HEALTH PLANNING
Qualitative Aspects and Quantitative Techniques

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Edited by **William A. Reinke**
Assisted by **Kathleen N. Williams**

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Preface

While dedicated effort continues to enlarge the body of medical knowledge, a growing number of voices are being raised to express concern that the existing knowledge be used effectively to make quality health care generally available. In the health field, the gap between what is scientifically and technologically possible and what is actually being accomplished is very disturbing—all the more so when health care is proclaimed to be a right instead of a privilege and when those who need the services take the proclamation seriously, for the economic and social cost of an imperfect and inefficient fulfillment of that right is tremendous.

As a result, we are witnessing accelerated interest in the application of modern management methods to health services, systematic appraisal of health care systems and their components, and rational planning to allocate scarce health resources efficiently according to accepted priorities.

As the need for planning becomes more generally appreciated, troublesome questions are raised concerning the nature of this planning. On the one hand, the growing body of available quantitative techniques suggests that planning can and should be a straightforward, systematic assessment of the benefits and costs (monetary and otherwise) associated with alternative approaches. On the other hand, in recognition of the political, social, and cultural realities of a given planning environment we are forced to admit that many policies, priorities, and courses of action are the result of subjective considerations that defy tidy methodological packaging. To the question of whether health planning is art or science, we can answer only that it contains ingredients of both; hopefully, with the passage of time, it will contain more of the latter and less of the former.

Comprehensive health planning is broad in scope, not only with respect to the services covered, but also in terms of the variables to be considered and the methods to be employed. As a minimum the planner must cope with demographic and epidemiologic variables, with human, physical, and financial resources, and with the disciplines of economics, sociology, political science, statistics, and operations research. The literature in any one of these fields is voluminous, and to keep abreast of developments in all of them is impossible. Moreover, most of the literature is not addressed specifically to the matter of health planning. The resulting need for a concise, integrated, multidisciplinary digest of planning methodology seems obvious.

This need has become particularly obvious in the course of our experience at Johns Hopkins University with an educational program in comprehensive health planning. A large proportion of the participants in this program are practical

administrators without recent formal training in the various disciplines in question. Yet we take care not to spend excessive time in remedial teaching. Our program is built around small group workshops in which the students actually participate in the planning process. Under such circumstances, they come to recognize the extent to which planning can be methodical and to apply the methods at their command. Thus, a digest of health planning concepts and methods is essential for the participants in order that they may get to the practice of planning quickly, but knowledgeably. Hopefully, this volume will serve the same purpose for others engaged in planning at various levels.

The material covered herein is extensive, although obviously not exhaustive. For this reason, we make extensive use of associated reading lists. Annotated primary readings are cited for each of the topical areas with the aim of guiding the reader to the minimum body of information required for a reasonably comprehensive understanding of the subject in question. For the reader interested in broader and deeper insights, secondary reading lists are provided, as well as a listing of bibliographies on various aspects of health planning.

The book is divided into four parts. Part I provides an introduction and places the planning process in some perspective. Part II emphasizes the various aspects of information gathering which form the health planning base. Part III deals with specific methods of analyzing and synthesizing the component sets of information. Since the first three parts are especially relevant to planning for personal health care services, Part IV considers the special features of mental health, environmental health, and population planning.

A volume such as this requires a number of authors with individual areas of expertise but with a common background of experience and competence in the teaching and practice of health planning. Those who have contributed herein meet these qualifications and we are grateful indeed for their generous support in the writing. They in turn are each indebted for the counsel of others too numerous to mention. Four individuals must be given special recognition, however, for their long-standing guidance and support of health planning in general and this volume in particular: Drs. Carl E. Taylor, Timothy D. Baker, Ernest L. Stebbins, and John C. Hume.

William A. Reinke
Editor

Baltimore
January, 1972

List of Contributors

Unless otherwise noted, the contributors to this volume listed below are members of the faculty of The Johns Hopkins University School of Hygiene and Public Health

Timothy D. Baker, M.D., M.P.H. Assistant Dean and Professor of International Health and Public Health Administration

Philip D. Bonnet, M.D. Professor of Medical Care and Hospitals

Margaret Bright, Ph.D. Professor of Epidemiology and Behavioral Sciences

Thomas L. Hall, M.D., Dr.P.H. Deputy Director, Carolina Population Center, University of North Carolina, Chapel Hill, North Carolina

M. Alfred Haynes, M.D., M.P.H. Professor and Chairman, Department of Community Medicine, Charles R. Drew Postgraduate Medical School, Los Angeles, California

Cornelius W. Krusé, Dr.P.H. Professor and Chairman, Department of Environmental Health

Paul V. Lemkau, M.D. Professor and Chairman, Department of Mental Hygiene

Wallace Mandell, Ph.D., M.P.H. Professor of Mental Hygiene

Vicente Navarro, M.D., Dr.P.H. Associate Professor of Medical Care and Hospitals and International Health

William A. Reinke, Ph.D. Professor of International Health, Public Health Administration, Biostatistics, and Medical Care and Hospitals

A. Peter Ruderman, Ph.D. Lecturer in International Health; Professor of Health Administration, University of Toronto School of Hygiene, Toronto, Canada

Ernest L. Stebbins, M.D., M.P.H. Dean Emeritus and Professor of Public Health Administration and International Health

Carl E. Taylor, M.D., Dr.P.H. Professor and Chairman, Department of International Health

Kathleen N. Williams, M.A. Research Assistant, Department of International Health

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Planning in Perspective

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History and Background of Health Planning in the United States

ERNEST L. STEBBINS and KATHLEEN N. WILLIAMS

HEALTH PLANNING THROUGH VOLUNTARY EFFORTS

In the United States, efforts at health planning until quite recently were either decentralized to state or local governments or initiated by private or nongovernmental agencies. Most frequently these planning efforts were disease-oriented, i.e., categorical approaches directed toward specific health problems. Consider, for example, the work of the National Tuberculosis Association, which was established at the beginning of the twentieth century. A nationwide network of voluntary health workers under the guidance of a central organization dramatized the problem of tuberculosis in the nation and stimulated the development of programs in state or local governmental agencies for prevention and treatment of that disease.

This pattern of health planning and program development has been followed by a number of voluntary agencies, such as the American Cancer Society, American Public Health Association, National Foundation for Infantile Paralysis, and a host of others. An effort was made to coordinate the activities of these voluntary health agencies and to achieve some degree of comprehensive planning by the creation of the National Health Council, which provided a means of communication among these various organizations and afforded limited coordination of their activities.

The first serious effort at health manpower planning was a study of medical education in the United States and Canada conducted by Abraham Flexner, which clearly focused attention upon the need for adequately trained physicians and revealed the sad state of medical education at the time (1). This report had a major influence on the establishment of standards of medical education and the improvement of physician training and education in the United States.

The economic crisis and the Great Depression of the late 1920's and early 1930's focused attention upon the rising costs of medical care and the inequities of the distribution of health and medical services in the nation. In its 1933 report, the Committee on the Cost of Medical Care dramatized the serious

deficiencies in the existing system of personal health services (2). This study clearly demonstrated the inability of a large proportion of the population to obtain high-quality medical care because of the rising cost of these services. Recommendations of the Committee included proposals for prepayment systems for medical care needs, and they undoubtedly were at least partially responsible for the introduction of proposed legislation for compulsory health insurance (the Wagner Bill, introduced in the late 1930's) and the health provisions of the Social Security Act of 1935.

During this same period, a joint committee of the American Public Health Association and the National Health Council, chaired by Dr. Haven Emerson, carried out a study of the provision of full-time local health services in the nation. The findings and recommendations of this committee were not released for publication until the end of World War II, at which time the report, which came to be known as the Emerson Report, was published (3). Because of the conservatism of the committee, recommendations were limited to the then-accepted traditional public health services–environmental sanitation, communicable disease control, maternal and child heath, vital statistics, and public health laboratory services. This report set minimal standards for full-time, local health services, based upon the very limited scope of activity then generally accepted, and made the grievous error of stating these minimal standards in terms of number of health personnel per population unit and per capita expenditure. In the rapidly expanding field of public health, these minimum standards were inadequate almost before they were promulgated.

During this same period, the New York Academy of Medicine undertook an ambitious study of the problems of provision of personal health and medical services under the theme of "Medicine in the Changing Order." This project, guided by a distinguished committee of physicians and staffed by a highly-qualified, multidisciplinary group of experts, analyzed and further defined the problems of provision of quality medical care to the total population. Because of the highly controversial issues then being debated, however, no startling new proposals came out of this learned dissertation (10 volumes), and the report had little impact on health planning in the nation (4).

Aging of the population, with its associated increase in chronic illness, was recognized as a major and expanding problem of medical care during the 1950's. Under the auspices of the American Medical Association, the American Hospital Association, and the American Public Health Association, a Commission on Chronic Illness was established to carry out a detailed study of the extent and nature of chronic illness in the nation. Although sponsored by three professional organizations, the Commission was unique in that it included a broad representation of consumer groups including organized labor, industry, commercial insurance interests, and the general public. An exhaustive five-year study led to a voluminous report which contributed greatly to existing knowledge about the problem of caring for the chronically ill (5).

Unfortunately, conflicting interests and minority opinions expressed by commission members weakened the impact of recommendations and hampered implementation of proposed plans.

National Commision on Community Health Services

The most recent, largely voluntarily supported, national effort at comprehensive health planning was the National Commission on Community Health Services. This Commission was created under the sponsorship of the American Public Health Association and the National Health Council and was financed by both private foundations and the United States Public Health Service and the Vocational Rehabilitation Administration. It carried out a four-year study of community health needs and existing services with the stated purpose of developing a blueprint for a system of preventive and curative medical services and environmental health protection for the next decade. The Commission consisted of a mixture of health professionals and representatives of organized labor, industry, and the community at large. Its work was carried out through three major projects: a National Task Forces project, a Community Action Studies project, and a Communications project.

The *Task Forces* project consisted of six groups dealing with environmental health, comprehensive personal health services, health manpower, health care facilities, financing of health services and facilities, and organization of community health services. Each task force was made up of approximately 15 recognized leaders in its particular field of study, who were charged with studying the problem and making recommendations for the development and improvement of health services for the next decade. The task forces were given a high degree of autonomy, and their recommendations, while obviously influencing the Commission's report, were published unmodified and unedited as individual task force reports (6-11).

The *Community Action Studies* project guided the development of detailed studies in 21 communities throughout the United States (12). The communities selected for self-study, while not strictly a cross-section of the country, did include different geographical regions and areas of differing population density and differing socioeconomic conditions. Each community established a broadly representative advisory group responsible for the study and for the subsequent findings and recommendations in important problem areas. The findings of the Task Forces project and the Community Action Studies project formed the basis for the deliberations of the National Commission and the development of its recommendations.

The *Communications* project was an effort to test public reaction to the findings of the various task forces and the community studies. Nearly a year before the conclusion of the Commission's report, four regional conferences were held, in San Francisco, Chicago, Atlanta, and Philadelphia. Each of these

conferences was attended by approximately 300 representatives of all segments of the population, including labor, industry, professionals, and community leaders, in approximately equal proportions.

The report of the Commission was published in early 1966 (13). Its recommendations and those of the six task forces dealt with almost every phase of community health services. Many of its recommendations have already been implemented through legislation or administrative action. Its most significant recommendations were that community health services need greater federal participation and that comprehensive health planning must take place on a continuing basis. The Commission assumed that high-quality personal health services and a healthy environment were civic rights and that government at all levels, together with nongovernmental agencies and private citizens, had a responsibility to provide, within the limits of their resources, superior community health services.

The Commission recognized that existing political boundaries and local autonomy represent major obstacles to comprehensive health planning and the development of excellent community health services. The Commission also enunciated the concept of the "problem shed" and the need for a mechanism for dealing with health problems by a combination of political subdivisions representing the "community of solution." It recognized that the "community of solution" might differ from one health problem to another and recommended regional or areawide planning bodies corresponding to the problem areas. In the provision of personal health services, the Commission recommended a "single system," eventually combining into one system of medical service all of the many and fragmented programs of both the public and private sector.

HEALTH PLANNING IN THE NATIONAL GOVERNMENT

Presidential Commissions

Health Needs of the Nation

In 1951, the President of the United States appointed a Commission on the Health Needs of the Nation, which was broadly representative of the health professions and also of consumers, particularly organized labor and industry. The Commission gathered detailed information concerning available health services, facilities, and manpower and their adequacy to meet health needs, and assembled panels of experts to explore health needs and the extent to which these needs were being met. It also held open hearings to determine consumer opinion as to the adequacy of existing programs and services. The Commission compiled a voluminous report, known as the Magnuson Report, which contained previously unavailable information clearly identifying deficiencies in existing systems (14). The report also provided important recommendations for the correction of the deficiencies with major federal participation in financing more adequate services and facilities; however, as it was published shortly before a

change in administration, it had little impact on the new administration or the Congress.

Heart Disease, Cancer, and Stroke

In February of 1963, President Kennedy appointed a Commission on Heart Disease, Cancer, and Stroke "to recommend steps to reduce the incidence of these diseases through new knowledge and more complete utilization of the medical knowledge we already have." The Commission was made up of approximately 30 prominent citizens, predominantly specialists in one of the three specified diseases. It gathered much information concerning the extent of the problems and the existence of services and facilities to care for individuals suffering from heart disease, cancer, and stroke. This information was obtained from approximately 50 professional organizations in the health field and from several hundred individuals, again primarily specialists in one of these three diseases.

In a surprisingly short time (about seven months), the Commission published a two-volume report with some major recommendations and certain legislative proposals, some of which were not directly related to the specific charge of the Commission (15). Among the important recommendations was the establishment of a nationwide network of Regional Medical Programs, based in medical schools or medical centers and related to satellite centers in community hospitals and through them to practicing physicians, which would provide exemplary care for victims of heart disease, cancer, and stroke, or "related diseases." With almost unprecedented speed, the recommendations were enacted into law (as the Heart Disease, Cancer, and Stroke Amendments of 1965), and the Regional Medical Programs were authorized.

Significant Legislation

Hill-Burton Act

In 1946, Congress enacted the Hospital Survey and Construction Act (Hill-Burton Act, P.L. 79-725) to provide federal aid to states for hospital facilities. An important condition of this legislation was that each state create a Hospital Planning Council, charged with the responsibility for assessing the need for new hospital construction (according to a prescribed formula of hospital beds per population unit). Each state's planning council was required to submit a plan detailing the appropriate priorities for meeting these needs. Annual revision of the plans was mandatory.

Amendments to the Act in 1954 broadened the scope of the program to include nursing homes, rehabilitation facilities, chronic disease facilities, and diagnostic or treatment centers. The most far-reaching revisions to the basic law came in 1964 with the passage of the Hospital and Medical Facilities Amendments (Hill-Harris Act, P.L. 88-443), which established a new grant