Health Services Research: Report of a Study (1979)

Pages
111

Size
8.5 x 11

ISBN
0309028752

Division of Health Care Services; Institute of Medicine

INSTITUTE
OF
MEDICINE
Division of
Health Care Services

REPORT OF A STUDY

Health Services Research

NATIONAL
ACADEMY of
SCIENCES

Washington, D.C. 1979

NOTICE

This is the report of a project undertaken with the approval of the Governing Board of the National Research Council, whose members are drawn from the Councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the committee appointed to conduct the project and prepare the report were selected for recognized competence and with due consideration for the balance of disciplines appropriate to the project.

This report has been reviewed by a group other than the authors according to procedures approved by a Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

Supported by a contract from the Office of Science and Technology Policy, Executive Office of the President of the United States.

The Institute of Medicine was chartered in 1970 by the National Academy of Sciences to enlist distinguished members of medical and other professions for the examination of policy matters pertaining to the health of the public. In this, the Institute acts under both the Academy's 1863 Congressional charter responsibility to be an advisor to the Federal Government, and its own initiative in identifying issues of medical care, research, and education.

IOM Publication 78-06

Library of Congress Catalog Card Number 79-84281

International Standard Book Number 0-309-02875-2

Available from

Office of Publications
National Academy of Sciences
2101 Constitution Avenue, N.W.
Washington, D.C. 20418

Printed in the United States of America

Order from
National Technical
Information Service,
Springfield, Va.
22161
Order No. PB-294 584

INSTITUTE OF MEDICINE

COMMITTEE ON HEALTH SERVICES RESEARCH

Chairman

Robert H. EBERT, M.D., President, Milbank Memorial Fund, New York

Members

Leonard W. CRONKHITE, Jr., M.D., President, The Medical College of Wisconsin, Milwaukee

Robert L. EICHHORN, Ph.D., Professor of Sociology and Director of the Health Services Research Program, Purdue University, Lafayette

Scott FLEMING, Senior Vice President, Kaiser Plan Medical Care Program, Oakland

Jacob GETSON, Assistant Commissioner, Department of Public Health, Boston

Jay GOLDMAN, D.Sc., Professor and Chairman, Department of Industrial Engineering, University of Missouri-Columbia, Columbia

Robert J. HAGGERTY, M.D., Director, General Pediatrics Academic Development Program, Robert Wood Johnson Foundation, Children's Hospital Medical Center, Boston

James G. HAUGHTON, M.D., Executive Director, Health and Hospitals Governing Commission of Cook County, Chicago

Barbara S. HULKA, M.D., Professor, Department of Epidemiology, University of North Carolina at Chapel Hill, North Carolina

Herbert E. KLARMAN, Ph.D., Professor of Economics, Graduate School of Public Administration, New York University, New York

Paul A. MARKS, M.D., Vice President for Health Sciences and Professor of Human Genetics and Development, Columbia University, New York

David MECHANIC, Ph.D., Professor of Sociology, University of Wisconsin, Madison

Frederick MOSTELLER, Ph.D., Professor of Mathematical Statistics and Chairman, Department of Biostatistics, Harvard University, Boston

Alan R. NELSON, M.D., Internist, Salt Lake City

Daniel W. PETTENGILL, West Hartford, Connecticut

Donald C. RIEDEL, Ph.D, Professor and Chairman, Department of Health Services, University of Washington, Seattle

Kerr L. WHITE, M.D., Deputy Director, Division of Health Sciences, Rockefeller Foundation, New York

INSTITUTE OF MEDICINE

DAVID A. HAMBURG, M.D., President

Division of Health Care Services

STUDY OF HEALTH SERVICES RESEARCH

Staff

Thomas W. BICE, Ph.D., Study Director, Deputy Director, Institute for Health Care Studies, United Hospital Fund of New York, New York*

Linda K. DEMLO, Ph.D., Director, Division of Health Care Services, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Barbara BUCKLEY, Administrative Secretary, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Paul CAMPBELL, M.S., Professional Associate, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Peter E. DANS, M.D., Senior Professional Associate, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Richard M. SCHEFFLER, Ph.D., Director, Division of Health Manpower and Resources Development, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Wallace K. WATERFALL, Director, Office of Communications, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Karen WINTRINGHAM, M.H.A., Research Assistant, Institute for Health Care Studies, United Hospital Fund of New York, New York

*Currently Professor, Department of Health Services, University of Washington, Seattle

CONTENTS

PREFACE

This is a good report. It may seem odd for the chairman of the committee that submitted the report to open with that statement, but I feel justified in doing so, because I was an interested amateur. I suppose that is one reason why I was chosen as chairman. I did not know enough about the subject to be biased, and as a former medical school dean I had had some experience in chairing meetings attended by people with divergent views.

The committee heard testimony from a variety of individuals representing both public and private agencies, and the staff explored the extent of the health services research enterprise among the various federal agencies. In reviewing the evidence generated by these activities the committee became aware of two underlying and recurring themes. The first was a sense of disappointment in the usefulness to policymakers of the product of health services research, and the second was confusion about what constituted the field. Disappointment leads to criticism and much of the criticism was directed at the National Center for Health Services Research. Why, for example, could not the Center provide quick and easy answers to questions about health manpower or cost containment that would be immediately applicable to federal policy? This in turn led to questions of organization. Should the Center be expanded to control all research in the field, or should it be eliminated, or simply reorganized again? Should control of health services research be centralized or decentralized, should more be done intramurally or more extramurally, and, by the way, do we all agree on what should be labeled health service research? The report deals with these complex issues and in my view makes some sensible comments and recommendations, which include:

-- Health services research has suffered because of unrealistic expectations of what it could provide in the way of easy answers for policymakers in the health field. There are no quick fixes for problems of health manpower and distribution or cost containment. This does not mean that health services research is unimportant. On the contrary, it means that it is enormously important to know much more than we do about the complex variety of factors affecting our health care system if we are to make sensible policy decisions.

Chapter 1

INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

A need for more knowledge about health services in the United States is becoming increasingly apparent to health care professionals, government officials, and the public. Management of the highly diverse and interdependent personnel, facilities, and technologies that constitute modern health care institutions requires information similar to that employed in other complex business enterprises. In addition, the growing involvement of government in the financing, planning, and regulation of health care has heightened the demand of government officials for knowledge to guide the formulation and implementation of policy and the desire of the public for more information about their health care and the political choices that affect it. In response to these needs, governments, philanthropic foundations, and private organizations are investing in research on virtually all aspects of the nation's health services.

Research on health services began in the United States in the 1920s, prompted by the efforts of philanthropic foundations to improve the living conditions of the poor. Over the following three decades, this research developed in various settings, but remained primarily under the auspices of foundations and other private organizations. It was only a sporadic and relatively small scale activity within the federal government until the mid-1950s, when the first major authorities for support of health services research were enacted. These increased in numbers and scope during the Lyndon Johnson administration of the 1960s, when new social legislation vastly extended federal responsibilities for financing health services.

By the mid-1960s, health services research had become a distinct field of inquiry, supported largely by grants and contracts from federal agencies administering the government's health care programs. Recognizing that attainment of national health care objectives and efficient management of the federal government's disparate research activities required a coordinated effort, President Johnson in 1967 ordered the creation of the National Center for Health Services Research and Development within the Department of Health, Education, and Welfare.

The National Center* was given a broad mandate to conduct and support health services research. Unlike other federal agencies involved in research on health care, the Center had no direct relationship to operating programs. Rather, its mandate was broadly conceived to encompass research and experimentation on fundamental problems of health care. Additionally, the Center was to expand the nation's research capability by sponsoring training in health services research.

Although there have been large investments in health services research in recent years, many government officials, health care professionals, and health services researchers have expressed confusion as to what the field encompasses and skepticism about its relevance to the needs of decision makers.[1] Moreover, the growth of research in health services throughout the federal government has occasioned concern about the necessity for continuing the National Center for Health Services Research, and possibly wasteful duplication and fragmentation of research efforts.[2]

In view of these concerns, the Office of Science and Technology Policy of the Office of the President of the United States in September 1977 commissioned the Institute of Medicine to undertake an assessment of the field of health services research for the purpose of proposing recommendations that would clarify the focuses and boundaries of the field and improve its contributions to decisions affecting health care. This report presents the findings and conclusions of that assessment.

Issues Addressed in the Study

The doubts of those who sponsor health services research and use its products center on whether their investment has resulted in the intended returns and, if not, what might be done to improve the situation. If answers to these questions are to be more than speculation, several preliminary problems require attention. First, one needs to develop an operational definition of health services research and enumerate over some period the resources devoted to its activities. Likewise, the intended and unintended benefits of research must be defined and assessed in a context of the resources used to produce them. Finally, if these comparisons are judged not favorable, one must identify and alter the circumstances that are to blame.

---

*Since its inception, the agency has experienced three name changes from the original National Center for Health Services Research and Development to the Bureau of Health Services Research, the Bureau of Health Services Research and Evaluation, and the current National Center for Health Services Research. In this report, the current name or the abbreviated "the National Center" or "the Center" is used.

Although the study committee attempted to follow this path of logic, its efforts were only partially successful. The paucity of reliable data within the federal government and elsewhere about health services research, coupled with the inherent difficulty of measuring the effects of research on decision making, preclude the application of precise cost-benefit reasoning and analysis to this field. Nevertheless, it is evident that on several issues, such as health maintenance organizations, hospital bed supply, and increases in health care expenditures, research findings have influenced both the level and focuses of debate.

Health services research within the federal government can produce findings that frequently have political implications. Therefore, recent debate as to where within the federal structure primary responsibility for health services research should rest raised complex questions about trade-offs between the preservation of free and open inquiry and the needs of government officials for ready information upon which to base programmatic and policy decisions. In view of the government's several extensive reorganizations of health services research activities since 1968, the most recent of which occurred within the past year, the committee had little evidence upon which to base recommendations about further structural changes.

On the basis of its charge from the Office of Science and Technology Policy and its reviews of literature and testimony of interested and knowledgeable persons, the committee concentrated on the following issues:

1. What is health services research? How does it differ from other related types of inquiry?

2. What is the nature of the field of health services research? What are its priorities, and how are they established? Who contributes to the field, and who uses its products?

3. How is health services research organized within the federal government? What are the research priorities and needs of federal agencies? How are their studies done internally, and what mechanisms are used to support research done in universities and other settings outside government? How are the research programs of various agencies coordinated? What mechanisms are employed to promote and evaluate the quality of research?

4. What is the role of the National Center for Health Services Research? How is the agency organized? What are its priorities and programs, and how do they differ from those of other federal agencies?

Boundaries of the Study

Although the questions above and the issues they imply are of major importance to the federal government, their answers will not constitute an assessment of the totality of health services research. Much of this activity lies beyond the purview of the committee--in state and local governments, private organizations, and philanthropic foundations. A broader study would examine the relative contributions of the federal government's health services research activities to the overall effects of all such efforts.

The committee's direct information about the utility of health services research is limited to the federal government. It did not systematically assess the effects of research findings on state and local officials or the general public, although these are important audiences. The committee did not set out to evaluate particular agencies or to assess research on particular problems. In keeping with its charge to examine generic issues in health services research, the committee attempted to take a broad perspective. Occasionally, however, the information obtained led logically to committee judgments involving issues related to effectiveness. Its emphasis on some agencies, particularly the National Center for Health Services Research, reflects the committee's recognition of their primary importance in the federal government's health services research structure.

Finally, the committee did not attempt to weigh the contributions of health services research in all issues of health care delivery or to set forth research agendas for them. Although the committee recognizes the pressing need for research in a variety of areas, some of which are noted throughout this document, detailed comment on each is precluded by their number and complexity.

Methods

Information in this report was gathered from literature reviews, hearings, reviews of documents, interviews, and deliberations of the committee.

In January 1978, the committee held a two-day session of hearings at which invited persons presented views on health services research. On the first day, in open session, 19 persons representing professional, public, and research organizations spoke and responded to questions from the committee. These persons had been selected from 35 who submitted written testimony in response to the committee's mailed solicitation to approximately 175 organizations or institutions. On the following day, a closed session was held at which 12 officials representing congressional committees and offices and executive agencies spoke and responded to questions.

Much of the information reported here was gathered in interviews with government officials and others. At least two Institute of Medicine staff members were present at more than two-thirds of the interviews. Except where the interview was aimed at acquiring only specific factual information, conversations with respondents were structured by interview guides. Although these guides were altered to fit particular circumstances, they typically addressed agencies' requirements for and uses of information and the means by which they are satisfied. For those agencies which conducted or supported health services research, the questioning extended to the methods by which research priorities are established, mechanisms for assuring the quality of research, and relationships with other agencies engaged in health services research, especially the National Center for Health Services Research and the Health Care Financing Administration.

Information assembled by staff was summarized in memoranda that were distributed to committee members. These and related matters were discussed at four meetings of the committee. They constitute the basis for the committee recommendations, which are summarized below.

Findings and Recommendations

The committee found that several departments and agencies of the federal government sponsor health services research, principally as an adjunct to their programmatic missions. Because agencies' mandated responsibilities for personal health services are defined in various ways, each has needs for information that emphasize particular population groups, health problems, or government functions. In many instances, agencies' needs and interests necessarily overlap, causing apparent similarities in the types and focuses of their health services research agendas and projects. However, more problematic in the committee's view are the fragmentation and gaps in knowledge that result from the widespread involvement of federal agencies in health services research that is closely identified with their operating needs.

Analysis of the history and current situation of the National Center for Health Services Research (NCHSR) revealed that the Center has several unique and worthwhile roles in health services research within the federal government. The committee found, however, that financial and other constraints prevent it from realizing its full potential.

In view of its findings of the widespread involvement in health services research by agencies throughout the federal government, of the absence of systematic and effective mechanisms for coordinating activities of departments and agencies, and of the consequent problems of fragmentation and omissions in health services research, the committee recommends that

administrative procedures be established within the federal government to coordinate the setting of departmental and agency health services research priorities, agendas, and projects.

These procedures should apply to all departments engaged in health services research, and should emphasize the identification of areas of common interest among departments and agencies and, in such instances, facilitate interdepartmental and interagency exchange of information and collaboration.

The committee further believes that efforts to coordinate health services research priorities, agendas, and projects should not hamper agencies' abilities to carry out their mandated missions and should encourage experimentation with diverse perspectives and approaches to problems. Therefore, the committee recommends that

attempts to coordinate health services research within the federal government should not centralize responsibility for the conduct or sponsorship of research required for the attainment of specific and identifiable program or agency objectives.

This recommendation has two implications. First, the committee would not endorse a research plan (either government-wide or DHEW-wide) that would limit the scope or content of agencies' research agendas if they can be demonstrated to be reasonably related to agencies' mandated missions. Second, the committee would not be in favor of a reorganization of health services research that would remove responsibilities for the conduct or sponsorship of programmatic research from operating agencies.

In view of its findings of important matters missing from the research priorities of individual agencies within the Department of Health, Education, and Welfare, created by the close identification of agencies' health services research priorities with their program missions, the committee recommends that

agencies be designated to assume responsibilities for studies that will fill the gaps in knowledge.

These agencies should periodically review their own research agendas and those of other agencies with common or logically related interests, identify research needs that are not being met, and propose projects that would meet these needs. These findings and plans should be

submitted to departmental officials who, in turn, should designate agencies to implement them.

Having found that substantial portions of federal spending for health services research are disbursed for extramural studies, the majority through contracts, and that most of these disbursements are made without the benefit of systematic and open peer review, the committee recommends that

> all Executive departments and agencies sponsoring extramural studies in health services research establish peer review by nongovernment personnel of all projects involving appreciable expenditures.

These procedures should (1) subject requests for proposals to review before they are advertised, (2) facilitate competition for funds among qualified researchers, and (3) review results of projects for their scientific and technical merit.

Finding that federal agencies are increasingly relying upon intramural research and research funded by contracts, and being concerned over the long-term consequences of these funding strategies for the types of research that will be done and for the quality of health services research, the committee recommends that

> the federal government adopt a policy regarding health services research to assure that a significant portion of all monies invested in this area go to support investigator-initiated extramural research.

Intramural research should not be viewed as a substitute for extramural research, nor contracted research as a substitute for grant-supported, investigator-initiated research. Rather, a strategy of funding should be developed that identifies the strengths and problems associated with each and achieves a balance among them.

From its review of the history of the National Center for Health Services Research, the Center's current priorities and functions, and potential for effecting greater coordination of the health services research activities of the Public Health Service, the committee recommends that

> the National Center for Health Services Research be maintained as a general-purpose health services research agency within the federal government.

Further, the committee recommends that the Center's functions should be

- to sponsor health services research and research in related disciplines through a program of extramural, investigator-initiated grants and contracts,
- to conduct intramural research,
- to sponsor through a program of extramural grants and contracts training in health services research and related disciplines,
- to monitor the development of knowledge relevant to health services research, and disseminate this knowledge,
- to assist other federal agencies in developing health services research priorities and programs and in designing and executing evaluations of federal programs, and
- to facilitate the development of the health services research capabilities of non-federal organizations and agencies.

The committee believes that one of the National Center's principal missions should be to conduct and sponsor synthesizing research aimed at filling gaps in research and knowledge. Therefore, the Center's purview must not be limited to particular types of questions. Indeed, the Center should be encouraged to pursue research on issues that are related to the principal focuses of operating agencies and should be accorded the opportunity to be designated as the lead agency in coordinating and developing important areas of health services research. Accordingly, the committee recommends that

> the purview of the NCHSR should not be constrained by specific federal policies or programs and should encompass research on dental, mental, and nursing services.

Although the recommendations regarding the Center's functions are similar to those established for the agency at its outset, the committee is mindful of the fact that they cannot be performed adequately under current circumstances. In retrospect, the committee believes that initial expectations about the Center's objectives were unrealistically optimistic, especially in light of the meager resources devoted

to them. Declining budgets and limitations on the Center's ability to recruit personnel needed to address each of its missions have placed the agency under doubly difficult constraints. If these constraints are not relaxed, the Center will be forced to continue to suspend important functions entirely or to pursue them with less vigor than they warrant. Therefore, the committee recommends that

> DHEW review the budgetary and personnel requirements for each of the functions identified in the committee's recommendations and provide the NCHSR with the resources required to perform them.

The committee did not consider in detail issues relating to health services research training because of the existence within the Academy of the Commission on Human Resources panel on health services research, which was created specifically for that purpose. The committee reviewed the Commission's reports and endorses its recommendation that a program for health services research training be established under the National Research Award Act of 1974 (P.L. 93-348) and recommends that

> the National Center for Health Services Research be permitted to re-institute its support of health services research training, based on a careful review of the most appropriate mix of disciplines and levels of training deserving of support.

The National Center is required by legislation to make grants to health services research centers. This program accounts for approximately 15 percent of the Center's total research budget. In view of the limited funds available to support investigator-initiated health services research, the committee recommends that

> legislation authorizing the National Center for Health Services Research be amended to strike the requirement that the Center support centers for health services research.

The National Center should be permitted to support center grants if a consensus is reached that the program complements the Center's overall mission and the evolution of the field as a whole. Awards of center grants should be based on review by peers of the scientific and technical

merits of proposed studies, their coherence as a set, qualifications of principal investigators and staff, and other features that are relevant to the applicants' abilities to complete the proposed work, rather than the existence of a legislative mandate.

The committee recognizes that the National Center requires a strong intramural research effort to attract and keep qualified researchers. Such persons are needed to assist other federal agencies in their health services research activities, to develop the Centers' priorities, to monitor health services research studies and literature, to identify, summarize, and critique methods and findings, and to conduct studies that are best done within the government structure.

However, the committee believes that because of current government-wide restrictions on hiring, the Center has been unable to attract the full complement of experienced staff required to conduct an effective intramural research program. The legislative requirement that at least a one-quarter of the Center's budget be devoted to intramural research means that extremely limited resources are channeled to intramural efforts that might be spent more wisely on investigator-initiated extramural research.

In view of the stringent fiscal and personnel constraints faced by the National Center for Health Services Research, the committee recommends that

> the legislation mandating the intramural research program of the National Center for Health Services Research be amended to strike the language requiring the Center to allocate not less than twenty-five percent of its budget to intramural research.

Over the past decade, the National Center has occupied three different locations within the federal government. It has been situated in the Office of the Assistant Secretary for Health for less than one year. In light of Congressional debate about the appropriate organizational locus for the Center which occurred during the course of this study, the committee reviewed several options. These include leaving the Center in its present position, relocating it in the National Institutes of Health, re-creating it as a free-standing agency within the Public Health Service, or re-creating it as a free-standing agency within the Office of the Secretary of the Department of Health, Education, and Welfare. The associated strengths and weaknesses of each option were carefully analyzed. Many of the arguments are essentially variations on themes surrounding a central dilemma: the need to infuse the Center with the requisite organizational, political, and intellectual authority to achieve the desired coordination of research priorities and high standards of quality; combined

with the need to avoid the politicization of decision-making that potentially adheres to levels of bureaucracy sufficiently high to achieve the desired degree of coordination.

After carefully considering these and other issues, the committee concluded that there are no compelling grounds for recommending specific organizational changes. As the Center has experienced frequent and significant disruptions from previous reorganizations, the committee believes that further changes of location would create additional difficulties. The committee notes that the Center's present location within OASH provides the possibility for enhanced organizational and political visibility and authority. This may, however, lead to inappropriate politicization of its research priorities, agendas, and roles. As the Center has been in OASH for only a limited period, it is too early to determine whether its current location is, overall, a desirable one. Therefore, the committee recommends

> that the National Center for Health Services Research remain in its present location in the Office of the Assistant Secretary for Health and that the effects of these arrangements on the various functions and priorities of the Center be evaluated after a suitable interval, say five years, to determine whether further reorganization is warranted.

REFERENCES

1
David H. Banta and Patricia Bauman, "Health Services Research and Health Policy," Journal of Community Health 2 (Winter 1976): 121-32; Charles E. Lewis, "Health Services Research and Innovations in Health Care Delivery: Does Research Make a Difference?" New England Journal of Medicine 297 (25 August 1977): 423-27; Beverlee A. Myers, "Health Services Research and Health Policy: Interactions," Medical Care 11 (July-August 1973): 352-58; Sherman R. Williams and Jere A. Wysong, "Health Services Research and Health Policy Formulation: An Empirical Analysis and a Structural Solution," Journal of Health Politics, Policy and Law 2 (Fall 1977): 362-87.

2
U.S. Congress, Senate, Committee on Appropriations, Departments of Labor, and Health, Education, and Welfare and Related Agencies Appropriations Bill, 1978, Report No. 95-283, 95th Cong., 1st sess., 1977, p. 81.

Chapter 2

HEALTH SERVICES RESEARCH DEFINED

The term "health services research" is commonly used to refer to a broad and heterogeneous set of activities, but there is no consensus as to its precise meaning. In a review of the literature, the committee found no definition that both (1) provides criteria to identify studies as health services research and distinguish them from other types of inquiry and (2) subsumes the entire range of studies that are conventionally classified as health services research. The need for such a definition is two-fold. As a practical matter, the committee required an understanding of the characteristics of health services research in order to establish the scope of its study. Beyond this, because health services research has become an administrative category for support of research and training, officials in the federal government need a definition upon which to base research funding and related policy decisions and with which to devise an effective division of responsibilities for research among the several agencies involved in health care.

This chapter reviews existing definitions, explains the one adopted by the committee, and discusses and illustrates various types and uses of health services research.

Existing Definitions

Most existing definitions describe characteristics of the field of health services research but do not specify the features of studies that distinguish health services research from other types of inquiry. Such statements typically emphasize the variety of disciplinary perspectives and methods employed in the field of health services research and note its broad substantive concerns and purposes. For instance, the often cited definition of the Panel on Health Services Research and Development of the President's Science Advisory Committee characterizes health services research and development as a "broad scientific field, the overall objective of which is to improve the provision of health services,"[1] and illustrates its scope with lists of participating disciplines and "representative questions."[2]

There are several problems with definitions of this sort. First, they imply that studies in health services research are inherently multidisciplinary and directly focused on specific programmatic or policy questions. While many studies do in fact incorporate theoretical perspectives of several disciplines and are aimed at solving particular problems, it is equally true that others that should be classified as health services research employ the conceptual frameworks of particular disciplines or address problems that have no direct implications for program or policy decisions.

Second, to define the scope of a field by listing its principal specific concerns both presumes that issues endure and risks omission of emerging topics. Priorities for health services research change in response to new information and changing definitions of problems in health care. Therefore, illustrations of the core concerns of the field of health services research based on lists of current issues are likely to become outdated.

Finally, definitions and critiques of the field frequently use the terms "health services research and development" and "health services research" interchangeably. As the former connotes a strategy of research coupled with systematic interventions in the delivery system, it should not be confused with research, which may or may not be focused on planned or conscious changes.

"Health Services Research"

> Health services research is inquiry to produce knowledge about the structure, processes or effects of personal health services.

A study is classified as health services research if it satisfies two criteria:

- It deals with some features of the structure, processes, or effects of personal health services.
- At least one of the features is related to a conceptual framework other than that of contemporary applied biomedical science.*

---

*This definition is similar to that proposed by the National Research Council Committee on National Needs for Biomedical Research Personnel.[3] The purposes of the IOM and NRC studies differed and the definitions of health services research were developed to meet the specific study objectives. In the NRC study a definition was employed that more directly related to the health policy aspects of health services.

The first criterion defines the core focus of health services research as a personal health service, which the committee understands to be a transaction between a provider of health services and a client for the purpose of promoting the health of the client. Providers include licensed health care professionals and ancillary personnel as well as "marginal" and lay practitioners. Hence, health services research deals with both formal and informal systems of health care. In this definition, health services are understood to include direct applications of medical knowledge and technologies and the provision of advice and assurance. In addition, health services encompass the full range of personal health care, including dental and mental health services. As concepts of health and health services change, the scope of health services research will change accordingly.

The second criterion places in the category of health services research all studies of personal health services that focus on at least one feature of their structure, processes, or effects defined in terms of some conceptual framework other than that of contemporary applied biomedical science.* That framework views the human organism in terms of its anatomical structure and physiological processes, and identifies, classifies, and explains diseases, which usually are defined as structural malformations, chemical lesions, or behavioral abnormalities.[4]

These two criteria permit one to distinguish the principal emphases of health services research from other related types of inquiry. The committee emphasizes, however, that the boundaries of health services research are neither fixed nor sharply distinct. Similarly, research in this area draws upon concepts and methods from various fields of inquiry, frequently attempting to integrate their knowledge and techniques and to investigate their implications for the organization, processes, and effects of personal health services.

Research on Environmental Health Services

The first criterion differentiates the principal focus of health services research from that of research on environmental health services, which concentrates on services that attempt to promote the health of populations by treating their environments rather than by treating specific individuals.

Knowledge from studies of environmental causes of health problems is

---

*"Basic" biomedical science is concerned with development of knowledge about the fundamental life process.

obviously important in health services research, because it gives insight into the kinds of health problems for which people seek care and the types of services that must be provided by the personal health services industry. Furthermore, research aimed at assessing the relative effects of environmental factors and personal health services on the health of populations combines information from both fields of study. Studies of effects of fluoridating water supplies on the incidence of dental caries, for example, would not be thought of as health services research. However, investigations of the relative costs or effectiveness of reducing caries by fluoridating community water supplies versus applying topical fluorides to individuals would be.

Behavioral Research

A portion of the field of health-related behavioral research is concerned with understanding factors influencing individuals' life styles that, in turn, are associated with their health. Research in this area draws upon knowledge from epidemiological studies that identify behavioral determinants of illness, such as diet and smoking habits, and examines their social and psychological components.

As do studies on environmental health services, behavioral research often overlaps with health services research. Behavioral studies of the determinants of smoking behavior, for instance, are not health services research, according to the committee's criteria. However, behavioral and health services research interests come together in studies of effects of life styles on the use of personal health services and in research on the effects of personal health services on individual's health-related habits.

Biomedical Research

The second criterion differentiates health services research from contemporary applied biomedical research. Within the conceptual framework of biomedical research, no explicit attention is given to matters other than therapeutic interventions and disease processes. Indeed, a major assumption of the randomized clinical trial is that all factors that might both influence an organism and be associated with the intervention under investigation are controlled by randomization. To the extent that this assumption is tenable, the randomized clinical trial is able to assess the effects of interventions on an individual's disease free from the disturbing influences of extraneous matters, such as the characteristics of physicians and hospitals.

Although the randomized clinical trial is considered the ideal method for assessing the safety and efficacy of therapeutic interventions,

in practice, relatively few are carried out. In consequence, most information about the efficacy of medical procedures is from studies done in practice settings in which the conditions of the randomized clinical trial cannot be assumed. Nevertheless, these studies are not considered health services research unless they take explicit account of factors other than interventions and outcomes conceptualized in terms of the framework of biomedical science. Studies of the relative effectiveness of coronary bypass surgery versus drug therapy on reducing chest pain, for example, are extensions of biomedical research. Studies that examine characteristics of hospitals or physicians that affect differential outcomes of surgery fall into the realm of health services research.

The distinction between biomedical and health services research becomes somewhat blurred when the outcomes of therapeutic interventions are conceptualized in terms that are not strictly medical. Studies in this area seek to evaluate technologies in terms of their efficacy, safety, and implications for the organization and costs of care. Evaluations of a surgical procedure might, for example, take into consideration lengths of recovery time required by patients. Such studies of stays in hospitals following surgery are in the realm of clinical (rather than strictly biomedical) research. Because such questions are more closely aligned with other problems of interest to those who do health services research than with the principal concerns of biomedical research, the committee is inclined to make a strict interpretation of its second criterion and to consider such clinically-oriented studies instances of health services research. For the example given, one need only change the research question to a study of differences in postsurgical lengths of stay of patients in acute-care hospitals versus others in extended care facilities to place the inquiry squarely in the domain of health services research.*

When outcomes of medical interventions are defined in terms of costs of care, patient satisfaction, or other matters of interest to the social sciences, studies are clearly in the realm of health services research.

Epidemiological Research

Most contemporary research within the discipline of epidemiology falls outside the boundaries of health services research. Epidemiology is

---

*The same reasoning would lead to classifying as health services research studies of effects of medical interventions on patients' functional or general health status.

generally viewed as the "study of the distribution and determinants of disease frequency in man"[5] in which explanatory factors are drawn principally from individuals' physical, biological, and social environments and their life style and behavioral patterns.

Epidemiological studies that include features of the structure or processes of personal health services among their explanatory factors are instances of health services research if these features satisfy the second criterion. Investigations of effects of populations' use of health services on their mortality rates are examples of this type of research. However, research on the effects of inoculations against smallpox on the incidence of the disease in populations would not be classified as health services research. Although such studies would meet the first criterion of dealing with a personal health service (i.e., having an inoculation), they would not satisfy the second, because the provision of an inoculation is a medical intervention. By contrast, studies employing epidemiological methods to assess the impacts of particular medical interventions on general health status or other outcomes that are not defined in strictly medical terms would be classified as health services research.

Levels of Health Services Research

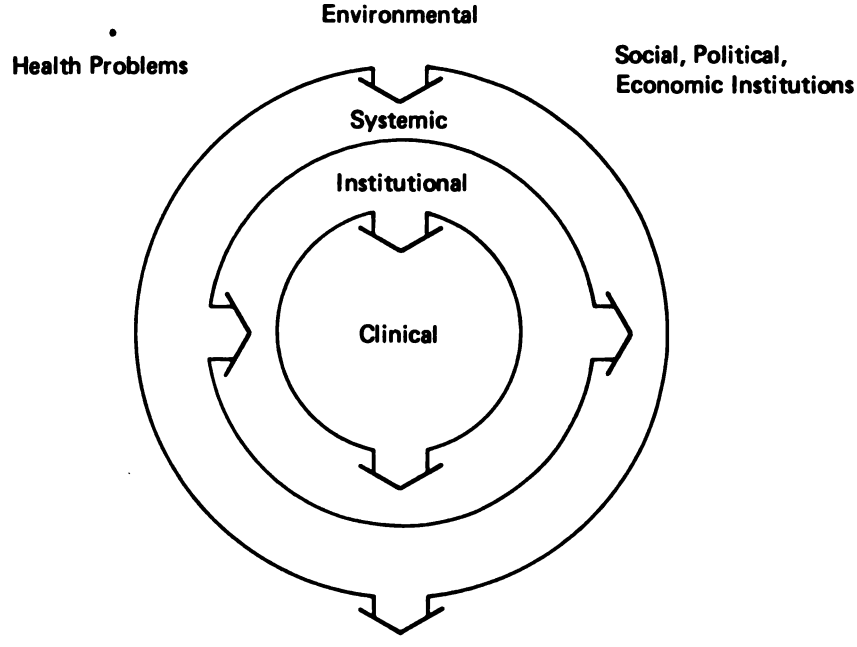
Studies of health services may be categorized according to the four general levels of problems they address: clinical, institutional, systemic, or environmental. These levels are depicted in Figure 1 in order of increasing generality, proceeding from the core of studies of clinical practice to the most global level of research on relationships between characteristics of the health services system and events in the larger social, political, and economic environment that affect them.

Clinically-Oriented Studies

Clinically-oriented studies attempt to discover the characteristics of providers and patients and combinations of resources employed in practice settings that affect the processes and outcomes of care. Unlike applied biomedical research, which concentrates on developing procedures and testing their efficacy and safety under controlled conditions, clinically-oriented studies recognize that the effectiveness of health services is influenced by conditions in which they are provided and that criteria other than strictly medical considerations are relevant to outcomes. Accordingly, they deal explicitly with the circumstances of medical practice and take into consideration a broader range of outcome criteria, including patient satisfaction and the costs of care as well as the effectiveness of treatment.

FIGURE 1

LEVELS OF HEALTH SERVICES RESEARCH



Studies in this category usually concentrate on characteristics of providers or patients. They deal with such matters as the influences of physicians' ages, training, and work loads on the quality of their practice; the effects of using ancillary personnel or various computer-based techniques on the efficiency and completeness of medical history taking; and the cost-effectiveness of alternative treatment modalities. Studies focusing on patients investigate, for instance, characteristics associated with adherence to medical regimens, use of particular preventive or diagnostic services, and lengths of hospital stays.

Institutionally-Oriented Studies

While institutionally-oriented studies share many of the concerns of clinically-oriented research, they are distinguished by their focus on organizational and administrative features of settings in which services are delivered. Research at this level examines, for instance, the productivity and quality of care rendered by physicians in solo practice compared with those working in group practices, differences in average lengths of stay in hospitals of varying sizes, ownership, and complexity, and the costs of custodial care in extended care facilities compared with those provided in patients' homes. Studies of populations focus on such matters as why families choose prepaid group practices and the determinants of utilization patterns of various providers of services.

Systemic Studies

System studies deal with features of the health services system that affect the inter-relationships among providers and health care institutions and the population's aggregate demand for health services. At this level, attention is given to the influences of financing mechanisms, regulatory programs, and other features of the system on such matters as the capital expenditures of hospitals, choices of specialties and practice sites by physicians, the development of group practices, and expenditures for various types of personal health services.

Environmental Studies

Environmental studies seek to understand the circumstances and events in the larger social, political, and economic contexts that shape the health services system and define its societal functions. These include research on the implications of tax policy for the flow of capital into the health services industry, studies of the legal

and ethical responsibilities of health care institutions, and research on the population's preferences for and expectations of health services. Studies at this level usually deal with matters quite remote from clinically-oriented research. Whether they are considered health services research depends ultimately upon their inter-relationships with other studies at the systemic, institutional, and clinical levels. The question of tax policy, for instance, becomes relevant to health services research when it can be shown to have implications for the ways in which health care is organized, delivered, or used.

Types of Health Services Research

The definition of health services research presented above states that it is inquiry to produce knowledge. Inquiry refers to the series of stages ordinarily associated with empirical research, including problem formulation and conceptualization, measurement and data collection, and analysis and interpretation. While each of these stages is a necessary part of the process of inquiry, the crucial ingredients of research are the analysis and interpretation of data for the purpose of answering a question.

The collection of data to administer programs does not constitute research unless it is directed toward answering some question that applies to groups of units. The Health Care Financing Administration, for instance, manages the Medicare and Medicaid programs for the federal government. In this capacity the agency assembles vast amounts of information about beneficiaries' use of health services and charges for them in order to determine whether particular services and charges are eligible for reimbursement. This activity does not constitute research, however, because it is not directed toward answering broader questions that apply to groups of Medicare or Medicaid beneficiaries. In general, program monitoring activities, in which interest is focused on individual units, are not research.

The nature of the questions or problems that occasion inquiry define two types of research, descriptive and analytic. Descriptive research addresses questions of the form "how many (or what) Xs are in A?" The objective of quantitative descriptive inquiry is to estimate parameters that apply to groups of cases. For instance, descriptive data may depict trends over time or compare geographic areas and their populations.

A great deal of useful health services research is descriptive. The series of estimates of national health care expenditures produced by the Social Security Administration (and now by the Health Care Financing Administration) provide invaluable information on the amounts and

categories of public and private expenditures for health care. Similarly, the various series of publications from the National Health Survey (conducted by the National Center for Health Statistics) yield useful national estimates of the prevalence of illness and the use of health services. Data from these types of studies identify trends and variations that raise theoretical and policy questions that invite further analysis to reveal their correlates and causes. This is the objective of analytic research.

Analytic research attempts to answer cause-effect questions or to make projections into the future. Descriptive research deals with questions of "how many" or "how much," but analytic research is concerned with answering "why" or "what will be" questions. This type of research is inherently more difficult and abstract than descriptive research. It requires the use of theoretical models and designs of proof to demonstrate that causal interpretations (or projections) are logically consistent with what is already known and that statements (or assumptions) about the effect of particular variables are not spurious (i.e., due to circumstances not explicitly included in the analyses).

Several circumstances combine to complicate analytic research efforts in health services research, including (1) the complexity of problems addressed in this area and their variations in time and place; (2) the states-of-the-art of the theories and methods of disciplines that contribute to health services research; (3) the specific data available for research; and (4) the difficulty of establishing truly experimental situations, which frequently requires relying on nonexperimental research designs.

The logical and practical necessities that set the limits of analytic studies encourage investigators, working from different theoretical perspectives, to focus on selected aspects of problems and to disregard others. As no conceptual framework takes into account all aspects of a problem or is inherently superior to others, health services research encompasses a great variety of perspectives. Research, for instance, relating to the Health Systems Agencies created under the current health planning act would employ the theories and methods of economics to assess their effects on hospital cost inflation, the perspectives and approaches of sociology or political science to study their influences on community organization, and a variety of disciplines ranging from clinical medicine to economics to determine the effects of awarding a certificate of need for the installation of an expensive new technology. Because health services research takes place in particular places and periods and is focused on different levels of generality, particular studies cannot satisfy the needs and interests of all potential audiences. Findings from a study done in a particular health care institution, city, or state often are not generalizable to other settings, because of circumstances that are peculiar to the site in which the study was done. For the same reasons, data from national studies often do not apply to local situations.

Since much of health services research is based on the theories and methods of the social sciences, its ability to explain events is limited by those sciences' levels of development. Even a cursory reading of the literature in these fields reveals considerable uncertainty and debate about the meanings and appplications of fundamental concepts and the validity of basic propositions. These problems are compounded by the concerns of much of health services research with such elusive and judgmental issues as quality and economic value of life, the general health status of populations, and the humaneness of health services.

Data for health services research are drawn principally from population surveys, records and documents, and direct observation. Each of these methods admits various biases and unreliability that militate against clearcut description and analysis. Answers to such seemingly straightforward questions as precisely how many hospital beds or physicians there are in the United States or how much the population spends on various types of services are not readily found from existing data sources, and special studies to determine these numbers are expensive and time-consuming. Furthermore, the protection of privacy afforded individuals and institutions by law and the economic and political advantages that accrue to some from concealing certain types of information frequently lead to incomplete and biased data that limit the validity of analyses.

The classic experimental design remains the ideal foundation on which to conduct research. With few exceptions, however, studies in health services research are based on nonexperimental designs. As a consequence, it is seldom possible to draw strong conclusions regarding cause and effect, such as those drawn in the laboratory sciences. The practical and ethical obstacles that prevent investigators from controlling events and circumstances that are extraneous to their principal research problems introduce errors into analytic studies whose magnitudes often cannot be estimated. Because of these problems, analytically-oriented health services research relies heavily upon the comparative approaches of studying so-called natural experiments and of applying complex statistical procedures to historical data to adjust for characteristics of cases and situations that are known or presumed to be related to the question under investigation.

These difficulties inherent in health services research account to a large extent for the seeming inconclusiveness of much of the research, and underscore the need for studies aimed at improving research methods and for replications using various perspectives and methods. As the field has developed, significant advances in knowledge have been achieved through the application and integration of theoretical perspectives and methods that either were unknown or undeveloped two decades ago. Advances in computerized multivariate analyses, for example, opened possibilities for research on certain types of questions that previously could not be addressed. Likewise, the availability of national data on use of health services has given impetus to comparative studies

of national and international scope. Thus, there is unmistakable evidence of progress within the field and need for continued efforts for improvement. While that occurs, however, those who sponsor health services research should recognize the limitations of current theoretical and methodological approaches and encourage replications to validate and extend findings of studies.

Uses of Health Services Research

Most definitions and critiques of the field of health services research imply that studies in this area have or should have direct implications for action. The field is characterized as an applied endeavor whose products should be assessed primarily in terms of their usefulness to people with decision making responsibilities, whether they be clinicians, administrators of health care institutions or government programs, or officials charged with formulating national health care policy.

Although the committee agrees that these are legitimate expectations and grounds for assessing health services research, it notes that discussions of the usefulness of studies in this area are often clouded by simplistic analogies to research and development in the physical and natural sciences, misunderstandings of decision making processes in various settings, and narrowly defined conceptions of the audiences for health services research. In this section, various potential uses of health services research by decision makers are described when purely rational models of decision making are assumed. The following section critiques these models and discusses others.

Evaluation of Technologies and Innovations

The logical sequential linkage of biomedical and health services research occurs at the point where a technology* is tested in selected clinical settings, indicated by the "transfer" stage in Figure 2. At this point, technologies whose efficacy and safety have been established by trials carried out in the application stage are placed in clinical settings for further testing. The first step in the transfer stage involves designing suitable arrangements for the use of the technology. Once these are developed, the innovation is tested for clinical effectiveness and cost-effectiveness in terms of the institutions

---

*Although this discussion refers to biomedical technology, it applies equally to other types of technology employed in the health services industry, for instance the uses of computers in institutional management, geocoding and other computer-based technologies employed by planners, and architectural innovations. The term technology encompasses knowledge and procedures as well as materials and equipment.

FIGURE 2

EVOLUTION AND DIFFUSION OF HEALTH CARE TECHNOLOGY

	RESEARCH STAGE	OBJECTIVE	EVALUATION CRITERIA
BIOMEDICAL RESEARCH AND DEVELOPMENT	Basic research	Develop knowledge about fundamental life processes	New knowledge
	Applied research	Apply knowledge from basic to research on particular diseases	New knowledge about causes and/or processes of particular diseases
	Application	Develop and test technologies to diagnose, prevent, cure, or contain particular diseases	Efficacy, safety relative to existing technologies
HEALTH SERVICES RESEARCH	Transfer	Design and test systems for use of technologies in clinical settings	Acceptability, efficiency of application and effectiveness and safety within test sites
		Test cost-effectiveness, patient and provider acceptability and effects on institutions	Knowledge about cost-effectiveness, patient and provider acceptability and institution-wide impacts
	Diffusion	Develop knowledge about the diffusion of technologies	Knowledge about why technologies diffuse; effects of prices, institutional resistance, etc.
	System impact	Develop knowledge about impacts of technologies due to their diffusion and applications	Knowledge about impacts of technologies on system-wide demand for services, costs, relationships between their supplies and needs of populations, etc.

in which it is applied. During this transfer stage, development and research activities often become intertwined. In fact, much of health services research involves demonstrations in which developmental and research activities are closely integrated.

The subsequent stages of research on the diffusion of technologies and its effects on health services systems are clearly health services research. At this point, however, attention turns from questions of efficacy and cost-effectiveness of technologies to studies at the institutional and systemic levels of health services research. Investigations of the features of individuals or institutions that adopt technologies and of the effects of their adoption are similar to market research conducted in other industries. At the systemic level, studies in health services research focus on impacts of such matters as the influences of financing and regulatory programs on the diffusion of technologies. Also, they examine the effects of their organization on the demand for services, per capita expenditures for health services, and inter-organizational arrangements among health care and other institutions.

Problem Solving

The use of health services research in assessment of technologies at the clinical level is a situation in which both the question and the decision are clearly identifiable and the need for decision making is relatively predictable. At issue is whether a particular technology should be adopted by a particular individual or institution. The problem arises from the "knowledge-driven" processes[6] of biomedical research and development.

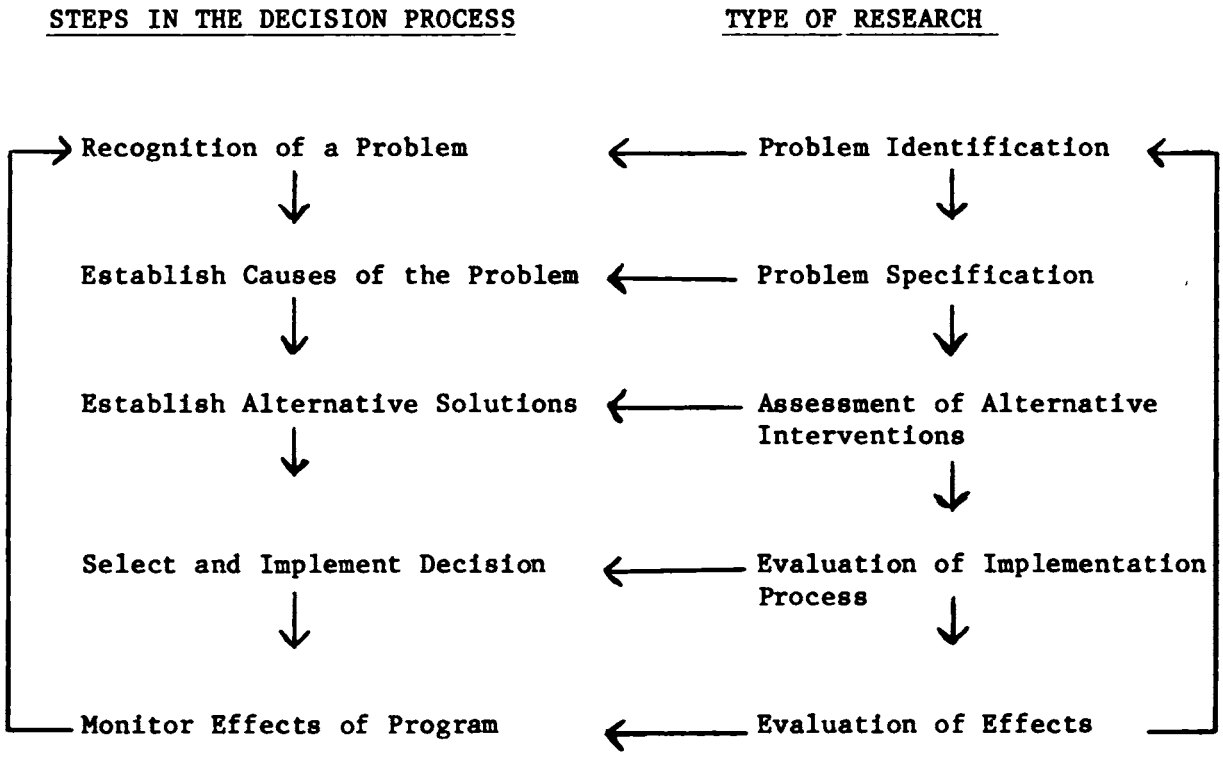
Most health services research does not come about in this sequential, predictable way. Instead, studies in this area are occasioned by existing problems identified by societal groups and decision makers. Research is aimed at solving the problems.

Rational problem-solving involves several stages, each of which requires a particular type of knowledge. These stages and corresponding types of health services research are shown in Figure 3.

Problem identification typically involves descriptive research to measure the extent or seriousness of a problem and to locate subgroups of people, institutions, or geographic areas that are most affected by it. Findings from such studies occasionally may bring "new" problems to the attention of decision makers. More commonly, however, they provide more precise and systematic information about problems previously identified by affected groups. As these types of studies describe the nature and extent of a problem, their findings usually are not amenable to direct translation into decisions about desirable interventions. The studies of the Committee on the Costs of Medical Care

FIGURE 3

RELATIONSHIPS BETWEEN STEPS IN THE DECISION PROCESS AND TYPES OF RESEARCH



carried out in the late 1920s and early 1930s are widely cited examples of problem identification research. The Committee's studies of use of personal health services provided the first quantitative information in the United States on the distribution of medical services among income groups. The series of descriptive reports of the National Center for Health Statistics and of the Center for Health Administration Studies of the University of Chicago on the use of health services and those of the Office of Policy, Planning, and Research of the Health Care Financing Administration (formerly of the Office of Research and Statistics of the Social Security Administration) on expenditures for health care are notable contemporary examples of this type of research.

Problem specification moves beyond description to identify causes of problems. It is analytic insofar as it seeks to quantify the relative importance of various factors presumed to contribute to a problem. Studies of effects of health insurance on hospital utilization and costs, research on factors affecting physicians' choices of practice locations, and inquiries about determinants of hospital capital expenditures illustrate this type of research.

Assessment of alternative interventions is similar to problem specification in that it attempts to quantify the relative effects of factors on a problem. It differs from problem specification in the explicit attention it gives to effects of alternative potential interventions. In effect, this type of research attempts to quantify the costs and benefits associated with various intervention strategies. Comparative studies of hospital use by health maintenance organizations and insured populations, and cost-benefit studies of alternative modes of improving a population's health status are of this type.

Evaluations of implementation processes attempt to assess the degree to which a program operates as intended and to identify causes and consequences of deviations. Unlike the types of research described above, evaluations follow choices of implementation strategies. Therefore, researchers have access to plans of action that, in principle, specify intended modes of implementation that can be used as standards against which to compare performance. Research of this type can be descriptive, aimed at determining whether the actual process conforms to the plan, or it can be analytically oriented, aimed at identifying causes and consequences of the ways in which intervention strategies are implemented. For instance, studies of the compositions of boards of directors of Health Systems Agencies and of physicians' conformance to standards of practice established by Professional Standards Review Organizations are descriptively oriented evaluation research. Extensions of these aimed at identifying causes of observed behaviors would be examples of analytically oriented evaluations.

Evaluations of effects attempt to measure the extent to which interventions attain stated objectives, to identify their unanticipated consequences, and to explain their causes. Minimally, such research

describes whether (or the extent to which) a stated objective is attained. More elaborate evaluations examine features of interventions or their environments that account for observed results.

The series of stages in this process constitute health services research and development when applied at the clinical or institutional levels and policy research at the systemic level. Health services research and development refers to a strategy of cycles of interventions combined with research and evaluation. Its purposes, like research on the transfer of technology, are to develop and test innovations in test sites.

The problem solving stages described above are sometimes referred to as "cyclical policy analysis" to distinguish it from the more general meaning of policy analysis.[7] Cyclical policy analysis refers to an orderly strategy of research aimed at providing knowledge based on experience. It rests on empirical study of situations or events as they currently exist. Findings from such studies are employed in policy analysis, which assembles information with which to design alternative options for action and anticipates the likely effects of alternative intervention strategies. Because policy analysis usually takes into account a broader range of criteria in evaluating alternatives than is considered in particular studies, it typically involves synthesizing findings of existing research and extrapolating their implications.

Limitations of Rational Models

The foregoing schemes were intended to identify potential uses of health services research in decision making, not to describe what actually occurs. It should be noted, however, that these schemes are based on assumptions that rarely are met in situations for which health services research is conducted. Furthermore, they overlook uses and users of health services research other than decision making by decision or policy makers.

The models of technology evaluation and of problem solving described above make several assumptions about decision making situations and the relationship of information from research to decisions:

- a person has identified a problem to be solved, has formulated consistent criteria for valuing alternative solutions, has the will and means to implement solutions, and will base decisions exclusively on results of the research;

- the research was completed before the decision was taken, dealt with the problem as identified by the person and

> incorporated all of his evaluation criteria, and was accurately communicated to, understood, and accepted by the person.

Given these assumptions, the utility of research can be assessed in objective terms by comparing the problem situation before and after implementation of the solution. Absent any of these, the utility of research must be judged on subjective grounds, such as its informative value to the person. In formulating its assessment of health services research, the committee took these assumptions as problems to be addressed.

The principal difficulty in assessing the uses of health services research is that few decision making situations fit the assumptions of rational problem-solving models. Decisions to adopt or not to adopt particular technologies are usually made before completion of cost-effectiveness and institutional studies, and decision makers are influenced by several factors other than the results of empirical studies. Because new technologies are developed and marketed through the private sector, decisions about their adoption or nonadoption are influenced by competitive pressures and custom, as well as by cost-effectiveness and other so-called rational criteria.

The same is true of the uses of findings from health services research in policy making. Policy decisions are a blend of factual information, values, and expectations about the future effects of alternative courses of action. Research may point up issues, measure their extent and seriousness, suggest the likely effects of alternative interventions, and influence the context and quality of policy debate. It cannot, however, substitute entirely for the political process through which value choices and judgments about possible outcomes are explicitly and implicitly incorporated into policy decisions.

Rational decision models also are limited sources of criteria for assessing the utility of research because they concentrate exclusively on formal decision making and official decision makers. Research findings have informative value whether or not they lead to identifiable decisions. They are the substance of formal education in health care administration and much of clinical medicine and a source of knowledge, attitudes, and expectations on the part of the public. Moreover, as government involvement in the health care industry expands and the scope of political decisions affecting health care enlarges, information from health services research, if effectively transmitted, becomes an increasingly crucial ingredient of the public's abilities to choose the types of health services it desires and to hold providers, planners, and government accountable for what is delivered.

REFERENCES

1
Executive Office of the President, Office of Science and Technology, Improving Health Care Through Research and Development, Report of the Panel on Health Services Research and Development of the President's Science Advisory Committee (March 1972): 1.

2
Ibid.

3
Personnel Needs and Training for Biomedical and Behavioral Research: The 1978 Report of the Committee on a Study of National Needs for Biomedical and Behavioral Research Personnel. Commission on Human Resources, National Research Council, Washington, D.C. (1978): 113.

4
Alvan R. Feinstein, "Scientific Methodology in Clinical Medicine II. Classification of Human Disease by Clinical Behavior," Annals of Internal Medicine (October-December 1964): 757-781.

5
Brian MacMahon and Thomas F. Pugh, Epidemiology: Principles and Methods (Boston: Little, Brown and Company, 1970): 1.

6
Carol H. Weiss, Using Social Research in Public Policy Making (Lexington, Massachusetts: Lexington Books, 1977): 13.

7
Charles O. Jones, "Why Congress Can't Do Policy Analysis (or words to that effect)," Policy Analysis (Spring 1976): 251-264.

CHAPTER 3

THE FIELD OF HEALTH SERVICES RESEARCH

The field of health services research includes the persons and resources employed to produce and disseminate knowledge about personal health services. Although the field has certain features of an academic discipline, it is not generally regarded as a distinct scientific discipline with its own characteristic theories and methods. Rather, the field gains its coherence by concentrating on questions and problems pertaining to a particular set of activities, namely, the provision of personal health services. In this sense, health services research is an applied field; its priorities are established by societal questions and problems about personal health services.

This chapter describes features of the field of health services research, distinguishing them from characteristics of academic disciplines, and sketches the history of the problems and circumstances that have shaped the field's priorities and development.

Field as Distinct from Discipline

The body of knowledge known as health services research encompasses findings from studies conducted from a variety of perspectives and applying a variety of methods, many of which combine approaches of several academic disciplines.* In this sense, the field is multidisciplinary. It does not, however, have a distinct theoretical framework or set of characteristic concepts and methods ordinarily associated

---

*Health services research employs concepts, theoretical frameworks, data, and methods from the field of medicine and other health professions (nursing, dentistry, pharmacy, etc.), the social and behavioral sciences, the applied social sciences (social work, business and hospital administration, etc.), industrial engineering, law, biostatistics, demography, and geography.

with academic disciplines. These and other differences between fields and disciplines account for differences in their internal organization and research priorities.

The major differences between research in academic disciplines and that in applied fields are in their conceptual content, the purposes for which research is done, and the sources of questions for research. Research in academic disciplines is identified by its relationships to particular conceptual frameworks. Economics, political science, and sociology, for example, all focus on exchanges among individuals. However, research in each of these disciplines usually concentrates on selected features of exchanges that are relevant to its own conceptual framework. An economist studying physician-patient exchanges, for instance, might examine effects of prices on the volume and types of services consumed or produced; a sociologist would be more inclined to study the effects of organizational characteristics on interpersonal behavior. Research is done to produce knowledge to be incorporated into the theories of academic disciplines from which further questions for research are derived. Findings are usually directed toward other scientists within the disciplines working on related questions.

By definition, applied fields are problem-oriented. Their research questions are drawn from the work of practical affairs, and their theoretical and methodological approaches are more diverse than any of the individual disciplines that contribute to the field. Research on why people use different types of health services, for instance, may draw upon concepts and methods of economics, psychology, and sociology, using administrative or clinical definitions to categorize "types of health services." As the questions that occasion research are practical problems in the area being investigated, findings are addressed to and used by persons who must deal with the problems as well as by those who are interested in their implications for knowledge in their scientific disciplines.[1]

While the purposes and content of research may differ between that done by a person studying a health services problem from the perspective of an academic discipline and another who identifies himself as a "health services researcher," knowledge in the field of health services research encompasses the products of both. The crucial features of studies that make them health services research are those defined in Chapter 2, rather than the motives of researchers or the perspectives and methods they employ in their research. An economist studying the capital expenditures of hospitals to test theories of the behaviors of nonprofit firms, for instance, produces health services research regardless of his intentions and interests. Hence, the analogy with biomedical research and development, which distinguishes between basic and applied research is not entirely applicable to health services. While many of the studies that contribute to health services research

are done in response to practical problems, many others are done to develop basic knowledge in the participating academic disciplines.

Because the field of health services research is identified by the content of the research questions and findings, there is considerable variation among the perspectives and interests of persons who contribute to it. Lacking commitment to theoretical frameworks and methods that unify academic disciplines, the field is divided into several groups on the basis of several dimensions. First, because more persons who contribute to the field identify themselves primarily with their disciplines, the field is partitioned along disciplinary lines (e.g., health economists, medical sociologists). Second, within disciplines, researchers subdivide into groups sharing interests in particular features of health services. For instance, among medical sociologists, some are interested in the structure and dynamics of health care organizations and others concentrate primarily on the illness behavior of individuals. Third, groups divide among and within disciplines along particular substantive interests (e.g., mental health services, rehabilitation services). Finally, because many issues in health services research are value-laden, researchers are often divided by political and value orientations.

Although these circumstances are not unique to the field of health services research, they point out the potential problems of characterizing the entire field of health services research in terms of its purposes, interests, and perspectives. Because the research priorities and agendas of applied fields are set largely by societal definitions of problems and issues, research emphases and perspectives change with changing circumstances.

Origins and Development of the Field

The types of systematic inquiry and the organizational structure that characterize the contemporary field of health services research have developed only within the past 20 years. During this period, research in personal health services became recognized subspecialties within several academic disciplines, and professional groups, training programs, and specialized journals in health services research were established. These developments, along with the enlarged and relatively regular sources of federal support for studies in this area, have provided the institutional structure by which the field of health services research is identified.

Although health services research has only recently come to be recognized as a distinct field of inquiry, it builds upon traditions of research on health services that began in the opening decades of

the Twentieth Century. As Odin Anderson has observed, systematic research on health care emerged in the 1920s in response to concerns about equity of access to health services, and its emphases have historically reflected prevailing societal definitions of issues surrounding the organization, financing, and quality of health services.[2] As these emphases changed and evolved, participation in the field and the varieties of settings in which research is done broadened, and, increasingly, the federal government became its principal source of financial support.

The predominant policy issues of various periods in the history of health services in the United States define four general stages of health services research: its origins from 1900 to the 1930s, during which the principal features of the nation's health services industry took shape; the 1930s through the early 1950s, during which voluntary health insurance emerged as the principal mode of financing hospital services; the mid-1950s through the mid-1960s, which witnessed the the extension of federal subsidies for training, hospital construction and planning, and repeated changes in hospital reimbursement by Blue Cross; and from the late 1960s to the present, during which costs, reimbursment, quality of health care, and planning and regulation became major issues.[3]

Origins: Pre-1930s

During the opening decades of the Twentieth Century, the nation's personal health services industry consolidated in the private sector. Medical care was purchased by the patient from physicians working in solo practices and charging fees for each service and from independent, voluntary hospitals. Care for indigent and medically indigent persons was provided free or partially free by physicians applying a sliding scale of fees, voluntary hospitals in receipt of philanthropic funds, and public hospitals and clinics financed with local or state tax funds. These patterns had been established without conscious planning or public intervention and, with the exception of the efforts of organized labor in the early 1900s to establish workmen's compensation schemes and later compulsory national health insurance, they raised few public policy issues.

Research during this period was sporadic and largely descriptive in nature. Sponsored by philanthrophic foundations, private associations, and a few federal agencies, studies focused on prevalences of illness in general populations and on the activities of local health departments. Concern about the health and health care of the poor gave impetus in the 1920s to studies by the Public Health Service examining relationships between income and morbidity, to investigations of infant mortality by the Children's Bureau, and to a series of studies by the American Public Health Association of the organization, expenditures, and accomplishments of municipal health departments.

The most ambitious effort of this period was the series of studies undertaken by the Committee on the Costs of Medical Care (CCMC). Composed of more than 40 eminent physicians, public health professionals, representatives of health care organizations, insurance companies, the general public, and economists and statisticians, and sponsored jointly by eight private foundations, the Committee undertook several studies from 1928 through 1932 that culminated in more than 70 reports and papers and a far-reaching set of recommendations for the reform of health services financing and organization. Among the more than 20 field studies undertaken by the staff or under the Committee's sponsorship were the first major population surveys of use of personal health services, which revealed substantial variations among income groups; projects that laid the groundwork for estimating populations' needs for personal health services; and the pioneering work on the potential benefits of the group practice form of medical care organization.

1930s - 1950

Although the CCMC's recommendations in favor of group practice and the use of ancillary medical personnel, prepayment for personal health services, and community-wide planning for health care did not result in immediate changes in the nation's health services industry, its findings and insights were a major source of information and ideas in the public debate concerning compulsory health insurance that re-emerged during the depressions of the 1930s. In addition, they gave impetus to a variety of more systematic and detailed studies of the organization of medical practice and of the supply and distribution of health services.

In 1935-36 the Public Health Service undertook the first official National Health Survey involving interviews of more than 700,000 households in 21 states, studies of activities of public health agencies in 94 communities, and, in cooperation with the Department of Commerce, studies of the financial situation of hospitals. Data from the population survey with those from the earlier CCMC study were to comprise the nation's information base on the use of personal health services until the early 1950s. Data from the survey of hospitals were extensively analyzed by staff of the Public Health Service's Office of Public Health Methods, leading to the first attempts to define health service areas for hospitals.

With the enactment of the Social Security Act of 1935, the Office of Research and Statistics was created in the Social Security Administration. Staff in this office worked on estimating aggregate expenditures for health services, making actuarial projections of alternative national health insurance plans, and conducting surveys of the coverage of developing prepayment plans. These efforts were joined in the mid-1930s by several books and reports analyzing the cases for and against government sponsored and voluntary health insurance.

By the early 1940s, concern about the availability of personal health services had given impetus to research on the geographic distribution of medical personnel and facilities. The Public Health Service produced a series of studies on the location of physicians in the United States that culminated in the first estimates of optimal physician-population ratios. In 1944, the Commission on Hospital Care of the American Hospital Association, with the financial support of private foundations, issued a report showing that hospital beds were unevenly distributed and that their distribution was unrelated to needs for inpatient care. Following enactment of the Hospital Survey and Construction Act of 1946, data from the Committee's studies were employed to establish standards to guide the allocation of subsidies for construction of hospitals.

Before the 1940s, most research on health services was done in the United States largely by statisticians, economists, and physicians employed by government agencies and private associations or by the staff of commissions financed by private foundations. During the late 1940s, programs for research on health services developed in universities, and other disciplines began to become involved. Multidisciplinary teaching and research programs in public health administration developed in schools of public health, and, encouraged by the Agricultural Extension Service of the Department of Agriculture, sociologists, social anthropologists, and social psychologists were attracted to research on the health care of rural populations.

1950s - 1965

The fifteen years between 1950 and the mid-1960s marked a great expansion of research on health services and the beginnings of organizations and associations devoted to furtherance of the field.

Debate over national health insurance having subsided, attention turned in the early 1950s to questions of the extent and effectiveness of voluntary health insurance coverage. The first truly national study of health insurance coverage and use of and expenditures for personal health services was undertaken in 1953 by the newly established Health Information Foundation and repeated periodically over the following decade. These studies, with the periodic National Health Surveys initiated in 1956 by the Public Health Service, provided systematic descriptive information that revealed continuing differences in volumes of personal health services consumed by the poor and the uninsured as compared to higher income and insured segments of the nation's population. By the early 1960s, research on use of personal health services had become a major area of study for social psychologists and sociologists interested in relationships between social and psychological determinants of utilization and for economists interested in the demand for various types of

services under different insurance schemes. As attention shifted to questions pertaining to the effects of modes of health services organization on utilization, comparative studies of rates of hospitalization under solo practice, fee-for-service arrangements versus prepaid group practices were done, showing the now familiar pattern of lower use of inpatient services by populations enrolled in prepaid group practices.

Research on hospitals was stimulated by amendments in 1950 to the Hospital Survey and Facilities Construction Act of 1946 authorizing funds for studies in hospital administration. The Division of Hospitals and Medical Facilities of the Public Health Service conducted intramural research and sponsored contracted studies of patient groupings, hospital classifications, and a variety of other questions of interest to economists and operations researchers. When the first explicit appropriations for support of extramural research were made in 1955, the Public Health Service established the Hospital Facilities Study Section, which in 1959 was broadened to become the Health Services Research Study Section.

Research on health services during the 1950s produced several landmark studies that incorporated innovative conceptual and methodological approaches. In 1956, the Commission on Chronic Illness published its three-volume report of its five-year study of chronic illness, two of which reported findings from extensive field surveys and clinical evaluations. The Commission on Financing of Hospital Care released its three-volume set including essays on hospital costs and financing. Evaluations of medical care were reported, based on comparative analyses of stays in hospitals following surgery, review of charts, and observation of physicians in office settings. Economists began applying concepts of cost-benefit to particular illnesses, and engineers introduced and tested the computer as an aid in medical diagnosis and patient screening and monitoring.

By the early 1960s, the organizational base of the field of health services research had begun to form. Programs in hospital administration were underway in several universities, and, in the early 1960s, multidisciplinary departments of community medicine began to appear in medical schools. Subspecialties in health economics and medical sociology had developed and were producing their first generations of researchers with concentrations on aspects of personal health services. New associations and groups within existing ones were created to serve as forums for the dissemination of research ideas and findings, and journals specializing in health services research appeared (e.g., Health Services Research, Inquiry, Journal of Health and Social Behavior, Medical Care).

These developments were facilitated in large degree by the availability of funds for extramural research from the federal government. By the early 1960s, several sources had been established, including the authorizations for research on nursing established in 1955 by the National Institutes of Health, studies of health care facilities sponsored under 1955 amendments to the Hospital Survey and Facilities Construction Act of 1946, and a Community Health Services Research Grants program initiated in 1963 by the Division of Community Health Services of the Bureau of State Services.

Mid-1960s to the Present

Since the mid-1960s, the emphases of health services research have been influenced by two major trends: the institutionalization of health services research within the nation's universities, and the expansion of the federal government's roles in health care delivery, financing, planning, and regulation. These trends have had the salutory effect of concentrating a portion of the nation's intellectual resources on important health care issues. On the other hand, demands for "targeted studies" and immediate answers to complex questions have forced trade-offs between longer term investigation of fundamental questions and shorter term studies relevant to current policies and programs.

As funds became available in the mid-1960s for general-purpose health services research and training, the locus of health services research shifted to the nation's universities. In this setting, research became markedly more theoretically- and analytically-oriented. Research on the use of health services, for instance, began to quantify the social and economic determinants of variations in use of physicians' services,[4] and research on hospitals focused systematically on isolating causes of variations in productivity, efficiency, and costs.[5] As in other areas of research, attempts to apply theoretical models and sophisticated analytic methods to complex questions not only produced new insights but raised additional conceptual and methodological issues for research and led to subspecialization within the field. In the area of hospital costs, for example, the difficulty of defining and measuring outputs of hospitals led economists to develop and test several competing models,[6] and research on outcomes of care and health status produced a variety of approaches.[7]

The traditions of health services research that developed in the 1960s contributed important knowledge and methods that are being employed to inform and assess contemporary health care policy. Rising costs of health care, for instance, have led the federal and state governments to institute several forms of regulatory programs whose effects are being analyzed by health services research. Studies of the effects of the Economic Stabilization Program on physicians' fees,[8] of prospective

hospital reimbursement on per diem charges,[9] and of certificate-of-need laws on hospital investment[10] build upon previous health services research while raising relatively unexplored conceptual and methodological issues.

The current situation of the field of health services research differs from that of previous periods, however. On the one hand, it enjoys the benefits of having learned from the recorded experience of its predecessors and of its access to the more powerful conceptual and methodological tools of various cognate disciplines. On the other, it faces issues that are vastly more complex and far-reaching in their consequences than those of earlier periods at a time when expectations of the application of knowledge from research are heightened and resources are scarce. In such circumstances, the field of health services research is subject to contending forces leading in one direction to research aimed at improving concepts and methods and furthering knowledge about fundamental dynamics within a health services system, and in the other to the application of what is known to the development and assessment of health care policies and programs.

These problems of the division of intellectual labor are neither new nor unique to the field of health services research, nor can they be settled by edicts. The field of health services research currently has access to a variety of forums and means of communication through which such matters can be aired and debated. These should be employed to the fullest extent if those who regard themselves as "health services researchers" are to have a voice in the future development of the field.

REFERENCES

1
Robert L. Eichhorn and Thomas W. Bice, "Academic Disciplines and Health Services Research," in E. Evelyn Flook and Paul T. Sanazaro (eds.) Health Services Research and R & D in Perspective (Ann Arbor: Health Administration Press, 1973), 136-149, and David Mechanic, "Prospects and Problems in Health Services Research," Milbank Memorial Fund Quarterly/ Health and Society, 56 (Spring, 1978), 127-139.

2
Odin W. Anderson, "Influences of Social and Economic Research on Public Policy in the Health Field: A Review," in Donald Mainland (ed.), Health Services Research (New York: Milbank Memorial Fund, 1966), pp. 11-48.

3
Much of the historical information in the following sections is from: Anderson, op. cit; E. Evelyn Flook and Paul J. Sanazaro, Health Services Research and R&D in Perspective (Ann Arbor: Health Administration Press, 1973), pp. 1-81.

4
Ronald Andersen, Toanna Kravits, and W. Anderson (eds.), Equity in Health Services: Empirical Analyses in Social Policy (Cambridge: Ballinger Publishing Co., 1975).

5
Sylvester E. Berki, Hospital Economics (Lexington, Mass.: Lexington Books, (1972), Chapters 2-5.

6
Ibid., pp. 19-29.

7
Robert L. Berg (ed.), Health Status Indexes (Chicago: Hospital Research and Educational Trust, 1973).

8
Paul B. Ginsburg, "Impact of the Economic Stabilization Program on Hospitals: An Analysis with Aggregate Data," in Michael Zubkoff, Ira E. Raskin, and Ruth S. Hanft (eds.), Hospital Cost Containment: Selected Notes for Furture Policy (New York: Provist, 1978), pp. 293-323.

9 Fred T. Hellinger, "An Empirical Analysis of Several Prospective Reimbursement Systems," in Zubkoff, et. al., op. cit., pp. 370-400.

10 David S. Salkever and Thomas W. Bice, "Certificate-of-Need Legislation and Hospital Costs," in Zubkoff, et. al, op. cit., pp. 401-428.

Chapter 4

HEALTH SERVICES RESEARCH IN THE FEDERAL GOVERNMENT

The principal focus of the study was the federal government's role as sponsor, producer, and consumer of health services research. Specifically, the committee addressed issues concerning the nature and extent of investments in this area, the manner in which health services research is organized within the federal structure, and the means by which the quality of studies is assured. This chapter presents findings and recommendations on these issues.

Federal Involvement in Health Services Research

To identify the agencies that might be engaged in health services research, the committee reviewed several published analyses of federal spending for health-related research and development and statistical activities. These reviews revealed that existing reports do not consistently and reliably record health services research as defined in Chapter 2.

The most inclusive routinely available source of information about health-related research is the annual analysis of the federal budget published by the Office of Management and Budget. According to its analysis of the 1977 federal budget, all executive departments except Housing and Urban Development were engaged in some form of "health research."[1] This category, however, includes several activities and types of research that are not health services research according to the committee's definition, for instance, biomedical research, developmental activities, and routine gathering of statistics.

Data published by the National Institutes of Health on federal expenditures for health-related research and development for fiscal year 1975 itemized agencies' activities in biomedical, health services, and other research and development.[2] According to this analysis, only four executive departments were involved in health services research and development: the Department of Health, Education, and Welfare; the Department of Defense; the Energy Research and Development Administration; and the Veterans Administration. Based on the committee's

experience, this inventory was judged to have serious omissions. Within the Department of Health, Education, and Welfare, for example, the report omitted the National Institutes of Health, although the committee was aware of several projects supported by NIH that it considered instances of health services research as research and development.* Therefore, the committee found it necessary to gather information on health services research directly from individual agencies.

From its contacts with all executive departments and research agencies of the Congress, the committee identified health services research in the following locations:

Department of Health, Education, and Welfare
Department of Defense
Department of State
Department of Labor
Veterans Administration
National Aeronautics and Space Administration

Additionally, three of the research arms of Congress--the General Accounting Office, the Congressional Budget Office, and the Office of Technology Assessment--and the Federal Trade Commission have some involvement in this area of research.**

Most studies of health services sponsored or conducted by federal agencies are adjuncts to their programmatic missions and constitute only small portions of these missions. The Department of Defense, for example, operates an extensive health services system for active military personnel and their dependents. In this capacity the Department conducts research on the organization, costs, and other features of these services. Similarly, health services research within the Veterans Administration is primarily on the VA hospital system. The Agency for International Development of the Department of State provides assistance to other nations that includes research and technical assistance for the development of personal health services. The Department of Labor's concerns with labor force participation, collective bargaining, and wage rates encompass workers in the health services industry. In the Congress, the General Accounting Office assesses federally funded health programs, and the Congressional Office studies the potential costs of proposed health legislation.

---

*A version of the NIH inventory that is currently being compiled will include the NIH among agencies supporting health services research.

**Undoubtedly, other agencies conduct studies from time to time that would be considered health services research. Such studies, however, are usually small-scale and sporadic.

Nearly all of the agencies and offices of the Department of Health, Education, and Welfare are engaged in some form of health services research. Like activities in other departments, most health services research is mission-oriented and accounts for relatively small portions of agencies' resources. The Health Care Financing Administration and all six agencies of the Public Health Service conduct health services research; each of the offices of planning and evaluation sponsor additional research to inform their policy decisions. (Their organization interrelationships are displayed in Figure 4.) Only the National Center for Health Services Research, the National Center for Health Statistics, and the National Institutes of Health engage in health-related research as a full-time activity, and only the former two concentrate primarily on health services research.

The committee found that five federal agencies account for the majority of health services research supported by the federal government:

National Center for Health Services Research (NCHSR)
National Center for Health Statistics (NCHS)
National Institutes of Health (NIH)
Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA)
Health Care Financing Administration (HCFA)

The priorities of these agencies set the agenda for most health services research sponsored by the federal govenment.

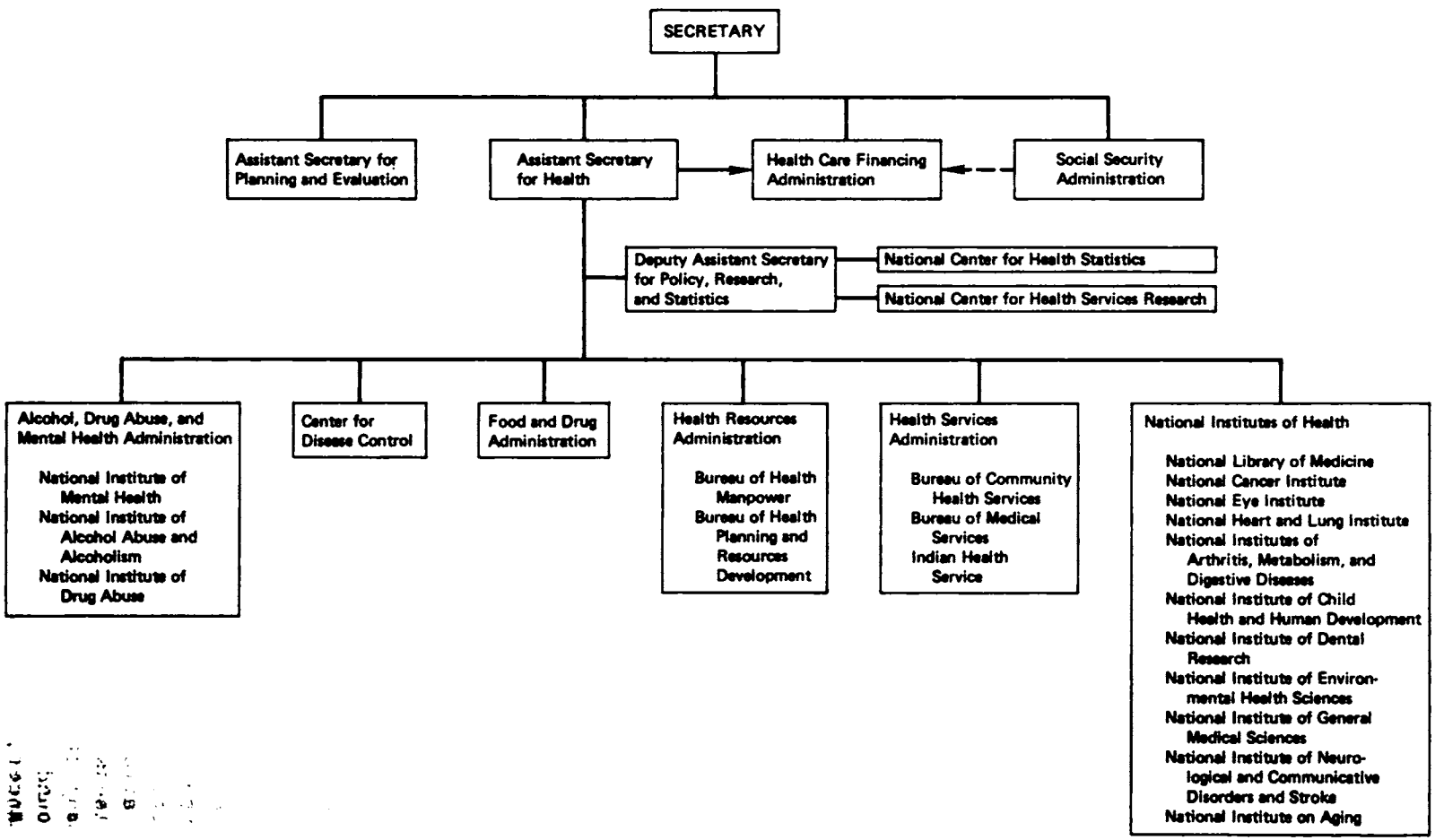
The National Center for Health Services Research, the only agency of the five with an exclusive mandate to support health services research, sponsors a broad array of research activities both intramurally and extramurally. The Center was created in 1968 for that purpose and has no other programmatic mission. It is discussed in detail in Chapter 5.

The National Center for Health Statistics is the primary agency for the production of national general purpose health statistics. Findings from its inventories and surveys constitute descriptive health services research; NCHS also conducts special surveys to meet particular research needs such as the national health expenditures survey, which is a joint activity with NCHSR.

The mission of the National Institutes of Health has extended beyond the support of biomedical research and development to include a range of activities relating to the widespread application and use of new and available knowledge and techniques to reduce the effects of particular diseases. Though the distinctions are frequently difficult to draw, many of the activities constitute health services research. They are found primarily in comprehensive centers and control programs for cancer, diabetes, arthritis, and cardiovascular and pulmonary diseases, as well as individual demonstration and education projects.

FIGURE 4

HEALTH COMPONENTS OF THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE



Although the Alcohol, Drug Abuse, and Mental Health Administration concentrates on supporting approximately 650 community mental health centers and other service programs throughout the nation, research programs also are sponsored, ranging from physiological and behavioral research to health services research. The last includes developmental and evaluation projects, as well as research on the financing, organization, productivity, and need for mental health services and their integration into the general health care sector.

The Health Care Financing Administration (HCFA) supports research relating to its responsibilities for Medicare, Medicaid, and professional standards review, their accompanying statistical and monitoring activities, and the eventuality of national health insurance. The mandate of HCFA's Office of Policy Planning and Research is broadly interpreted, and most types of health services research could fall within its purview.

Federal Expenditures for Health Services Research

Health services research has several different methods of support by the federal government, including intramural activities of federal employees and extramural studies performed by nonfederal persons. Funds for research derive from specific Congressional authorizations, either for particular types of research or for discretionary use by agencies, and from agencies' operating budgets. Support for extramural research is provided through grants and contracts. Grants typically are awarded on the basis of scientific merit and the relevance of research proposals to the funding agency's mission and priorities. Applications for grants usually are initiated by investigators. Contracts are means by which agencies purchase studies from nonfederal persons. Most contracting involves competitive bidding by potential contractors for research tasks conceived and advertised by government agencies. In limited instances, when the task can be performed by only a particular person or institution known to the agency, the competitive process is suspended, and a sole source contract is awarded.

The Intergovernmental Personnel Act and service fellows programs provide another mechanism for facilitating research that lies between the traditional intramural and extramural programs. Under these arrangements, nonfederal employees are given the temporary status of federal employees in order to do intramural research. Usually, investigators perform their research at the agency's offices in the Washington, D.C. area.

In reviewing these programs, the committee attempted to determine each agency's 1977 intramural and extramural expenditures for health services research. Although the committee endeavored to include only research activities meeting its operational definition, several difficulties were

encountered. Most important were problems of definition. Records maintained by federal agencies do not reliably and consistently distinguish funds invested in health services research from those devoted to other types of research or to routine data collection and reporting for program management. Enumerating funds for health services research was especially difficult in agencies that supported large-scale demonstration and education projects in which most funds were devoted to service activities. Many of the health services research studies sponsored by the National Institutes of Health, for example, are appended to developmental projects. In many instances, the costs of evaluating these demonstration projects are quite small; and because they are buried in the total costs of projects, they cannot be estimated precisely. Additionally, demonstration projects raise judgmental questions about whether their total costs should be classified as expenditures for research. Because many developmental efforts officially categorized as demonstration projects are pursued with minimal systematic evaluation, an argument could be made for omitting them from the enumeration of health services research. On the other hand, since such projects, in principle, are intended to test innovations, their total costs might reasonably be considered research.

The committee attempted to segregate the costs of purely developmental activities from those of related research and evaluation efforts. However, this proved to be an impossible task because of the ways in which the agencies record research budgets. Therefore, in some instances the estimates given below are probably biased upwards.

The committee estimates the current federal investment in health services research to be in the neighborhood of $142 million.* As shown in Table 1, expenditures by the Department of Health, Education, and Welfare account for about 85 percent of this total, with no other department or agency contributing more than 8 percent.

While these sums are not inconsiderable, they are miniscule in comparison with all spending for health care and account for only a small fraction of the government's total investments in health-related research and statistical activities. As shown in Table 2, the federal government expended less than one dollar for health services research for each $1,000 spent on health care in the United States in 1977 and less than three dollars for each federal outlay of $1,000 for health care. Federal spending for health services research in that year accounted for less than five percent of all outlays for health-related research and statistical activities.

---

*Private foundations contribute another $26.4 million.[3] Data are not available from states and private industry.

TABLE 1

ESTIMATED EXPENDITURES FOR HEALTH SERVICES RESEARCH
BY AGENCY, FISCAL YEAR 1977

Agency	Expenditure (in $1,000s)	Percent of total
Executive Departments (total)	(141,118.7)	(98.9)
Health, Education, and Welfare	121,837.7	85.5
State	10,029.0	7.0
Defense	4,981.0	3.5
Veterans Administration	4,100.0	2.9
National Aeronautics and Space Administration	100.0	0.1
Labor	71.0	0.1
Congressional Agencies (total)	(1,277.5)	(1.0)
General Accounting Office	787.5	0.6
Congressional Budget Office	225.0	0.2
Office of Technology Assessment	265.0	0.2
Federal Trade Commission	175.0	0.1
Total	$142,571.2	100.0

TABLE 2

FEDERAL SPENDING FOR HEALTH SERVICES RESEARCH IN RELATION TO EXPENDITURES FOR HEALTH CARE AND HEALTH-RELATED RESEARCH, FISCAL YEAR 1977

Expenditures	Amount in millions of dollars*	Federal spending on health services research as a percent**
All health care		
Total U.S.	$160,000	0.09%
Federal government	49,636	0.29
Federal health-related research & statistical activities	3,147	4.51

*Source: Office of Management and Budget, Special Analyses, Budget of the United States Government, 1979, January, 1978, Section L, Tables L-1, L-21, p. 242, 258.

**Based on an estimated $142 million for health services research.

The majority of federal expenditures for health services research support either intramural or contracted studies. In 1977, about 30 percent of all federal support went to intramural research; approximately 45 percent supported extramural contracted research; and the remaining 25 percent was invested in research grants.

As noted earlier, the Department of Health, Education, and Welfare is the principal source of support for health services research. Within the Department, expenditures are concentrated in five agencies (see Table 3):

National Center for Health Services Research
National Center for Health Statistics
National Institutes of Health*
Alcohol, Drug Abuse, and Mental Health Administration
Health Care Financing Administration

Together, these agencies accounted for about 80 percent of all 1977 DHEW expenditures for health services research and about 70 percent of all federal expenditures in this area.

Emphases of Federally Supported Health Services Research

Because most studies of health services research are sponsored by agencies as adjuncts of their operating missions, and because these missions are defined in various ways, the research focuses of federal agencies emphasize different features of related questions. Agencies are variously charged with providing services to particular population groups (e.g., American Indians, the active military, veterans), improving services for particular problems (e.g., mental, dental, specific diseases), and dealing with systemic problems (e.g., financing, planning, manpower development, restraint of trade).

---

*Committee members familiar with the research programs of the NIH noted that officials of some of the institutes estimate NIH's health services research expenditures considerably higher than those shown in Table 1. In the committee's judgment, many of the activities contributing to these higher estimates should not be considered health services research, according to the committee's definition.

TABLE 3

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ESTIMATED EXPENDITURES FOR HEALTH SERVICES RESEARCH BY AGENCY, FISCAL YEAR 1977*

Agency	Expenditure (in $1,000s)	Percent of Total
Office of the Assistant Secretary for Planning and Evaluation/Health	4,870.0	3.9
Public Health Service (total)	(90,135.0)	(74.1)
Office of Deputy Assistant Secretary for Health Policy, Research, and Statistics (total)	(48,090.3)**	(39.6)
Office of Health Policy, Research, and Statistics	389.9	0.3
National Center for Health Services Research	21,161.4	17.4
National Center for Health Statistics	24,039.0	19.7
Health Resources Administration (total)	(4,955.2)	(4.1)
Bureau of Health Manpower	4,151.4	3.4
Bureau of Health Planning and Resources Development	803.8	0.7
Health Services Administration (total)	(8,211.9)	(6.7)
Bureau of Community Health Services	5,300.2	4.4
Bureau of Medical Services	1,778.7	1.5
Indian Health Services	1,133.0	0.9
National Institutes of Health	19,420.4	15.9
Center for Disease Control	870.2	0.7
Alcohol, Drug Abuse, and Mental Health Administration	6,935.8	5.7
Food and Drug Administration***	1,651.2	1.4
Health Care Financing Administration	26,832.7	22.0
Total	$121,837.7	100.0

*Basic data from survey conducted by the Director, Division of Health Budget Analysis, DHEW, January 1978, with augmentation and revision based on IOM data.

**Includes $2.5 million of Public Health Service evaluation monies.

***Estimate for FY 76.

As indicated by Figure 5, the division of program emphases within the federal structure creates areas of programmatic overlaps that are reflected in the research interests of various agencies. The Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), for instance, sponsors federally supported mental health programs. It is concerned with financing, planning, and manpower issues that affect the delivery of mental health services. The Bureau of Health Planning and Resources Development (BHPRD), which is responsible for facilitating comprehensive health planning in states and regions, is concerned with all types of services, including mental health services. Finally, the Health Care Financing Administration (HCFA), which manages the federal Medicare and Medicaid programs, seeks ways to contain the costs of mental and other health services to Medicare beneficiaires. Intersecting needs, such as those of ADAMHA, BHPRD, and HCFA in this example, multiply throughout the federal government.

A meaningful taxonomy of health services research would classify projects along several dimensions such as those employed in Figure 5. No such taxonomy exists, and the committee's attempt to develop one was thwarted by the paucity of detailed and consistent descriptions of research projects. However, a study of the health services research activities of several DHEW agencies recently undertaken by the Department provides some insight into how the agencies describe their research focuses.

The study revealed that about one-fifth of the agencies'* extramural projects and one-half of their funds were devoted to questions relevant to health insurance, compliance with federal programs, and expenditures for health care (Table 4). A greater number of projects and slightly over 20 percent of funds focused on quality of care and service delivery questions. Matters pertaining to technology assessment, planning and regulation, health manpower, and health care for the disadvantaged received less attention, as indicated by both the numbers of studies initiated and the funds devoted to them.

As might be expected, the several agencies surveyed classified their projects in categories corresponding to their own principal missions (Table 5). HCFA, for instance, concentrated 86 percent of its research funds on studies of health insurance and health care expenditures; the Bureau of Health Manpower classified all of its studies in the "health

---

*The study covered all agencies of the Public Health Service (except the National Center for Health Statistics, the Center for Disease Control, the Food and Drug Administration, and the National Institutes of Health) and the Health Care Financing Administration. Intramural projects other than those of the National Center for Health Services Research were excluded, as were projects funded by Public Health Service evaluation monies.[4] Within the Health Resources Administration, nursing and dental health services research activities were omitted.

FIGURE 5

AGENCY MISSIONS AND RESEARCH INTERESTS

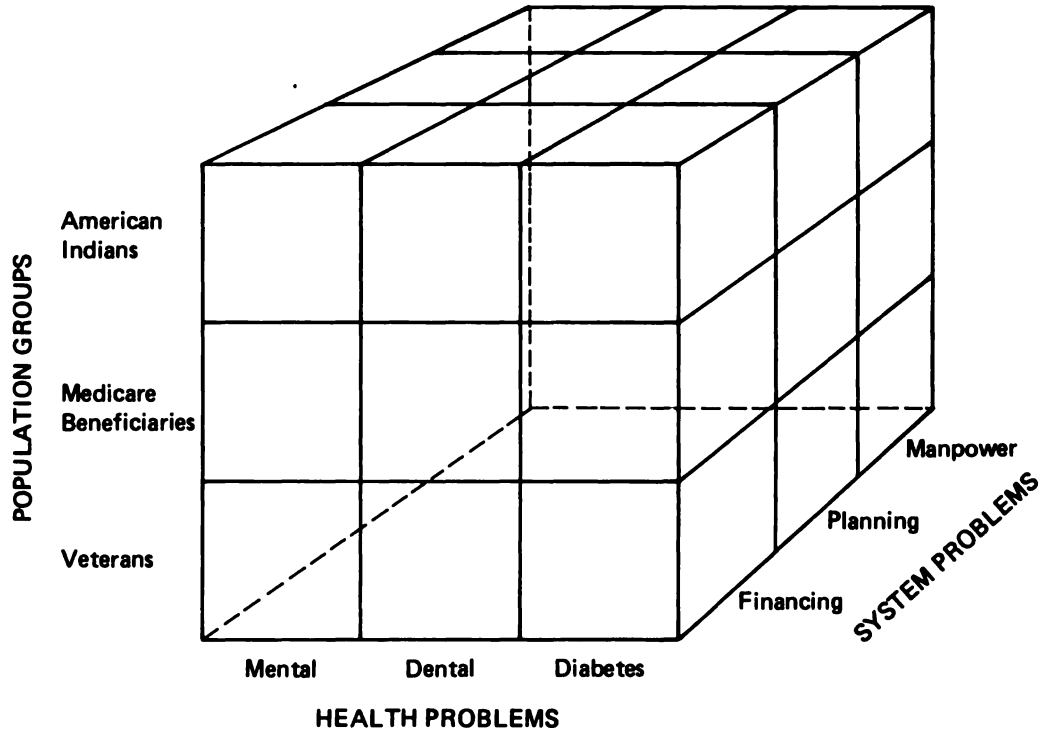


TABLE 4

DISTRIBUTION OF HEALTH SERVICES RESEARCH EXPENDITURES IN DHEW BY PROJECT FOCUS, FISCAL YEAR 1977*

Project Focus	Projects		Funds (in $1,000s)	
	Percent	Number	Percent	Dollars
Health Insurance and Compliance with Federal Programs	8.3	41	28.8	20,253.2
Health Care Expenditures	12.7	63	20.6	14,521.6
Quality of Care	16.9	84	11.6	8,152.0
Service Delivery	17.7	88	10.8	7,615.2
Special Studies	13.9	69	10.6	7,483.0
Technology Assessment	8.9	44	7.3	5,148.5
Planning and Regulation	7.0	35	4.6	3,213.1
Health Manpower	7.8	39	3.4	2,409.3
Health Care for the Disadvantaged	6.8	34	2.3	1,592.7
Total	100.0%	497	100.0%	$70,388.6

*Includes extramural projects of the Office of Health Policy, Research, and Statistics, National Center for Health Services Research, Bureau of Health Manpower, Bureau of Health Planning and Resources Development, Bureau of Community Health Services, Bureau of Medical Services, Indian Health Services, Alcohol, Drug Abuse, and Mental Health Administration, and Health Care Financing Administration; and intramural activities of the National Center for Health Services Research. Excludes Divisions of Dentistry and Nursing.

TABLE 5

DISTRIBUTION OF HEALTH SERVICES RESEARCH EXPENDITURES BY PROJECT FOCUS WITHIN AGENCIES, FISCAL YEAR 1977*

Project Focus	Agency									
	HCFA	BCHS	IHS	BMS	BHPRD	BHM	ADAMHA	NCHSR	OHPRS	ASPE/H
Health Insurance and Compliance with Federal Programs	43.0%	- %	1.7%	- %	- %	- %	21.2%	1.7%	- %	100.0%
Health Care Expenditures	43.9	3.5	9.9	2.5	-	-	-	21.5	-	-
Quality of Care	-	31.1	9.9	54.4	5.1	-	0.8	25.0	-	-
Service Delivery	-	14.7	19.8	2.7	-	-	29.0	19.1	54.9	-
Special Studies	5.2	40.8	18.2	16.0	56.0	-	35.7	1.4	29.3	-
Technology Assessment	-	6.4	28.6	1.1	-	-	0.5	20.9	-	-
Planning and Regulation	6.4	-	4.6	4.5	38.9	-	0.9	6.1	-	-
Health Manpower	-	3.5	0.8	18.8	-	100.0	3.9	1.7	15.8	-
Health Care for the Disadvantaged	1.5	-	6.5	-	-	-	8.0	2.6	-	-
Total	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dollars (in 1,000s)	21,933.7	5300.2	1133.0	1778.7	803.8	1155.5	7975.4	21,161.4	398.9	8478.0

*Agencies abbreviated in Table 5 are the same as those listed in Table 3. For a summary of the projects that constitute the base of these percentages, see the footnote to Table 4.

manpower" category; and the relative numbers of projects classified as "service delivery" and "special studies" were highest among agencies with service responsibilities. The funding pattern of the National Center for Health Services Research showed the greatest variation across the categories, reflecting the agency's broad and nonprogrammatic mission.

Given the magnitudes of their research budgets, the priorities of the Health Care Financing Administration (HCFA) and the National Center for Health Services Research (NCHSR) strongly influence the content of federally funded health services research. Moreover, they are the principal sources of research in several areas. Table 6 shows, for instance, that HCFA accounted for nearly half of the monies invested in research on health insurance, planning, and regulation, for nearly two-thirds of the funds devoted to research on health care expenditures, and for about one-fifth of the funds for studies of the disadvantaged. NCHSR was also a major source of support for research on health care planning and regulation (40 percent), health care for the disadvantaged (34 percent), and health care expenditures (30 percent). In addition, it provided more than half the funds for research on the delivery of services (53 percent) and the quality of of health care (65 percent) and was the principal source of support for research on health care technologies (86 percent).*

Coordination of Health Services Research

The division of health services research activities among agencies throughout the federal government impedes their coordination. Although there is widespread agreement that greater coordination is desirable, views differ on why it is needed and on precisely what it should entail and seek to accomplish.

The committee found that officials whose primary responsibilities are to establish budgets or to manage the fiscal affairs of the government or its departments tend to view the issues of organization and coordination primarily in terms of economic efficiency and see duplication of research efforts among agencies as the principal problem. From this perspective, coordination would entail defining more clearly the research agendas of various departments and agencies so as to minimize overlaps and redundancy. Such a position was taken recently by the Senate Committee on Appropriations. In its 1977 budget hearings, the

---

*Data in Table 3 differ from those in Tables 4 and 5 because the latter, taken directly from the DHEW survey omit some categories of health services research that are included in Table 3. (See the footnote at the bottom of page 55.) Because of the omissions, the data in Table 5 and the conclusions based on them cannot be generalized to all DHEW sponsored health services research.

TABLE 6

DISTRIBUTION OF HEALTH SERVICES RESEARCH EXPENDITURES
BY PROJECT FOCUS ACROSS AGENCIES, FISCAL YEAR 1977*

Project Focus	Agency											
	HCFA	BCHS	IHS	BMS	BHPRD	BHM	ADAMHA	NCHSR	OHPRS	ASPE/H	TOTAL	DOLLARS in $1,000s
Health Insurance and Compliance with Federal Programs	46.6	-	0.1	-	-	-	8.3	1.8	-	43.2	100.0	20,253.2
Health Care Expenditures	66.3	1.3	0.8	0.3	-	-	-	31.3	-	-	100.0	14,521.6
Quality of Care	-	20.2	1.4	11.9	0.5	-	0.8	65.2	-	-	100.0	8,152.0
Service Delivery	-	10.2	2.9	0.6	-	-	30.4	53.0	2.9	-	100.0	7,615.2
Special Studies	14.9	28.9	2.8	3.8	6.0	-	38.0	4.0	1.6	-	100.0	7,483.0
Technology Assessment	-	6.6	6.3	0.4	-	-	0.8	85.9	-	-	100.0	5,148.5
Planning and Regulation	43.9	-	1.6	2.5	9.8	-	2.3	39.9	-	-	100.0	3,213.0
Health Manpower	-	7.7	0.4	13.9	-	48.1	12.7	14.6	2.6	-	100.0	2,409.3
Health Care for the Disadvantaged	21.3	-	4.6	-	-	-	39.9	34.2	-	-	100.0	1,592.7

***Agencies abbreviated in Table 6 are the same as those listed in Table 3. For a summary of the projects that constitute the base of these percentages, see the footnote to Table 4.**

committee denied requests for increases by the National Center for Health Services Research, pending a full review by the Department of Health, Education, and Welfare of its health services research activities.[5] Stating that the Department's research programs were duplicative, the committee directed the Department to develop a plan to coordinate the research and statistical activities of its agencies.*

Government officials who use information from research are inclined to view organization issues in terms of the effort required to assemble the information they desire and in terms of the gaps in the information from studies produced by various agencies. Concerned less with possible duplication and more with gaps in knowledge, better coordination implies to them planned areas of overlap, improved dissemination of findings, and closer integration of research efforts. From this perspective, a major problem with the current situation is that existing areas of overlap are frequently unintentional and stem from a failure to adequately utilize or build upon prior related research. Furthermore, there is insufficient attention given to dealing systematically with crosscutting important problems. To remedy these problems, agencies are encouraged to engage in joint planning, to cooperate in joint endeavors, and to consider the problems they deal with in broader contexts. If these efforts to coordinate research among agencies are successful, in some areas agencies' research focus may become less distinct; in other areas, they may become more clearly specified.

Researchers have mixed views on how the government's research activities should be organized. Few are concerned about its implications for the internal management of government agencies. Instead, they regard the matter primarily in terms of its effects on the types and quality of research produced under existing arrangements and on the stability to of support available from funding sources. Some prefer to maintain the flexibility and diversity afforded by multiple sources of support, arguing that too close coordination might unduly or prematurely limit the ranges of problems that are studied and the perspectives from which research is done. A major problem in their view is the lack of clear and accurate information about the research priorities of the various agencies that support extramural research. Others take the position that the ad hoc and sporadic research interests of agencies militate against the continuity and stability required to address fundamental and long term questions. Furthermore, they believe that the development of the field of health services research is perhaps hampered by the absence of a politically visible agency within the federal government.

---

*At least partially in response to this directive, DHEW undertook the study of agencies' research projects cited above. In the spring of 1978, efforts to develop a department-wide plan for all health research began under the leadership of the National Institutes of Health.

Duplication

From its review of agencies' research priorities, summaries of research projects, and interviews with government officials, the committee concluded that the concern about widespread duplication of research activities is exaggerated. It found instances of sets of particular projects that addressed similar problems and, undoubtedly, others exist. However, it found no patterns of obvious and consistent overlaps of research priorities and agendas among agencies involved in health services research.

Apparent similarities between projects supported by different agencies were attributable, in most instances, to agencies' special needs and program emphases. A common practice in agencies with service delivery responsibilities or with clearly identified audiences and uses for information is to extend or replicate prior studies to incorporate features relevant to their particular missions. Studies of use of health services provide abundant examples of this pattern. Data published by the National Center for Health Statistics give overall rates of uses of the several types of health services by the nation's population classified by certain general demographic characteristics, such as age, sex, and income level. Studies of use of services funded by the National Center for Health Services Research typically are more analytically oriented, aimed at identifying factors that account for variation in utilization rates among population groups. Research in this area sponsored by the Alcoholism, Drug Abuse, and Mental Health Administration focuses on influences of behavioral disorders and "life crises" on the use of services. Studies conducted by the Health Care Financing Administration concentrate on the use of services by Medicare and Medicaid beneficiaries.

Several persons suggested to the committee that it might be desirable to place responsibility for all studies on the use of health services, their quality, costs, or other particular attributes in a special agency that would meet the information needs of operating agencies. Referring to the legislation calling for the creation of a National Institute for Health Policy Research within the National Institutes for Health Care Research,* they noted that such an agency would minimize opportunities for duplication of research and provide a stronger and more visible base for health services research activities within the federal government.

Others, however, said that this approach to coordination would encounter several obstacles that might lead to greater inefficiency and other undesirable effects. In their view, removing responsibility for research from operating agencies and placing it in a general research agency could be effective under certain circumstances, namely, when operating agencies' needs for information are predictable, routine, and relatively large in scale. From its review of federal agencies' research activities, the committee found that these conditions rarely

---

*The National Institutes of Health Care Research Act of 1978, S. 2466, 95th Cong., 2nd sess., (1978).

obtain. The majority of research programs are comprised of ad hoc and intermittent studies arising from problems encountered in the pursuit of agencies' programmatic missions. Removal of these research programs from the operating context would place an additional step between the problems and the research, that would inevitably lead to delays in addressing them, as persons familiar with particular operating programs would have to communicate closely and frequently with research personnel located elsewhere about varieties of details, special reporting requirements, and interpretations.

Coordination of research agendas through centralization also risks closing opportunities for the development of innovative approaches to problems. A certain amount of repetition is desirable in research to validate knowledge and to experiment with new ideas and methods. In view of the complexity of the problems addressed by studies in health services research and of the variety of plausible and potentially useful approaches encompassed by the field, the standardization of perspectives and methods that would accompany centralized planning and sponsorship of health services research within the federal government might invite premature closure on methodological approaches and might leave certain issues unexplored.

Fragmentation and Gaps

The committee found that fragmentation and gaps in the organization of responsibilities for health services research are endemic in the federal government. The close identification of research programs with agencies' missions produces a great variety of studies and analyses, each dealing with limited aspects of larger issues and leaving relatively unattended issues that are not the principal concerns of operating agencies.

The insularity of research programs and their limited foci complicate the work of officials who formulate policy. Issues such as national health insurance encompass questions about financing, manpower, regulation, and other matters, each of which is dealt with by individual agencies. However, relatively few studies on any of these subjects address interrelationships among the several problems that are relevant to the formulation of broad health care policies.

The gaps in research stemming from existing organizational arrangements have especially serious implications for knowledge about health care technology. Because no agency within the federal government has been assigned primary responsibility for the evaluation of technology, little research is done at the transfer stage where decisions to adopt innovations are made.* The committee was additionally concerned that this major area of potentially useful health services research is impeded by the paucity of systematic studies of the effectiveness of medical technologies.

*This problem should be at least partially resolved by the newly enacted Center for Technology Assessment within the Office of the Assistant Secretary for Health.

Fragmentation of responsibilities also has implications for the quality of research done intramurally and supported by government agencies. The committee found that persons in charge of research in several agencies have limited contact with their counterparts in other agencies and frequently are unaware of research efforts related to their own interests. Hence, opportunities for potentially fruitful collaboration and learning are missed, resulting in substantial variations among agencies in the standards employed in designing and evaluating research projects.

The existing organization of research activities is rooted in basic processes of the federal government that militate against coordination. Due to the "from-the-bottom-up" manner in which divisions and departments are constituted, agencies have considerable autonomy and discretion. The Congress mandates agencies' programs and establishes their budgets, frequently earmarking funds for research purposes. Superordinate layers of departments, therefore, have limited control over the program and daily activities of their constituent agencies and no authority over agencies in other divisions and departments of the government. DHEW, for instance, has no official involvement in the health services research programs of the Department of Defense or the Veterans Administration; within DHEW, the Public Health Service housing NCHSR and NCHS is statutorily and administratively separate from the Health Care Financing Administration which has substantial programs in health services research. This pattern continues through the agency level, where responsibilities for research are divided among divisions and branches.

Because health services research activities at each layer of government usually account for only miniscule portions of its total budget and are peripheral to its principal concerns, these activities receive relatively little attention. As one proceeds upward from the levels where particular projects are conceived or funded, each layer of organization involves fewer people and larger spans of responsibility for greater varieties of problems. Moreover, as needs for and uses of information broaden from concerns with particular programs to attention to agency and departmental policy, decisions affecting research priorities are increasingly colored by conflicting values and other political considerations.

Unless systematic mechanisms are established to counteract centrifugal forces that inhere in the organization of the federal government, no coherent research policy or priorities will develop. The committee found few such mechanisms. Although responsibilities for coordination of health services research exist in specific agencies at each layer of government, none devotes sufficient attention to the organizational and substantive problems of health services research.

The inability of these agencies to establish priorities and policies stems, in large part, from the disarray of information about the research priorities and emphases of agencies below them. The difficulties encountered by the committee in its attempt to determine the focuses

and contents of agencies' health services research agendas are indicative of the problems faced by agencies charged with developing priorities and policies. There is, for instance, no routine reporting system that reliably and consistently assembles either descriptions of health services research projects or their results. With notable exceptions,* few agencies routinely produce summaries of their health services research priorities, projects, or findings, and agencies' inventories and records are inconsistent and incomplete.

In view of its findings of the widespread involvement in health services research by agencies throughout the federal government, the absence of systematic and effective mechanisms for coordinating activities of departments and agencies, and the consequent problems of fragmentation and omissions in health services research, the committee recommends that

> administrative procedures be established within the federal government to coordinate the setting of departmental and agency health services research priorities, agendas, and projects.

These procedures should apply to all departments engaged in health services research, and should emphasize the identification of areas of common interest among departments and agencies and, in such instances, facilitate interdepartmental and interagency exchange of information and collaboration.

The committee further believes that efforts to coordinate health services research priorities, agendas, and projects should not hamper agencies' abilities to carry out their mandated missions and should encourage experimentation with diverse perspectives and approaches to problems. Therefore, the committee recommends that

> attempts to coordinate health services research within the federal government should not centralize responsibility for the conduct or sponsorship of research required for the attainment of specific and identifiable program or agency objectives.

This recommendation has two implications. First, the committee would not endorse a research plan (either government-wide or DHEW-wide) that

---

*The Health Care Financing Administration, The National Center for Health Services Research, and the National Center for Health Statistics.

would limit the scope or content of agencies' research agendas if they can be demonstrated to be reasonably related to agencies' mandated missions. Second, the committee would not be in favor of a reorganization of health services research that would remove responsibilities for the conduct or sponsorship of programmatic research from operating agencies.

In view of its findings of important matters missing from the research priorities of individual agencies within the Department of Health, Education, and Welfare, created by the close identification of agencies' health services research priorities with their program missions, the committee recommends that

> agencies be identified to assume responsibilities for implementing studies to bridge the gaps in knowledge.

These agencies should periodically review their own research agendas and those of other agencies with common or logically related interests, identify research needs that are not being met, and propose projects that would meet these needs. These findings and plans should be submitted to higher departmental officials who, in turn, should identify agencies and resources to implement them.

Quality Controls

The quality of research traditionally has been maintained in the scientific community by publication of methods and findings. Completed projects submitted for publication are reviewed by peers to determine whether they satisfy accepted standards of scientific rigor and contribute to knowledge. Failing either, the manuscript is not accepted for publication. Dissemination of published research incorporates the mechanisms of review, comment, and debate among peers to correct results when initial reviews are shown to be erroneous or when new knowledge is produced.

When the federal government established programs to support scientific research, it adopted peer review as the principal means of assessing potential quality and procedures employed by the National Institutes of Health as its exemplar. Basically, the process entails the review of investigator-initiated research proposals by panels of peers ("study sections") who have contributed to the literature in the fields they review. Applications for support are examined to determine whether methods and subjects of investigation proposed by investigators are likely to contribute significantly to scientific knowledge and whether the investigators are potentially capable of carrying out the projects

they propose. The latter is assessed by examining the investigators' records of previous performance or, in the case of scientists beginning their careers, by considering their training or recommendations by their supervisors. Proposals disapproved by the panels are not funded by the institutes; those endorsed by panels are assigned priority scores reflecting panel members' judgments of their relative scientific importance. The final step is a substantive review by Institute staff to select from the approved applications those that promise to contribute to the agency's own priorities. Funded projects are subsequently assessed through monitoring of progress and, ultimately, by their contributions to the published literature.

The general features of these approaches for assuring the quality of research were adopted by agencies that first offered extramural support for health services research. Currently, however, only a few agencies adhere closely to them.

Several circumstances and trends account for this. Above all, the pure form of scientific review has rarely been applied in the field of health services research. The objectives and needs of most sponsoring agencies call for information to be used for various applied purposes as well as to contribute to the accumulation of knowledge relevant to their missions. In consequence, the worthiness of research proposals has been judged in terms of the likelihood that they will provide the information needed by the sponsoring agency, as well as on grounds of scientific merit.

As programmatic needs for particular types of information have increased throughout the government, use of the contract mechanism to support extramural research has grown, and intramural activities have enlarged. Both devices provide agencies greater control over the content of research projects but at the expense of opportunities for applying of traditional methods of assuring quality.

Contract Research

Approximately 45 percent of the federal government's total spending for health services research and about 78 percent of its outlays for extramural studies are disbursed through contract mechanisms. Under these procedures, the questions to be addressed and basic designs of research projects are formulated by agency personnel and advertised as requests for proposals. Submissions are usually reviewed either by the government employees who designed the requests or by ad hoc groups of personnel assembled from the agency or other parts of government. In some instances, these groups include nongovernmental persons selected by agency personnel.

Because the products of contracted research are technically the property of the federal government, agency personnel have at least some control over how and to whom they are disseminated. In some cases, contracts contain provisions that prohibit the contractor from publishing results.

The means by which contract proposals are devised and awarded and constraints on the publication of results combine in many instances to eliminate outside review of the quality of research. Projects are devised and advertised, proposals are reviewed and funded, and results are acquired — all by the same government personnel. This pattern is particularly common in the large numbers of contracts issued to proprietary research firms. As most of these businesses are not generally concerned with the development of a body of knowledge about health services, they rarely publish in journals where their conceptual and methodological approaches and findings could be reviewed by the health services research community.

The committee was particularly concerned about the absence of procedures for systematic and open review of relatively large-scale projects. A major virtue of competitive investigator-initiated research coupled with open peer review is its stimulation and assessment of innovative ideas for research within the communities of researchers and health care professionals. This situation does not prevail under contracting mechanisms, for research ideas are generated and evaluated completely within the government. Hence, the conceptual and methodological rigor of requests for proposals are not subject to open assessment, either at the point of their formulation or when proposals are reviewed. Even when nongovernment persons are employed in the review of proposals, their role is often limited primarily to assessing the purely technical and logistical aspects of submissions within the constraints imposed by the conceptual and methodological approaches already fixed by the requests for proposals. These circumstances deter qualified researchers from participating in contract reviews.

Having found that substantial portions of federal spending for health services research are disbursed for extramural studies, the majority through contracts, and that most of these disbursements are made without the benefit of systematic and open peer review, the committee recommends that

> all Executive departments and agencies sponsoring extramural studies in health services research establish peer review by nongovernment personnel of all projects involving appreciable expenditures.

These procedures should (1) subject requests for proposals to review prior to their being advertised, (2) facilitate competition for funds among qualified researchers, and (3) review results of projects for their scientific and technical merit.

Intramural Research

Intramural research usually is conducted entirely by government personnel on projects conceived and executed for specific uses by government agencies or officials. Studies carried out by staff of the Federal Trade Commission, for instance, are used by the Commission in rule-making, and those of the General Accounting Office are submitted to Congressional committees. In other cases, government agencies produce information for general dissemination, such as the statistical series on federal expenditures for health services for Medicare beneficiaries published by the Health Care Financing Administration and the various series published by the National Center for Health Statistics. Nearly 30 percent of all federal expenditures for health services research are for intramural activities.

The growth of intramural research raises issues more fundamental than the problems of contract research, although they are similar in some respects. In both cases, the research agenda is set by government agencies and officials, thereby limiting the range of questions that are or could be addressed. Also, both are often conducted in response to specific requests by agencies or officials or as adjuncts to the normal business of government. In these instances, the imposition of peer review on intramural research would inappropriately interfere with wholly internal matters of government.* In the case of intramural research to produce statistical series for general dissemination, the need for prior peer review is partially obviated by the opportunities subsequently afforded the research community to debate publicly the methods and interpretations of published studies.

The major issue raised by intramural research is not, therefore, that of peer review. Rather, it has to do with the effects this approach could conceivably have on the quality and content of the entire body of knowledge of health services research. To the extent that intramural research is used as a substitute for extramural research, the types of problems addressed and approaches used are determined increasingly by federal personnel, relegating the research community's roles to those of occasional advisors and critics of published results.

The long term consequences of this strategy would have serious deleterious effects on the types of research done and on its quality. As noted earlier, the committee believes that there must be opportunities for replication of studies in health services research to guard against

---

*However, in instances where large-scale studies are undertaken intramurally, the committee encourages the use of advisory groups to assist in their designs, to oversee their implementation, and to review their findings and interpretations.

basing health care policy decisions on only a few studies of complex questions. Given the pressures within the federal government toward standardization of definitions and methods, a totally intramural strategy for health services research could greatly impair the process by which previous research results are subjected to revision by the appearance of contradictory findings based on different conceptual and methodological approaches. In the same vein, an exclusively intramural strategy would, in effect, create a government monopoly over data that would contribute to the lack of opportunities to challenge results. Ultimately, the consequences of this strategy would be seen in the migration of qualified and interested researchers to other fields of inquiry and the destruction of the infrastructure of the field of health services research. Without this community of researchers and their work to draw upon, the quality of federally supported intramural research would surely decline.

The question of where to draw the boundaries between intramural and extramural efforts in health services research might be addressed in terms of the contents of research questions and the government's needs for information.[6] The intersection of these features in Figure 6 creates four types of situations and identifies funding strategies most suited to each.

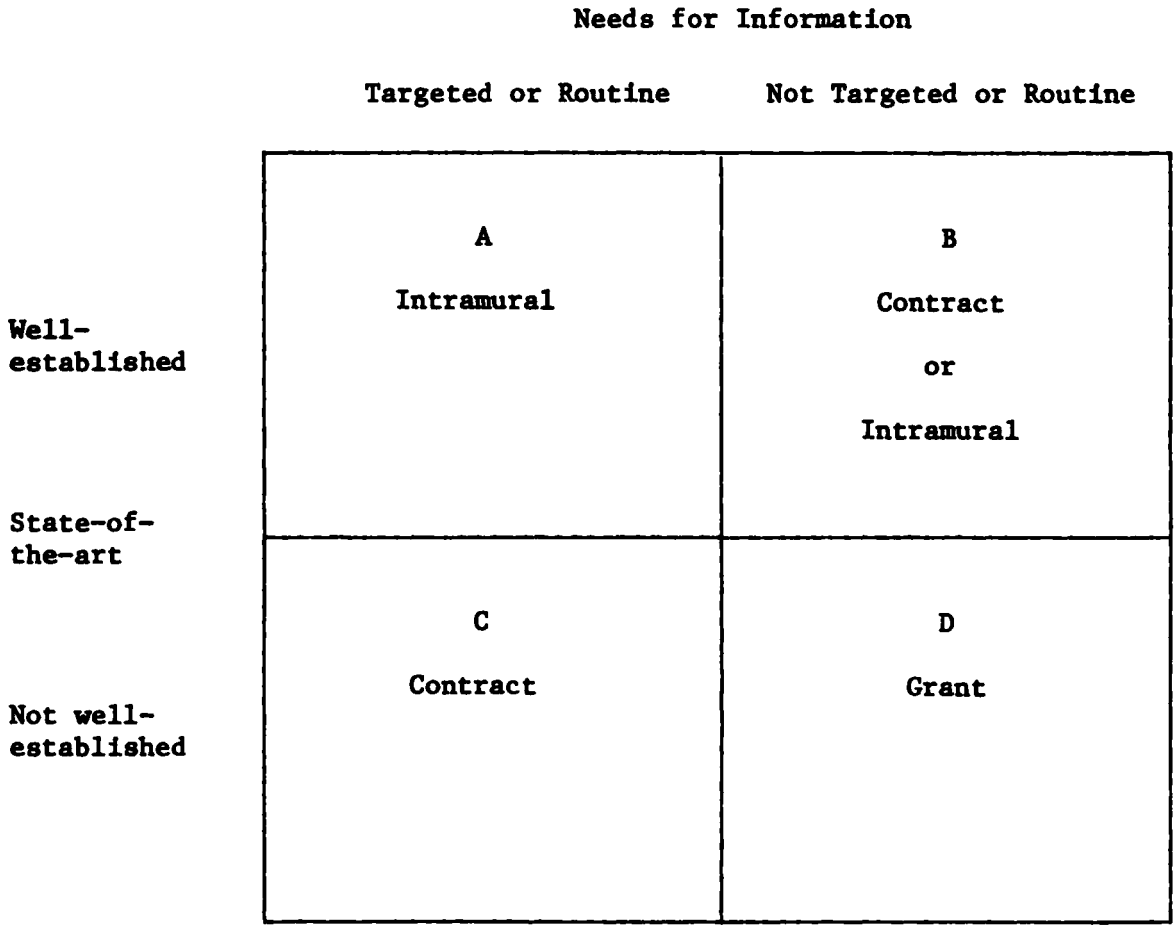
Situations A and B include studies of questions for which relatively well-established and codified conceptual and methodological solutions exist, for instance, the enumeration of physician visits using household surveys. Situations C and D, by contrast, involve problems for which there are no standard solutions, as for instance questions about the economic value of life. The columns distinguish situations in which needs for information are either highly targeted or routine (A & C) from those in which needs are less well-defined or predictable (B & D).

The cells of Figure 6 indicate the types of funding strategies that the committee believes best fit these situations. Intramural research is best suited to deal with the problems for which standard solutions exist and for which there are high specific or routine needs for information. Most studies performed by the National Center for Health Statistics are in this category. When needs for such information are less specific or routine, either the contract mechanism or the intramural strategy is suitable. Here, the contract might be used as an adjunct to or extension of intramural activities. Problems for which no routine solution is available call for competitive proposals, either for contracts in circumstances where needs for information are specific or routine or for grants in other situations.

Finding that federal agencies are increasingly relying upon intramural research and research funded by contract, and being concerned over the long-term consequences of these funding strategies for the types of

FIGURE 6

RESEARCH FUNDING STRATEGY



research that will be done and for the quality of health services research, the committee recommends that

> the federal government adopt a policy regarding health services research to assure that a significant portion of all monies invested in this area go to support investigator-initiated extramural research.

Intramural research should not be viewed as a substitute for extramural research, nor contracted research as a substitute for grant-supported investigator-initiated research. Rather, a strategy of funding should be developed that identifies the strengths and problems associated with each and achieves a balance among them.

REFERENCES

1
Office of Management and Budget, "Special Analysis L: Health," Special Analysis, Budget of the United States Government, 1979 (January 1978), 259.

2
U.S. Department of Health, Education, and Welfare, National Institutes of Health, Office of the Director for Program Planning and Evaluation Dollars for Health Research and Development: 1968-1975, DHEW Pub. no. (NIH) 77-1185 (June 1977): 49.

3
John Craig, Mega McDonald, and Betty Dooley, "Private Foundations' Health Expenditures: A Survey Analysis," Health Policy Research Group, Georgetown School of Medicine, May, 1978.

4
Report by the Director, Division of Budget Analysis, DHEW, January 1978.

5
U.S. Congress, Senate, Committee on Appropriations, Departments of Labor and Health, Education, and Welfare and Related Agencies Appropriations Bill, 1978, Report no. 95-283, 95th Cong., 1st sess., 1977, p. 81.

6
Gerald Gordon, Ann E. MacEachron, and G. Lawrence Fisher, "A Contingency Model for the Design of Problem-Solving Research Programs: A Perspective on Diffusion Research," Milbank Memorial Fund Quarterly/ Health and Society 52 (Spring 1974): 185-220.

Chapter 5

THE NATIONAL CENTER FOR HEALTH SERVICES RESEARCH

The National Center for Health Services Research (NCHSR) was created in 1968 as the federal government's only general-purpose health services research agency and the focal point of the field.

In the decade since the founding of NCHSR, the growth of health services research elsewhere in the federal government has led to confusion about what the agency's roles and objectives are, and to debate about where in the federal structure the agency or its functions should be located. Opinions on these issues are divergent. Some hold that there is no need for a general-purpose health services research agency, arguing that its functions could be absorbed by other federal agencies. Others, taking the view that a strong and highly visible general-purpose research agency is essential, favor broadening NCHSR's functions and strengthening its position in the federal government.

This chapter describes the issues surrounding NCHSR and the arguments for and against various proposals for changing its functions and position. It begins with a brief history of the agency and an analysis of its functions and focuses. Arguments are then presented for and against a general-purpose health services research agency. Assuming there are needs for such an agency, options for its functions, location within the federal government, and structure are analyzed.

Origins

To understand the issues surrounding the National Center, it is helpful to examine the agency's history. Accordingly, the committee reviewed literature and documents and interviewed persons who were involved with the National Center at various points in its development. Information from these sources indicates that some of the problems currently faced by the agency are attributable to its original conception and design and to changing circumstances in its surroundings in the federal government.

Background

The National Center was created in 1968 in response to a combination of several trends of the 1960s: (1) a growing direct federal involvement in providing, financing, and planning health services; (2) a growing recognition that problems in the health care industry were due to fundamental organizational deficiences; (3) a belief that reforms could be achieved and should be based on knowledge derived from systematic, large-scale research and development programs; and (4) the emergence of an identifiable field of health services research.

Before the 1960s, the federal government's activities in health care were relatively limited and followed traditional patterns of directly providing services for particular groups (e.g., military personnel, veterans, American Indians, merchant marines) and assisting states through grants-in-aid for services rendered to others (e.g., mothers and infants, public welfare recipients). Subsidies for the construction and renovation of health care facilities were provided through the Hill-Burton program. In the late 1950s, the federal government's share of all spending for health care was slightly less than that of the states, which together accounted for about a quarter of the nation's health care expenditures.[1] Federally-supported research on health services was confined to studies related to particular federal programs, either done or sponsored by the administering agencies, and research on groups with diseases of interest to the Public Health Service and the National Institutes of Health.

Legislation of the 1960s greatly extended the federal government's involvement in health care and changed the nature of its responsibilities. During the Lyndon Johnson Administration, the federal government adopted the view that such matters as poverty, housing, and health care were national problems that required national solutions.[2] This perspective was expressed in a series of legislative enactments that established many programs aimed at eliminating the hardships of poverty, some of which provided funds for health care. Unlike previous federal assistance programs, however, many created in the early 1960s called for direct and almost total federal funding and administration. Programs such as those for community action, demonstration cities, and neighborhood and migrant health vastly increased requirements for intragovernmental coordination and information for their management. The needs became more acute in the mid-1960s, when the federal government enacted Medicare and Medicaid, and expanded community health planning under the Regional Medical Programs and Comprehensive Health Planning efforts. Following the implementation of Medicare and Medicaid, rising health care costs became a national issue whose consequence were strongly felt by the federal government. By 1968, federal spending for health care had reached $15 billion--a five-fold increase over the expenditures of 1960--and accounted for a quarter of all expenditures for health care in the United States and two-thirds of all public spending.[3]

Because most of these monies were being spent under the Medicare and Medicaid programs to purchase health services through the private sector, attention turned to features of the nation's health services industry that accounted for rapidly increasing costs of health care. The 1967 report of the National Advisory Committee on Health Manpower attributed the cost problems to organizational and managerial deficiencies within the industry.[4]

Scattered responsibilities for categorical federal health care delivery programs, combined with rising health care costs, led to recommendations for a federal agency to coordinate the government's research efforts and to discover ways of improving the performance of the nation's health care industry. In his 1967 Health and Education Message to the Congress, President Johnson ordered the creation of such an agency in the Department of Health, Education, and Welfare.

Objectives and Functions

In its planning for the National Center for Health Services Research and Development (NCHSR&D), the DHEW had commissioned a panel to recommend functions and organization arrangements. Its report, issued in mid-1967, recommended a national health services research program to provide

> fundamental knowledge to facilitate unrestricted access to optimal health care at the lowest sound costs (and) to foster within the health care system a sustaining capacity for timely and adequate adaptation and self-adjustment in response to changing needs and demands.[5]

The report went on to identify immediate goals, which were adopted in most essential details as the program for NCHSR&D:

- --to improve the quality and efficiency of health care services through the application of advanced personnel utilization, technological innovations, and management methods of demonstrated value and effectiveness;
- --to survey and analyze the present state of the health system, searching for naturally occurring improvements;
- --to devise and test advanced health care delivery concepts and systems;

—to develop resources of personnel and knowledge in the field of health services research and development, and to foster within the Center the capacity to plan, define, and skillfully guide extensive programs of health research and development;

--to provide scientific data, analyses, and forecasts for consideration in planning and formulating policies affecting health services and health services research and development;

—to foster the widespread development of resource (sic) and development capabilities in universities and other institutions and agencies;

--to seek actively to motivate and actuate the application and installation of advanced concepts and systems of health service management; and

--to develop information systems providing data relevant to health services research and development.[6]

These goals were reflected in NCHSR&D's statement of program concerns submitted to the Congress in 1969.[7] The Center was to:

--be a resource to the federal government by

- assembling and disseminating information about health services and health services research from the United States and abroad, and

- assisting other federal agencies to plan, establish priorities, and cooperate in joint endeavors;

—support through its extramural grants program study of the organization and financing of health care, use of personnel and resources, and other fundamental problems in the health care industry;

--develop operational definitions and knowledge about preconditions for the establishment and maintenance of effective and efficient health services;

--encourage demonstration and testing of innovative approaches to health services delivery and management by

- extramural support of projects initiated by persons in health care institutions, and

- large-scale interventions designed by NCHSR&D staff;

--develop the nation's capacity to conduct research and development by

- subsidizing training in health services research, and

- supporting centers for research and development located in universities and health care institutions.

As NCHSR&D's programs developed, each of these functions was intended to contribute to its principal strategy of health services development. Reflecting the engineering and rationalistic research and development approaches of the aerospace industry and program planning and budgeting applied to the management of complex systems, NCHSR&D adopted a strategy of active intervention to develop and test innovations in the health services industry. This approach was manifested in several large-scale research and development projects begun in the early 1970s.[8] NCHSR&D's program in health manpower financed the training of former medical corpsmen and other ancillary personnel; its efforts to improve the quality of health services led to the Experimental Medical Care Review Organizations; several projects were initiated to facilitate the collection and use of health services information by state and local planning agencies; and its Experimental Health Services Delivery Systems program was aimed at developing and testing new forms of local and state organizations to consolidate the planning and management of community-wide health services delivery systems. From 1970 to 1973, these and other developmental efforts accounted for nearly half of the monies disbursed by NCHSR&D for new activities.

Organization

When NCHSR&D was created in 1968, it was placed in the newly created Health Services and Mental Health Administration (HSMHA) of DHEW. NCHSR&D was given no explicit Congressional authorization,* and its

---

*NCHSR&D's activities were authorized under Sections 301 and 304 of the Public Health Service Act.

personnel and portfolio of research projects were assembled from other DHEW agencies. Few persons who came to the Center had previous experience in health services research, and few of the continuing projects inherited by the new agency dealt with important questions in health services. These beginnings greatly compromised the Center's ability to carry out its mandated functions.

HSMHA was established in 1968 to combine under a single administration DHEW's various health services delivery, planning, and research programs.* As NCHSR&D was located at an equal organizational level with each of HSMHA's other agencies, it had no direct authority to coordinate their research and development activities. Attempts to do so through NCHSR&D's Experimental Health Services Delivery Systems program met with resistance that prevented cooperative interagency funding of local projects, and most agencies pursued the research and development programs they had developed before coming to HSMHA, paying little attention to NCHSR&D's offers of assistance.

The problems NCHSR&D encountered within HSMHA were compounded in its efforts to provide coordination and assistance to other federal agencies involved in health services. HSMHA had no official authority over other DHEW programs, such as those in the National Institutes of Health, the Social Security Administration (Medicare) and the Social Rehabilitation Service (Medicaid), or those of other executive departments and agencies (e.g., the Office of Economic Opportunity, the Veterans Administration).

NCHSR&D's bureaucratic isolation from operating federal health services programs, which were unwilling to transfer or delegate research and development activities to the new agency, led NCHSR&D to assign relatively low priority to intragovernmental assistance and coordinating functions. Constrained by the small size of its initial budget and the heterogeneity of its staff and projects, the agency turned instead to developing its own research and development efforts. This involved redirecting emphases of the various grants and contracts the agency had inherited from other agencies and establishing new priorities and funding mechanisms more in keeping with NCHSR&D's own objectives.

To accomplish this, NCHSR&D adopted the principal organizational features of the National Institutes of Health. A council provided advice on priorities and general oversight of the Center's activities. Experts from outside the federal government were appointed to study section panels to review the scientific and technical merits of

---

*Initially, these included the Indian Health Service, Federal Health Programs Service, Community Health Service, National Institute of Mental Health, National Communicable Disease Center, Health Facilities Planning and Construction Service, Regional Medical Program Service, National Center for Health Statistics, and NCHSR&D.

proposals submitted to the agency* and to advise NCHSR&D staff on health services research needs and priorities. Based in part on earlier recommendations of the Health Services Research Study Section, NCHSR&D expanded its program to support the creation of centers for health services research and development in selected universities and health care settings.

The Center's programs and internal organization evolved into two largely distinct sets. One involved the solicitation, review, funding, and management of investigator-initiated grants and contracts that supported studies and research and development in a variety of subject areas. The other employed NCHSR&D staff in developing and managing the agency's large-scale research and development activities, which during the Center's formative years increasingly dominated its attention and budget.

1970 to the Present

Location

The National Center's location in the federal government and its program emphases have changed several times since its creation. In 1973, as part of a general reorganization of the Public Health Service, HSMHA was abolished and replaced by two new administrative organizations. The Public Health Service's delivery programs were combined under the Health Services Administration, and the National Center** was placed in the Health Resources Administration, along with the National Center for Health Statistics, the newly created Bureau of Health Planning and Resources Development (BHPRD),*** and the Bureau of Health Manpower (transferred from the National Institutes of Health).

---

*Four study sections were chartered: Health Services Research, Health Services Demonstrations, Health Care Technology, and Health Services Research Training.

**Renamed briefly the Bureau of Health Services Research, the Bureau of Health Services Research and Evaluation, and, finally, the present National Center for Health Services Research.

***Established under P.L. 93-641 to combine and replace authorities of the Hill-Burton, Comprehensive Health Planning, and Regional Medical programs.

Officially, NCHSR's missions remained unchanged, including its role as a coordinating and assistance resource within the federal government. In fact, however, the 1974 reorganization further impeded the agency's possibilities of influencing research and development within the Public Health Service by imposing an additional bureaucratic layer between the National Center and the service delivery programs in the Health Services Administration.

In an effort to remedy this organizational problem, NCHSR and its sister agency, the National Center for Health Statistics, were elevated in 1977 to the Office of the Assistant Secretary for Health of DHEW, where they currently are under the supervision of the Deputy Assistant Secretary for Health Policy, Research, and Statistics. This move took place only a few months before the committee began its assessment, and too little time has elapsed for an evaluation of its effects on the Center's programs and functions.

Budget

Over the course of the National Center's history its budget and program priorities have undergone major changes. By 1970, NCHSR had reached its present personnel complement of about 200 and, as shown in Table 7, had a budget of $37.4 million. Available funds increased annually to a peak of $56.1 million in 1972, after which they declined steadily in actual and real terms. The Center's 1978 budget represented less than 40 percent of its purchasing power in 1970.*

Coincident with the trend in total budget are important changes in components of spending, which reflect changes in the Center's priorities and constraints on its budget imposed by DHEW and the Congress. During the Center's formative years, its programs were influenced greatly by large-scale, agency-initiated developmental projects funded largely by contracts. The effects of these projects are shown at the bottom of Table 7 in the relative portions of funds spent by contract. As these efforts were phased out in 1974 and 1975, the use of contracts diminished relative to grant-supported research from more than 40 percent contract in 1970-1972 to 17 percent in 1978.

The shift from large-scale developmental projects left a larger portion of the Center's declining budget to support research. The great majority of funds employed to finance the Experimental Health Services Delivery System, the Federal-State-Local Data Systems and other large-scale projects were devoted to developmental activities and relatively

---

*These budget figures refer to funds available for support of research and training programs and do not include costs of administering the agency.

TABLE 7

NATIONAL CENTER FOR HEALTH SERVICES RESEARCH BUDGET
BY CATEGORY, FISCAL YEARS 1970-1978
(in thousands of dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978*
Extramural Research and Development	32,940	46,618	51,118	41,150**	39,705	32,905	18,600	17,900	18,000
(%)	(88)	(91)	(91)	(90)	(92)	(92)	(72)	(74)	(75)
Grants	15,283	25,009	28,050	24,529	27,459	27,905	16,100	14,900	15,000
(%)	(41)	(49)	(50)	(55)	(64)	(78)	(62)	(62)	(62)
Contracts	17,657	21,609	23,068	15,121	12,246	5,000	2,500	3,000	3,000
(%)	(47)	(42)	(41)	(34)	(28)	(14)	(10)	(12)	(13)
Training	4,500	5,000	5,000	4,700	3,400	2,000	900	100	-
(%)	(12)	(9)	(9)	(10)	(8)	(6)	(3)	(*)	-
Intramural Research	-	-	-	-	-	1,000	6,500	6,039	6,000
(%)	-	-	-	-	-	(2)	(25)	(25)	(25)
Total	$37,440	51,168	56,118	45,850**	43,105	35,905	26,000	24,039	24,000
(%)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Contracts as a % of Extramural Research	54%	46	45	31	31	15	13	17	17

*Amount requested.
**Includes special appropriation of $1.5 million for research on emergency medical services.

Source: "Justification of the Budget Estimates, Departments of Labor and HEW Appropriations," Hearings Before A Subcommittee of the Committee on Appropriations, House of Representatives: 91st Con., 2nd sess., Part 2, p. 681; 92 Con., 1st Sess., Part 2, p. 322; 92nd Con., 2nd Sess., Part 3, p. 556; 93rd Cong, 1st Sess., Part 3, p. 400; 94th Cong., 1st Sess., Part 2, p. 808; 94th Cong., 2nd Sess., Part 3, p. 628; 95th Cong., 1st Sess., p. 644; Hearings Before Subcommittees of the Committee on Appropriations, United States Senate, Supplemental Appropriations for Fiscal Year 1975, 93rd Cong., 2nd Sess., on HR 16900, p. 143.

little to evaluation and other research. When these developmental costs are subtracted from the Center's 1970-1973 budgets, approximately $35 million remains for support of the types of research and smaller-scale demonstration projects that comprise the Center's current programs and priorities. Hence, the decline in the Center's total budget after 1973 is substantially overstated if the agency's current priorities and strategies are taken as the touchstone.

The Center's support for research training decreased after 1973, following a decision by the Office of Management and Budget to suspend the program. The Center has not been allowed to reinstate it, despite the existence of provisions for training in the Center's authorizing legislation. Following 1973, expenditures for training met obligations for programs incurred earlier, but no new programs were permitted. By 1978, all support for training programs had ceased.

In 1974, the Center received its first explicit legislative authority under the Health Services Research, Health Statistics, and Medical Libraries Act (P.L. 93-353), which amended Sections 301, 304, and 308 of the Public Health Service Act. These amendments directed the National Center to allocate a minimum of 25 percent of its annual budget to intramural research and to establish centers for health services research. By 1977, both provisions had been implemented, with the result that already reduced monies for new extramural research grants and contracts were further reduced. As shown in Table 8, the Center now obligates a total of about $10 million annually to the intramural and centers programs. This, combined with obligations for continuing extramural projects, accounted for 88 percent of the Center's budget in 1978, leaving only $2.8 million for new extramural projects.

Priorities

The priorities established early in the National Center's history emphasized large-scale, agency-initiated demonstration programs funded largely through contracts. By 1975, however, the present pattern of funding primarily investigator-initiated research and demonstration via grants had become established.

The shift from the large-scale developmental projects to smaller-scale demonstrations and research was occasioned in part by the enactment of several programs similar to those NCHSR had been testing and by the Center's declining budget. For instance, the Center's Experimental Medical Care Review Organizations (EMCRO) program dealt with phototypes of the Professional Standards Review Organizations created by 1972 amendments to the Social Security Act; its Experimental Health Services Delivery Systems (EHDS) projects, which attempted to test the feasibility of local management of health care programs by community organizations, was terminated with the enactment of the National Health Planning and Resources Development Act of 1974.

TABLE 8

TOTAL FUNDS AVAILABLE, CONTINUING OBLIGATIONS, AND REMAINING FUNDS, THE NATIONAL CENTER FOR HEALTH SERVICES RESEARCH, FISCAL YEARS 1976-1978

	Fiscal Year	
	1977	1978*
	(in millions of dollars)	
Total Funds Available	$24.0	$24.0
Obligations		
Continuing Projects	11.6	10.9
Intramural Program	6.0	6.0
Centers Program	3.6	4.3
Remaining Funds	2.8	2.8

*Amount requested

Source: "Justification of the Budget Estimates, Departments of Labor and HEW Appropriations," Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, 95th Congress, 1st Session, Part 4, p. 645.

The Center's current priorities reflect its attempts to deal with major policy issues and to coordinate the dissemination of findings from health services research. After a series of meetings involving persons from government, the health care industry, and the health services research community,[9] the Center has identified nine priority areas for research and demonstration.[10]:

- Quality of care
- Productivity and cost of inflation
- Health care and the disadvangaged
- Health manpower
- Health insurance
- Planning and regulation

- Ambulatory care and emergency medical services
- Long-term care
- Section 222 experimentation*

As of 1978, the Center has issued special solicitations for research and demonstration proposals in three of these areas: health care and the disadvantaged, long-term care, and planning and regulation.

Within the past two years, the Center has expanded its efforts to disseminate research findings to federal and state government officials, health care professionals, and members of the health services research community. It routinely distributes summaries of studies and annotated summaries of research findings bearing on particular problems. Additionally, pursuant to the mandates in P.L. 93-353 to disseminate information about health services, the Center co-sponsors regional "dissemination workshops" at which local officials and health professionals participate with selected researchers to discuss what is known from health services research about national and local health care issues.

Finally, the Center supports eight centers for health services research located in universities and health care institutions. The existence of the centers programs and, in part, their substantive orientation, are legislatively mandated.** Each of these centers receives core support of approximately $250,000 per year in direct costs to finance the basic staffing and administrative costs necessary to develop an organizational entity through which sustained health services research can be conducted. Three of these centers receive additional support to develop special emphases on health care technology, health care management, and health care policy. In addition to core support, these institutions receive about $400,000 annually in direct costs. The average total award, including direct and indirect costs, for all center grants is about $513,000 per year.

---

*This refers to Section 222 of the Social Security Act, which, as amended in 1972, provides for prospective reimbursment experiments and demonstrations under Medicare, and for approved plans by states for experimentation under the Medicaid and Maternal and Child Health programs.

**P.L. 93-353 mandated the support of center grants and specified the substantive orientation of two centers: health care technology and management. A third center focused on health policy was mandated by HMO amendments of 1976 (P.L. 94-460).

Issues

The principal issues surrounding the National Center for Health Services Research are as follows:

1. What are the National Center's unique functions within the federal government?

2. Could these functions be accomplished by other federal agencies, or do they require an organizationally distinct health services research agency within the federal government?

3. If the National Center's functions can be accomplished by other agencies, to whom should they be assigned?

4. If accomplishment of these functions requires a general-purpose agency, how can its programs be encouraged and sustained? Specifically, what ought to be its principal objectives, and where within the federal structure should the agency be located?

Coordination of a General-Purpose Research Agency

The problems that led to the creation of the National Center for Health Services Research endure, including needs for:

- research on fundamental problems in organization, financing, planning, and regulation of health services;
- evaluations of health care programs;
- validating and synthesizing knowledge from health services research and related fields of inquiry;
- coordinating and assisting activities of federal agencies involved in health services research;
- developing the nation's capacity to conduct research, demonstrations, and evaluations that will improve understanding and inform decisions;
- supporting programs for training in health services research to assure an adequate supply of appropriately trained investigators.

The question is whether a general-purpose agency is required in the federal government to address these needs.

The principal arguments against the continuation of the National Center for Health Services Research stem from the observations: (1) that each of the Center's research functions could be absorbed by other agencies; (2) that its declining budget is evidence of a politically weak government organization; and (3) that the Center has not been effective in its attempts to coordinate health services research activities within the federal government.

The first observation derives largely from the expansion of the Health Care Financing Administration's (HCFA) health services research program, which now exceeds that of the National Center in spending. The two agencies share interests in the effects of health insurance on the use of and expenditures for health services, impacts of new technologies on health care costs, and a host of other issues about the financing of health services. Furthermore, an examination of the special emphases of other federal agencies involved in some manner with health services, discloses that each deals with some aspect of problems the National Center identifies among its research priorities. The Bureau of Health Planning and Resources Development, for instance, shares the Center's interests in health care planning and regulation; the National Center for Health Statistics, its concern with gathering and analyzing health care utilization and expenditure information; the Bureau of Health Manpower, its focus on the development and use of new personnel; and the service delivery programs of the Health Services Administration, its interests in effects of organizational innovations on the management of health care institutions and on improving access to care. In sum, some observers believe that the National Center lacks a substantive focus of its own.

According to this view, the National Center's research activities could be dispersed throughout the federal government and each area of research placed in an agency that has corresponding operating missions. Research responsibilities would be accompanied by the necessary funds to support the training of researchers. Placing research and training within the operating agencies might ensure greater correspondence between agencies' needs for information and the focuses of research projects, and thereby, strengthen agencies' requests for research funds. This, in turn, might lead to a more stable supply of support for researchers than is currently the case, and might permit agencies to expand their research agendas to deal not only with questions of immediate import, but also with the longer-term and more theoretically-oriented problems that interest academic researchers.

Coupling research with operating program responsibilities would undoubtedly create the need for more systematic coordination and synthesis. Those who favor such an approach note that the National Center has been particularly unsuccessful in accomplishing this task. As such responsibilities are basically administrative in nature, they might be exercised by officials who have authority over the agencies that sponsor research. Regardless of where a particular general-purpose

health services research agency is located within the federal structure, major portions of all health services research activities will be in other branches of the government beyond its reach. Therefore, instead of relying on one agency to coordinate health services research throughout the government, each executive department might assign an official or task force at each bureaucratic layer to coordinate the research priorities and agendas of lower levels. This structure might build upward from the agencies to the departmental level, across departments, and ultimately to a government-wide coordinating mechanism -- perhaps within the Office of Science and Technology Policy in the Executive Office of the President.

The principal arguments in favor of a general-purpose health services research agency disagree on each point presented above and add other considerations. More specifically, it is argued: (1) that the Center has unique functions to fulfill that cannot be absorbed readily by operating agencies whose primary responsibilities are for programmatic missions and not research; (2) that the Center's declining budget is due to multiple factors and therefore should not be interpreted exclusively as an indicator of the agency's perceived worth; and (3) that organizational and political factors have mediated against the Center's ability to coordinate health services research activities within the federal government.

With respect to the first point the committee found that overlapping or duplication of research activities between the National Center and other federal agencies are more apparent than real. Inspection of particular projects reveals similarities at a general level but important differences in details. Studies supported by the National Center usually are less programmatically oriented and are more likely than projects funded by operating agencies to deal with pervasive conceptual and methodological problems and fundamental substantive issues. The National Center views the development of innovative research methods to be applied in health services research as one of its principal missions. As many of the conceptual and methodological problems encountered in health services research cut across various health care issues and agency missions, bureaucratic imperatives for standardization become persuasive, often leading to premature closure on definitions and methods. An agency devoted to evaluation and revision of existing conceptual and methodological approaches to problems and developing new approaches is a useful deterrent.

Related to the matter of premature standardization are the political incentives for agencies to confine the scope and content of their research priorities and agendas to studies dealing with relatively minor administrative features of their programs. One need not attribute venal motives to agency personnel to have concern about their tendency to view their programs and missions in a sympathetic light. Persons are attracted to agencies that foster values, perspectives, and objectives that they share. In consequence, they are likely to pursue research to further those values, perspectives, and objectives and to interpret evidence of

their programs' failures as indicating the need for more rigorous or extensive interventions along the general lines of their agencies' programs. Moreover, agency personnel may legitimately claim that their task is to implement a particular program mandated by law rather than to develop alternative policies that might obviate the need for their agency or its functions.

Given these tendencies, there is need for an agency that is independent of operating program responsibilities. Having no programmatic stake in the outcome of its research, a general-purpose agency is free to investigate problems that may cast unfavorable light on particular federal agencies or programs. As the federal government becomes more involved in controversial and highly politicized programs, such as the imposition of capital budget ceilings or fixing maximum bed-population ratios, the potential value of critical research increases substantially.

The argument for placing research functions in operating agencies also overlooks the possibly deleterious effects such a strategy may have on research into problems that are not highly visible. Several agencies deal with problems that, while important, do not receive the continuous and heightened attention of high-level policy makers. When such matters as emergency medical services, pharmaceutical practices, and dental care are eclipsed by major issues pertaining to the costs and quality of health care, tying research to the programs that deal with less visible problems tends to assure its neglect. As issues wax and wane, a general-purpose research agency is able to keep research in these areas alive, providing at least a modicum of continuity.

In addition, close relationships between research and program orientations pose a possibility of failure to anticipate emerging research needs. Research focuses tend to be narrowly defined within the limits imposed by agencies' missions and agency staff's commitments to them. Problems that transcend those limits often are neglected until they reach crisis proportions. Although a general-purpose agency may not be able to solve such problems nor prevent their development, it can establish the base of information required to address them more systematically when they come to the attention to policy makers. The history of research on several matters of current concern to policy makers illustrates this point. Studies of prepaid group practices, hospital costs, and the use of ancillary personnel were done before the creation of the Center, and others were continued under its auspices. Over time, research in these and other areas has produced knowledge and refined questions that have anticipated and subsequently influenced the content and quality of subsequent policy debates.

Implicit in the above is the need for an identified and visible locus for health services research responsible for monitoring and guiding the future directions of this continually evolving field. Such a center should support research on fundamental questions relating to the provision of personal health services free from the assumptions and

orientations of agencies responsible for administering specific programs The center should identify and nurture important, but low visibility, areas of research and anticipate emerging research needs. It should also serve an important capacity-building function with responsibilities for supporting basic conceptual and methodological research to strengthen the foundations of the field, working with the university and policy-making communities to synthesize research findings, clarify the current state of knowledge, and identify remaining research questions, and providing training opportunities to assure an adequate supply of appropriately trained investigators for the future.

With respect to the second argument, the National Center's budgetary history should not be interpreted exclusively as an expression of lack of confidence in the agency's worth. Declines in NCHSR's budget have been associated with changes in its strategies and priorities and its recently mandated functions. Its shift from large-scale, agency-initiated research and development after the absorption of its programs by other agencies was accompanied by losses of funds that had supported these activities. The requirements of P.L. 93-353 that 25 percent of the Center's budget support intramural research and the mandating of health services research centers, in effect, shifted funds from monies available for competitive grant and contract awards to nondiscretionary, fixed obligations. These decisions must be regarded as preferences of the Congress for particular means of conducting and supporting health services research rather than as an expression of its lack of confidence in health services research or in the National Center. Had these restrictions not applied in 1978, for instance, the Center would have had nearly $13 million to fund new extramural activities instead of the actual $2.8 million remaining after the intramural and centers programs' obligations had been met.

Finally, the proposal to place the National Center's coordinating functions within the government's administrative structure suffers two major weaknesses. First, it assumes that persons who would do the coordinating would be competent to judge the value of research priorities and agendas submitted by agencies, and at higher levels, by entire departments, and that they would not infuse political considerations into their assessments at the expense of the quality of research or legitimacy of research needs. The committee found relatively few people in administrative positions who would be qualified to judge the merits of health services research and still fewer who would have the time to review thoroughly the numerous and varied portfolios of proposals that would be issued by agencies and departments. Were the personnel presently employed by the National Center dispersed throughout the government, their numbers would make little difference. Furthermore, if decisions were left to persons in administrative positions, it is likely that coordinating efforts would become subject to the biases of current programs and policies, especially at the higher levels of the government.

The conclusion, even when based on history, that a general-purpose research agency such as the National Center is unable to effect coordination among federal agencies overlooks the weaknesses of the positions that the agency has occupied within the federal structure and its present status in the Office of the Assistant Secretary for Health (OASH). The Center has never before been located within the office of officials with authority over operating programs. During its first six years of existence, the Center was below the Office of the Administrator, on line with other agencies within HSMHA. Following the 1974 reorganization of the Public Health Service it resided under the Office of the Administrator of HRA, separated bureaucratically from the Public Health Service's service delivery agencies. Its move to OASH in 1977 placed it bureaucratically above all Public Health Service programs, which account for about 60 percent of the federal government's spending for health services research. From this position the Center may be better able than before to influence and assist other agencies' health services research agendas and projects.

From its review of the history of the National Center for Health Services Research, the Center's current priorities and functions, and potential for effecting greater coordination of the health services research activities of the Public Health Service, the committee recommends that

> the National Center for Health Services Research should be maintained as a general-purpose health services research agency within the federal government.

Further, the committee recommends that the Center's functions should be:

- to sponsor health services research and research in related disciplines through a program of extramural, investigator-initiated grants and contracts;
- to conduct intramural research;
- to sponsor through a program of extramural grants and contracts training in health services research and related disciplines;
- to monitor the development of knowledge relevant to health services research, and disseminate this knowledge;
- to assist other federal agencies in developing health services research priorities and programs and in designing and executing evaluations of federal programs; and

- to facilitate the development of the health services research capacities of non-federal organizations and agencies.

The committee believes that one of the National Center's principal missions should be to conduct and sponsor synthesizing research aimed at filling gaps in research and knowledge. Therefore, the Center's purview must not be limited to particular types of questions. Indeed, the Center should be encouraged to pursue research on issues that are related to the principal focuses of operating agencies and should be accorded the opportunity to be designated as the lead agency in coordinating and developing important areas of health services research that are not tied directly to other agencies' missions. Accordingly, the committee recommends that

> the purview of NCHSR should not be constrained by specific federal policies or operating programs and should encompass research on dental, mental, and nursing services.

Although the recommendation regarding the Center's functions are similar to those established for the agency at its outset, the committee is mindful of the fact that they cannot be performed adequately under current circumstances. In retrospect, the committee believes that initial expectations about the Center's objectives were unrealistically optimistic, especially in light of the meager resources devoted to them. Declining budgets and limitations on the Center's ability to recruit personnel needed to address each of its missions have placed the agency under doubly difficult constraints. If these constraints are not relaxed, the Center will be forced to continue to entirely suspend important functions or to pursue them with less vigor than they warrant. Therefore, the committee recommends that

> DHEW review the personnel and budgetary requirements for each of the functions identified in the committee's recommendations and provide the NCHSR with the resources required to perform them.

Health Services Research Training

Among the functions recommended above for the National Center is the support of programs for training in health services research. Early in its history, the Center provided grants for this purpose, and its current legislative authority permits the support of training. However, since 1973 DHEW has rejected the agency's requests for funds to re-establish this program.

The committee did not review in depth issues relating to training in health services research because of the existence within the Academy of the Commission on Human Resources panel on health services research, which was created specifically for that purpose. The Commission was established pursuant to provisions of the National Research Service Award Act of 1974 (P.L. 93-348), which authorized training in biomedical and behavioral research and directed DHEW to request the Academy to conduct studies of needs for biomedical and behavioral research personnel. One of the Commission's panels has focused on training needs for health services research.

The committee reviewed the Commission's reports and generally agrees with its findings and recommendations.[11] The committee is particularly concerned about the potential long-term effect of the lack of support for training on the supply of qualified persons to engage in health services research. Accordingly, the committee endorses the Commission's recommendations that the National Research Service Award Act of 1974 be amended to incorporate training in health services research and that the National Center be provided the opportunity to develop and maintain a training program. Specifically, the committee recommends that

> the NCHSR be permitted to re-institute its support of health services research training, based on a careful review of the most appropriate mix of disciplines and levels of training deserving of support.

Centers Program

On advice from the Health Services Research Study Section, a program to support health services research and development center grants was launched in early 1968 by the then Division of Medical Care Administration and subsequently expanded by the newly created National Center for Health Services Research and Development. In all, eleven centers received support through competitive grants. These grants were awarded on the basis of the scientific and technical merit of applicants' proposals and the promise of their settings to provide opportunities for the development and testing of innovations in health services organization and delivery. Each of the centers was to emphasize research and development dealing with particular identified health services problems (e.g., health care technology, ambulatory care).

As originally conceived, centers were to serve several purposes. In addition to conducting research and demonstrations, they were to provide assistance to their respective institutions and communities in health services research and development, to provide a setting in which to train researchers, and, ultimately, to become permanent, self-sustaining parts of their parent organizations.

As they developed, few of the original centers fulfilled these expectations. Needs for funds to survive and to keep their staffs intact militated against their pursuing only projects falling within their areas of emphasis.[12] These difficulties, compounded by changing priorities of federal agencies supporting health services reaearch, led several centers to develop a spectrum of discrete projects, often bearing little identifiable relationship to a systematic research and development program. The centers program was also troubled by uncertain relationships between the centers and the National Center. Center directors were inclined to view their organizations as largely independent of the National Center's priorities and agendas. On the other hand, pressures on the Center from DHEW and the Congress to address matters of national importance often led the National Center to assess centers in terms of their contributions to its research and development agenda.

As the centers were brought up for periodic review, study sections recommended discontinuation of all but two of them. Pursuant to provisions of P.L. 93-353, directing the National Center to reinstate its centers programs, the two remaining centers and six new ones were funded, three of which were designated as special emphasis centers.

The current program differs from the earlier ones in two important respects. With the exception of the special emphasis centers, awards to centers of about $250,000 per year in direct costs are intended to be used primarily for core support, not as monies to support research. While a portion of these funds may be used to design projects and to support small-scale, exploratory and feasibility studies, their principal purposes are to provide at least partial salaries for a full time director and associated staff and to cover administrative costs. With this relatively meager support, the centers are expected to engage in several activities, including research, technical assistance to local health care institutions and agencies, and providing opportunities for training. As in the situation of the National Center itself, expectations placed on the centers greatly exceed their resources. The centers, other than those having a special emphasis, must seek outside support for their research programs, which means that few can afford to selectively pursue projects that fit into a coherent programmatic effort. These circumcumstances greatly detract from the National Center's ability to evaluate their programs and contributions. Ultimately, the National Center finds itself accountable for research done by centers over which it has little control.

The centers program also raises the issue of how the National Center's scarce resources should be used. While the committee recognizes the importance of fostering centers of excellence in health services research and providing them with stable support, the benefits of this program to the health services research community must be weighted against the share of available research funds it consumes. As noted earlier, the centers program is a fixed annual obligation of approximately $4.0 million

In 1978 this represented one-sixth of the National Center's total budget and nearly one-third of the funds remaining after continuing and intramural obligations were met.

In view of the uncertainty surrounding the centers program and of the limited funds available to support investigator-initiated health services research, the committee recommends that

> legislation authorizing the National Center for Health Services Research be amended to strike the requirement that the Center support centers for health services research.

The National Center should be permitted to support center grants if a consensus is reached that the program complements the Center's overall mission and the evolution of the field as a whole. Awards of center grants should be based on review by peers of scientific and technical merits of proposed studies, their coherence as a set, qualifications of principal investigators and staff, and other features that are relevant to applicants' abilities to complete the proposed work, rather than the existence of a legislative mandate.

Intramural Research

The committee recognizes that the National Center for Health Services Research requires a strong intramural research effort to attract and keep qualified researchers. Such persons are needed to assist other federal agencies in their health services research activities; to develop NCHSR priorities; to monitor health services research studies and literature; to identify, summarize, and critique methods and findings; and to conduct studies that are best done within the government.

However, the committee is concerned about two features of the present intramural program of the Center. The committee's first concern has to do with its legislatively mandated minimum budget. Public Law 93-353 requires the National Center to devote not less than a quarter of its budget to intramural research. The requirement is troublesome for at least two reasons. Because of the practice of establishing separate ceilings for budget and personnel, the availability of funds to conduct intramural research on a topic that may be of critical importance provides no assurance that the work will be done or, if done, will be done well. Spending the dollars wisely is dependent upon the availability of appropriately trained, experienced investigators. Despite some notable exceptions, the National Center has had difficulty in securing senior researchers of the stature required for a viable and respected intramural research program. A partial solution has been to augment

existing staff with visiting researchers under provisions of the Intergovernmental Personnel Act or, for less senior persons, the Service Fellows Program. A more lasting solution would be to revise civil service procedures and to eliminate dual ceilings.

The effects of a budgetary minimum for intramural research are further compounded by reducing the resources that would otherwise be available for investigator-initiated extramural research. In 1978, the intramural reserve was nearly three times the monies available to support new extramural research. In such circumstances of scarce resources, the committee believes that it is inappropriate to require the Center to devote nearly $6.0 million to intramural research when other meritorious uses could be made of these funds.

In view of the stringent fiscal and personnel constraints faced by the National Center for Health Services Research, the committee recommends that

> the legislation mandating the intramural research program of the National Center for Health Services Research be amended to strike the language requiring the Center to allocate not less than twenty-five percent of its budget to intramural research.

Organizational Location Of The National Center

Over the past decade, the National Center has occupied three different locations within the federal government. It has been situated in its present location in the Office of the Assistant Secretary for Health (OASH) for less than one year. In light of Congressional debate about the appropriate organizational locus for the Center that occurred during the course of this study, the committee reviewed several options. These include leaving the Center in its present OASH position; relocating it in the National Institutes of Health; re-creating it as a free-standing agency in the Public Health Service; and re-creating it as a free-standing agency in the Office of the Secretary of the Department of Health, Education, and Welfare. The associated strengths and weaknesses of each are presented below. Many of the arguments arise from a fundamental dilemma involving the need for organizational and political authority to achieve coordination of research priorities versus the need to insulate the Center from political pressures that might inappropriately influence its research priorities and interpretation of research findings.

Option #1 - Leave the Center in the Office of the Assistant Secretary for Health

Pro:

1. Located above all PHS agencies and better able to coordinate and assist other health services research activities.

2. Greater leverage in securing increases in budget and staff positions.

3. Greater ability to enlist support of Assistant Secretary for Health in negotiating with non-PHS sponsors of health services research.

4. Enhanced likelihood that research findings will be synthesized and channeled to policy-makers when appropriate.

5. Re-location too disruptive, given the recent placement in OASH.

Con:

1. Unable to influence directly the health services research activities of the Health Care Financing Administration and other non-PHS agencies.

2. Close proximity to persons responsible for policy initiatives heightens the potential for politicization of research agenda and findings.

Option #2 - Relocate within NIH

Pro:

1. Heightened visibility and status by association with widely respected institution with tradition of supporting high quality research.

2. Greater protection from political influences.

3. Enhanced likelihood of stimulating research to fill large gaps between clinical and health services research.

4. Potential salutary effect on health services research components of NIH activities.

Con:

1. Removed from operating agencies within PHS.

2. Still unable to influence directly the health services research activities of HCFA and other non-PHS agencies.

3. NIH traditionally has not been interested in health services research; Center might suffer from neglect.

Option #3 - Re-create as free-standing agency in Public Health Service

Pro:

1. Heightened visibility and status.
2. Potential for creating new focus for health services research free from limitations of the past.
3. Greater protection from political influences.

Con:

1. On line with (rather than above) other agencies in PHS.
2. Still unable to influence directly the health services research activities of the HCFA and other non-PHS agencies.
3. Given resource constraints, a fledgling organization is unlikely to acquire the necessary bureaucratic infrastructure to survive.

Option #4 - Re-create as free-standing agency in the Office of the Secretary, DHEW

Pro:

1. Heightened visibility and status.
2. Potential for creating new focus for health services research free from limitations of the past.
3. Located above all DHEW programs, including HCFA; better able to coordinate research priorities and integrate and synthesize research findings.
4. Potential to improve quality of research and maintain accountability to and for the entire field.
5. Enhanced likelihood that research findings would be channeled to policymakers when appropriate.

Con:

1. Creates distance between researchers and other DHEW agencies that lessens the likelihood that research will be responsive to needs of operating programs.

2. Close proximity to persons responsible for policy initiatives heightens the potential for politicization.

After considering the issue of the location of the National Center, the committee concluded that there are no compelling grounds for recommending specific organizational changes. As the Center has experienced frequent and significant disruptions from previous reorganizations, the most recent of which occurred within the past year, the committee believes that further changes of location would create additional difficulties. The committee notes that the Center's present location within OASH provides the possibility for enhanced organizational and political visibility and authority. This may, however, lead to inappropriate politicization of its research priorities, agendas and roles. As the Center has been in OASH for only a limited period, it is too early to determine whether its current location is, overall, a desirable one. Therefore, the committee recommends

that the National Center for Health Services Research remain in its present location in the Office of the Assistant Secretary for Health and that the effects of these arrangements on the various functions and priorities of the Center be evaluated after a suitable interval, perhaps five years, to determine whether further reorganization is warranted.

REFERENCES

1
Barbara S. Cooper, "National Health Expenditures," Research and Statistics Note (November 1969), Table 2,3.

2
James L. Sundquist and David W. Davis, Making Federation Work (Washington, D.C.: The Brookings Institution, 1969.)

3
Barbara S. Cooper, "National Health Expenditures," Research and Statistics Note (November 1969), Table 2,3.

4
Report of the National Advisory Commission on Health Manpower, Volume I (Washington, D.C.: U.S. Government Pringing Office, 1967), 2.

5
Task force report on the National Center for Health Services Research and Development submitted to the Assistant Secretary for Health and Sciencific Affairs, Department of Health, Education, and Welfare, 24 July 1967, p. I-4.

6
Ibid., pp. I-4-5.

7
"Justification of the Budget Estimates, Depts. of Labor and HEW Appropriations," Hearings Before A Subcommittee of the Committee on Appropriations, House of Representatives: 91st Con., 2nd Session, Part 2, p. 322; 92nd Con., 2nd Session, Part 3, p. 556; 93rd Con., 1st Session, Part 3, p. 400; 94th Con., 1st Session, Part 2, p. 808; 94th Con., 2nd Session, Part 3, p. 628; 95th Con., 1st Session, p. 644; Hearings Before Subcommittees of the Committee on Appropriations, United States Senate, Supplemental Appropriations, for fiscal year 1975, 93rd Con., 2nd Session on HR 16900, p. 143.

8
Paul J. Sanazaro, "Federal Health Services R & D Under the Auspices of the National Center for Health Services Research and Development," Chapter VI in E. Evelyn Flook and Paul J. Sanazaro, Health Services Research and R & D in Perspective (Ann Arbor: Health Administration Press, 1973), pp. 150-83.

9
Daniel M. Fox, "The Development of Priorities for Health Services Research: The National Center, 1974-1976," Milbank Memorial Fund Quarterly/Health and Society 54 (Summer 1976): 237-248.

10
U.S. Department of Health, Education, and Welfare, Public Health Service, Forward Plan for Health, FY 1978-82, DHEW Pub. No (05) 76-50046 (August 1976).

11
Commission on Human Resources, National Research Council, Personnel Needs and Training for Biomedical and Behavioral Research: 1977 Report (Washington, D.C.: National Academy of Sciences, 1977), Vol. 1, 128-149.

12
Jere A. Wysong and Edward G. Ludwig, "Health Services Research Centers: The Concept, Experience, and New Legislation," Journal of Health Services Research 9 (Fall 1974): 183-194.