KIDNEY DISEASE

PROGRAM ANALYSIS

A REPORT TO THE SURGEON GENERAL

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE Public Health Service

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A REPORT TO THE SURGEON GENERAL

Prepared Under
Direction of Office of
Program Planning and Evaluation
Office of the Surgeon General

FOREWORD

The Public Health Service has a continuing responsibility to examine the framework for effective decision-making required in the determination of health priorities and in the delineation of the most effective and efficient methods of approaching the solution of the health problems that face us. Therefore, in the spring of 1967 I convened a number of health program analysis groups to study and analyze critically the subject and program content in several specific areas of public health importance. Each of these groups was to examine present and potential goals and objectives, describe and discuss the current relevant state of knowledge and current operating programs, and to develop and analyze to the best of its ability alternative courses of action directed toward the achievement of these goals.

The analysis group responsible for this report on kidney disease was under the direction of Benjamin T. Burton, Ph.D., Associate Director for Program Analysis and Scientific Communication, NIAMD, who was assisted ably by staff from the various bureaus of the Public Health Service. Analyses of this kind are hampered by large data gaps which limit the breadth and precision with which specific program alternatives and effectiveness models can be developed. These limitations, however, do not invalidate the basic concepts contained or the alternative courses of action considered. In addition, the determination of the precise areas of insufficient knowledge emphatically underscores our need for additional research and development. Thus, although program analyses in the health field are still in the very early stages of development, it nevertheless is important that we continue and improve upon previous efforts using this analytic technique.

Dr. Burton, his staff, and members of the analysis group, are to be commended for their efforts to comply with my request in such a short span of time and for the quality of the report itself. There can be no question that this initial effort will be of value to me and my staff in considering not only Public Health Service Programs directed toward kidney disease, but also in the development of the methods and procedures required for subsequent analyses in the future.

William H. Stewart

Surgeon General

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July 28, 1967

William H. Stewart, M.D.
Surgeon General
U. S. Public Health Service

Dear Dr. Stewart:

In the spring of 1967, pursuant to your memoranda of February 27 and March 15, you established a Kidney Disease Program Analysis Group and charged it with responsibility for an analytical study of kidney disease in the light of present and future Public Health Service goals and objectives.

This study, by a group of staff members from the various Bureaus of the Service with competences relevant to the specific task, was pursued actively until now. This group was comprised of Dr. R. van Hoek of the Bureau of Health Services, Dr. G. H. Escovitz of the Bureau of Health Manpower, Mr. J. O'S. Francis, Dr. R. B. Freeman, and Dr. N. A. Hilmar of the Bureau of Disease Prevention and Environmental Control, Mr. W. Anderson of your office, and Dr. W. R. DeCesare, Mr. E. Glaser, Dr. W. H. Goldwater, Dr. D. E. Kayhoe, Dr. K. N. Gershengorn and myself of the National Institutes of Health. Valuable quantitative analytic competence was obtained through a contract with the Research Triangle Institute,

The demands of this undertaking were high both in terms of the magnitude and diversity of the disease area involved and in terms of the very brief time available for the study. Nevertheless, I believe I am expressing the consensus of the group when I say that the individual members feel rewarded by the new knowledge and insights which they have gained during this study.

We have now completed our task and are pleased to present to you our report. Please be assured of our continued interest and desire to cooperate.

Respectfully submitted,

B. T. Burton

Benjamin T. Burton, Ph.D.
Chairman
Kidney Disease Program Analysis Group

PREFACE

This kidney disease program analysis, one of several similar efforts being conducted at the present time, was originally conceived as an integral part of the planning and analytic effort required in the implementation of the Planning, Programming, Budgeting System throughout the United States Public Health Service. It is being published and distributed at this time with a two-fold purpose. First, to inform biomedical scientists and health professionals of some of the current thinking of the Public Health Service on approaches to combating illness, disability, and death, due to kidney disease. Secondly, to elicit comment and criticism on the assumptions, methodologies, and general character of the analysis in order to assist the Public Health Service in efforts to improve upon this and subsequent studies related to planning and evaluation of health programs. It should be clearly stated that in both regards it is recognized by members of the Public Health Service and the analysis group itself that parts of the analysis are totally dependent upon assumptions in areas in which there is very rigorous scientific dispute, i.e., the etiology and subsequent pathogenesis of certain kidney diseases, as well as assumptions regarding the ease or practicability of the delivery of preventive health services. Nonetheless, the significance of these diseases in terms of human suffering and death challenges us to develop programs which will have the maximum impact on human well being in relation to the resources that will be available for these efforts.

The importance of planning and evaluation in any large scale enterprise has gained increasing attention and emphasis during recent years and has resulted in the establishment of a Planning, Programming, Budgeting System through the Executive Branch of the Federal Government. Although sometimes narrowly conceived as a limited management tool, its broader effect of supporting more informed and therefore better decision-making was clearly emphasized in the original memoranda transmitting the Presidential decision to effect its wide-spread implementation. The approach emphasizes (1) clear articulation of goals and objectives, and (2) alternative approaches to attaining these objectives.

Numerous authorities on the Planning, Programming, Budgeting System have emphasized the two major components of this approach as "systems analysis" and "program budgeting." Systems analysis requires a multidisciplinary approach by analytically oriented people skilled in the use of quantitative techniques. Program budgeting requires thinking of the budget in terms of program objectives, i.e., purposes realized rather than objects of expenditure, i.e., facilities, equipment, and the like. The unifying theme of program analysis is one of attempting to relate program costs to program effectiveness. That some problems have been encountered in attempting to implement this budgetary system is understandable.

Charles J. Hitch, who directed the implementation of the Planning, Programming, Budgeting System in the Department of Defense beginning in 1961, has repeatedly cautioned others on the need for adequate preparatory work and development of the analytic competencies necessary to carry out this activity. It is noted by Mr. Hitch in the Nuffield Lecture delivered last year,

> "In Defense we had several hundred analysts at the RAND Corporation and elsewhere developing programming and systems analysis techniques for a decade before the Department attempted any large scale general application. No remotely similar preparatory effort has gone into any other governmental area and the number of trained and skilled people is so limited that they are inevitably spread far thinner in other departments of government than they were and are in Defense."

There has not been a comparable "preparatory effort" in the health field devoted to the development of appropriate techniques and methodology. Moreover, more time is usually required than that available in the budgetary cycle to carry out cost effectiveness studies that attempt to consider all costs, not just those that are readily apparent and quantifiable. Thus tremendous demands are placed on individuals attempting to carry out suitable program analysis in the health problem areas. Nonetheless, it is important that a beginning be made and that a body of experience be developed, critiqued, assessed, and improved upon.

In this analysis of kidney disease a priority was placed on attempting to obtain a synergistic interrelation between analytically oriented individuals with substantive knowledge of kidney disease and qualified analysts. The former were represented by selected staff members of the Public Health Service serving on a task force. The quantitative analytic competency was obtained through a contract with the Research Triangle Institute. Great credit is due to all individuals

involved who tried to grapple with the objectives of kidney disease programs and alternative program approaches for meeting them. It is hoped that through their efforts, as well as through comment and criticism that may be forthcoming from others, that we will be able to improve sequentially the process and the product in future analyses.

The Office of Program Planning and Evaluation, Office of the Surgeon General, is charged with the responsibility to define, develop, and implement analytic techniques of this kind. Any assistance, criticism, or comments from professional groups, the academic community, or interested individuals will be welcome and greatly appreciated.

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