NEW YORK**
R. H. Lyons, M.D.
State U. of N.Y.
750 E. Adams St.
Syracuse, N.Y. 13210
- 8 COLORADO-
WYOMING**
P. R. Hildebrand, M.D.
U. of Col. Med. Ctr.
4200 E. 9th Ave.
Denver, Col. 80220
- 9 CONNECTICUT**
H. T. Clark, Jr., M.D.
272 George St.
New Haven, Conn. 06510
- 10 FLORIDA**
S. P. Martin, M.D.
Provost, J. Hillis
Miller Med. Ctr.
U. of Florida
Gainesville, Fla. 32601
- 11 GEORGIA**
J. G. Barrow, M.D.
Med. Assoc. of Ga.
938 Peachtree St. N.E.
Atlanta, Ga. 30309
- 12 GREATER
DELAWARE
VALLEY**
W. C. Spring, Jr., M.D.
Wynnewood House
300 E. Lancaster Ave.
Wynnewood, Pa. 19096
- 13 HAWAII**
W. C. Cutting, M.D.
Dean, Sch. of Med.
U. of Hawaii
2538 The Mall
Honolulu, Ha. 96822
- 14 ILLINOIS**
Wright Adams, M.D.
112 S. Michigan Ave.
Chicago, Ill. 60603
- 15 INDIANA**
R. B. Stonehill, M.D.
Indiana U. Sch. of Med.
1100 W. Michigan Street
Indianapolis, Ind. 46207
- 16 INTERMOUNTAIN**
C. H. Castle, M.D.
Assoc. Dean
U. of Utah
Salt Lake City, Ut. 84112
- 17 IOWA**
W. A. Krehl, M.D., Ph.D.
308 Melrose Ave.
U. of Iowa
Iowa City, Ia. 52240
- 18 KANSAS**
C. E. Lewis, M.D.
Chairman
Dept. of Preventive Med.
U. of Kansas
Kansas City, Kan. 66103
- 19 LOUISIANA**
J. A. Sabatier, M.D.
Claiborne Towers Roof
119 S. Claiborne Ave.
New Orleans, La. 70112
- 20 MAINE**
M. Chatterjee, M.D.
295 Water St.
Augusta, Me. 04332
- 21 MARYLAND**
W. S. Spicer, Jr., M.D.
550 N. Broadway
Baltimore, Md. 21205
- 22 MEMPHIS
MEDICAL
REGION**
J. W. Culbertson, M.D.
Coll. of Med.
U. of Tennessee
858 Madison Ave.
Memphis, Tenn. 38103
- 23 METROPOLITAN
WASHINGTON, D.C.**
T. W. Mattingly, M.D.
D.C. Medical Society
2007 Eye St. N.W.
Washington, D.C. 20006
- 24 MICHIGAN**
A. E. Heustis, M.D.
1111 Michigan Ave.
East Lansing, Mich. 48823
- 25 MISSISSIPPI**
G. D. Campbell, M.D.
U. of Miss. Med. Ctr.
2500 N. State Ct.
Jackson, Miss. 39216
- 26 MISSOURI**
V. E. Wilson, M.D.
Executive Director
for Health Affairs
U. of Missouri
Columbia, Mo. 65201
- 27 MOUNTAIN STATES**
K. P. Bunnell, Ed.D.
Assoc. Director
Western Interstate
Comm. for Higher Ed.
Univ. E. Campus
Boulder, Col. 80302

**28 NEBRASKA-
SOUTH DAKOTA**

H. Morgan, M.D.
1408 Sharp Bldg.
Lincoln, Neb. 68508

29 NEW JERSEY

A. A. Florin, M.D.
N. J. State Dept. of Hlth.
88 Ross St.
E. Orange, N.J. 07018

30 NEW MEXICO

I. E. Hendryson, M.D.
U. of New Mexico
900 Stanford Dr. N.E.
Albuquerque, New Mex.

**31 NEW YORK
METR. AREA**

V. deP. Larkin, M.D.
N.Y. Academy of Med.
2 E. 103d St.
New York, N.Y. 10029

32 NORTH CAROLINA

M. J. Musser, M.D.
Teer House
4019 N. Roxboro Rd.
Durham, N. C. 27704

33 NORTH DAKOTA

T. H. Harwood, M.D.
Dean, Sch. of Med.
U. of North Dakota
Grand Forks, N.D. 58201

**34 NORTHEASTERN
OHIO**

F. C. Robbins, M.D.
Dean, Sch. of Med.
Western Reserve U.
2107 Adelbert Rd.
Cleveland, Ohio 44106

**35 NORTHERN
NEW ENGLAND**

J. E. Wennberg, M.D.
U. of Vt. Coll. of Med.
25 Colchester Ave.
Burlington, Vt. 05401

36 NORTHLANDS

W. R. Miller, M.D.
375 Jackson St.
St. Paul, Minn. 55101

**37 NORTHWESTERN
OHIO**

C. R. Tittle, Jr., M.D.
2313 Madison Avenue
Toledo, Ohio 43624

38 OHIO STATE

R. L. Meiling, M.D.
Dean, Coll. of Med.
Ohio State U.
410 W. 10th Ave.
Columbus, Ohio 43210

39 OHIO VALLEY

W. H. McBeath, M.D.
1718 Alexandria Dr.
Lexington, Ky. 40504

40 OKLAHOMA

K. M. West, M.D.
U. of Ok. Med. Ctr.
800 N.E. 13th St.
Oklahoma City, Ok. 73104

41 OREGON

M. R. Grover, M.D.
Director, Cont. Med. Ed.
Sch. of Med.
U. of Oregon
3181 S.W. Sam Jackson
Portland, Ore. 97201

42 PUERTO RICO

A. Nigaglioni, M.D.
Chancellor, Sch. of Med.
U. of Puerto Rico
San Juan, P.R. 00905

43 ROCHESTER, N.Y.

R. C. Parker, Jr., M.D.
Sch. of Med. and Dent.
U. of Rochester
Rochester, N.Y. 14620

44 SOUTH CAROLINA

C. P. Summerall, III, MD
Dept. of Med.
Med. Coll. Hospital
55 Doughty St.
Charleston, S.C. 29403

**45 SUSQUEHANNA
VALLEY**

R. B. McKenzie
3806 Market St.
P.O. Box 541
Camp Hill, Pa. 17011

**46 TENNESSEE
MID-SOUTH**

S. W. Olson, M.D.
110 Baker Bldg.
110 21st Ave. S.
Nashville, Tenn. 37203

47 TEXAS

***S. G. Thompson, M.D.**
Suite 724
Sealy-Smith Prof. Bldg.
Galveston, Tex. 77550

48 TRI-STATE

N. Stearns, M.D.
22 The Fenway
Boston, Mass. 02115

49 VIRGINIA

E. R. Perez, M.D.
Richmond Acad. of Med.
1200 E. Clay St.
Richmond, Va. 23219

**50 WASHINGTON-
ALASKA**

D. R. Sparkman, M.D.
Sch. of Med.
U. of Washington
Seattle, Wash. 98105

51 WEST VIRGINIA

C. L. Wilbar, Jr., M.D.
W. Va. Univ. Med. Ctr.
Morgantown, W. Va. 26506

**52 WESTERN
NEW YORK**

J. R. F. Ingall, M.D.
Sch. of Med.
State U. of N.Y. at Buffalo
Buffalo, N.Y. 14214

**53 WESTERN
PENNSYLVANIA**

F. S. Cheever, M.D.
Dean, Sch. of Med.
U. of Pittsburgh
3530 Forbes Ave.
Pittsburgh, Pa. 15213

54 WISCONSIN

J. S. Hirschboeck, M.D.
Wisconsin RMP, Inc.
110 E. Wisconsin Ave.
Milwaukee, Wisc. 53202

*Associate Coordinator

APPENDIX 7

DIRECTORY OF REGIONAL MEDICAL PROGRAMS

DIRECTORY OF REGIONAL MEDICAL PROGRAMS

The Directory lists Regional Medical Programs for which planning or operational grants have been awarded or which are in earlier stages of development.

Regions were defined for planning purposes in the planning applications. State designations do not necessarily indicate that the regions are coterminous with State boundaries. The original definitions of the regions may be modified on the basis of experience.

Awarded as of April 26, 1968.

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| Name of Region | Alabama | Albany | Arizona | Arkansas |
|---|--|--|---|--|
| Preliminary Planning Area | Alabama | Northeastern New York and portions of Southern Vermont and Western Massachusetts | Arizona | Arkansas |
| Estimated Population | 3,540,000 | 1,940,000 | 1,635,000 | 1,970,000 |
| Coordinating Headquarters | University of Alabama Medical Center | Albany Medical College of Union University | University of Arizona College of Medicine | University of Arkansas Medical Center |
| Program Coordinator | Benjamin B. Wells, M.D. University of Alabama Medical Center 1919 Seventh Avenue South Birmingham, Ala. 35233 (tel: 205-324-6581, ext. 453) | Frank M. Woolsey, Jr., M.D. Associate Dean and Professor Chairman, Department of Post-graduate Medicine Albany Medical College of Union University 47 New Scotland Avenue Albany, N.Y. 12208 (tel: 518-462-7521) | Dermont W. Melick, M.D. College of Medicine University of Arizona Tucson, Ariz. 85721 (tel: 602-884-1505) | Winston K. Shorey, M.D. Dean, School of Medicine University of Arkansas 4301 West Markham Street Little Rock, Ark. 72201 (tel: 501-MO 4-5000) |
| Program Director | | | | |
| Chairman, Regional Advisory Group | T. Joseph Reeves, M.D. Alabama Heart Professor of Cardiovascular Research Department of Medicine Medical College of Alabama University of Alabama Medical Center Birmingham, Ala. 35233 | Harold C. Wiggers, Ph. D. Dean, Albany Medical College of Union University 47 New Scotland Avenue Albany, N.Y. 12208 | Not identified | Thomas E. Townsend, M.D. Member, Executive Council Arkansas Medical Society 1310 Cherry Street Pine Bluff, Ark. 71601 |
| Grantee | University of Alabama Medical Center | Albany Medical College of Union University | University of Arizona College of Medicine | University of Arkansas Medical Center |
| Effective Starting Date of Planning Grant | January 1, 1967 | July 1, 1966 | April 1, 1967 | April 1, 1967 |
| Amount of Planning Grant | \$318,046 (1st year) \$393,788 (2d year) | \$373,254 (1st year) \$384,244 (2d year) | \$119,045 (1st year) \$346,125 (2d year) | \$360,174 (1st year) \$360,625 (2d year) |
| Effective Starting Date of Operational Grant | April 1, 1967 | | | |
| Amount of Operational Grant | \$921,510 | | | |

| Name of Region | BI-State | California | Central New York | Colorado-Wyoming |
|--|--|---|---|---|
| Preliminary Planning Area | Eastern Missouri and Southern Illinois | California | Syracuse, New York and 15 surrounding counties | Colorado and Wyoming |
| Estimated Population | 4,775,000 | 19,160,000 | 1,760,000 | 2,200,000 |
| 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 |
| Program Coordinator | William H. Danforth, M.D. Vice Chancellor for Medical Affairs Washington University 660 South Euclid Avenue St. Louis, Mo. 63110 (tel: 314-361-6400, ext. 3013) | Paul D. Ward Executive Director California Committee on Regional Medical Programs Room 304 655 Sutter Street San Francisco, Calif. 94102 (tel: 415-771-5432) | Richard H. Lyons, M.D. Director, Regional Medical Program of Central New York 750 East Adams Street Room 1500 State University Hospital Syracuse, N.Y. 13210 (tel: 315-473-5600) | Paul R. Hildebrand, M.D. University of Colorado Medical Center 4200 East Ninth Avenue Denver, Colo. 80220 |
| Program Director | | | | Howard W. Doan, M.D. University of Colorado Medical Center 4200 East Ninth Avenue Denver, Colo. 80220 (tel: 303-394-7506) |
| Chairman, Regional Advisory Group | G. Duncan Bauman Business Manager St. Louis Globe-Democrat 710 North 12th Street St. Louis, Mo. 63101 | Roger O. Egeberg, M.D. Dean, School of Medicine University of Southern California 2025 Zonal Avenue Los Angeles, Calif. 90033 | Wilfred W. Westerfeld, M.D. Acting President Upstate Medical Center 766 Irving Avenue Syracuse, N.Y. 13210 (tel: 315-473-4513) | John J. Conger, Ph. D. Vice President for Medical Affairs and Dean, School of Medicine University of Colorado 4200 East Ninth Avenue Denver, Colo. 80220 |
| Grantee | Washington University School of Medicine | California Medical Education and Research Foundation | Research Foundation of State University of New York | University of Colorado Medical Center |
| Effective Starting Date of Planning Grant | April 1, 1967 | November 1, 1966 | January 1, 1967 | January 1, 1967 |
| Amount of Planning Grant | \$603,965 | \$1,575,096 (1st year) \$2,974,497 (2d year) | \$289,522 (1st year) \$268,634 (2d year) | \$361,984 (1st year) \$339,605 (2d year) |
| Effective Starting Date of Operational Grant | | | | |
| Amount of Operational Grant | | | | |

| Name of Region | Connecticut | Florida | Georgia | Greater Delaware Valley |
|--|--|---|---|--|
| Preliminary Planning Area | Connecticut | Florida | Georgia | Eastern Pennsylvania and portions of New Jersey and Delaware |
| Estimated Population | 2,925,000 | 6,000,000 | 4,510,000 | 8,200,000 |
| Coordinating Headquarters | Yale University School of Medicine and University of Connecticut School of Medicine | Florida Advisory Council, Inc. | Medical Association of Georgia | University City Science Center |
| Program Coordinator | Henry T. Clark, Jr., M.D. Program Coordinator Connecticut Regional Medical Program 272 George Street New Haven, Conn. 06510 (tel: 203-776-6872) | Samuel P. Martin, M.D. Provost, J. Hillis Miller Medical Center University of Florida Gainesville, Fla. 32601 (tel: 904-376-3211, ext. 5377) | J. W. Chambers, M.D. Coordinator for Georgia Regional Medical Program Medical Association of Georgia 938 Peachtree Street NE. Atlanta, Ga. 30309 (tel: 404-876-7535) | George Clammer, M.D. Wynnewood House 300 East Lancaster Avenue Wynnewood, Pa. 19096 (tel: 215-649-4100) |
| Program Director | | | J. Gordon Barrow, M.D. Director for Georgia Regional Medical Program Medical Association of Georgia 938 Peachtree Street N.E. Atlanta, Ga. 30309 (tel: 404-875-0701) | |
| Chairman, Regional Advisory Group | Arthur M. Rogers Director of Traffic Scovill Manufacturing Company 99 Mill Street Waterbury, Conn. 06720 | H. Phillip Hampton, M.D. 1 Davis Boulevard Tampa, Fla. 33606 (tel: 813-253-0991) | Arthur P. Richardson, M.D. Dean, School of Medicine Emory University Atlanta, Ga. 30322 | Glen R. Leymaster, M.D. Dean, Woman's Medical College of Pennsylvania 3300 Henry Avenue Philadelphia, Pa. 191 |
| Grantee | Yale University School of Medicine | Florida Advisory Council, Inc. | Medical Association of Georgia | University City Science Center |
| Effective Starting Date of Planning Grant | July 1, 1966 | November 1, 1967 | January 1, 1967 | April 1, 1967 |
| Amount of Planning Grant | \$406,622 (1st year) \$338,513 (2d year) | \$240,000 | \$240,098 (1st year) \$555,079 (2d year) | \$1,531,494 |
| Effective Starting Date of Operational Grant | | | | |
| Amount of Operational Grant | | | | |

| Name of Region | Hawaii | Illinois | Indiana | Intermountain |
|---|--|---|--|---|
| Preliminary Planning Area | Hawaii | Illinois | Indiana | Utah, and portions of Wyoming, Montana, Idaho, and Nevada |
| Estimated Population | 740,000 | 10,895,000 | 5,000,000 | 2,220,000 |
| Coordinating Headquarters | University of Hawaii College of Health Sciences | Coordinating Committee of Medical Schools and Teaching Hospitals of Illinois | Indiana University School of Medicine | University of Utah School of Medicine |
| Program Coordinator | Masato Hasegawa, M.D. Suite 105 Medical Arts Building 1010 South King Street Honolulu, Hawaii 96822 (tel: 808-944-8499) | Leon O. Jacobson, M.D. Dean of Biological Sciences Chairman, Coordinating Committee of Medical Schools and Teaching Hospitals of Illinois 950 East 59th Street Chicago, Ill. 60637 (tel: 312-MU4-6100) | Robert B. Stonehill, M.D. Indiana University Medical Center 1100 West Michigan Street Indianapolis, Ind. 46207 (tel: 317-639-8492) | C. Hillmon Castle, M.D. Associate Dean and Chairman Department of Postgraduate Education University of Utah College of Medicine 50 North Medical Drive Salt Lake City, Utah 84112 (tel: 801-322-7901) |
| Program Director | William D. Graham, M.D. Deputy Director Hawaii Regional Medical Program Leahi Hospital Honolulu, Hawaii 96822 | Wright R. Adams, M.D. Executive Director Illinois Regional Medical Program 122 South Michigan Avenue Suite 939 Chicago, Ill. 60603 (tel: 312-939-7307) | | |
| Chairman, Regional Advisory Group | Wilson P. Cannon, Jr. Senior Vice President Bank of Hawaii P.O. Box 2900 Honolulu, Hawaii 96802 | Oglesby Paul, M.D. Professor of Medicine Northwestern University School of Medicine Passavant Hospital 303 East Superior Street Chicago, Ill. 60611 (tel: 312-WH4-4200) | George T. Lukemeyer, M.D. Associate Dean, Indiana University School of Medicine Indiana University Medical Center 1100 West Michigan Street Indianapolis, Ind. 46207 (tel: 317-639-8877) | Kenneth B. Castleton, M.D. Dean, University of Utah College of Medicine University of Utah Medical Center Salt Lake City, Utah 84112 (tel: 801-322-7211, ext. 7201) |
| Grantee | University of Hawaii College of Health Sciences | University of Chicago | Indiana University Foundation | University of Utah College of Medicine |
| Effective Starting Date of Planning Grant | July 1, 1966 | July 1, 1967 | January 1, 1967 | July 1, 1966 |
| Amount of Planning Grant | \$108,006 (1st year) \$194,771 (2d year) | \$336,366 | \$384,750 (1st year) \$497,837 (2d year) | \$456,415 (1st year) \$363,524 (2d year) |
| Effective Starting Date of Operational Grant | | | | April 1, 1967 |
| Amount of Operational Grant | | | | \$2,038,123 (1st year) \$2,215,234 (2d year) |

| Name of Region | Iowa | Kansas | Louisiana | Maine |
|--|--|---|--|---|
| Preliminary Planning Area | Iowa | Kansas | Louisiana | Maine |
| Estimated Population | 2,755,000 | 2,275,000 | 3,660,000 | 975,000 |
| Coordinating Headquarters | University of Iowa College of Medicine | University of Kansas Medical Center | Louisiana State Department of Hospitals | Medical Care Development, Inc. |
| Program Coordinator | Willard A. Krehi, M.D., Ph. D. 308 Melrose Avenue University of Iowa Iowa City, Iowa 52240 (tel: 319-353-4843) | Charles E. Lewis, M.D. Chairman, Department of Preventive Medicine and Community Health University of Kansas Medical Center 39th and Rainbow Boulevard Kansas City, Kans. 66103 (tel: 919-AD6-5252, ext. 271) | E. Lee Agerton Director Louisiana State Department of Hospitals 655 North Fifth Street Baton Rouge, La. 70804 | Manu Chatterjee, M.D. Program Coordinator Maine Regional Medical Program 295 Water Street Augusta, Maine 04322 (tel: 207-622-7566) |
| Program Director | | | Joseph A. Sabatier, Jr., M.D. Program Coordinator Louisiana Regional Medical Program Claiborne Towers Roof 119 South Claiborne Avenue New Orleans, La. 70112 (tel: 504-522-5678) | |
| Chairman, Regional Advisory Group | Harry B. Weinberg, M.D. Iowa Heart Association 1333 West Lombard Street Davenport, Iowa 52804 | George A. Wolf, Jr., M.D. Provost and Dean, School of Medicine University of Kansas Medical Center Rainbow Boulevard at 39th Street Kansas City, Kans. 66103 | Charles B. Odom, M.D. Past President Louisiana State Medical Society 134 North 19th Street Baton Rouge, La. 70002 | Merle S. Bacastow, M.D. President Medical Care Development, Inc Director of Medical Education Maine Medical Center Portland, Maine 04102 |
| Grantee | University of Iowa College of Medicine | University of Kansas Medical Center | Louisiana State Department of Hospitals | Medical Care Development, Inc. |
| Effective Starting Date of Planning Grant | December 1, 1966 | July 1, 1966 | January 1, 1967 | May 1, 1967 |
| Amount of Planning Grant | \$291,348 (1st year) \$290,591 (2d year) | \$197,945 (1st year) \$281,627 (2d year) | \$490,448 (1st year) \$454,445 (2d year) | \$193,909 (1st year) \$204,709 (2d year) |
| Effective Starting Date of Operational Grant | | June 1, 1967 | | |
| Amount of Operational Grant | | \$699,852 | | |

| | | | | |
|---|--|---|--|---|
| Name of Region | Maryland | Memphis Medical Region | Metropolitan Washington, D.C. | Michigan |
| Preliminary Planning Area | Maryland | Western Tennessee, Northern Mississippi, and portions of Arkansas, Kentucky, and Missouri | District of Columbia and contiguous counties in Maryland (2) and Virginia (2) | Michigan |
| Estimated Population | 3,685,000 | 2,425,000 | 2,160,000 | 8,585,000 |
| Coordinating Headquarters | Steering Committee of the Regional Medical Program for Maryland | Mid-South Medical Council for Comprehensive Health Planning, Inc. | District of Columbia Medical Society | Michigan Association for Regional Medical Programs, Inc. |
| Program Coordinator | William S. Spicer, Jr., M.D. Acting Coordinator Maryland Regional Medical Program 550 North Broadway Baltimore, Md. 21205 (tel: 301-955-7444) | James W. Culbertson, M.D. Professor and Cardiologist Department of Internal Medicine College of Medicine University of Tennessee 858 Madison Avenue Memphis, Tenn. 38103 (tel: 901-JA6-8892, ext. 437) | Thomas W. Mattingly, M.D. Program Coordinator Metropolitan Washington, D.C. Regional Medical Program District of Columbia Medical Society 2007 Eye Street N.W. Washington, D.C. 20006 (tel: 202-223-2230) | Albert E. Heustis, M.D. 1111 Michigan Avenue Suite 200 East Lansing, Mich. 48823 (tel: 517-351-0290) |
| Program Director | | | | |
| Chairman, Regional Advisory Group | William J. Peeples, M.D. Commissioner Maryland State Department of Health 301 West Preston Street Baltimore, Md. 21201 | Frank M. Norfleet Vice President Parts, Inc. 601 South Dudley Memphis, Tenn. 38104 | Clayton Ethridge, M.D. Associate Dean, School of Medicine 901 23d Street N.W. Washington, D.C. 20037 | William N. Hubbard, Jr., M.D. Dean, School of Medicine University of Michigan 1335 Catherine Street Ann Arbor, Mich. 48104 (tel: 313-764-8175) |
| Grantee | The Johns Hopkins University | University of Tennessee College of Medicine | District of Columbia Medical Society | Michigan Association for Regional Medical Programs, Inc. |
| Effective Starting Date of Planning Grant | January 1, 1967 | April 1, 1967 | January 1, 1967 | June 1, 1967 |
| Amount of Planning Grant | \$518,443 (1st year) \$412,227 (2d year) | \$173,119 | \$203,790 (1st year) \$216,322 (2d year) | \$1,294,449 |
| Effective Starting Date of Operational Grant | | | March 1, 1968 | |
| Amount of Operational Grant | | | \$418,318 | |

| Name of Region | Mississippi | Missouri | Mountain States | Nebraska-South Dakota |
|--|---|--|--|--|
| Preliminary Planning Area | Mississippi | Missouri, exclusive of St. Louis | Idaho, Montana, Nevada, and Wyoming | Nebraska and South Dakota |
| Estimated Population | 2,350,000 | 4,605,000 | 2,160,000 | 2,110,000 |
| Coordinating Headquarters | University of Mississippi Medical Center | University of Missouri School of Medicine | Western Interstate Commission for Higher Education | Nebraska State Medical Association |
| Program Coordinator | Guy D. Campbell, M.D. Mississippi Regional Medical Program University of Mississippi Medical Center 2500 North State Street Jackson, Miss. 39216 (tel: 601-362-4411) | Vernon E. Wilson, M.D. Executive Director for Health Affairs University of Missouri Columbia, Mo. 65201 (tel: 314-449-2711) | Kevin P. Bunnell, Ed.D. Associate Director Western Interstate Commission for Higher Education University East Campus 30th Street Boulder, Colo. 80302 (tel: 303-443-2111, ext. 6342) | Harold Morgan, M.D. Program Coordinator Nebraska-South Dakota Regional Medical Program 1408 Sharp Building Lincoln, Nebr. 68503 (tel: 402-432-5427) |
| Program Director | | George E. Wakerlin, M.D. Director, Missouri Regional Medical Program Lewis Hall 406 Turner Avenue Columbia, Mo. 65301 (tel: 314-449-2711) | Alfred M. Popma, M.D. Program Director Mountain States Regional Medical Program 525 West Jefferson Street Boise, Idaho 83702 (tel: 208-342-4666) | |
| Chairman, Regional Advisory Group | Not identified | Nathan J. Stark Group Vice President Operations Hallmark Cards, Inc. 25th and McGee Trafficway Kansas City, Mo. 64108 | George D. Humphrey, M.D. President Emeritus University of Wyoming P.O. Box 3067, University Station Laramie, Wyo. 82070 | Robert J. Morgan, M.D. President Nebraska State Medical Association 916 West 10th Street Alliance, Nebr. 69301 |
| Grantee | University of Mississippi Medical Center | University of Missouri School of Medicine | Western Interstate Commission for Higher Education | Nebraska State Medical Association |
| Effective Starting Date of Planning Grant | July 1, 1967 | July 1, 1966 | November 1, 1966 | January 1, 1967 |
| Amount of Planning Grant | \$454,206 | \$398,556 (1st year) \$324,254 (2d year) | \$876,855 (1st year) \$1,082,107 (2d year) | \$350,339 (1st year) \$349,367 (2d year) |
| Effective Starting Date of Operational Grant | | April 1, 1967 | March 1, 1968 | |
| Amount of Operational Grant | | \$2,887,903 (1st year) \$3,484,039 (2d year) | \$206,913 | |

| | | | | |
|---|--|--|---|---|
| Name of Region | New Jersey | New Mexico | New York Metropolitan Area | North Carolina |
| Preliminary Planning Area | New Jersey | New Mexico | New York City and Westchester, Nassau, and Suffolk Counties | North Carolina |
| Estimated Population | 7,000,000 | 1,005,000 | 11,480,000 | 5,030,000 |
| Coordinating Headquarters | New Jersey Joint Committee for Implementation of Public Law 89-239 | University of New Mexico School of Medicine | Associated Medical Schools of Greater New York | Association for the North Carolina Regional Medical Program |
| Program Coordinator | Alvin A. Florin, M.D. New Jersey Regional Medical Program 88 Ross Street East Orange, N.J. 07018 (tel: 201-675-1100) | Reginald H. Fitz, M.D. Dean, School of Medicine University of New Mexico 900 Stanford Drive N.E. Albuquerque, N. Mex. 87106 (tel: 505-277-2321) | Vincent de Paul Larkin, M.D. New York Academy of Medicine 2 East 103d Street New York, N.Y. 10029 (tel: 212-427-4100) | Marc J. Musser, M.D. Executive Director North Carolina Regional Medical Program Teer House 4019 North Roxboro Road Durham, N.C. 27704 (tel: 919-477-8685) |
| Program Director | | Irvin E. Hendryson, M.D. University of New Mexico 900 Stanford Drive N.E. Albuquerque, N. Mex. 87106 | | |
| Chairman, Regional Advisory Group | Joseph R. Jehl, M.D. President The Medical Society of New Jersey 315 West State Street Trenton, N.J. 08618 | Not identified | Vernon Stutzman Regional Medical Program New York Academy of Medicine 2 East 103d Street New York, N.Y. 10029 | George W. Paschal, Jr., M.D. President, Medical Society of State of North Carolina 1110 Wake Forest Road Raleigh, N.C. 27604 |
| Grantee | Foundation for the Advancement of Medical Education and Research in New Jersey | University of New Mexico | Associated Medical Schools of Greater New York | Duke University |
| Effective Starting Date of Planning Grant | July 1, 1967 | October 1, 1966 | June 1, 1967 | July 1, 1966 |
| Amount of Planning Grant | \$297,466 | \$449,736 (1st year) \$553,270 (2d year) | \$967,010 | \$435,851 (1st year) \$773,674 (2d year) |
| Effective Starting Date of Operational Grant | | | | March 1, 1968 |
| Amount of Operational Grant | | | | \$1,510,796 |

| Name of Region | North Dakota | Northeastern Ohio | Northern New England | Northlands |
|--|--|--|---|--|
| Preliminary Planning Area | North Dakota | 12 counties in Northeastern Ohio | Vermont and three counties in Northeastern New York | Minnesota |
| Estimated Population | 640,000 | 4,170,000 | 570,000 | 3,580,000 |
| Coordinating Headquarters | University of North Dakota | Case Western Reserve University | University of Vermont College of Medicine | Minnesota State Medical Association Foundation |
| Program Coordinator | Theodore H. Harwood, M.D. Dean, School of Medicine University of North Dakota Grand Forks, N. Dak. 58201 (tel: 701-777-2514) | Frederick C. Robbins, M.D. Dean, School of Medicine Case Western Reserve University 2107 Adelbert Road Cleveland, Ohio 44106 | John E. Wennberg, M.D. Program Coordinator Northern New England Regional Medical Program University of Vermont College of Medicine 25 Colchester Avenue Burlington, Vt. 05401 (tel: 802-864-4511, ext. 244) | Winston R. Miller, M.D. 375 Jackson Street Saint Paul, Minn. 55101 (tel: 612-224-4771) |
| Program Director | Willard Wright, M.D. Program Director North Dakota Regional Medical Program 1600 University Avenue Grand Forks, N. Dak. 58201 | | | |
| Chairman, Regional Advisory Group | Lee A. Christoferson, M.D. The Neuro-Psychiatric Institute 700 First Avenue South Fargo, N. Dak. 58102 | Irvine H. Page, M.D. Consultant Emeritus Cleveland Clinic Division of Research 2050 East 93d Street Cleveland, Ohio 44106 | Edward C. Andrews, M.D. Dean, College of Medicine University of Vermont 25 Colchester Avenue Burlington, Vt. 05401 | O. L. Nelson, M.D. Chairman, Advisory Group Northlands Regional Medical Program 601 Medical Arts Building Minneapolis, Minn. 55402 |
| Grantee | North Dakota Medical Research Foundation | Case Western Reserve University | University of Vermont College of Medicine | Minnesota State Medical Association Foundation |
| Effective Starting Date of Planning Grant | July 1, 1967 | January 1, 1968 | July 1, 1966 | January 1, 1967 |
| Amount of Planning Grant | \$188,010 | \$285,783 | \$316,186 (1st year) \$702,504 (2d year) | \$370,904 (1st year) \$529,250 (2d year) |
| Effective Starting Date of Operational Grant | | | | |
| Amount of Operational Grant | | | | |

| Name of Region | Northwestern Ohio | Ohio State | Ohio Valley | Oklahoma |
|---|--|--|--|--|
| Preliminary Planning Area | 20 counties in Northwestern Ohio | Central and southern two-thirds of Ohio (61 counties, excluding Metropolitan Cincinnati area) | Greater part of Kentucky and contiguous parts of Ohio, Indiana, and West Virginia | Oklahoma |
| Estimated Population | 1,360,000 | 4,680,000 | 6,000,000 | 2,500,000 |
| Coordinating Headquarters | Medical College of Ohio at Toledo | Ohio State University College of Medicine | Ohio Valley Regional Medical Program | University of Oklahoma Medical Center |
| Program Coordinator | C. Robert Tittle, Jr., M.D. 2313 Madison Avenue Toledo, Ohio 43624 (tel: 419-248-6201) | Neil C. Andrews, M.D. Assistant Dean, College of Medicine Ohio State University 410 West 10th Avenue Columbus, Ohio 43210 (tel: 614-293-5344) | William H. McBeath, M.D. Director, Ohio Valley Regional Medical Program 1718 Alexandria Drive Lexington, Ky. 40508 (tel: 606-255-6684) | Kelly West, M.D. Professor and Head, Department of Continuing Education University of Oklahoma Medical Center 800 Northeast 13th Street Oklahoma City, Okla. 73104 (tel: 405-CE 2-8561) |
| Program Director | | | | |
| Chairman, Regional Advisory Group | Edward L. Burns, M.D. Northwestern Ohio Regional Medical Program 2313 Madison Avenue Toledo, Ohio 43624 | Richard L. Meiling, M.D. Dean, College of Medicine Ohio State University 410 West 10th Avenue Columbus, Ohio 43210 (tel: 614-293-5344) | Louis Wozar President and General Manager Tait Manufacturing Company 500 Webster Street Dayton, Ohio 45404 (tel: 513-224-9871) | James L. Dennis, M.D. Director and Dean University of Oklahoma Medical Center 800 Northeast 13th Street Oklahoma City, Okla. 73104 |
| Grantee | Medical College of Ohio at Toledo | Ohio State University College of Medicine | The University of Kentucky Research Foundation | University of Oklahoma Medical Center |
| Effective Starting Date of Planning Grant | January 1, 1968 | April 1, 1967 | January 1, 1967 | September 1, 1966 |
| Amount of Planning Grant | \$309,180 | \$126,182 | \$346,760 (1st year) \$407,238 (2d year) | \$177,963 (1st year) \$282,100 (2d year) |
| Effective Starting Date of Operational Grant | | | | |
| Amount of Operational Grant | | | | |

| | | | | |
|---|--|---|--|--|
| Name of Region | Oregon | Puerto Rico | Rochester | South Carolina |
| Preliminary Planning Area | Oregon | Puerto Rico | Rochester, New York and 11 surrounding counties | South Carolina |
| Estimated Population | 2,000,000 | 2,670,000 | 1,270,000 | 2,600,000 |
| Coordinating Headquarters | University of Oregon Medical School | | University of Rochester School of Medicine and Dentistry | Medical College of South Carolina |
| Program Coordinator | M. Roberts Grover, M.D. Director, Continuing Medical Education University of Oregon Medical School 3181 Southwest Sam Jackson Park Road Portland, Oreg. 97201 (tel: 503-228-9181, ext. 519) | A. Nigaglioni, M.D. Chancellor, School of Medicine University of Puerto Rico San Juan, P.R. 00905 (tel: 174-723-5210) | Ralph C. Parker, Jr., M.D. Clinical Associate Professor of Medicine School of Medicine and Dentistry University of Rochester 260 Crittenden Boulevard Rochester, N.Y. 14620 (tel: 716-473-4400, ext. 3112) | J. C. Chambers, M. D. Medical College of South Carolina 55 Doughty Street Charleston, S.C. 29403 (tel: 803-723-9411) |
| Program Director | | | | |
| Chairman, Regional Advisory Group | Herman A. Dickel, M.D. Member, Council of Medical Education Oregon Medical Association 511 Southwest 10th Avenue Portland, Oreg. 97205 | Not identified | Frank Hamlin Papec Machine Company Shortsville, N.Y. 14548 | William M. McCord, M.D., Ph. D. President, Medical College of South Carolina 80 Barre Street Charleston, S.C. 29401 |
| Grantee | University of Oregon Medical School | | University of Rochester School of Medicine and Dentistry | Medical College of South Carolina |
| Effective Starting Date of Planning Grant | April 1, 1967 | Application under review | October 1, 1966 | January 1, 1967 |
| Amount of Planning Grant | \$219,168 (1st year) \$231,125 (2d year) | | \$306,985 (1st year) \$318,286 (2d year) | \$123,527 (1st year) \$379,246 (2d year) |
| Effective Starting Date of Operational Grant | March 1, 1968 | | March 1, 1968 | |
| Amount of Operational Grant | \$221,191 | | \$343,749 | |

| Name of Region | Susquehanna Valley | Tennessee Mid-South | Texas | Tri-State |
|---|--|---|--|---|
| Preliminary Planning Area | 27 counties in Central Pennsylvania | Eastern and Central Tennessee and contiguous parts of Southern Kentucky and Northern Alabama | Texas | Massachusetts, New Hampshire, and Rhode Island |
| Estimated Population | 2,140,000 | 2,700,000 | 10,875,000 | 7,010,000 |
| Coordinating Headquarters | Pennsylvania Medical Society | Vanderbilt University School of Medicine and Meharry Medical College | University of Texas | Medical Care and Educational Foundation, Inc. |
| Program Coordinator | Richard B. McKenzie 3806 Market Street P.O. Box 541 Camp Hill, Pa. 17011 (tel: 717-761-3252) | Stanley W. Olson, M.D. Professor of Medicine Vanderbilt University Clinical Professor of Medicine Meharry Medical College 110 Baker Building 110 21st Street South Nashville, Tenn. 37203 (tel: 615-255-0692) | Charles A. LeMaistre, M.D. Vice-Chancellor for Health Affairs University of Texas Main Building Austin, Tex. 78712 (tel: 512-GR 1-1434) | Leona Baumgartner, M.D. Medical Care and Educational Foundation 22 The Fenway Boston, Mass. 02115 (tel: 617-262-3040) |
| Program Director | | | Spencer G. Thompson, M.D. Regional Medical Program of Texas Suite 724 Sealy-Smith Professional Building Galveston, Tex. 77550 (tel: 713-505-2425) | |
| Chairman, Regional Advisory Group | Raymond C. Grandon, M.D. Secretary Dauphin County Medical Society 131 State Street Harrisburg, Pa. 17101 | Thomas P. Kennedy, Jr. President, Executive Committee Health and Hospital Planning Council Vanderbilt University Medical Center Hospital Board St. Thomas Hospital P.O. Box 449 Nashville, Tenn. 37203 | John F. Thomas, M.D. Committee on Cancer Texas Medical Association 918 East 32d Street Austin, Tex. 78705 | Mac V. Edds, Jr., Ph. D. Division of Medical Sciences Brown University President, Medical Care and Educational Foundation, Inc. 22 The Fenway Boston, Mass. 02115 |
| Grantee | Pennsylvania Medical Society | Vanderbilt University | University of Texas | Medical Care and Educational Foundation, Inc. |
| Effective Starting Date of Planning Grant | June 1, 1967 | July 1, 1966 | July 1, 1966 | December 1, 1967 |
| Amount of Planning Grant | \$263,530 | \$265,841 (1st year) \$524,738 (2d year) | \$1,271,013 (1st year) \$1,577,612 (2d year) | \$439,037 |
| Effective Starting Date of Operational Grant | | February 1, 1968 | | |
| Amount of Operational Grant | | \$1,630,304 | | |

| | | | | |
|---|--|---|--|--|
| Name of Region | Virginia | Washington-Alaska | West Virginia | Western New York |
| Preliminary Planning Area | Virginia | Washington and Alaska | West Virginia | Buffalo, New York and 7 surrounding counties |
| Estimated Population | 4,535,000 | 3,360,000 | 1,800,000 | 1,935,000 |
| Coordinating Headquarters | Medical College of Virginia and University of Virginia School of Medicine | University of Washington School of Medicine | West Virginia University Medical Center | School of Medicine, State University of New York at Buffalo, in cooperation with the Health Organization of Western New York |
| Program Coordinator | Kinloch Nelson, M.D. Dean, Medical College of Virginia 1200 East Broad Street Richmond, Va. 23219 (tel: 703-M14-9851) | Donal R. Sparkman, M.D. Associate Professor of Medicine School of Medicine University of Washington AA 312 University Hospital Seattle, Wash. 98105 (tel: 206-543-8540) | Charles L. Wilbar, Jr., M.D. West Virginia Regional Medical Program West Virginia University Medical Center Morgantown, W. Va. 26506 (tel: 304-293-4511) | John R. F. Ingall, M.D. Director, Regional Medical Program for Western New York School of Medicine, State University of New York at Buffalo Buffalo, N.Y. 14214 (tel: 716-833-2726, ext. 32, 50) |
| Program Director | Eugene R. Perez, M.D. Program Director Virginia Regional Medical Program 700 Building, Suite 1025 700 East Main Street Richmond, Va. 23219 (tel: 703-643-6631) | | | William E. Chalecke, M.D. R.D. 2 Horton Road Jamestown, New York 14701 (tel: 716-483-1840) |
| Chairman, Regional Advisory Group | Mack I. Shanholtz, M.D. State Commissioner of Health State Department of Health Bank and Governor Streets Richmond, Va. 23219 | Donal R. Sparkman, M.D. Associate Professor of Medicine School of Medicine University of Washington AA 312 University Hospital Seattle, Wash. 98105 (tel: 206-543-8540) | Clark K. Sleeth, M.D. Dean, School of Medicine West Virginia University Medical Center Morgantown, W. Va. 26506 | Douglas M. Surgenor, M.D. Dean, School of Medicine State University of New York at Buffalo 101 Capen Hall Buffalo, N.Y. 14214 (tel: 716-831-2811) |
| Grantee | University of Virginia School of Medicine | University of Washington School of Medicine | West Virginia University Medical Center | Research Foundation of the State University of New York |
| Effective Starting Date of Planning Grant | January 1, 1967 | September 1, 1966 | January 1, 1967 | December 1, 1966 |
| Amount of Planning Grant | \$545,454 | \$266,248 (1st year) \$655,148 (2d year) | \$150,798 (1st year) \$208,910 (2d year) | \$149,241 (1st year) \$383,717 (2d year) |
| Effective Starting Date of Operational Grant | | February 1, 1968 | | March 1, 1968 |
| Amount of Operational Grant | | \$1,032,003 | | \$357,761 |

| | | |
|---|---|---|
| Name of Region | Western Pennsylvania | Wisconsin |
| Preliminary Planning Area | Pittsburgh, Pennsylvania and 28 surrounding counties | Wisconsin |
| Estimated Population | 4,200,000 | 4,190,000 |
| Coordinating Headquarters | University Health Center of Pittsburgh | Wisconsin Regional Medical Program, Inc. |
| Program Coordinator | Francis S. Cheever, M.D. Dean, School of Medicine University of Pittsburgh M-240 Scalfi Hall 3550 Terrace Street Pittsburgh, Pa. 15213 (tel: 412-621-1006) | John S. Hirschboeck, M.D. Wisconsin Regional Medical Program, Inc. 110 East Wisconsin Avenue Milwaukee, Wis. 53202 (tel: 414-272-3636) |
| Program Director | | |
| Chairman, Regional Advisory Group | Dan J. Macer President, Veterans Administration Hospital University Drive Pittsburgh, Pa. 15240 | T. A. Duckworth Senior Vice President Employers Insurance of Wausau 407 Grant Street Wausau, Wis. 54402 |
| Grantee | University Health Center of Pittsburgh | Wisconsin Regional Medical Program, Inc. |
| Effective Starting Date of Planning Grant | January 1, 1967 | September 1, 1966 |
| Amount of Planning Grant | \$340,556 (1st year) \$326,765 (2d year) | \$344,418 |
| Effective Starting Date of Operational Grant | | September 1, 1967 |
| Amount of Operational Grant | | \$630,149 |

APPENDIX 8

EXCERPTS OF TESTIMONY AND MATERIALS (H.R. 15758)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (PUBLIC HEALTH SERVICE)
REPORT ON 12 OPERATING REGIONAL MEDICAL PROGRAMS

ALBANY REGIONAL MEDICAL PROGRAM

The Albany Regional Medical Program was one of the first regions to receive an operational award on April 1, 1967. Currently funded with \$755,005, the region has approximately 43 operational staff members, including approximately 14 physicians, 17 nurses, 5 other allied health personnel, and 6 general support personnel. Over two-thirds of the staff are from the community hospitals, and they are working closely with the local medical center and RMP staff to increase the capabilities for quality care at the local hospitals.

Approximately 60 hospitals from the Albany Region are participating in the program. Approximately 30 of these hospitals are directly participating in the operational projects outlined below. Two hospitals are represented on the Advisory Committee, and the remaining are involved in on-going planning activities.

Operational Projects

1. *Two-way radio communication system, direct cost—\$144,100*

This project will expand an existing two-way radio network to include 57 hospitals and 24 high schools. It will provide continuing education for physicians and allied medical personnel. It will also provide information and education programs for administrators, members of boards of trustees, voluntary health agencies, adult education classes, and selected civic groups.

2. *Community information coordinators, direct cost—\$73,800*

Former pharmaceutical representatives will be used to contact local physicians to tell them about Regional Medical Programs and to evaluate their attitudes towards RMP.

3. *Postgraduate Instruction Development Panel, direct cost—\$102,600*

This program proposes to have experimental and control groups of doctors to determine their educational needs. These doctors will then participate in instructional programs. Afterwards they will be tested to determine the effectiveness of the instruction.

4. *Community hospital learning centers, direct cost—\$75,800*

This project will establish learning centers at community hospitals using "Self Instruction Units" and audio-visual equipment for rapid dissemination of new medical knowledge. Eventually, the directors of this project hope to evaluate physician progress. Initially, 8 hospitals will be involved.

5. *Albany Medical Center coronary care training and demonstration programs, direct cost—\$125,200*

A coronary care unit will be established at Albany Medical College to serve as a model and training unit for training physicians and nurses who will then be able to establish similar units at community hospitals. This project will augment the existing Coronary Intensive Care Unit at the Albany Medical Center.

6A and 6B. *Community hospital coronary care training and demonstration program, direct cost—\$55,400*

This will complement project #5 by establishing coronary care units of three beds each at three community hospitals: Pittsfield General, St. Lukes, and Vassar Brothers. These will serve as demonstration and educational projects for other hospitals in the region. A continuing educational program will serve the permanent Unit Staff and staffs from smaller hospitals.

7. *Training and demonstration project, intensive cardiac care unit Herkimer Memorial Hospital, direct cost—\$3,500*

The initial phase of this project is to train 6 or 8 nurses from small community hospitals in cardiac anatomy and physiology, coronary disease, the principals and staffing of a cardiac intensive care unit, and in handling the complex equipment. These nurses will also be sent to Albany Medical Center for active training with specialized equipment.

INTERMOUNTAIN REGIONAL MEDICAL PROGRAM

The Intermountain Regional Medical Program received its first operational grant award on April 1, 1967 and its current operational award totals \$1,832,800. Approximately 80 staff members are serving in the operational projects, about one-third of whom are from community hospitals working together with the Regional Medical Program staff from the medical center, they are bringing to local health practitioners and hospitals throughout the region modern techniques for treating patients with the categorical diseases.

Approximately thirty hospitals are currently participating in the Program. Three hospitals are represented on the Regional Advisory Group, and almost every major hospital in the region has established a local planning group to study local needs and to serve as liaison with the Central IRMP staff. Seventeen hospitals are participating in the operational projects outlined below, and as the program continues to grow, it is anticipated that additional hospitals will become involved.

Operational Projects

1. Regional faculty and core-staff seminar, direct cost—\$12,600

The University of Utah Medical School will hold a series of quarterly seminars on comprehensive health care, continuing education, contemporary learning theory, behavioral science principles, and measurement technology. The faculty, experts from across the country, will address an audience of health professionals involved in IRMP.

2. Network for continuing education in heart disease, cancer, stroke, and related diseases, direct cost—\$243,000

The objectives of this program are to develop a communications network between patient-care and research institutions to encourage liaison between health care personnel in the area. The currently existing 2-way radio system, including 11 hospitals in 7 communities in or near Salt Lake City, will be extended to remote hospitals to serve as one link. Closed circuit TV and use of KVED (University of Utah education TV) is also planned. This may establish the community hospital as the locus of continuing education.

3. Information and communications exchange service, direct cost—\$40,000

The CIES is a region-wide clearing house for information about IRMP. Staff will be put in local communities to act as public relations representatives and also to distribute information to medical personnel and the public. The community staff will also gather information on community needs and resources and resources and serve as a station for collecting economic, social, and medical data.

4. Cardiopulmonary resuscitation training program, direct cost—\$63,400

The University of Utah will give a 3-day course in resuscitative techniques to selected physicians from small communities. Each physician will then be responsible for teaching the techniques to health personnel in his community. This "resuscitation consultant" will also collect data about the number of times resuscitation is employed and the results.

5. A training program in intensive cardiac care, direct cost—\$118,600

A core faculty of experts in using Cardiac Care Units and diagnosing and treating heart disease will teach short courses in their subjects. The students will be interested physicians and nurses from community hospitals building coronary care units.

6. Training for nurses in cardiac care and cardiopulmonary resuscitation, direct cost—\$34,000

This is an integral part of both the cardiac care and cardiopulmonary resuscitation programs for physicians (#4, #5). Nurses trained in Salt Lake City will return to their communities to serve as a core faculty for reaching the techniques at the local level. The nurses will work closely with the similarly trained physicians.

7. Clinical trainee program in cardiology, direct cost—\$65,700

This program has two emphases—

(1) To provide general practitioners, internists and cardiologists with training programs in heart disease techniques tailor made to their individual situations.

(2) To increase the number of formally trained clinical cardiologists through a training period (3 months to one year) at the existing cardiology school at the university of Utah.

8. Visiting consultants and teacher program for small community hospitals, direct cost—\$14,800

Small communities will be given the option of requesting one or two-day clinics. A minimum number of four cardiac patients will be required. These clinics will upgrade the level of care to victims of heart disease living in remote areas. Visiting physicians will assist the local physician in a precise diagnosis in a precise diagnosis of his patients.

9. A regional computer-based system for monitoring physiologic data on-line from remote hospitals in the regional medical program, direct cost—\$637,100

This project's purpose is to test the feasibility of using a central computer to process a variety of physiological signals generated by patients in remote hospitals, feeding the results of calculations from these signals back to stations within the hospitals, and using the information for diagnosis.

10. Cancer teaching project, direct cost—\$94,300

This project attempts to upgrade the level of care available to local communities. The coordinator will direct a program of physician education to create trained cancer specialists who in turn, will become centers of cancer information in their local communities. The physicians will receive a small stipend for teaching and obtaining information. A region-wide tumor registry will be started, as will a training program in new techniques for pathologists.

11. Stroke and related neurological diseases, direct cost—\$98,700

This project will establish clinics to bring expert consultation service in stroke and related neurological diseases to local communities; will provide continuing education to local physicians and Nurses; will collect data about stroke patients seen and the problems they present to the practitioner. A 24-hour telephone consultation service and information library service will be maintained at the Utah Medical Center to provide community physicians with immediate advice. In addition, practicing physicians will be trained at the medical center in the latest diagnostic and treatment techniques. The courses will last from 4 weeks to one year.

12. Educational program in respiratory therapy for physicians and nurses, direct cost—\$25,300

To train physicians and nurses to utilize the special techniques and equipment in respiratory therapy. Five day seminars and follow-up 2 day refresher courses will train participants to administer therapy and to teach others.

13. Regional endocrine metabolic laboratory, direct cost—\$237,900

To provide service facilities where practicing physicians can obtain laboratory data essential to the diagnosis and treatment; to create awareness among physicians of the possible presence of metabolic and endocrine abnormalities; to derive statistical information. Three laboratories will be established: an immunoassay laboratory, a chemical laboratory to measure steroid hormones, and a developmental laboratory to refine techniques. Seminars will be held both inside and outside of the laboratories. Abnormal findings will be reported to the referring physician by telephone by a physician who is competent to offer consultation.

KANSAS REGIONAL MEDICAL PROGRAM

The operational activities of the Kansas Regional Medical Program began on June 1, 1967, and are currently funded at the level of \$699,852. Approximately 80 individuals with varied backgrounds, comprise the current staff, of which about one-sixth are physicians, one-fifth are nurses, and an additional one-fifth are other types of allied health personnel. The remaining staff includes related health personnel, such as communications specialists and social scientists, and general support personnel. About half the staff are from the medical center and the other half are from community hospitals. Together they are working on programs to improve community capabilities for treating the categorical diseases.

Approximately 20 community hospitals are currently involved in the Kansas Program, and it is anticipated that additional hospitals will become involved as expansion takes place during the next few years. Ten of these hospitals are directly involved in operational projects, two are represented on the Advisory Committee, and eight are involved in on-going planning activities.

Operational Projects

1. Educational programs—Great Bend, Kans.—\$261,000 (direct cost)

To develop a model educational program in this small community a full-time faculty, which will be affiliated with the Kansas Medical Center, will be in residence. Included in this comprehensive program are plans for continuing physician and nurse education and clinical traineeships for health-related personnel. Studies will be made of community needs, resources, etc.

2. Health Sciences Communication and Information Center—\$77,900 (direct cost)

This project is engaged in conducting studies to determine the feasibility of establishing communication linkages vital to education, service, and research programs. Specific studies to be undertaken are a physician communication system, TV teaching, electronic linkages, and Medlars search capacity.

3. Study of the quality and availability of medical care—\$149,000 (direct cost)

To determine unmet needs of patients, locations, professional education, and working arrangements of physicians and those in the health related disciplines.

4. *Hospital information system and data facilities—\$67,500 (direct cost)*

To conduct studies within the region concerning various aspects of community resources and needs, epidemiologic data and participation of health care personnel in continuing educational programs. A *computer system* will be used.

5. *Cardiovascular nurse training—\$98,500 (direct cost)*

To develop an in-service training program to prepare nurses, who are the mainstay of coronary care units in community hospitals, with basic physiological knowledge of coronary care, ability to use instruments and equipment in coronary care units, experience in home care, and familiarity with social agencies that can aid in the rehabilitation of patients.

6. *Cancer detection program—Providence Hospital—\$25,000 (direct cost)*

To evaluate the strengths and weaknesses of the Cancer Detection Center now operating as an area referral center in Providence Hospital in Kansas City, Kansas. The records of patients will be studied to show effectiveness and yield of test results, type of personnel who have used the clinic and their source of referral, and effectiveness of follow-up.

7. *Cardiovascular work evaluation—\$21,100 (direct cost)*

This project will demonstrate the Cardiac Work Evaluation Unit and show its usefulness for the evaluation and rehabilitation of the patient. It is developing an effective technique for showing physicians and the community at large the ability of patients to return to work after receiving the appropriate rehabilitation.

METROPOLITAN DISTRICT OF COLUMBIA REGIONAL MEDICAL PROGRAM

This region began its operational activities on March 1, 1968, with an award of \$418,318. A staff of 47, including about 11 physicians, two nurses, seven other allied health personnel, and 27 other types of supportive personnel such as computer programmers, coding clerks and secretaries will work together to improve local medical capabilities and resources. About half of the staff is from the medical center and the other half is from community hospitals and other local health agencies. This combination of medical center-community personnel helps assure a quality, community oriented program.

Seven hospitals are currently participating, and this number will increase as the program expands over the next few years to reach out to the entire region. Three of these hospitals are directly participating in the projects outlined below, two additional hospitals are on the Regional Advisory Group, and two are serving on planning subcommittees. However, several additional hospitals will benefit from these programs as they send their personnel to be trained in the programs outlined below.

Operational Projects

1. *Freedman's Hospital Stroke Station for the Diagnosis, Treatment, and Investigation of Cerebral Vascular Disease, direct cost—\$181,889*

This project is a comprehensive approach to stroke, from diagnosis and treatment to home care and rehabilitation in an urban Negro area. Based in the Freedman's Hospital, a community hospital in the region, the stroke station will serve as a teaching component for physicians and medical students. Related epidemiological and socio-economic studies will be undertaken.

2. *The Washington, D.C. Regional Cerebrovascular Disease Followup and Surveillance System, direct cost—\$94,200*

Under the sponsorship of Georgetown University, this project is attempting to establish a uniform system for measuring and evaluating medical care given to stroke patients in the area, in order to facilitate nursing and follow-up services. It will provide information helpful in determining community medical facilities requirements, and in carrying out epidemiological or demographic studies. Patients entering the system through the various community hospitals in the region will receive follow-up attention and therefore greater continuity of care.

3. *A training program for cardiovascular technicians, direct cost—\$74,707*

Qualified students are being trained at the Washington Hospital Center in Washington, D.C. in specific areas of medical observation and procedures to complement nurses' activities. In addition to training personnel for work in hospitals throughout the region, this project hopes to produce a manual for training these technicians in the other regional hospitals.

MISSOURI REGIONAL MEDICAL PROGRAM

Operational activities began in Missouri on April 1, 1967, and current operational funds amount to \$2,619,000. An estimated 160 operational staff people, with diverse backgrounds, are serving on the Program, including approximately 15 physicians, four nurses, 16 allied health personnel, three social scientists, and approximately 60 computer specialists and their supporting personnel. The remaining staff provide overall support, such as research and staff assistants and administrative and clerical personnel.

The developmental approach being employed by this region and outlined in project descriptions below suggests that hospital involvement will increase rapidly over the next two years. Currently, nine hospitals are involved in the program, including two hospitals which are represented on the Regional Advisory Committee.

Operational Projects

1. *Smithville community health service program—direct cost \$200,957*

The purpose of this project is to establish a model community health service program including continuing education and training programs and health education for the public; emergency intensive and restorative care facilities; home care programs; public health, preventive medicine, and school health; coordinated with voluntary health agencies. Program centered around Smithville and to include about 50,000 persons in county (Clay). Activities are centered around Smithville Community Hospital and the group practice clinic as a nucleus.

2. *Multiphasic testing of an ambulant population—direct cost \$421,471*

This project is designed to establish centers for performing series of diagnostic laboratory tests to identify the most useful tests feasible for screening large rural population groups; determine the different patterns for ill and healthy populations as an aid in detection of heart disease, cancer and stroke in pre-clinical stages. Model test centers will be established at the University Medical Center, Columbia, Missouri, and the State Mental Hospital in Missouri. A third is planned for the Smithville complex.

3. *Computer fact bank—direct cost \$279,365*

This project is designed to develop and apply techniques for delivering latest information on diagnosis and care of patients with stroke and allied diseases to the local physicians. Electronic data information storage and retrieval system will be developed at the University Medical Center (Columbia, Missouri) and later extend to include Smithville and other communities in the region.

4. *Mass screening-radiology—direct cost \$54,814*

This project will help improve the accuracy of radiologic diagnosis of heart disease, cancer and stroke through electronic communications media. Three small rural hospitals will be hooked into the University of Missouri computer and Department of Radiology to evaluate diagnostic efficiency and determine applicability of ultra-sound and thermography in diagnosis and therapy.

5. *Comprehensive cardiovascular care units—Springfield, Mo., direct cost \$69,347*

A comprehensive care unit for grouping patients with heart disease or other circulatory system illness or who have been admitted for other purposes but require close cardiac observation is being developed. The project is to be undertaken at hospitals without a house staff, where it is hoped that grouping of patients will relieve the workload for nurses on general medical and surgical wards. St. John's Hospital medical staff and Greene County Medical Society are coordinating activities with 3 local hospitals in Springfield.

6. *Communication research unit—direct cost \$61,743*

Supporting research unit for program to identify public attitudes and knowledge about heart disease, cancer, and stroke; to understand motivations for seeking health care and to determine and develop effective methods for communicating with public and lead them to seek medical care.

7. *Data evaluation, computer simulation and systems design—direct cost \$329,712*

This program will help to determine data needed from the public and physicians for early detection of heart disease, cancer and stroke through studies on the form of data, mechanisms for classifying, storing and retrieving data most effectively.

8. *Bioengineering project—\$229,129*

The aim of this activity is wider distribution in rural areas of sensor transducers, for early detection of heart disease, cancer and stroke and to generate more information on physiological patterns of these diseases.

9. *Program evaluation center—direct cost \$103,899*

Through a multidisciplinary research approach accumulate data in two separate communities about health care, needs and attitudes as a base for developing instruments for measuring quality of care and levels of health in terms of an individual's function in his community.

10. Automated patient history—direct cost \$77,561

This project is testing the feasibility of an automated system for obtaining patient history and analyze complaints prior to examination by physicians, as an aid in early disease detection.

11. Automated electrocardiography in a rural area—direct cost \$369,000

To provide hospitals and physicians in rural areas with automated facilities for transmitting electrocardiograms and an automated system for analyses of ECG's; to demonstrate the feasibility of such systems where this service is limited or non-existent, and to develop, test and implement the use of bioengineering signals as aid in diagnosis.

12. Operations research and systems design—direct cost \$39,055

This activity will help develop systems concerned with testing "early detection" hypothesis-develop operational methods of early detection tests for a large rural population.

13. Population study group survey—direct cost \$65,200

Using National Health Survey questionnaire study factors contributing to use of health services in small towns, with emphasis on the influence of availability of care.

14. Automated hospital record system—direct cost \$52,100

This activity is testing the automation of hospital record data through use of computer systems to organize a ready reference service and easy access to hospital data as a base for measuring effectiveness of changes.

15. Computer Assembled On-Going Manual of Medical and Paramedical Services—direct cost \$26,842

16. Central core administration, planning and coordination—direct cost \$238,805
(University of Missouri Medical Center, Columbia, Missouri) Missouri Regional Medical Program.

MOUNTAIN-STATES REGIONAL MEDICAL PROGRAM

This four-state region (Idaho, Montana, Wyoming and Nevada) began its operational activities on March 1, 1968 with an operational award of \$206,913 to include one activity in coronary care. An operational staff of approximately eleven will serve in the project, and includes five physicians and six nurses. The hospitals involved will include the community hospital in which the activity is taking place as well as those hospitals who will send their staff to the unit for training. The Regional Advisory Group also includes two hospital representatives.

Operational Projects

1. Intensive coronary care in small hospitals in the region—direct cost \$206,913

Hospitals in the Region will send Registered Nurses into St. Patrick's Hospital, Missoula, Montana for coronary care training. This 3 week course will be offered three times a year for 21 nurses, and there will be follow-ups at the home hospitals four times a year. In addition, a 4-day training program especially designed for small town physicians will be held at the University of Montana four times a year.

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

On March 1, 1968, the North Carolina Regional Medical Program received a combined planning and operational award totalling \$1,485,341. The operational component of this award totalled \$753,759 in direct costs only. The operational staff includes approximately forty individuals, including twenty-eight physicians, one nurse, six other allied health personnel, and five general support personnel.

North Carolina has already involved twenty-seven of its hospitals in the Program. The Advisory Group includes four hospital representatives and planning subcommittees include an additional ten hospitals. Approximately twenty-one hospitals are participating in the operational projects outlined below:

Operational Projects

1. Education and research in community medical care, direct cost—\$209,200

To develop resources for training more medical and allied medical students; to provide new types of educational experiences which will make family practice more attractive; to have a post-graduate education program at the medical school; to strengthen ties between the medical school faculty and practicing physicians; and to have the medical school become involved in community planning for improving the quality and availability of medical care. Affected by this project are the following groups: the University Community; the Caswell County Rural Health Services Project; the Regional Health Council of Eastern Appalachia, Inc.; the State of Franklin Health Council, Inc.; the Charlotte Memorial Hospital; the Moses Cone Memorial Hospital, Greensboro; and the Dorothea Dix Neuromedical Service.

2. Coronary care training and development, direct cost—\$56,938

To use the project as a medium for developing cooperative arrangements among the various elements in the health care community. Initial and continuing education will be provided to nurses and physicians in community hospitals, consultation will be available to hospitals in establishing CCU's, and a computer-based system of medical record keeping will be developed. This project has led to new working arrangements: (1) between the university medical centers; (2) between medical and nurse educators; (3) between doctors and nurses in community hospitals; (4) between university medical centers and community hospitals.

3. Diabetic consultation and educational services, direct cost—\$132,081

To establish three medical teams to deliver services throughout the state; to assist in expansion of diabetic consultations and teaching clinics; to provide seminars for physicians and teaching sessions for nurses and patients to assist in organization of a State Diabetes Association and local chapters; to test techniques of data collection. Many people of different disciplines in many communities are involved in this project.

4. Development of a central cancer registry, direct cost—\$66,615

To devise a uniform region-wide cancer reporting system, integrated with the PAS, the computer-stored data from which can be retrieved to serve a broad range of educational, research, statistical, and other purposes. The following hospitals are participating in the first year of the project: Duke University Medical Center, North Carolina Memorial Hospital, North Carolina Baptist Hospital, Charlotte Memorial Hospital, Veterans Administration Hospital, Watts Hospital, Hanover Memorial Hospital, Southeastern General Hospital, Craven County Hospital. In subsequent years the registry will be expanded to include all hospitals and physicians in the region.

5. Medical library extension service, direct cost—\$25,839

To bring medical library facilities of the three medical schools into the daily work of those engaged in medical practice. Local hospital personnel will be trained to assist medical staff; libraries will be organized into a functional unit for responding to requests for services. Bibliographic request service will be established.

6. Cancer Information Center, direct cost—\$41,716

To provide practicing physicians with immediate consultation by telephone and follow-up literature. Each of the three medical schools will be responsible for providing service in its geographic locale. The aims of this project are two-fold: (1) to assist physicians in providing optimum care of patients with cancer; and (2) to continue the education of the physicians by giving new information in a patient-centered experience.

7. Continuing education in internal medicine, direct cost—\$33,313

To bring practicing internists from all over the state to the Medical Center for a month of up-to-date training in their subspecialties. They will share responsibilities with attending physicians and make ward rounds with students, staff, and together. This experience should enhance the appreciation in the University, both at faculty and student levels, for the expanding role of the medical center for the quality of care in the community.

8. Continuing education in dentistry, direct cost—\$67,500

To provide physicians and dentists with the knowledge of mutual concern which will enable them to be more effective members of the health team. Courses will be given at the University of North Carolina and in communities. Studies will be made of facilities needed to provide dental care in hospitals. The purpose of this project is to insure that as many patients as possible who suffer from heart disease, cancer, stroke, or a related disease receive appropriate dental care as a part of their comprehensive treatment.

9. Continuation education for physical therapists, direct cost—\$27,838

To develop and establish regional continuing education programs for physical therapists in order to strengthen physical therapy services for patients in all parts of the state. Subregions will be delineated where needs and interests will be identified and committees will be organized to arrange local activities.

10. The establishment of a network of coronary care units in small community hospitals in Appalachia, North Carolina

This is a proposal to develop coronary care units in seven hospitals in this rural, mountainous area. RMP will supply the monitoring equipment (the hospital provides suitable space) when adequately trained physicians and nurses are available. An intensive training course for physicians will be conducted in the geographic region, and continuing education programs will be conducted when necessary.

ROCHESTER REGIONAL MEDICAL PROGRAM

On March 1, 1968 the Rochester Program began its operational activities with a modest operational grant award of \$255,487. Approximately 15 people are currently serving on the staff which will expand with additional recruitment. The current staff includes 13 physicians, and two allied health personnel. A majority of the staff are from community hospitals, and are working closely with medical center and RMP staff to improve the quality of local patient care.

Approximately eleven hospitals from the region are now participating in the program, and this will expand as the program moves forward over the next few years. Four hospitals are initially participating in the operational projects. Three of these four are represented on the Regional Advisory Committee. Seven additional hospitals are serving on the Advisory Committee and planning subcommittees.

Operational Projects

1. *Renovation and equipping of facilities for a learning center for projected training programs related to heart disease, cancer, and stroke, direct cost—\$26,400*

The awarded funds are for the purpose of altering and renovating space in Helen Wood Hall, which houses the Departments of Nursing at the University of Rochester. It is planned to convert five rooms into two rooms for self-instructional learning. These facilities initially will be used for four 4-week coronary care training courses for nurses and physicians in the region. New techniques that are disseminated by means of these courses will then be carried to the various community hospitals and rural areas in the region by the training course participants.

2. *Postgraduate training program for the physicians in the Rochester 10-county region, direct cost—\$83,900*

The objectives of this project are centered around the further development of a postgraduate program in cardiology. Learning opportunities will be made available for general practitioners and internists, as well as cardiologists practicing in the region. Several different programs are planned and vary in length from one-half day to two weeks. It is anticipated that a number of the participating physicians will represent community hospitals in rural areas.

3. *Registry of patients with acute myocardial infarction in the Rochester regional hospitals, direct cost—\$21,200*

One objective of this registry is to provide a uniform data collection system from which both periodic information as well as longitudinal analyses may be extracted. Appropriate information as to prognosis and treatment will be disseminated to participating hospitals and cooperating physicians in the region. Strong Memorial Hospital in Elmira, New York is already participating in this project, and it is anticipated that several other community hospitals, especially those in rural areas, will soon also be participating.

4. *Proposal for establishment and support of a regional laboratory for the education and training in the care of patients with thrombotic and hemorrhagic disorders, direct cost—\$69,400*

At the present time no single, central facility concerned with the diagnosis and therapy of patients with thrombotic or hemorrhagic disease exists in the Rochester region. Laboratory technicians from the regional hospitals will be invited to spend three or four days in the new facility. In addition, the physicians directing this project will visit the participating communities so that a continuing educational program for practicing physicians in the care of patients with thrombotic diseases will be maintained.

TENNESSEE MID-SOUTH REGIONAL MEDICAL PROGRAM

On February 1, 1968, the Tennessee Mid-South Regional Medical Program began its operational activities with a diverse array of programs designed to provide local health practitioners and hospitals with advanced techniques and facilities necessary for quality health care. Over fifty people are currently serving on the staff of the operational program, including approximately thirty-five physicians, five nurses, five other allied health personnel, and nine general support personnel. About one-fourth of the staff are from community hospitals and the remaining are medical center staff who are working on the community oriented projects discussed below.

Seventeen hospitals are currently participating in the operational projects, representing broad geographic spread throughout the region. Ten of these hospitals are also represented on the Regional Advisory Group.

Operational Projects

1. *Continuing medical education—Meharry, direct cost—\$44,800*

Meharry Medical College is informing Negro physicians in the region about more effective techniques for treating heart disease, cancer, and stroke. Teams of physicians will teach two-week courses in the three areas at the Medical Center, using various audio-visual aids and, where feasible, programmed instruction. One of this plan's interesting provisions is sending a senior resident from Meharry to care for the physician's practice while he is attending the course.

2. Continuing education—Vanderbilt, direct cost—\$141,600

Vanderbilt proposes to establish continuing education centers at community hospitals linked to a proposed Department of Continuing Education at Vanderbilt. Libraries and information centers at the local hospitals will bring Vanderbilt's information resources to the local physician. The program, though planned and coordinated by Vanderbilt, will function through the local centers and emphasize bringing information to the physician at the times he needs it.

3. and 4. Hopkinsville Education Center and Chattanooga Education Center, direct cost—\$73,700

These are the first of the local continuing education centers specified in the Vanderbilt plan. At each hospital, a full-time Director with an appointment at Vanderbilt and an assistant director will supervise resident and physician education in their area. Their services will be available to physicians at smaller community hospitals in each area, as will the enlarged hospital library facilities. The Chattanooga and Hopkinsville locations provide the basis for looking at problems in continuing education in urban and rural settings.

5. Special training for practicing radiologists—Vanderbilt, direct cost—\$50,400

This plan focuses on developing practicing radiologists' skills in vascular radiology, but might later be broadened to include all aspects of diagnosis and therapeutic radiology. Two post-graduate educational methods will be used. One to three month courses for technologists will be offered. In addition, eminent radiologists will preside at two-hour monthly seminars to which all radiologists in the region will be invited.

6. Cardiac nurse training program—Mid-State Baptist Hospital-Nashville, direct cost—\$49,600

The key factor in reducing mortality from cardiac arrest is the immediate availability of a knowledgeable person to initiate resuscitation. Mid-South Baptist proposes to instruct cardiac nurses in new resuscitation techniques by holding three four-week courses. These nurses will then be available to hospitals throughout the region.

7. School of X-ray and technology—Meharry, direct cost—\$19,500

Meharry plans to establish a two-year program for training at least ten X-ray technologists per year. The faculty will be Meharry's Radiology staff. Feasibility studies for establishing nuclear medicine and radiotherapy programs will be conducted.

8. Radiology technologist training program—Vanderbilt, direct costs—\$30,300

Vanderbilt proposes to increase the number of X-ray technologists, improve the quality of their training, and increase their opportunities for continuing education. Three small hospital training programs in the area will be discontinued as separate entities and subsumed by a new school of X-ray technology at Vanderbilt. Practical clinical experience will be both at Vanderbilt and the smaller hospitals.

9. Nuclear medicine training program—Vanderbilt, direct cost—\$25,300

A new series of courses taught by paramedical and medical personnel will be made available to physicians and technologists to increase their skill in nuclear medical techniques. When possible the physician and his technologist will spend some training time together to work out procedures suited to their situation. Trainees will be accepted from smaller community hospitals planning to establish or improve nuclear medicine services.

10. Expansion of School of Medical Technology—Baroness Erlanger Hospital—Chattanooga, direct cost—\$35,400

To augment medical technology capabilities in the area, this plan makes two proposals: (1) Expand the Baroness Erlanger program for medical technologists; and (2) establish a school for certified lab assistants who could free technologists from more routine work for more complex procedures.

11. Vanderbilt Coronary Care Unit, direct cost—\$51,600

This project's purpose is to establish a network of coronary care units with adequate equipment, staffed by well trained personnel. Vanderbilt will be the training and information center for the region; a demonstration unit there will provide a focal point for continuing education. In addition, communication systems will be set up to facilitate the flow of information from Vanderbilt to the community hospitals. Studies are being made to see if the small hospitals connected with Vanderbilt can become, in turn, centers for local networks of coronary care facilities in still smaller hospitals.

12. Franklin Coronary Care Unit—Williamson County Hospital—Franklin, direct cost—\$31,400

This is one of the subsidiary units mentioned in the Vanderbilt proposal. This is primarily a pilot project to study the feasibility and usefulness of establishing a center in a small community hospital.

13. Hopkinsville Coronary Care Unit—Jennie Stuart Memorial Hospital—Hopkinsville, Ky., direct cost—\$49,500

This plan is similar to the Franklin plan, except that it mentions establishing links to smaller community hospitals by helping set up smaller care units in them, thus providing for the grouping of rural community hospitals for more efficient use of existing resources.

14. Clarksville Coronary Care Unit—Clarksville Memorial Hospital, direct cost—\$19,000

As the Franklin program, this project is a subsidiary of the Vanderbilt proposal. Since this hospital has been operating a unit, the plan calls for its expansion, continuing education and a phone hook-up to Vanderbilt.

15. Nashville General Coronary Care Unit—Nashville Metropolitan General Hospital, direct cost—\$42,100

Again, this is like the Franklin plan. Nurses here will be included in the in-service training programs initiated throughout the participating hospitals.

16. Meharry Medical College Coronary Care Unit, direct cost—\$35,800

Meharry intends to establish a demonstration unit of coronary care facilities which will serve as a continuing education center for smaller hospitals in its region.

17. Murray Coronary Care Unit—Murray—Calloway (Ky.) County Hospital, direct cost—\$38,800

Murray-Calloway County Hospital, the training center for Murray State University School of Nursing, will serve as a demonstration center for the sub-region. Direct phone communication will be established with Vanderbilt, which will send consultants from its school of continuing education. This project has the dual objective of relating the Murray State Nursing program to an established medical center and providing regional training resource to a remote area.

18. Chattanooga Coronary Care Unit—Baroness Erlanger Hospital, direct cost—\$14,400

Baroness Erlanger plans to establish a coronary care unit in a program of cooperation with Vanderbilt. Both telephone communications and electronic maintenance systems connected with Vanderbilt will be installed. This unit will serve as a center for the smaller hospitals in Chattanooga.

19. Baptist Hospital Coronary Care Unit—Mid-State Baptist Hospital, Nashville, direct cost—\$51,000

This plan is similar to the others included in the Vanderbilt plan. Baptist Hospital will expand its present facilities and aid establishment of smaller centers at Tullahoma and Crossville, Tennessee. Direct telephone lines will be established for consultations. The unit director will have a clinical faculty appointment at Vanderbilt. He will devote approximately 25% of his time to the unit.

20. Crossville Coronary Care Unit—Uplands Cumberland Medical Center, Crossville, direct cost—\$28,500

This project has two purposes: (1) to establish a two-bed coronary care unit in the hospital; and (2) to determine the feasibility of operating acute coronary care units in rural areas. The hospital will cooperate with Mid-State Baptist Hospital and Vanderbilt.

21. Tullahoma Coronary Care Unit—Horton Memorial Hospital, Tullahoma, Tenn., direct cost—\$28,800

See Baptist Hospital Program.

22. Meharry superelectricity therapy program, direct cost—\$58,500

This project is aimed specifically at improving cancer therapy for a large indigent population. Meharry will use its funds to obtain a cobalt 60 High Energy Source for therapy and a computer hook-up with Vanderbilt. These facilities will also be used to improve undergraduate and graduate radiology training programs at Meharry.

23. Project to improve patient care in a remote mountain community by recruiting and training health aides for a new extended care facility—Scott County Hospital—Oneida, Tenn., direct cost—\$10,500

Manpower shortage in this isolated mountain hospital is critical. Personnel to man an extended care facility now under construction will be obtained by two methods: (1) In-service training for hospital personnel; (2) an educational director (an RN) to serve as a liaison to the high schools to encourage young people to enter the medical field and come back home to practice. In addition a training program leading to the LPN would be initiated. Clinical training will be supervised by the Educational Director while local high schools provide basic training.

24. Health evaluation studies on a defined population group—multiphasic screening—Meharry Medical College, direct cost—\$486,000

Meharry will determine the effectiveness of a comprehensive health program and multiphasic screening examinations in early diagnosis of heart disease, cancer, stroke and their precursors. To run this experiment, a neighborhood medical center supported by OEO will serve a selected population of 18,000. The test population and a control population will be evaluated with reference to morbidity, changes in health attitudes and utilization patterns, effectiveness of the screening procedure and the cost per patient diagnosed or treated.

25. Experiment to test and implement a model of patient care—Vanderbilt University Hospital, direct cost—\$110,400

This is an attempt to define a new structure for patient care. New personnel called stewardesses will be trained to take over the nurses' non-clinical duties. Nurses would then be free to spend more time with the patient and to keep up their specialized skills. After the model is refined at Vanderbilt, it will be tested in community hospitals—specifically Baptist and St. Thomas.

26. A medical surgical nurse specialist graduate program to improve nursing care of patients with heart disease, cancer, and stroke—Vanderbilt University School of Medicine, direct cost—\$23,600

Vanderbilt is developing a program to train medical surgical nurse specialists to improve nursing care of heart, cancer, and stroke patients. It will be a master's degree program staffed by physicians and clinical nurses (1 calendar year) plus one year of clinical experience half at Vanderbilt and half at the community hospital. Stipends will be provided during the first year only.

WASHINGTON-ALASKA REGIONAL MEDICAL PROGRAM

With an operational grant award of \$1,032,003 on February 1, 1968, this two-state region began its efforts to bring quality care to the dispersed populations of this area. About forty operational staff members are currently serving on the program, including about seventeen physicians, three nurses, six other allied health personnel, and fourteen related health and general support personnel. About one-third of the staff is from the medical center, another third is from community hospitals and the last third is from other health and medical organizations. The entire staff is working in concert to bring up-to-date medical techniques to communities throughout the region.

Strong hospital involvement in the Washington-Alaska program is evident in the project descriptions below. Approximately 36 hospitals are currently participating in the program, almost 20 of which are directly involved in operational activities. Six of these hospitals are represented on the Regional Advisory Groups, and an additional four of these are on planning subcommittees. The remaining participating hospitals are involved in current planning activities. It is likely that these, and the many other hospitals in the region, will become increasingly involved in operational activities.

Operational Projects

1. Central Washington—Communication system for continuing education for physicians—\$18,181 (direct cost)

This project is designed to bring the medical resources of the University of Washington to physicians and community hospitals in Yakima, who in turn will act as consultants to surrounding smaller communities through seminars and conferences, educational TV, other audio-visual instruction; and exchange of teachers and practitioners. It will also connect internists in Central Washington to Yakima cardiologists via EKG telephone hot-line, to permit quick analysis (starting with 5 community hospitals). Three general hospitals in Yakima involved are: St. Elizabeth's, Yakima Valley Memorial, and New Valley Osteopathic. Nine other community hospitals to be reached initially are located in Ellensburg, Moses Lake, Othello, Toppenish, Prosser and Cynnyside.

2. Southeastern Alaska—Postgraduate education—\$27,062 (direct cost)

This program will help improve communication between Seattle Medical Community and University to alleviate problems of the isolated physicians in southeast Alaska cities and communities: Juneau, Sitka, Ketchikan (3 largest). As in Central Washington several methods will be used such as telelectures, consultant services, seminars and the EKG hot line to hospitals in Juneau, Sitka, and PHS Native Hospital at Mt. Edgecumbe and Ketchikan community hospital.

3. Postgraduate preceptorship for physicians—Coronary care—\$17,610 (direct cost)

A pilot project to provide opportunity for practitioners from isolated communities to spend a week or more under a preceptor at major medical centers to study advances in care of coronary heart disease. The 4 major medical centers in Seattle are Providence Hospital, Swedish Hospital, Virginia Mason Hospitals and Medical Center, and University Hospital and Medical Center; two in Spokane are Deaconess Hospital and Sacred Heart Hospital.

WESTERN NEW YORK REGIONAL MEDICAL PROGRAM

With an award of \$357,761, the Western New York Regional Medical Program began its operational program on March 1, 1968. The current operational staff of seven physicians, one nurse, and two secretaries will be expanded to over 20 during the next several months. Over forty hospitals are currently involved in this program, almost all of which are slated to be part of the developing regional two-way TV network for continuing education. Eleven hospitals are represented on the Regional Advisory Group, and an additional two hospitals are serving on planning subcommittees.

Operational Projects

1. *Two-way communications network, direct cost—\$170,510*

A two-way communication network will link hospitals of Western New York and Erie County, Pennsylvania to the Continuing Education Departments of the State University of New York at Buffalo and the Roswell Park Memorial Institute. The network will serve several purposes, such as continuing education for physicians and the health-related professions, public education, administrative communication, consultation with experts, and contacts among blood banks. It will assist both the physician and community hospital, in either the rural or urban environment in having at their fingertips the latest advances in the diagnosis and treatment of heart disease, stroke, and cancer. Particular emphasis will be placed upon involving rural hospitals in this program thereby improving both their didactic and restorative function.

2. *Coronary care information coordinators, direct cost—\$127,544*

This project will test a training technique for providing qualified nurses who will be required to staff developing coronary care units in the Region. Approximately 80 nurses will be selected from all parts of the Region for a combined academic and clinical course. It is planned that the nurses receiving this training will return to both rural and urban hospitals for the purpose of providing a diagnostic and didactic function. While the program will be housed at the medical center, the community hospitals of this region will be the benefactors of the project. Since there are few nurses trained to work in coronary care units, particularly in the rural environment, special attention will be paid to attracting nurses who will return to the community hospital.

WISCONSIN REGIONAL MEDICAL PROGRAM

The Wisconsin Program began its operational activities on September 1, 1967 when it became the first Regional Medical Program to be awarded a combined planning and operational grant. Currently funded with \$630,147, about one third of which is for operational activities, the operational staff numbers 20. About one-third of the staff are physicians, another third are allied health personnel, and the last one third are supportive and other type of personnel.

Approximately 20 hospitals are involved in the current phase of the Program. Eleven of these hospitals are directly involved in the operational projects. Five are represented in the Regional Advisory Group and the remaining are represented in planning subcommittees. As the program develops additional activities during the next few years, it is anticipated that many additional hospitals will be involved.

1. *Study program for uterine cancer therapy and evaluation, direct cost—\$40,100*

This pilot project is designed to review and evaluate current radiotherapy for patients with uterine cancer. In its first phase it will involve information exchange and dosimetry standardization. Hospitals at Marquette and the University of Wisconsin will be connected to a central, computerized data bank in Milwaukee which will compute radiation classes. When the necessary computer techniques are developed, it is projected that the central facility will be linked to other hospitals outside the Milwaukee and Madison areas with similar treatment programs, and the long-term result will be to improve local medical capabilities for the treatment of all uterine cancer patients in the Region.

2. *A pilot demonstration program for pulmonary thromboembolism, direct cost—\$84,600*

In this project a center is being established at Marshfield Hospital in Marshfield, Wisconsin, for demonstrating diagnostic techniques and the available therapy for pulmonary thromboembolism. The project has a continuing education component which will reach physicians from many hospitals in the Region. This will involve a 24-hour consultation service, the preparation of a movie on the topic, and special training sessions for groups of physicians.

The project will demonstrate a comprehensive program which will encompass diagnostic, preventive, therapeutic, and rehabilitation procedures for patients, postgraduate education, a rapid transportation system for patients from Northern sections of the state, and cooperation between the clinic and other hospitals and medical schools in the State.

3. *Telephone dial access tape recording library in the areas of heart disease, cancer, stroke, and related diseases, direct cost—\$18,950*

This feasibility study will be carried out by the University of Wisconsin which will record and store short, 4-6 minute, tapes on various aspects of treating patients with the three diseases. Any physician anywhere in the

4. Coronary care unit coordination—\$70,255 (direct cost)

This activity will serve as coordinating unit for CCU related projects—their development, improvement of operations, and training activities. A mock-up coronary care unit will be used in the educational programs for nurses and physicians; audio-visual self-instruction materials will be produced and evaluated.

5. Cardiac pulmonary technician training—\$41,554 (direct cost)

This program will help develop a formal program for training cardio-pulmonary technicians to perform non-critical functions in coronary care units and free physicians for other duties. Four larger general hospitals in Spokane will participate with Spokane Community College. The 4 hospitals are Deaconess, Holy Family, Sacred Heart and St. Luke's Hospital.

6. Information and education resource support unit—\$522,304 (direct cost)

This program will help provide medical communities with the skilled assistance which will help identify their educational needs and serve as a support unit in developing programs to meet them; to establish a central production unit, to coordinate audio-visual projects and the distribution of materials, to penetrate the entire region.

7. Two-way radio conference and slide presentation—\$8,445 (direct cost)

Six pilot programs on heart, cancer and stroke topics to be transmitted via two-way radio-telephone slide conferences, to physicians and hospital staffs on topics selected by a panel of physicians, starting with 20 hospitals in Washington are underway. It will explore potential for continuing network series with local and remote regions.

8. Continuing education and on-the-job training of laboratory personnel—\$53,446 (direct cost)

Primary purpose of this activity is to train technical personnel in newer clinical laboratory procedures, and shorten gap between availability of advance in techniques and actual use. First phase is to be directed at 5 local designated training centers in Washington (cities of Seattle, Tacoma, Spokane, Yakima and Vancouver) and Anchorage, Alaska. University of Washington will select from a list of available lab procedures, arrange training courses for technicians in specific ones at designated facilities and establish quality control criteria; they will follow through with education of physicians in newer and practical tests for better diagnosis and treatment.

9. Alaska medical library facilities—\$21,754 (direct cost)

This activity will help develop a community medical library located at the PHS Alaska Native Medical Center, Anchorage, for Alaska physicians and health related staffs and agencies. It will have close ties with community colleges, Arctic Health Research, University at Fairbanks and to supplement continuing education projects for Southeast Alaska and the Anchorage cancer project.

10. Anchorage cancer program—\$51,450 (direct cost)

This project will aid in providing a supervoltage therapy unit for cancer patients to be located in an addition to Providence Hospital in Anchorage. It involves training of radiologist and technical staffs, consultant clinical conferences and accumulation and analysis of diagnostic data. Presbyterian Community Hospital in Anchorage will be participating.

11. Care of children with cancer (study)—\$23,030 (direct cost)

This is an epidemiological study to determine the impact of different methods of care for children with cancer, focusing on differences among children treated in local communities and at major centers; to be conducted by the staff of Children's Orthopedic Hospital and Medical Center, Seattle.

12. Radiation physicist consultation program for radiologists in Washington and Alaska—\$56,393 (direct cost)

This project will provide consultation services of a radiologist-physicist for smaller hospitals, in dosimetry and other problems of radiotherapy. To enhance postgraduate education for radiology residents and paramedical trainees outside of the University system.

13. Computer-aided instruction in heart disease, cancer, and stroke and related diseases—\$53,390 (direct cost)

To develop and evaluate the effectiveness of computer-aided instruction for teaching medical techniques. Participants will be instructed in the use of computer terminals.

Region can dial the library at any time and request a tape relevant to a problem in which he is interested.

4. Nursing telephone dial access tape recording library in the areas of heart disease, cancer, stroke, and related diseases, direct cost—\$18,800

This feasibility study, similar to the one above, will establish a central tape library with information recorded on nursing care in emergencies, new procedures and equipment, and recent developments in nursing. Nurses from any hospital in the region will be able to call at any time to have a tape played to them.

5. Development of medical and health related single concept film program in community hospitals, direct cost—\$33,250

This education feasibility project involves ten community hospitals in its first phase. Fifteen films on procedures and techniques used in treating heart, cancer, and stroke, will be developed. Projectors and the films will be installed in the hospitals for use by physicians and other health personnel at their convenience as a continuing education device. After four to six months the materials will be relocated in ten additional hospitals.

TELEVISION, RADIO AND TELEPHONE NETWORKS FOR CONTINUING EDUCATION

OPERATIONAL PROJECTS

I. Albany Regional Medical Program

Two-way radio communication system—Direct cost, \$144,100

This project will expand an existing two-way radio network to include 57 hospitals and 24 high schools. It will provide continuing education for physicians and allied medical personnel. It will also provide information and education programs for administrators, members of boards of trustees, voluntary health agencies, adult education classes, and selected civic groups.

II. Intermountain Regional Medical Program

Network for continuing education in heart disease, cancer, stroke, and related diseases—Direct cost, \$243,000

The objectives of this program are to develop a communications network between patient-care and research institutions to encourage liaison between health care personnel in the area. The currently existing two-way radio system, including 11 hospitals in 7 communities in or near Salt Lake City has been expanded to 10 additional remote hospitals to serve as one link. This system will be expanded to additional hospitals in response to physician requests. Closed circuit TV and use of KVED (University of Utah education TV) is also planned. This may establish the community hospital as the focus of continuing education.

III. Kansas Regional Medical Program

Health sciences communication and information center—Direct cost, \$77,900

This project is engaged in conducting studies to determine the feasibility of establishing communication linkages vital to education, service and research programs. Specific studies to be undertaken are a physician communication system, TV teaching, electronic linkages, and Medlars search capacity. Linkages will be established at hospitals in Great Bend, Pittsburg and Kansas City.

IV. Washington-Alaska Regional Medical Program

Central Washington—Communication system for continuing education for physicians—Direct cost, \$18,181

This project is designed to bring the medical resources of the University of Washington to physicians and community hospitals in Yakima, who in turn will act as consultants to surrounding smaller communities through seminars and conferences, educational TV, other audio-visual instruction; and exchange of teachers and practitioners. It will also connect internists in Central Washington to Yakima cardiologists via EKG telephone hot-line, to permit quick analysis (starting with 5 community hospitals). Three general hospitals in Yakima involved are: St. Elizabeth's, Yakima Valley Memorial, and New Valley Osteopathic. Nine other community hospitals to be reached initially are located in Ellensburg, Moses Lake, Othello, Toppenish, Prosser and Sunnyside.

Southeastern Alaska—Postgraduate education—Direct cost, \$27,063

This program will help improve communication between Seattle Medical Community and University to alleviate problems of the isolated physicians in southeast Alaska cities and communities: Juneau, Sitka, Ketchikan (3 largest). As in Central Washington several methods will be used such as telelectures, consultant services, seminars and the EKG hot line to hospitals in Juneau, Sitka, and PHS Native Hospital at Mt. Edgecumbe and Ketchikan community hospital.

Two-way radio conference and slide presentation—Direct cost, \$8,445

Six pilot programs on heart, cancer and stroke topics to be transmitted via two-way radio-telephone slide conferences, to physicians and hospital staffs on topics selected by a panel of physicians, starting with 20 hospitals in Washington are underway. It will explore potential for continuing network series with local and remote regions.

V. Western New York Regional Medical Program

Two-way communications network—Direct cost, \$170,519

A two-way telephone communication network will link over 40 hospitals of Western New York and Erie County, Pennsylvania to the Continuing Education Departments of the State University of New York at Buffalo and the Roswell Park Memorial Institute. The network will serve several purposes, such as continuing education for physicians and the health-related professions, public education, administrative communication, consultation with experts, and contacts among blood banks.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE STATEMENT ON REGIONAL MEDICAL PROGRAM EFFORTS DIRECTED AGAINST THE HEALTH PROBLEMS OF THE INNER CITY

In August 1967, the National Advisory Council on Regional Medical Programs issued a statement which gave consideration to the health problems of metropolitan areas and their inner cities. While recognizing the complexities of the urban environment, the Council stressed the responsibility of Regional Medical Programs to contribute to the solution of health problems there. In addition, it recommended that an appropriate group of national leaders be named and called together to consider how the attention of Regional Medical Programs could best be focused on the issue.

In response to the statement and to the Surgeon General's memorandum of October 9, 1967 "Improving the Health Status of the Urban Poor," a meeting was held on November 16, 1967 to consider the problem. Among those persons invited to attend were hospital representatives, RMP coordinators from urban areas, health planners, representatives from OEO, medical school officials and physicians with responsibility for the provision of care to the urban poor. The discussion concerned the need for immediate action to reduce the health status differential which now exists, the need for experimentation in the methods of delivering health care, and the need for coordinating the activities of diverse groups which provide health care services in the inner city as well as specific approaches and projects which might be undertaken.

At the local level, Regional Medical Programs which include major metropolitan areas have developed varied approaches to solving these problems. These efforts include cooperative arrangements between hospitals, health departments, medical schools, voluntary agencies and practicing physicians to meet the health needs of the poor. Examples of these approaches now under development or in operation can be summarized as follows:

California Regional Medical Program has established a subregion covering the Watts-Willowbrook area of Los Angeles which will facilitate the development of activities aimed at meeting the specific needs of the people there. Through the Regional Medical Program, the University of Southern California School of Medicine and the UCLA School of Medicine are cooperating with the local Charles R. Drew Medical Society (an affiliate of the National Medical Association) in establishing a post-graduate medical school at the Southeast General Hospital now under construction in Watts. This school will provide back-up services to the OEO neighborhood health center in the area, develop training programs for allied health personnel, provide stimulus for additional physicians to enter the practice within the community and will develop training programs for physicians already there. California Regional Medical Program has requested funds for partial support of the school in the early stages of development. In addition, work is now underway at the University of Southern California School of Medicine on the application of cancer case finding methodology to poverty groups.

New Jersey Regional Medical Program has organized an urban health unit within their office and has established a Task Force on Urban Health Services under the chairmanship of Mrs. Anne Somers, a member of their Regional Advisory Group. Membership on the Task Force includes representatives of the New Jersey Hospital Association, the New Jersey State Department of Community Affairs, county medical societies, local OEO CAP programs and other groups. The function of the group will be to stimulate and review projects for improving the availability of health services to persons living in urban areas of the state, particularly low income groups. The group currently is working on the development of hospital based group practices at Middlesex General Hospital in New Brunswick and at West Jersey Hospital in Camden, as demonstrations of improved systems for patient care for heart disease, cancer and stroke.

The New Jersey Regional Medical Program will assign a coordinator/planner to the Model Cities offices in Trenton, Newark, and Hoboken. The function of

these persons will be to gather data on services and the facilities available for people suffering from heart disease, cancer and stroke; to provide liaison between Regional Medical Programs and the Model Cities programs; and to assist the Model Cities offices in developing a program of health services for the community which will be consistent with the overall goals and objectives of the Regional Medical Program.

Tennessee-midsouth Regional Medical Program has developed a number of projects which affect the health care of the poor in Nashville. Coronary care units will be established at Nashville Metropolitan General Hospital and Hubbard Hospital, which serve patients largely drawn from an indigent population. Meharry Medical College will conduct continuing education programs for Negro physicians and will establish a supervoltage radiation unit to improve cancer therapy in the community and improve graduate and under-graduate radiology training. In addition, there is a project to test the effectiveness of multiphasic screening examinations in the early diagnosis of heart disease, cancer and stroke. Meharry will establish a screening center which will operate in support of a comprehensive neighborhood health center funded by OEO and will serve a population of 18,000 people. The test population and a control group will be evaluated and compared with reference to changes in morbidity, patterns of utilization of health services, health attitudes and cost per patient diagnosed.

Tri-State Regional Medical Program received a planning grant in late 1967 and is only now becoming completely organized. Since that time Dr. Norman Stearnes, Program Coordinator, has been involved in a number of meetings where he has made known Regional Medical Program's interest in working to improve the availability of health services to the urban poor. He also is serving on an ad hoc committee formed in Boston by Blue Shield to discuss the planning of home services and will sit on the Health Services Advisory Committee to the Boston City Department of Health and Hospitals. At this time, there are two projects for earmarked funds under development in the Boston area, a stroke project at the New England Medical Center which will have a tie-in with the Columbia Point Neighborhood Health Center and a hypertension project being developed by Dr. Edward Kass of the Channing Laboratory, Boston Department of Health and Hospitals.

Illinois Regional Medical Program has established a number of formal and informal contacts with persons in the Chicago area responsible for providing health services to the inner city including Dr. David Greeley, Associate Director, Chicago Board of Health and Dr. Mark Lepper, Vice President, Presbyterian-St. Luke's Hospital which operates an OEO financed neighborhood health center. Now in the planning stage at Presbyterian-St. Luke's Hospital is a community hypertension detection program which will be focused on the Mile Square area of Chicago. Included would be evaluation of case finding methodology, effectiveness of treatment, nurse interviews with patients and an analysis of the interaction of the program to the community.

Michigan Regional Medical Program: At its recent February meeting the Regional Advisory Group of this program formally adopted a statement for priorities for Regional Medical Program action which reads in part "the first priority for Regional Medical Program support will be given to those projects which are concerned with the improvement of the delivery system of health care including such aspects as (a) improvement of the delivery system of health care to low income groups; and (b) innovations and improvements in the utilization of manpower . . ." Underway is a planning project supported jointly by Regional Medical Programs and the State Health Department (Project ECHO) for gathering data on the health needs in depressed areas of Wayne County, Michigan.

Wayne County General Hospital has submitted a project to study the use of subprofessional workers to assist the physician in patient care and will design and establish training for such persons recruited from the local community. Wayne County General Hospital serves the indigent population of Wayne County and is located adjacent to a large indigent group in western and southern Wayne County, Michigan.

In addition, Regional Medical Program staff at Wayne State University School of Medicine is working to establish liaison with urban health programs in Detroit including OEO and Model Cities. The Executive Director of the Detroit Urban League has been named to the Wayne State Advisory Group.

Indiana Regional Medical Program is working with Flanner House, a voluntary community agency in Indianapolis to develop a multiphasic health screening program for low income population groups. With State and local support the Regional Medical Program is conducting planning and feasibility studies to determine the types of screening procedures which will most effectively reach target population groups and which can in part be administered by previously untrained persons from the community who have received on-the-job training.

New York Metropolitan Regional Medical Program has made specific assignments to members of their core staff for maintaining liaison with community mental health programs, OEO and Model Cities. Particular effort has been made to develop a working relationship with the Provident Clinical Society, the moving force behind an OEO health center in Brooklyn and as a result the president of this organization has recently been appointed to the Regional Advisory Group. In upper Manhattan, the Regional Medical Program is practicing with representatives of the National Medical Association, Columbia University College of Physicians and Surgeons, Mount Sinai School of Medicine and St. Luke's Hospital in the development of continuing education programs for unaffiliated physicians. The Regional Medical Program is also taking leadership in co-sponsoring a conference on health careers for the underprivileged to bring together

all interested forces in the area to develop a coordinated program. Also in the developmental stage, are several projects for earmarked funds including a pediatric pulmonary disease center at Babies Hospital, a feasibility study for the development of screening and treatment of stroke patients at Harlem Hospital, and a mobile coronary care unit to operate out of St. Vincent's Hospital in Greenwich Village.

Metropolitan Washington, D.C., Regional Medical Program will establish a stroke station at Freedman's Hospital, the teaching hospital of Howard University Medical School. The project will improve the care of patients from a predominantly Negro population group by setting up an intensive care stroke unit in the hospital and by developing extensive follow-up services for stroke patients. The unit will be used for training medical students, area physicians, nurses and paramedical personnel in the latest techniques of stroke management. There will be research studies undertaken on diagnostic methods, epidemiology and the cultural, behavioral and socio-economic consequences of stroke. Also submitted for review are stroke projects to be operated at George Washington University Hospital, D.C. General Hospital and Glenn Dale Hospital which would combine university and D.C. Department of Public Health efforts.

Missouri Regional Medical Program will establish at Kansas City General Hospital a special diagnostic and treatment unit for patients with cerebrovascular disease. Approximately 500 patients a year will be referred from the emergency room, outpatient department, clinical services of the hospital and from physicians in the surrounding communities. Kansas City General Hospital serves the majority of indigent patients in the Kansas City, Missouri area and will provide the back-up to an OEO neighborhood health center now under development in the community. Missouri Regional Medical Program and Kansas Regional Medical Program have also established a greater Kansas City liaison committee to review and coordinate the activities of both programs in the metropolitan area.

Georgia Regional Medical Program has submitted for review a project for the development of a community hypertensive control program, to determine the most effective methods to identify symptomatic hypertension in an urban racially mixed community in Atlanta. The project which would be conducted by the Georgia State Health Department would assess the most effective methods to achieve good blood pressure control in these hypertensives, train lay blood pressure aids, and determine whether a community program in hypertension control is economically feasible using public health methods.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE STATEMENT ON OPERATIONAL PROJECTS AFFECTING RURAL AREAS

ALBANY REGIONAL MEDICAL PROGRAM

Many of the Albany operational activities will serve to enhance the capabilities of health professionals in the rural areas. By bringing professionals from small communities into the medical center for continuing education and by improving communications between the medical center and the communities they hope to raise the level of patient care in those communities. The following projects involve rural areas:

Operational Projects

1. Two-way Radio Communication System: Direct Cost, \$144,100

This project will expand an existing two-way radio network to include 57 hospitals and 24 high schools. It will provide continuing education for physicians and allied medical personnel. It will also provide information and education programs for administrators, members of boards of trustees, voluntary health agencies, adult education classes, and selected civic groups.

2. Community Information Coordinators: Direct Cost, \$73,800

Former pharmaceutical representatives will be used to contact local physicians to tell them about Regional Medical Programs and to evaluate their attitudes towards RMP.

3. Community Hospital Learning Centers: Direct Cost, \$75,800

This project will establish learning centers at community hospitals using "Self Instruction Units" and audio-visual equipment for rapid dissemination of new medical knowledge. Eventually, the directors of this project hope to evaluate physician progress. Initially, 8 hospitals will be involved.

4. Community Hospital Coronary Care Training and Demonstration Program: Direct Cost, \$55,400

This project will establish coronary care units of three beds each at three community hospitals: Pittsfield General, St. Lukes, and Vassar Brothers. These will serve as demonstration and educational projects for other hospitals in the region. A continuing educational program will serve the permanent Unit Staff and staffs from smaller hospitals.

5. Training and Demonstration Project, Intensive Cardiac Care Unit Herkimer Memorial Hospital: Direct Cost, \$3,500

The initial phase of this project is to train 6 or 8 nurses from small community hospitals in cardiac anatomy and physiology, coronary disease, the principals and staffing of a cardiac intensive care unit, and in handling the complex equipment. These nurses will also be sent to Albany Medical Center for active training with specialized equipment.

INTERMOUNTAIN REGIONAL MEDICAL PROGRAM

The Intermountain Regional Medical Program has essentially three types of projects for remote communities. Several projects are educational involving the training of health professionals who are brought into the medical center. Other projects send specialists from the medical center to the small communities to aid local physicians with specific areas of patient care. A third type involves the use of electronic monitoring equipment which transmits physiological signals from patients in remote areas to the medical center for interpretation. A listing of these projects follows.

Operational Projects

1. Network for Continuing Education in Heart Disease, Cancer, Stroke and Related Diseases: Direct Cost, \$243,000

The objectives of this program are to develop a communications network between patient-care and research institutions to encourage liaison between health care personnel in the area. The currently existing 2-way radio systems, including 11 hospitals, in 7 communities in or near Salt Lake City, will be extended to remote hospitals to serve as one link. Closed circuit TV and use of KYED (University of Utah education TV) is also planned. This may establish the community hospital as the locus of continuing education.

2. Information and Communications Exchange Service: Direct Cost, \$40,300

The CIES is a region-wide clearing house for information about IRMP. Staff will be put in local communities to act as public relations representatives and also to distribute information to medical personnel and the public. The community staff will also gather information on community needs and resources and serve as a station for collecting economic, social, and medical data.

3. Cardiopulmonary Resuscitation Training Program: Direct Cost, \$63,400

The University of Utah will give a 3-day course in resuscitative techniques to selected physicians from small communities. Each physician will then be responsible for teaching the techniques to health personnel in his community. This resuscitation consultant will also collect data about the number of times resuscitation is employed and the results.

4. A Training Program in Intensive Cardiac Care: Direct Cost, \$118,600

A core faculty of experts in using Cardiac Care Units and diagnosing and treating heart disease will teach short courses in their subjects. The students will be interested physicians and nurses from community hospitals building coronary care units.

5. Training for Nurses in Cardiac Care and Cardiopulmonary Resuscitation: Direct Cost, \$34,000

This is an integral part of both the cardiac care and cardiopulmonary resuscitation programs for physicians (#3, #4). Nurses trained in Salt Lake City will return to their communities to serve as a core faculty for teaching the techniques at the local level. The nurses will work closely with the similarly trained physicians.

6. Visiting Consultants and Teacher Program for Small Community Hospitals: Direct Cost, \$14,800

Small communities will be given the option of requesting one or two-day clinics. A minimum number of four cardiac patients will be required. These clinics will upgrade the level of care of victims of heart disease living in a remote area. Visiting physicians will assist the local physician in a precise diagnosis of his patients.

7. A Regional Computer-Based System for Monitoring Physiologic Data on-line from Remote Hospitals in the Regional Medical Program: Direct Cost, \$637,100

This project's purpose is to test the feasibility of using a central computer to process a variety of physiological signals generated by patients in remote hospitals, feeding the results of calculations from these signals back to stations within the hospitals, and using the information for diagnosis.

8. Cancer Teaching Project: Direct Cost, \$94,300

This project attempts to upgrade the level of care available to local communities. The co-ordinator will direct a program of physician education to create trained cancer specialists who, in turn, will become centers of cancer information in their local communities. The physicians will receive a small stipend for teaching and obtaining information. A region-wide tumor registry will be started as well a training program in new techniques for pathologists.

9. Stroke and Related Neurological Diseases: Direct Cost, \$98,700

This project will establish clinics to bring expert consultation service in stroke and related neurological diseases to local communities; will provide continuing education to local physicians and nurses; will collect data about stroke patients seen and the problems they present to the practitioner. A 24-hour telephone consultation service and information library service will be maintained at the Utah Medical Center to provide community physicians with immediate advice. In addition, practicing physicians will be trained at the medical center in the latest diagnostic and treatment techniques. The courses will last from 4 weeks to one year.

KANSAS REGIONAL MEDICAL PROGRAM

The Kansas Region is emphasizing cardiovascular care in its rural programs. In addition it is setting up a comprehensive model training program in a small community. The project descriptions follow:

Operational Projects

1. *Education Programs—Great Bend, Kansas: Direct Cost, \$261,000*

To develop a model educational program in this small community a full-time faculty, which will be affiliated with the Kansas Medical Center, will be in residence. Included in this comprehensive program are plans for continuing physician and nurse education and clinical traineeships for health-related personnel. Studies will be made of community needs, resources, etc.

2. *Cardiovascular Nurse Training: Direct Cost, \$98,500*

To develop an in-service training program to prepare nurses, who are the mainstay of coronary care units in community hospitals, with basic physiological knowledge of coronary care, ability to use instruments and equipment in coronary care units, experience in home care, and familiarity with social agencies that can aid in the rehabilitation of patients.

3. *Cardiovascular Work Evaluation: Direct Cost, \$21,100*

This project will demonstrate the Cardiac Work Evaluation Unit and show its usefulness for the evaluation and rehabilitation of the patient. It is developing an effective technique for showing physicians and the community at large the ability of patients to return to work after receiving the appropriate rehabilitation.

MISSOURI REGIONAL MEDICAL PROGRAM

The Missouri Regional Medical Program operational activities involve projects directed toward improved screening techniques, early disease detection and rapid diagnosis, and more effective delivery of services. These are coordinated with automated systems for transmission of information and health data to aid physicians and community hospitals in the treatment of patients with heart disease, cancer, stroke and related diseases. Six projects focus on the health needs, the care of patients, and training of staff for rural communities.

Operational Projects

1. *Smithville Community Health Service Program: Direct Cost, \$200,957*

To establish a model community health service program including continuing education and training programs and health education for the public; emergency intensive and restorative care facilities; home care programs; public health, preventive medicine, and school health; coordinated with voluntary health agencies. Program centered around Smithville (population of 3,500) and to include about 50,000 persons in Clay County. Activities are centered around *Smithville Community Hospital (75 beds)*, and the group practice clinic as a nucleus.

2. *Multiphasic Testing of an Ambulant Population: Direct Cost, \$421,471*

To establish centers for performing series of diagnostic laboratory tests to identify the most useful tests feasible for screening large rural population groups; determine the different patterns for ill and healthy populations as an aid in detection of heart disease, cancer, and stroke in preclinical stages. Model test centers will be established at the University Medical Center, Columbia, the State Mental Hospital and a third is planned for the *Smithville* complex.

3. *Mass Screening—Radiology: Direct Cost, \$54,814*

To improve the accuracy of radiologic diagnosis of heart disease, cancer and stroke through electronic communications media. Three small rural hospitals will be hooked into the University of Missouri computer and Department of Radiology; to evaluate diagnostic efficiency and determine applicability of ultrasound and thermography in diagnosis and therapy.

4. *Comprehensive Cardiovascular Care Units—Springfield, Missouri: Direct Cost, \$69,347*

To develop a comprehensive care unit for grouping patients with heart disease or other circulatory system illness or who have been admitted for other purposes but require close cardiac observation. The project is to be undertaken at *hospitals without a house staff*, where it is hoped that grouping of patients will relieve the workload for nurses on general medical and surgical wards. *Springfield (a community of over 100,000) has 4 general community hospitals*

ranging in size from 34 to 511 (a total of about 1,200 beds). St. John's Hospital medical staff and Greene County Medical Society are coordinating activities with 8 local hospitals in Springfield.

5. Automated Electrocardiography in a Rural Area: Direct Cost, \$369,000

To provide hospitals and physicians in rural areas with automated facilities for transmitting electrocardiograms and an automated system for analyses of ECG's; to demonstrate the feasibility of such systems where this service is limited or non-existent, and to develop, test and implement the use of bioengineering signals as an aid in diagnosis.

6. Operations Research and Systems Design: Direct Cost, \$39,055

To develop systems concerned with testing "early detection" hypothesis-develop operational methods of early detection tests for a large rural population.

MOUNTAIN STATES REGIONAL MEDICAL PROGRAM

Operational activity in the Mountain States Region is specifically designed to benefit small hospitals in rural areas and to train health professionals from rural areas.

Operational Projects

1. Intensive Coronary Care in Small Hospitals in the Region: Direct Cost, \$206,913

Hospitals in the region will send registered nurses into St. Patrick's Hospital, Missoula, Montana, for coronary care training. This three-week course will be offered three times a year for 21 nurses, and there will be follow-ups at the home hospitals four times a year. In addition, a 4-day training program especially designed for small town physicians will be held at the University of Montana four times a year.

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

In North Carolina there are 10 funded operational projects all of which have a direct effect upon hospitals, health professionals, and patients in rural areas. Some are concerned with education and training of physicians and allied health personnel, and others with patient care. All of them are designed to bring the latest scientific advances down to the community level. The projects are listed as follows:

Operational Projects

1. Education and research in community medical care—direct cost, \$209,200

To develop resources for training more medical and allied medical students; to provide new types of educational experiences which will make family practice more attractive; to have a postgraduate education program at the medical school; to strengthen ties between the medical school faculty and practicing physicians; and to have the medical school become involved in community planning for improving the quality and availability of medical care. Affected by this project are the following groups: the University Community; the Caswell County Rural Health Services Project; the Regional Health Council of Eastern Appalachia, Inc.; the State of Franklin Health Council, Inc.; the Charlotte Memorial Hospital; the Moses Cone Memorial Hospital, Greensboro; and the Dorothea Dix Neuromedical Service.

2. Coronary care training and development—direct cost, \$55,938

To use the project as a medium for developing cooperative arrangements among the various elements in the health care community. Initial and continuing education will be provided to nurses and physicians in community hospitals, consultation will be available to hospitals in establishing CCU's, and a computer-based system of medical record keeping will be developed. This project has led to new working arrangements: (1) between the university medical centers; (2) between medical and nurse educators; (3) between doctors and nurses in community hospitals; (4) between university medical centers and community hospitals.

3. Diabetic consultation and educational services—direct cost, \$132,081

To establish three medical teams to deliver services throughout the state; to assist in expansion of diabetic consultations and teaching clinics; to provide seminars for physicians and teaching sessions for nurses and patients; to assist in organization of a State Diabetes Association and local chapters; to test techniques of data collection. Many people of different disciplines in many communities are involved in this project.

4. Development of a central cancer registry—direct cost, \$66,615

To devise a uniform region-wide cancer reporting system, integrated with the PAS, the computer-stored data from which can be retrieved to serve a broad range of educational, research, statistical, and other purposes. The following hospitals are participating in the first year of the project: Duke University Medical Center, North Carolina Memorial Hospital, North Carolina Baptist Hospital, Charlotte Memorial Hospital, Veterans' Administration Hospital, Watts Hospital, Hanover Memorial Hospital, Southeastern General Hospital, Craven County Hospital. In subsequent years the registry will be expanded to include all hospitals and physicians in the region.

5. Medical library extension service—direct cost, \$25,839

To bring medical library facilities of the three medical schools into the daily work of those engaged in medical practice. Local hospital personnel will be trained to assist medical staff; libraries will be organized into a functional unit for responding to requests for services. Bibliographic request service will be established.

6. Cancer information center—direct cost, \$41,716

To provide practicing physicians with immediate consultation by telephone and follow-up literature. Each of the three medical schools will be responsible for providing service in its geographic locale. The aims of this project are two-fold: (1) to assist physicians in providing optimum care of patients with cancer; and (2) to continue the education of the physicians by giving new information in a patient-centered experience.

7. Continuing education in internal medicine—direct cost, \$33,313

To bring practicing internists from all over the state to the Medical Center for a month of up-to-date training in their subspecialties. They will share responsibilities with attending physicians and make ward rounds with students, staff, and together. This experience should enhance the appreciation in the University, both at faculty and student levels, for the expanding role of the medical center for the quality of care in the community.

8. Continuing education in dentistry—direct cost, \$67,508

To provide physicians and dentists with the knowledge of mutual concern which will enable them to be more effective members of the health team. Courses will be given at the University of North Carolina and in communities. Studies will be made of facilities needed to provide dental care in hospitals. The purpose of this project is to insure that as many patients as possible who suffer from heart disease, cancer, stroke, or a related disease receive appropriate dental care as a part of their comprehensive treatment.

9. Continuing education for physical therapists—direct cost, \$27,838

To develop and establish regional continuing education programs for physical therapists in order to strengthen physical therapy services for patients in all parts of the state. Subregions will be delineated where needs and interests will be identified and committees will be organized to arrange local activities.

10. The establishment of a network of coronary care units in small community hospitals in Appalachia, North Carolina—direct cost, \$93,019

This is a proposal to develop coronary care units in seven hospitals in this rural, mountainous area. RMP will supply the monitoring equipment (the hospital provides suitable space) when adequately trained physicians and nurses are available. An intensive training course for physicians will be conducted in the geographic region, and continuing education programs will be conducted when necessary.

TENNESSEE MID-SOUTH REGIONAL MEDICAL PROGRAM

Due to the geographical diversity of the region, the Tennessee Mid-South Regional Medical Program has been concerned with both the health problems of the urban poor as well as the health problems of remote rural areas. The Tennessee program has sought solutions to these and other regional programs through a system of linkages between the medical centers and the rural areas. In addition to providing programs to allow medical personnel and practicing physicians from rural community hospitals to come to the medical center for training courses, the Tennessee program has endeavored, through the use of modern communication techniques, to create medical education resources in the rural areas. The Hopkinsville Education Center and the deployment of coronary care units are two examples of such projects.

Operational Projects

1 and 2. Hopkinsville Education Center and Chattanooga Education Center—direct cost, \$73,700

These are the first of the local continuing education centers specified in the Vanderbilt plan. At each hospital, a full-time Director with an appointment at Vanderbilt and an assistant director will supervise resident and physician education in their area. Their services will be available to physicians at smaller community hospitals in each area, as will the enlarged hospital library facilities. The Chattanooga and Hopkinsville locations provide the basis for looking at problems in continuing education in urban and rural settings.

3. Franklin Coronary Care Unit—Williamson County Hospital—Franklin—direct cost, \$31,400

This is one of the subsidiary units mentioned in the Vanderbilt proposal. This is primarily a pilot project to study the feasibility and usefulness of establishing a center in a small community hospital.

4. Clarksville Coronary Care Unit—Clarksville Memorial Hospital—direct cost, \$19,000

As the Franklin program, this project is a subsidiary of the Vanderbilt proposal. Since this hospital has been operating a unit, the plan calls for its expansion, continuing education and a phone hook-up to Vanderbilt.

5. Murray Coronary Care Unit—Murray-Calloway (Ky.) County Hospital: Direct Cost, \$38,800

Murray-Calloway County Hospital, the training center for Murray State University school of nursing, will serve as a demonstration center for the sub-region. Direct phone communication will be established with Vanderbilt, which will send consultants from its school of continuing education. This project has the dual objective of relating the Murray State Nursing program to an established medical center and providing regional training resources to a remote area.

6. Crossville Coronary Care Unit—Uplands Cumberland Medical Center Crossville: Direct Cost, \$28,300

This project has two purposes: (1) to establish a two-bed coronary care unit in the hospital; and (2) to determine the feasibility of operating acute coronary care units in rural areas. The hospital will cooperate with Mid-State Baptist Hospital and Vanderbilt.

7. Tullahoma Coronary Care Unit—Harton Memorial Hospital, Tullahoma, Tenn.: Direct Cost, \$28,800

See Baptist Hospital Program.

8. Project to Improve Patient Care in a Remote Mountain Community by Recruiting and Training Health Aides for a New Extended Care Facility—Scott County Hospital—Oncida, Tenn.: Direct Cost, \$10,300

Manpower shortage in this isolated mountain hospital is critical. Personnel to man an extended care facility now under construction will be obtained by two methods: (1) In-service training for hospital personnel; (2) an educational director (an RN) to serve as a liaison to the high schools to encourage young people to enter the medical field and come back home to practice. In addition a training program leading to the LPN would be initiated. Clinical training will be supervised by the Educational Director while local high schools provide basic training.

9. Hopkinsville Coronary Care Unit—Jennie Stuart Memorial Hospital—Hopkinsville, Ky.: Direct Cost, \$49,500

This plan is similar to the Franklin plan, except that it mentions establishing links to smaller community hospitals by helping set up smaller care units in them, thus providing for the grouping of rural community hospitals for more efficient use of existing resources.

WASHINGTON-ALASKA REGIONAL MEDICAL PROGRAM

The Washington-Alaska Regional Medical Program operational projects concern themselves largely with continuing education and training activities to enhance the medical and paramedical capability. They focus on communications techniques and instruction materials and methodologies which are adaptable to the far flung and remote communities in the vast State of Alaska and the many scattered rural communities in Washington State. Several projects are being conducted to improve the health manpower resources in communities with limited or no specialty health services, which are distant from a major medical center.

Operational Projects

1. Central Washington—Communication System for Continuing Education for Physicians: Direct Cost, \$18,181

To bring the medical resources of the University of Washington to physicians and community hospitals in Yakima, who in turn will act as consultants to surrounding smaller communities through seminars and conferences, educational TV, other audio-visual instruction; and exchange of teachers and practitioners. To connect internists in Central Washington to Yakima cardiologists via EKG telephone hot-line, to permit quick analysis (starting with 5 community hospitals). Yakima is a community of about 45,000. The total population in 6 Central Washington counties exceeds 300,000. In addition to three general hospitals in Yakima—St. Elizabeth, Yakima Valley Memorial, and New Valley Osteopathic—nine other community hospitals to be reached initially are located in small rural communities of Ellensburg, Moses Lake, Othello, Toppenish, Prosser and Sunnyside, (population ranges from 500 in Moses City to some 8,600 in Ellensburg.)

2. Southeast Alaska—Postgraduate Education: Direct Cost, \$27,062

To improve communication between Seattle Medical Community and the university to alleviate problems of the isolated physicians in southeast Alaska cities and communities: Juneau, Sitka, Ketchikan (3 largest). As in Central Washington several methods will be used such as telelectures, consultant services, seminars and the EKG hot line to hospitals in Juneau, Sitka and Ketchikan. The population in these 3 cities totals about 17,000.

3. Postgraduate Preceptorship for Physicians—Coronary Care: Direct Cost, \$17,610

A pilot project to provide opportunity for practitioners from remote and isolated communities to spend a week or more under a preceptor at major medical centers to study advances in care of coronary heart disease and carry out these practices in their communities. The 4 major medical centers in Seattle are Providence Hospital, Swedish Hospital, Virginia Mason Hospital and Medical Center, and University Hospital and Medical Center and two in Spokane are Deaconess Hospital and Sacred Heart Hospital.

4. Cardiac Pulmonary Technician Training: Direct Cost, \$41,554

Develop a formal program for training cardio-pulmonary technicians to perform non-critical function in coronary care units and free physicians for other duties. Four larger general hospitals in Spokane—Deaconess, Holy Family, Sacred Heart, and St. Luke's—will participate in this training program with Spokane Community College.

5. Two-way Radio Conference and Slide Presentation: Direct Cost, \$8,445

Six pilot programs on heart, cancer and stroke topics to be transmitted via two-way radio-telephone slide conferences, to physicians and hospital staffs on topics selected by panel of physicians, starting with 20 hospitals in Washington. To explore potential for continuing network series with local and remote regions.

6. Alaska Medical Library Facilities: Direct Cost, \$21,754

To develop a community medical library for Alaska at the PHS Alaska Native Medical Center, Anchorage for Alaska physicians and health related staffs and agencies; to have close ties with community agencies, Arctic Health Research, University at Fairbanks and to supplement continuing education project for Southeast Alaska and the Anchorage cancer project.

WESTERN NEW YORK REGIONAL MEDICAL PROGRAM

Both of the programs in the Western New York region have a direct effect upon hospitals, health professionals, and patients in the rural areas. Particular emphasis will be placed upon involving community hospitals and on training nurses from community hospitals in rural areas. The projects are listed as follows:

Operational Projects

1. Two-Way Communications Network: Direct Cost, \$170,519

A two-way communication network will link hospitals of Western New York and Erie County, Pennsylvania to the Continuing Education Departments of the State University of New York at Buffalo and the Roswell Park Memorial Institute. The network will serve several purposes, such as continuing education for physicians and the health-related professions, public education, administrative communication, consultation with experts, and contacts among banks. It will assist both the physician and community hospital in either the rural or urban environment in having at their fingertips the latest advances in the diagnosis and treatment of heart disease, stroke, and cancer. Particular emphasis will be placed upon involving rural hospitals in this program thereby improving both their didactic and restorative function.

2. Coronary Care Program: Direct Cost, \$127,544

This project will test a training technique for providing qualified nurses who will be required to staff developing coronary care units in the Region. Approximately 80 nurses will be selected from all parts of the Region for a combined academic and clinical course. It is planned that the nurses receiving this training will return to both rural and urban hospitals for the purpose of providing a diagnostic and didactic function. While the program will be housed at the medical center, the community hospitals of this region will be the benefactors of the project. Since there are few nurses trained to work in coronary care units, particularly in the rural environment, special attention will be paid to attracting nurses who will return to the community hospital.

WISCONSIN REGIONAL MEDICAL PROGRAM

Four of the Wisconsin projects have relevance to the improvement of health care in a rural setting, through the provision of education and information. Physicians and allied health personnel in community hospitals will benefit from the following projects:

Operational Projects

1. A pilot demonstration program for pulmonary thromboembolism: direct cost, \$84,600

In this project a center is being established at Marshfield Hospital in Marshfield, Wisconsin, for demonstration diagnostic techniques and the available therapy for pulmonary thromboembolism. The project has a continuing education component which will reach physicians from many hospitals in the Region. This will involve a 24-hour consultation service, the preparation of a movie on the topic, and special training sessions for groups of physicians.

The project will demonstrate a comprehensive program which will encompass diagnostic, preventive, therapeutic, and rehabilitation procedures for patients, postgraduation education, a rapid transportation system for patients from Northern sections of the state, and cooperation between the clinic and other hospitals and medical schools in the State.

2. Telephone dial access tape recording library in the areas of heart disease, cancer, stroke, and related diseases: direct cost, \$18,950

This feasibility study will be carried out by the University of Wisconsin which will record and store short, 4-6 minute, tapes on various aspects of treating patients with the three diseases. Any physician anywhere in the Region can dial the library at any time and request a tape relevant to a problem in which he is interested.

3. Nursing telephone dial access tape recording library in the areas of heart disease, cancer, stroke and related diseases: direct cost, \$18,800

This feasibility study, similar to the one above, will establish a central tape library with information recorded on nursing care in emergencies, new procedures and equipment, and recent developments in nursing. Nurses from any hospital in the region will be able to call at any time to have a tape played to them.

4. Development of medical and health related single concept film program in community hospitals: direct cost, \$53,250

This education feasibility project involves ten community hospitals in its first phase. Fifteen films on procedures and techniques used in treating heart, cancer, and stroke, will be developed. Projectors and the films will be installed in the hospitals for use by physicians and other health personnel at their convenience as a continuing education device. After four to six months the materials will be relocated in ten additional hospitals.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE STATEMENT ON EFFECTIVENESS OF REGIONAL MEDICAL PROGRAMS

The effectiveness of Regional Medical Programs is determined in the following ways:

Evaluation of the effectiveness of each Regional Medical Program is a continuous process which involves review by the Federal Government, its non-Federal advisors, and the grantee itself. These review activities are specifically intended to determine the extent to which the region has implemented the process of regionalization which includes seven essential elements: involvement, identification of needs and opportunities, assessment of resources, definition of objectives, setting of priorities, implementation of program activities, and self-evaluation.

This process of regionalization is the means by which the region moves toward its ultimate objective—the assurance of easily accessible improved patient care for heart disease, cancer, stroke, and related diseases.

A systematic and comprehensive review of the scientific and administrative aspects of each Regional Medical Program has been designed in order to determine the extent to which each Regional Medical Program implements this process of regionalization for the purpose of achieving its goal of improved patient care.

This review process includes surveillance at the regional and Federal level, and is conducted by both non-Federal and Federal experts. By law each operational activity must be approved by the Regional Advisory Group prior to its submission to the Federal Government for review and approval. Frequently the regions themselves have elaborated on this requirement by establishing local, in addition to regional, advisory bodies and/or scientific review bodies which also carefully examine proposed activities.

A site visit by members of the Review Committee and the National Advisory Council on Regional Medical Programs to the region is included as an integral part of approving an operational program for a region. As the operational program develops and is expanded additional site visits are made. Finally each Regional Medical Program is required to submit an annual progress report which describes in detail the region's program.

Any proposed modification in program direction by the grantee must be justified in writing and subjected to these review procedures.

Within the context of this comprehensive review process it is possible to determine whether or not a regional program is in fact evolving a regional system intended to improve patient care.

The Missouri, Kansas, Albany, New York, and Intermountain Regional Medical Programs were the first to enter the operational phase of development. The determination of their readiness to begin operations was a result of the review process described above, including a site visit by members of the National Advisory Council and members of the staff of the Division of Regional Medical Programs. The progress of these regions has been further evaluated during the review of supplemental grant requests which have been received from all four regional programs. Further site visits by Council and/or staff to review the first year's progress have either just been carried out or are scheduled for the immediate future. The results of these reviews carried out to date indicate that these Regional Medical Programs are making substantial progress toward the goals set forth a year ago as the basis for the operational grant award. The major problems encountered have been difficulties in recruiting personnel and slowness in the delivery of important equipment. These factors have caused some delays in implementing particular projects.

In addition to this evaluation at the national level, the regional programs are developing their own capabilities for self-evaluation. Special staff has been added to the central staff of the regional programs with specific competence in evaluation techniques. These techniques are being further developed and applied to the operational activities.