BUDGETARY PHILOSOPHY AND PROCEDURES IN COMMUNITY, GENERAL, NON-PROFIT HOSPITALS IN THE STATE OF VIRGINIA

by

Jeffrey Robert Barnes

Thesis submitted to the Graduate Faculty of the Virginia Polytechnic Institute in partial fulfillment for the degree of

MASTER OF SCIENCE

in

Business Administration

APPROVED:

Chairman, Dr. Ronald J. Patten

Dr. William F. Hardin

L. M. Harrell, Jr.

May, 1968

Blacksburg, Virginia

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iv
LIST OF TABLES	v
INTRODUCTION	1
Statement of the Problem Purpose of the Study Hypotheses Selected Definitions Plan of Analysis	
Chapter	
I. AN ANALYSIS OF THE ROLE OF BUDGETING IN HOSPITAL ACCOUNTING	10
Review of the Literature Factors Supporting Use of Budgets Unique Aspects of Hospital Accounting Summary	
II. METHODOLOGY	23
General Collection of the Data	
The Questionnaire Techniques for Analyzing the Data	
III. THE ANALYSIS OF DATA	32
Distribution of the Respondents Analysis of Budgetary Philosophies Analysis of Responses to Questions Con- cerning Basic Requirements for Budget- ary Procedure	
Analysis of Responses to Questions Con- cerning Procedures in Budgeting	
Analysis of Responses to Questions Con- cerning Managerial Uses of Budget Data The Integration of Theory and Practice	

	Summary			4	
	Recommend	lations	and a start of the s The start of the start		
APPENDIXE	q				. 107
BIBLIOGRA			• • •		• • • •

ACKNOWLEDGEMENTS

I wish to express my appreciation to the members of my graduate committee, Dr. Ronald J. Patten, Dr. William F. Hardin, and Professor L. M. Harrell, Jr., for their constructive criticisms and advice during the writing of this thesis. Particular thanks go to Dr. Ronald J. Patten, chairman, for his many suggestions for improvement.

formerly administrator of Columbia Hospital for Women, Washington, D.C., and

Accounting Department, Indiana University, were instrumental in the design and refinement of the study questionnaire. This study would not have been possible without the full co-operation of the participating administrators, controllers, and business managers of Virginia community, voluntary, non-profit hospitals, who took time from their busy schedules to complete the questionnaire.

iv

LIST OF TABLES

Table		Page
I.	Distribution of Hospital Questionnaire Respondents by Size of Institution	33
II.	Responses to Budgetary Philosophy Ques- tionsby Size of Hospital Respondent	35
III.	Responses to Questions Concerning Basic Requirements for Budgetary Procedures by Size of Hospital Respondent	41
IV.	Automated Accounting Routines in Small, Medium, and Large Voluntary, Community, General Hospitals in the State of Virginia	54
v.	Rating of the Extent to Which Basic Require- ments for Budgetary Procedure Exist in Hospitals of Different Sizes	55
VI.	Responses to Questions Concerning Procedures in Budgetingby Size of Hospital Res- pondent	57
VII.	Responses to Questions Concerning Continuous versus Periodic Budgets, Comprehensive versus Partial Budgets, and Frequency of Comparisons of Forecasted and Actual Fig- uresby Size of Hospital Respondent	58
VIII.	Rating of the Extent to Which Budgetary Pro- cedures Exist in Hospitals of Different Sizes	83
IX.	Responses to Questions Concerning Managerial Uses of Budget Databy Size of Hospital Respondent	84
Χ.	A Tabulation of the Relationship Between Budgetary Philosophy and Practice in Individual Hospitalsby Size of Hospital Respondent	92

INTRODUCTION

Universal Concern with Medical Care.--There are few institutions which are more vital to our lives than the hospital, for sooner or later we all come to know at least some facets of its operation. One writer has stated that the "rising demand for medical care all over the world is not capricious, and it is unlikely to abate in the future."¹ One need not search through many newspapers or magazines, however, before he discovers numerous articles dealing with the rising costs of medical care and the shortage of skilled and unskilled hospital personnel. The need for optimum utilization of available resources and for longrange, innovative planning is apparent. For those who must cope with the immediacy, however, control over rising costs presents a problem that has escaped solution to date.

The Problem of Rising Costs. -- From the base period of 1957-1959 through 1966, medical care costs increased

¹Jerome Pollack, "The Voice of the Consumer: Cost, Quality, and Organization of Medical Services," <u>Hospitals</u>, <u>Doctors, and the Public Interest</u>, ed. John H. Knowles (Cambridge, Massachusetts: Harvard University Press, 1965), p. 188.

130 percent, more than any other component of consumer spending.² The increase from 1965 to 1966 alone was eight percent.³ The unhappy prospect is for a continued escalation in medical costs at a rate which will far exceed that of the general cost-of-living index.⁴ The economic reasoning for this escalation is not difficult to understand, but the consuming public has refused to accept the medical profession's explanation, i.e., that in high labor cost-service type enterprises, including hospitals, productivity cannot be increased proportionate to salary in-In manufacturing, productivity gains often offcreases. set a portion of the wage increase. Of the increase in per capita expenditures for medical care since 1948, only about one-third reflects an increase in individual volume of utilization, the remaining two-thirds representing price rises.⁵ The consumer agrees that physicians should be compensated at a level which reflects their responsibilities and that hospitals should be reimbursed for their

2

²U. S., Department of Health, Education, and Welfare, <u>Health, Education, and Welfare Indicators</u>, February, 1967, p. S-15.

³Ibid.

⁴"Folsom Report, The Governor's Committee on Hospital Costs: Summary and Findings," <u>N.Y. State Journal of Medi-</u> <u>cine</u>, August 1, 1965, cited by William J. Mueller, "Fin-<u>ancial Management," Hospitals</u>, XL (April 1, 1966), 73.

⁵Pollack, op. cit., p. 195.

full costs. At the same time, however, he is faced with prohibitive hospitalization rates and physicians' fees and relentlessly climbing premiums for hospitalization insurance. In view of this unhappy development, the consumer of medical services has taken more interest in the operations of his local community hospital and is increasingly asking for explanations of the various charges on his hospital bill, even though he does have insurance coverage. Hospital accounting must provide the data to support these charges.

The Role of Budgeting.--In a rapidly changing world, hospital services cannot be static. Improvements are constantly being made to provide better individual and more extensive service to the community at large. Just as there are new developments in medical equipment and techniques, so there must also be developments in the management aspects of hospital operation. The successful management of today's hospital presents a challenge in the effective utilization of the latest advances in managerial and cost accounting, personnel administration, psychology, public relations, finance, and many other fields. An essential part of successful business management is planning future operations through budgeting. Hay and Seawell have put the case for budgeting hospital income and expen-

ditures ahead of that for the business corporation since hospital deficits will necessitate outside financing to enable the institution to continue operations.⁶ Yet budget programs, while more widely used than ten years ago, are still not as common as they should be. There are numerous reasons for this slow progress, but perhaps the most significant has been the lack of uniform accounting. Inconsistency in methods of accounting and the adoption of procedures as a result of individual inclination have made it difficult to arrive at realistic cost figures and budget estimates. This in turn makes it difficult to justify prices to the public. Boards of trustees are realizing, however, that the public concern over hospital costs can be answered appropriately only when prices are set at rates that reflect the cost of rendering the service. There is a direct relationship between budgeting and rate setting.

Purpose of the Study

This thesis examines the budgetary philosophy and budgetary procedures found in community, general, non-

⁶Leon E. Hay, <u>Budgeting and Cost Analysis for Hos-</u> <u>pital Management</u> (Bloomington, Indiana: University Publications, 1958), p. 4 and

Lloyd Vann Seawell, Principles of Hospital Accounting (Berwyn, Illinois: Physicians' Record Company, 1960), p. 3.

profit hospitals in the State of Virginia. The purpose of this examination is to determine what budget progress has been made in the state's sixty-one such institutions and to pinpoint areas for possible improvement. It is emphasized that no attempt is made to analyze the budget status of each specific hospital in the state, but rather to disclose the causes of the limited budget progress made among the hospitals taken as a whole.

Scope.--It was decided to concentrate on the voluntary hospital as opposed to the government and proprietary types because the major needs of our population are met by, and the high standards of today's medical care are largely attributable to, the non-profit voluntary institution. Raymond P. Sloan describes the voluntary hospital as "a public enterprise conducted under private management. It is sponsored by boards of men and women, representative of the community, who are legally and morally responsible for its professional services, properties, and policies."⁷ This thesis does not attempt to investigate cost finding methods, although an accurate and uniform system of collecting and classifying cost data is essential for effective budget utilization.

. ⁷Raymond P. Sloan, <u>Today's Hospital</u> (New York: Harper & Row, Publishers, 1966), p. 4.

Methodology.--In collecting data concerning budgetary philosophy and procedures, a questionnaire was designed (see Appendix A) and mailed to the administrators of the hospitals included in the study. Chapter II, "Methodology," outlines this questionnaire in detail.

Significance. -- The need for budgetary controls has long been recognized by most successful profit-type organizations. Many non-profit voluntary hospital management teams have similarly recognized the value of these controls. Much, however, needs to be done to make the budget as effective a management tool as the board of trustees and administration desire it to be. The fact that there are so many different budget practices may be part of the reason that little, if anything, has been done in Virginia in the form of surveys or studies to determine existent attitudes and procedures. Although it is realized that the budgetary procedures for a 500-bed institution will differ from those for a forty-bed institution, the aim of management is the same, i.e., the formulation of a plan which will serve to direct and guide. No administrator will admit operating on the "hoping to come out" principle, i.e., that somehow everything will work itself out, and the hospital will prosper without the necessity for constant surveillance. By gathering data on individual

hospital budget philosophy and procedures, areas of substantial agreement and disagreement may be pinpointed and related to variables such as size and number of accounting personnel. In this manner, it is anticipated that recommendations may be formulated for strengthening budgetary controls.

Hypotheses

In order to guide the investigation, the following hypotheses are formulated and provisionally adopted for testing against the data:

- Regardless of institutional size, some degree of budgeting is generally recognized as a necessary management tool in planning and controlling operations. Most hospital administrators today realize the contributions budgeting can make toward achieving fiscal objectives.
- 2. Existent failures to obtain maximum benefits from budgeting result not from a lack of top management support and direction, but rather from a multitude of causes, varying from institution to institution.

Selected Definitions

In designing the study questionnaire (see Appendix A), an attempt was made to clearly define those technical hospital and budget terms which appeared to be subject to varying interpretations. This was accomplished on the questionnaire itself in order to facilitate the respon-

dents' replies to the questions. These definitions were formulated from publications of the American Hospital Association, the American Association of Hospital Accountants, and various authorities in the field of hospital accounting. The following additional terms are defined in order to clarify later discussions. They do not necessarily appear in the questionnaire:

- Occasions of Service. "Units of measurement of hospital activities."⁸ This unit of measurement varies, of course, with the type of activity, e.g., "patient days" and "examinations."
- 2. <u>Budgetary Control.--</u>"The full procedure of planning, formally recording the plans, and comparing actual with standard figures."⁹
- 3. <u>Total Costs.-All</u> indirect and direct costs of an activity.¹⁰
- 4. Cost Centers.--"Units (departments, subdivisions of departments, functions, or activities) whose costs are being determined."11 In this thesis, the terms cost center and "responsibility center" are considered to be synonymous, since both imply ultimate responsibility by an individual.
- 5. <u>Cost Analysis (Cost Finding).--"The process of</u> recasting the data derived from the accounts ordinarily kept by a hospital to obtain costs

⁸American Hospital Association, <u>Budgeting Procedures</u> <u>for Hospitals</u> (Chicago: American Hospital Association, 1961), p. 8.

⁹American Hospital Association, <u>Cost Finding for Hospitals</u> (Chicago: American Hospital Association, 1957), p. 97.

¹⁰<u>Ibid.</u>, p. 11. ¹¹Ibid., p. 22.

of services rendered."¹² Cost analysis, then, may be viewed as the link between the accounting system and budgeting.

Plan of Analysis

Chapter I will review the objectives and requirements of budgetary control as appearing in the significant literature on the subject, discuss some of the reasons for increased emphasis on the use of budgets, and point out some of the peculiarities of hospital operation that complicate, but do not alleviate the need for, accurate forecasts and control of costs. Chapter II will describe the methodology of the study. Chapter III will analyze the responses to the study questionnaire in an attempt to relate actual practices in Virginia hospitals to guidelines in the professional literature. Chapter IV will give conclusions and recommendations based on the data in Chapter III.

12Ernest C. Laetz, "Accounting's . . . Contribution to Administration," <u>Hospital Accounting</u>, XV (February, 1961), 3.

CHAPTER I

AN ANALYSIS OF THE ROLE OF BUDGETING

IN HOSPITAL ACCOUNTING

The literature of hospital budgeting is recent in comparison with that of industrial budgeting. This undoubtedly stems from the fact that the entire field of hospital accounting was neglected for a number of years by the majority of those engaged in health administration. In the last several years, however, the growth of thirdparty reimbursement, rising medical costs, and more public concern with community medical facilities have all operated to force hospital managements into more sophisticated accounting methods. Concomitant with this recognition of the need for improved accounting, several academicians and practitioners began to cover the subject of budgeting in The following discussion summarizes those more detail. books and articles which give some insight into the areas encompassed in this study.

MacEachern, a pioneer in many aspects of hospital administration, emphasized the need for utilizing all financial and economic information, both internal and exter-

nal, in preparing the budget. One such source of information--audited financial statements--has perhaps assumed more significance today than ten years ago when his comprehensive text first appeared. MacEachern also emphasized the role of department heads in budget preparation and in controlling activities in their own areas.¹

Successful budgets have been taken out of the narrow context of financial plans and into the broader area of operational plans by numerous contributors to budgeting literature during the last ten years, including Leon E. Hay, James L. Peirce, Lloyd Vann Seawell, Philip J. Taylor, Benjamin O. Nelson, and Glenn A. Welsch.² Hay's widely used text presents concise definitions of many budgetary terms and gives detailed examples of application of the concepts involved.³ Peirce has shown much insight into

¹Malcolm T. MacEachern, Hospital Organization and Management (Chicago, Illinois: Physicians' Record Company, 1957), pp. 906-907.

²Other authors advocating broad interpretation of the budgeting concept include:

Jack A. L. Hahn, "Budgetary Reporting and Management Action," Hospitals, XXXVII (March 16, 1963), 46-47.

Herbert Shore, "Budgeting - Theory and Practice,"

Professional Nursing Home, VII (May, 1965), 14. I. M. Whisnant, Jr., "The Budget - Its Value to the Hospital and the Community," Southern Hospitals, XXXIV (January, 1966), 36.

³Leon E. Hay, Budgeting and Cost Analysis for Hospital Management (Bloomington, Indiana: University Publications, 1958).

the human aspects of budgeting, aspects too frequently overlooked by well-intentioned but short-sighted planning.4 The works by Seawell⁵ and Taylor and Nelson⁶ were both published in 1964 and delve into the threefold budget purpose of planning, coordinating, and controlling. However, since these works are intended as basic texts for teaching the broad spectrum of hospital accounting, their coverage of the budgeting function is less comprehensive than that of Hay's book. Welsch has developed perhaps the most intensive application of the "three recognized functions of management" (the planning function, the coordinating function, and the controlling function), and although his book is dedicated to the profit-making enterprise, there is much which is applicable to the hospital administrator and his budget officer. Welsch also describes the implementation of an effective budget education program.⁷

⁴Jack L. Peirce, "The Budget Comes of Age," <u>Readings</u> in Cost Accounting, Budgeting, and Control, ed. William E. Thomas, Jr. (Chicago: South-Western Publishing Co., 1955), pp. 130-139.

⁵Lloyd Vann Seawell, <u>Hospital Accounting and Finan-</u> <u>cial Management</u> (Berwyn, Illinois: Physicians' Record Company, 1964), pp. 2-19.

⁶Philip J. Taylor and Benjamin O. Nelson, <u>Management</u> <u>Accounting for Hospitals</u> (Philadelphia: W. B. Saunders Company, 1964), pp. 146-150.

⁷Glenn A. Welsch, <u>Budgeting: Profit-Planning and Con-</u> trol (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1957), pp. 5, 25, 365-371.

Throughout the articles and books cited above as well as many others on budgeting, the reader can perceive an application of scientific management to the problems inherent in an increasingly complex economic environment. Intelligent and intensive thinking about the future may seem like a painful process, but the pain involved in failure due to lack of planning is manifestly greater.

Factors Supporting the Use of Budgets

The Threat of Governmental Intervention .-- Many individuals in the hospital field today fear that the voluntary health system is in danger of eventual government take-Although various reasons are projected to support over. this fear, failure of the voluntary system to adequately control its costs of rendering care is perhaps the most outstanding reason mentioned. Since planning is an integral phase of the total budgetary process, adequate planning will reveal developing trends and spotlight the need for alternative, less costly, actions where appropriate. An example of this involves the whole area of the computerized information system. At first glance, the extra cost of computer programming may seem to preclude the consideration of replacing a punched-card accounting system. However, the improved operating information and displacement of clerical personnel may mean a savings far greater

than the initial investment. Costs are rising, but the management that sits back and makes no attempt to affect savings will have little cause to complain about governmental encroachments.

Need to Establish Institutional Objectives .-- It would be almost inconceivable to ask the president of a large. company what the long-range objectives of the concern are and to receive the reply that there are none. Similarly, it would seem to be inconceivable that a hospital administrator would be unaware of any established goals for the institution he manages. Although a hospital obviously attempts to offer the best possible medical care at the lowest possible cost, the facility's management should establish definite objectives, which would probably include a standard of performance, an outline of services to be rendered, a plan for expanding facilities as community needs grow, and plans for financing these progressive programs. Peirce has described budgeting as "a trained, disciplined approach to all problems."⁸ Budget preparation forces management to consider problems that may arise in the future and to decide in advance how to meet these problems. For example, the demands for increased salaries and better patient services are occurring at the same time

⁸Peirce, op. cit., p. 131.

as demands for reduction or minimization of any increase in patient or third party charges.⁹ Only by sound management of available resources can hospital administration hope to solve this difficult problem. There appears to be a growing awareness in the hospital administration field of the need to establish fiscal goals. The properly designed and used budget can help management advance toward its goals.

Desire for Better Internal Control.---At a time when hospital management is desirous of effective cost control, it is inevitable that attention will be given to strengthening internal controls. A hospital must have strict standards of performance and controls based on accepted accounting practices if management is to have confidence in the financial statements. Effective utilization of the concepts of responsibility accounting within a framework of strong budgetary controls can go a long way toward giving management this confidence. By identifying and investigating deviations of actual performance from budgeted performance, management gives evidence to accountable individuals that it is evaluating their operating results, which in turn leads to closer surveillance throughout the

⁹Thomas P. Weil and Patrick F. Roche, "Some Factors in 1967 Hospital Budgeting," <u>Southern Hospitals</u>, XXXIV (December, 1966), 24.

organization. It should be remembered that internal control refers not only to reducing losses from dishonesty and errors, but also to the promoting of operational efficiency by getting the most output from a responsibility center with the least concomitant input.

Need for Coordination of Resource Utilization .-- Budget preparation necessarily involves an element of cooperation. During conferences between the administrator, the budget officer, and department heads, an excellent opportunity exists for the administrator to develop in subordinates a sense of the total needs of the hospital and the role each department plays in contributing to accomplishment of predetermined objectives. These group meetings may also promote better understanding of the problems faced by each department head and how these problems are interrelated among the various departments. An example of the value of group budget meetings is the assigning of priorities to the replacements, additions, and improvements to plant and equipment by the administrator based upon department head recommendations. At the department head meeting, the administrator has the opportunity of discussing projected requirements in the presence of representatives of all departments concerned and may thereby avoid friction when some requests have to be denied. Another example of co-operation resulting from budget meetings lies in the area of operating supplies. If the purchasing agent has a monthly projection of medical and surgical patient days, he may be able to affect savings by adjusting his purchases of supplies to take advantage of volume discounts or by maintaining inventories at a sufficient level to meet demands and at the same time minimize losses from spoilage or outdated drugs.

Unique Aspects of Hospital Accounting

In order to understand the problems inherent in budgeting hospital operations, it is necessary to recognize the difference in hospital accounting and accounting for commercial concerns, where budgets have a far longer history. Some administrators claim that there are too many variables involved in hospital operations and that the preparation of meaningful, comprehensive budgets is not feasible. However, prudent management will recognize the following unique aspects of hospital accounting and will overcome these difficulties by thorough investigation, study, and research preliminary to budget preparation.

<u>General Non-Competitiveness of Hospitals</u>.--Even before the passage of Medicare - Title XVIII of Public Law 89-97 hospitals received much of their income from third-party agencies. Voluntary hospitals exercise little control over the types of patients admitted, and thus the percentage of uncollectible accounts is ordinarily higher than in a commercial concern, where Dun and Bradstreet credit ratings and other methods for measuring a potential customer's ability to pay are available.¹⁰ For the budgeting of revenues, management will certainly need to keep track, on a year-to-year basis, of the percentage of total income derived from individuals not covered by hospitalization insurance and the percentage of uncollected billings to these individuals.

Diversity of Revenue Sources.--Hospital revenues arise from many sources, such as services rendered to patients, tuition fees for educational programs, donations from foundations and individuals, grants from governmental agencies, concession sales, and other miscellaneous sources including investments and telephone service. Most business concerns do not have such an extensive variety of revenues and can prepare revenue estimates based upon past trends, economic and financial indicators for the current year, competitors' performance, etc. Although there are many more variables to consider in preparing revenue estimates for hospitals, guidelines do exist and management must develop sound budgetary procedures in order to arrive

¹⁰Ernest C. Laetz, "Unique Aspects of Hospital Accounting," <u>Hospital Accounting</u>, XVII (June, 1962), 15.

at estimates that are neither too conservative nor too optimistic. The interdependence of the revenue budget and the expenditure budget means that poor estimates could result in decisions which adversely affect the future financial strength of the institution.

Impact of Stand-by Facilities .-- The goal of the hospital is service to the patient; the goal of business is to make a profit. In industry, a downturn in sales can be met by the laying off of employees. A process that is no longer profitable can be terminated. In other words, economic considerations determine the direction in which firm resources are utilized. In the hospital, however, management must be ready to meet the needs of the patients, and it is not possible to release personnel due to a decrease in patient volume, unless this decrease represents a definite trend rather than a temporary fluctuation. Similarly, equipment cannot be dismantled and scrapped simply because it is not being utilized at a certain percentage of capacity. This equipment must even be maintained for potential use. Thus, "readiness-to-serve," "stand-by," or more commonly, "fixed costs" represent a significant portion of the total hospital costs. These fixed costs must be carefully considered when budgeting expenditures and off-setting revenues, and when setting rates.

<u>Dual Control</u>.--Although the hospital administrator is ultimately responsible for directing the operations of the institution, the attending physician sets the standard of professional care and is only indirectly responsible to the administrator.¹¹ This problem of dual control is pointedly set forth by Hall as follows:

At the level of fiscal responsibility, that is, responsibility for financing the institution or for preserving it as a going concern, the doctors are generally unwilling to accept the burdens and tasks. On the other hand, in the day-to-day running of the hospital, they are unwilling to accept control by laymen.

Merely by stressing the emergency character of any situation the doctor puts himself in a position where he can sally forth to take control wherever he sees his interest at stake, without accepting any continuing responsibility to act in a similar way in succeeding situations.12

This problem can be overcome only through a spirit of co-operation and an awareness of the total hospital mission by both the administrator and the attending physician. This awareness is furthered in many institutions by regular conferences between the administrator and the medical staff. In this connection, it should be pointed out that the medical staff is a valuable source of information and opinions on long-range developments, and the administrator

11_{Ibid}.

120. Hall, "Some Problems in the Provision of Medical Services," <u>Canadian Journal of Economics</u>, XX (June, 1954), 461. should not overlook the contribution its members can make toward successful forecasting.

Summary

Before hospital management can make effective use of budgetary control, it must perceive the budget as a plan covering all phases of hospital operation for a definite future period. The budget represents a formal expression in financial terms of plans and objectives for the institution. Hahn has also called the budget "a vote of authority given by the hospital's board of trustees to its administration."¹³ It is up to the administration to run the hospital within this authority.

There are several factors which have brought about increased budget emphasis, including more cost consciousness, awareness of a need for more closely defined objectives, a desire for strengthened internal controls, and more interest in the effective utilization of resources. As management positions in today's community voluntary hospitals are filled by more highly trained and better educated individuals, the comprehensive budget promises to become a widely-used tool of control.

The several significant differences in hospital ac-

13_{Hahn}, <u>op. cit.</u>, p. 47.

counting and accounting for business concerns organized for profit must be recognized by the hospital management team in preparing budgets. Accounting, properly used, can provide guidance and direction to administration; and combined with a realistic appraisal of the future and co-operation throughout the institution, should enable management to reach its established objectives.

CHAPTER II

METHODOLOGY

In the Introduction to this thesis, it was noted that the mailed questionnaire was the method used to conduct the study. The purpose of this chapter is to (1) explain the procedures and methods of collecting data relating to budgetary philosophy and procedures in Virginia community, general, non-profit hospitals, (2) explain the organization of the questionnaire, and (3) describe the techniques to be utilized in analyzing the data.

Collection of the Data

Since the August 1, 1967 issue of <u>Hospitals</u> listed sixty-one voluntary non-profit general hospitals in Virginia, it was determined to attempt to collect budget data from all of these institutions rather than to design a sample.¹ Preliminary research and discussions with hospital administrators indicated that there was a wide vari-

¹American Hospital Association, <u>Hospitals</u>, XLI (August 1, 1967), 1-20.

ety of budget practices among hospitals and that the study would be of more value if all community hospitals in the State were examined. Because of the distances involved, time limitations, and perhaps most importantly, inconvenience to administrators and controllers, the mailed questionnaire was preferred over the personal interview. In order to gather the desired data during a personal interview, the researcher would have required approximately forty-five minutes to one hour with each interviewee. It was felt that most administrators and controllers could not afford this time during the working day. The mailed questionnaire, on the other hand, could be completed at home and may thus receive more careful attention. The questionnaire was devised after an extensive review of hospital budgeting literature and discussions with administrators, a hospital consultant, and officials of various hospital organizations. The questionnaire transmittal letter requested administrators to have their budget officers complete the form where possible. A second mailing was sent out approximately three weeks subsequent to the first.

The Questionnaire

The questionnaire (see Appendix A) is divided into five parts: (1) identification data, (2) budgetary philosophy, (3) basic requirements for budgetary procedures,

(4) procedures in budgeting, and (5) managerial uses of budget data. This arrangement is logical since it indicates the relationship between philosophy and practice and between practice and use of budget data. The major questions of each section and their intent are discussed below. It was not considered necessary to discuss the intent of the remaining questions since this intent should be clear from the question itself.

<u>Identification Data</u>.--The number of beds and number of bassinets is needed in order to classify the hospital as small, medium, or large. In classifying questionnaire respondents, three categories are used:

1. Small - hospitals of 100 beds and less.²

2. Medium - hospitals of 101 to 300 beds.

3. Large - hospitals of 301 beds and over.³

The number of accounting personnel is intended as one

²For purposes of this study, a bassinet is considered the equivalent of one-half bed. This conversion rate was used by several administrators interviewed in the planning stages of the study.

³This classification is used in Raymond P. Sloan, <u>Today's Hospital</u> (New York: Harper & Row, Publishers, 1966), p. 8. Although fifty beds and under represents a "small" institution in many publications, the writer feels that the purposes of this study are better served by using Sloan's classifications. It is also felt that in a day when institutions are increasing their bed capacities, small, medium, and large categories may come to mean increased lower limits for each category. indicator of accounting capability when related to the number of beds and bassinets. The limitations of this factor are recognized, however. Although one institution may have more accounting personnel than its same-size neighbor, the caliber of these personnel may not be as high, thus limiting budget capability. Unfortunately, a significant number of respondents failed to indicate the number of accounting personnel, and the factor was therefore not considered in analyzing the responses.

Budgetary Philosophy.--Question (1)--The purpose of this question is to determine whether the individual completing the questionnaire feels that he has an adequate understanding of the budgeting role. Question (2)--This question is intended to measure the <u>perceived</u> importance of the budget among hospital management personnel. Questions (3), (4), and (5) are designed to determine management attitudes toward the budget as used in the particular institution. These questions are applicable only if the institution does utilize a budget.

Basic Requirements for Budgetary Procedure.--Successful budgeting cannot be achieved without adequate financial and statistical data, a clearly defined organizational structure, proper budget education, and co-operation throughout all levels of the hospital. Without these cri-

teria, the best budget philosophy will not produce an effective budget. Question (2)--Written projected goals by department heads contribute to a "forward-leaning" posture throughout the organization and give the administrator some assurance that his subordinates do have definite plans for their areas of responsibility.

Question (4)--The position control plan is instrumental in budgeting labor expense, the major portion of the operations budget.⁴ By determining what positions are authorized, the administrator has a degree of control over departmental staffing that is far superior to relying solely on department head recommendations.

Question (9)--Budget preparation must be tied in with the chart of accounts if responsibility is to be assigned. A breakdown between direct and indirect costs greatly facilitates follow-up of budget deviations.

Question (11) -- This question is intended to determine whether the system of classifying costs is adaptable for flexible budgeting.

Question (13) -- Timely budget reports are essential if budget follow-up is to be effective. Automation may not only aid in preparation of useful budget reports, but may also

⁴"Position control plan" is a technical term widely used among hospital administrators. In effect, this plan constitutes a personnel budget, in that it sets forth predetermined positions in relation to projected work loads.

relieve accounting personnel from many routine duties so that more time may be devoted to cost analysis.

<u>Procedures in Budgeting</u>.--Question (1)--Flexible budgeting permits comparisons of actual expenses with what expenses should have been for the level of activity actually achieved. If variable elements of costs are known, budgets can be prepared for different levels of volume (patient days).

Question (4)--The purpose of this question is to determine if the administration communicates to the organization the established operating performance objective and financial position objective of the hospital.

Question (6)--Expressing budgets in quantitative and/or time units as well as in dollars facilitates the control aspects of budgeting. By comparing actual units of service with projected units, a measure of departmental productivity is provided.

Question (13)--This question is designed to determine how closely the administrator works with his department heads in the important task of budget preparation. The department heads undoubtedly desire a private session with the administrator so that a more detailed discussion is possible than that which takes place at group meetings. Question (16)--Consistent adherence from year to year to a specific schedule for budget preparation promotes better planning and coordination among the various departments. It also eliminates the excuse that a due date was missed because of ignorance of the requirement.

Question (18)--The long-term fixed asset plan describes fixed assets which will require replacement or retirement and details of future expansion, along with methods of financing such expansion. Although the plan will probably consist of informal notes and estimates, it reflects broad, comprehensive thinking about the future needs of the institution. Comparison of short-term requirements with this long-range plan may facilitate the assignment of priorities to current period purchases.

Question (19) -- This question attempts to determine whether management's concept of depreciation is consistent with its policy regarding fund accounting (see Question 3 under <u>Basic Requirements for Budgetary Procedure</u>). Because of the higher costs of replacing plant facilities, many hospital managements have begun to give greater attention to setting aside replacement funds from current operations.

Managerial Uses of Budget Data.--Question (1)--This is perhaps one of the most important potential uses of budget data, especially at a time when the purchasing power of the dollar is steadily declining. The inadequacy of historical cost reimbursement becomes more apparent as the time between incurring the costs and their reimbursement lengthens.

Question (2)--Before a department head is asked to explain an unfavorable budget deviation, the non-controllable portion of the deviation should be separated. It is not fair to ask an individual to explain fluctuations in financial statements over which he has no control.⁵

Techniques for Analyzing the Data

Classification of Hospitals by Size.--The purpose of classifying respondents by size is to isolate the impact of this factor upon budgetary philosophy and practice, if any. The American Hospital Association states that: "Basic budgeting procedures are the same for any size or type of hospital, whether functions are combined into few departments or segregated in many."⁶ The writer believes, however, that the difference in budget applications between the small, medium, and large-size hospitals is significant enough to warrant investigation.

Testing the Hypotheses. -- The first hypothesis formulated in the Introduction was that most administrators,

⁵See Homer A. Black, John E. Champion, R. Gene Brown, <u>Accounting in Business Decisions</u> (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), pp. 722-724, for a distinction between controllable and non-controllable, fixed and variable, and direct and indirect expenses.

⁶American Hospital Association, <u>Budgeting Procedures</u> for Hospitals (Chicago: American Hospital Association, 1961), p. 1. regardless of institutional size, recognize the significant contributions which budgeting can make toward enabling their organizations to achieve designated fiscal objectives. Responses to questions under the heading Budgetary Philosophy will be tabulated according to previously mentioned size categories in order to determine the validity of this proposal. The second hypothesis proposed that budget progress has been limited due to a number of causes, these causes varying from institution to institution. Responses to questions under the three remaining headings of the questionnaire will be tabulated to test this hypothesis. Finally, the interdependence of certain responses will be tested in order to discover possible budgeting trends in community general hospitals. Although this thesis does not specifically analyze the status of each institution involved in the study, it does point out those areas warranting further investigation on an institutionby-institution basis, if such an investigation were to be undertaken. The completed questionnaire returned by each facility would adequately serve as the starting point for an analysis of the facility's budget status.

CHAPTER III

THE ANALYSIS OF DATA

This chapter analyzes the responses to the mailed questionnaire. These responses are grouped under the section headings of the questionnaire, i.e., (1) Budgetary Philosophy, (2) Basic Requirements for Budgetary Procedure, (3) Procedures in Budgeting, and (4) Managerial Uses of Budget Data. Comparisons will be made between small, medium, and large size hospitals in order to assess the relative strengths and weaknesses of each category as a whole. These assessments will form the basis for recommendations to be made in Chapter IV.

Distribution of the Respondents

Table I shows by size category and in total (1) the total number of institutions included in the study, (2) the number of respondents to the study questionnaire, and (3) the percentage of (2) to (1).

A hospital was considered to have responded to the questionnaire if (1) the questionnaire was completed in its entirety and returned, (2) the questionnaire was partially completed and returned, or (3) the questionnaire

TABLE I

DISTRIBUTION OF HOSPITAL QUESTIONNAIRE RESPONDENTS BY SIZE OF INSTITUTION

Size Category	Total Number of Institutions Included in the Study*	Number of Respondents To the Questionnaire	Percentage of Respondents to Total in Category
Small (100 beds and under)	25	19	76.0
Medium (101 to 300 beds)	26	21	80.8
Large (Over 300 beds)	10	10	100.0
Total	61	50	81.9

*Source: American Hospital Association, Hospitals, XLI (August 1, 1967), 1-20. was not completed, but the reasons for noncompletion were stated either on the blank questionnaire itself or in a separate letter. Included in the fifty responses are replies from four hospitals stating that a budget is not used. Three of these hospitals are in the medium category and one is in the small category. No assumptions can be made regarding the eleven hospitals not responding in any manner.

Analysis of Budgetary Philosophies

Table II shows the distribution of responses to the five questions designed to determine the overall philosophy on budgeting and to compare philosophies among the different sizes of hospitals.

Analysis of Responses to Each Question

Questions One and Two.--It is significant to compare the percentage distributions of responses to questions one and two. Question one asks whether the respondent agrees with one writer who claims that the area of financial budgeting is probably one of the best understood areas of hospital operation. Question two asks the respondent whether or not he agrees that all hospitals should be operating on a budget. The vast majority of respondents do not agree with Toomey's assertion that the

	100	Small (100 beds and Under)	11 and	Under)	<u> </u>	(101 to 300	300	300 beds)	ت ==	(Over 300)		beds)		Total		
Ouestionnaire	Yes	5		No	Ř	Yes		No	Å	Yes		No.	Ř	Yes		NO
	.ov	σΩ	No.	eр	°N N	e?	.ov	50 1	No.	¢9	No.	cp	.ov	¢9	No.	¢9
									ļ							
	2	12.6	m m	87.4	۶٩	4.7	20	95.3	2	20.0	œ	80.0	S	10.8	41	89.2
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	13	87.4	2	12.6	80 1	85 <b>.</b> 8	m	14.2	6	0.06	н	10.0	0	87.0		13.0
ñ	12	85.8	N	14.2	4	70.0	S	30.0	00	88 88 88	н	11.2	34	0.67	Ø	21.0
5	7	58.2	ι Ω	41.8	0 H	52.7	<u>с</u> ,	47.3	\$	50.0	4	50.0	21	53.8	۲ ۲	46.2
IJ	7	50.0	~	50.0	7	35.0	m H	65.0	2	22.2*	୰	66.6	16	37.1*	26	60.6
	, , ,									*******	-		****		610.00	

TABLE II

RESPONSES TO BUDGETARY PHILOSOPHY QUESTIONS--BY SIZE OF HOSPITAL RESPONDENT

area of financial budgeting is well understood.¹ In the large institutions, where financial controls presumably should be more highly developed than in small institutions, only 20 percent of the individuals answering question one thought that there was good understanding of the budgeting area. Eighty-seven percent of the individuals answering question two, however, thought that all hospitals should be operating on a budget. The combination of responses to these two questions suggests that while there may be a significant degree of agreement on the recognition of the need for financial budgeting, there also appears to be a significant lack of understanding of the subject.

Question Three.--Seventy-nine percent of all individuals answering question three indicated that the budget used in their hospital was a financial measure of a preconceived and accepted program. This high percentage of positive responses to the question is a hopeful sign that there is a growing awareness of the broad applications of budgeting. Since hospitals in the medium size category reflected the smallest percentage of acceptance of this

1_{Robert E. Toomey, "Financial Management, Planned and Controlled," <u>Hospital Progress</u>, VL (February, 1964), 106.}

broad definition of budgeting, the six questionnaires with negative responses to this question were examined in an attempt to determine possible reasons for a "no" answer. No budget was prepared in three of the institutions. The questionnaires of two institutions, although indicating the existence of several conditions requisite for budgetary controls, showed definite reservations about the value of budgets. One questionnaire indicated that there had been a breakdown in the hospital's budgeting process and that the budget did not carry the importance that management desired of it.

Question Four.--Of the hospitals answering question four, concerning whether or not the budget is considered a time-saver, 21 did consider it to save time, while 18 apparently considered it to be a burden. Moreover, there was little variation between positive and negative percentages among the three size categories. Hahn points out that "the budget is time-saving in that it provides a sphere of freedom as well as a tool of control."² He believes the budget to be a vote of authority given by the board of trustees to management, within which management

²Jack A. L. Hahn, "Budgetary Reporting and Management Action," Hospitals, XXXVII (March 16, 1963), 47.

is free to operate.³ The writer of this thesis believes that at least some of the individuals responding negatively to this question probably read the question as: "Is the budget considered a time-saver?" in effect omitting the portion "rather than a burden?" This opinion is based on a comparison of negative answers to question four with all answers to question five, which seeks to determine how management perceives the overall reception throughout the institution to the idea of budgeting. Nine of the 18 "no" responses to question four (50 percent) were accompanied by "no" responses to question five, indicating either (1) that although top management may consider the budget to be a (necessary?) burden, it does not believe the idea of budgeting to be unpopular on a wide scale throughout the rest of the institution, or (2) that although the budget may not be considered a time-saver, its contributions in other ways to the well-being of the institution are acknowledged by both top management and the majority of other personnel. In other words, it is difficult to determine whether a negative answer to question four signifies (1) misunderstanding of the meaning of the question, (2) a poor attitude toward budgeting, or (3) a belief that the values of budgeting out-weigh the time it occupies.

³Ibid.

Question Five.--Although over 60 percent of the respondents to question five did not believe that budgeting carried a bad connotation in a significant portion of the institution, the 37 percent "yes" answers shows how much budget education is needed in hospitals. The ascending percentages of "no" answers from "small" to "large" categories appears logical if one visualizes more acceptance of the budgetary role in the larger hospital.

### Summary

The fact that a decided majority of individuals representing each size category of hospital answered questions two and three of the questionnaire section <u>Budgetary</u> <u>Philosophy</u> positively tends to support the hypothesis that most administrators recognize the contributions which budgeting can make toward achieving fiscal objectives. The import of the 53.8 percent positive and 46.2 percent negative answers to question four cannot be definitely determined since it is felt that there may have been some misunderstanding of the question. Finally, the distribution of responses to question five, regarding receptivity of the idea of budgeting throughout the institution, reveals that there may be a gap between management's understanding of the role of budgeting and that of other personnel in the hospital.

# Analysis of Responses to Questions Concerning Basic Requirements for Budgetary Procedure

Table III shows the distribution of responses to the thirteen questions designed to determine the overall existence of the basic requirements for budgeting and to compare the development of these requirements among the different sizes of hospitals. It should be noted that of the thirteen questions, only questions six and eight relate strictly to budgeting, i.e., all of the remaining questions may be answered "yes" for a particular hospital without there being any form of budgeting in the hospital.

### Analysis of Responses to Each Question

Question One.--As the responses to question one indicate (Table III), 84.5 percent of respondents do receive daily information on the patient census, the amount of income recorded, and the cash balance of the operating account. The spread from 80 percent of small size hospitals to 90 percent of large size hospitals appears reasonable, this spread representing a difference of only two institutions. The one large size hospital with a negative response to the question indicated that it was just beginning to institute budgetary procedures, although it appears unusual that a hospital with over 300 beds does TABLE III

RESPONSES TO QUESTIONS CONCERNING BASIC REQUIREMENTS FOR BUDGETARY PROCEDURE--BY SIZE OF HOSPITAL RESPONDENT

Onestion Number		Sma.		1-05-11	· ·	Med	Medium	10204		Large					-	
(See Section B of Ouestionnaire-	A A	Yes		No Nu	-				-   >	Yes		Non	R	Yes		No
Appendix A)	No	e9	No	cə	No	ся	.ov	62	-on	¢P	.ov	62	.ov	3	No.	ep
	12	80.0	M	20.0	15	83.4	'n	16.6	0	0.06	-	10.0	36	84.5	~	15.5
N	M	21.9	۲	78.6	Ø,	47.3	го	52.7	~	70.0	m	30.0	61	44.1	24	5°.9
m	r T	87.4	2	12.6	17	85.0	Ś	15.0	10	100.0	•		0	88.9	س	11.1
¢4	2	46.6	œ	53.4	Ъ,	55.0	ര	45.0	10	100.0	•	919429107639 0 0	28	62.2	17	37.8
<b>LO</b>	Ę	87.4	2	12.6	51	95.0	m	2.0	10	100.0	:	•	42	93.3	M	6.7
<b>9</b> .	m	21.4	~	78.6	r	s. O	19	95.0	~	12.5	7	87.5	S	11.9	37	33.1
۲	Ś	26.6	г г	73.4	7	35.0	Ч Ц	65.0	9	60.0	র্জ	40.0	11	37.7	<b>5</b> 3	62.3
co	13	92.9	~1	7.1	77	77.8	<b>\$</b>	22.2	00	80.0	8	20.0	35	83.3	2	16.7
Ø	12	100.0	•		20	100.0	•	•	10	100.0	•	•	å5	100.0		•
0	70	.66.7	S	33.3	67	45.0	Ч Ч	55.0	S	50.0	َى ب	50.0	24	53.3	5	46.7
	Ľ	73.4	5	26.6	72	75.0	Ŋ	25.0	~	70.0	m	30.0	33.	73.3	77	26.7
12	°00	53.4	7	46.6	n	15.7	16	84.3	Ŋ	50.0	S	50.0	16	36.3	8 7 8	63.7
л. Г	9	40.0	5	60.0	17	55.0	6	\$5.0	10	100.0	•	•	27	60.0	18	40.0

not generate these three important figures on a daily basis.

Question Two. -- The responses to question two, as indicated in Table III, show a wide variance between the three sizes of hospitals and, on an overall basis, it is seen that the majority (55.9 percent) of respondents do not have their department heads submit reports on planned accomplishments. Some administrators may argue that such reports are unnecessary in the small institution, where department heads are few in number and top management is aware of what the coming year will bring without having to have reports. However, the fact that, of the mediumsize hospitals answering the question, only 47.3 percent reported department head projections is more difficult to justify. One respondent answered "no," but inserted the word "informal," apparently implying that although written reports are not submitted, expected accomplishments are conveyed to the top in a less formal manner. It is, of course, not possible to determine how many negative responses would have been positive instead had the question been worded to the effect that such reports could be either verbal or written. The fact that 70 percent of the respondents from large size hospitals replied "yes" does possibly indicate that both means were considered by most

individuals completing the questionnaire. In any case, it appears that this may be an area subject to improvement. Viguers refers to this looking ahead as . . . "the key to progressive administration and . . . a yardstick by which to measure the performance of all the departments."⁴ (See also the discussion under question seven.)

Question Three.--Fund accounting is utilized in the vast majority of all hospitals, as indicated by the 88.9 percent "yes" answers to question three of Table III. There is but a slight difference in the percentages of small and medium size institutions using separate funds, but 100 percent of the large size institutions responding reported using these separate funds for different activities. The American Hospital Association recognizes fund accounting as meeting a managerial need to make a separate accounting for groups of resources restricted to particular activities or functions, but also acknowledges the division of opinion among hospital accounting authorities regarding the actual need for this separate accounting.⁵ Laetz takes issue with the whole concept of fund

⁴Richard T. Viguers, "How to Make a Report System Effective," <u>Modern Hospital</u>, CIII (August, 1964), 166.

⁵American Hospital Association, <u>Chart of Accounts</u> for <u>Hospitals</u> (Chicago: American Hospital Association, 1966), pp. 16-17.

accounting, claiming that "with our modern sophisticated accounting, this forced accounting by zones of activity really is no longer necessary."⁶ Although he does say that "the same controls and results may be attained more easily . . .," he does not elaborate beyond this point.⁷ See also the discussion of question nineteen under <u>Analy-</u> <u>sis of Responses to Questions Concerning Procedures in</u> <u>Budgeting.</u>

Question Four.--The responses to question four, concerning the use of a position control plan, indicate that the majority of reporting hospitals do use such a plan; however, only 51 percent of the total small and medium size hospitals replied affirmatively as opposed to 100 percent of large size hospitals. All large size hospitals reporting the utilization of fund accounting also reported using a position control plan, although no particular relationship between the two can be visualized. Seawell has called the position control plan an effective budget aid.⁸ Fifteen hospitals of the small and medium size categories

⁶Ernest C. Laetz, "Financial Responsibility Reporting and Interpretation," <u>Hospital Accounting</u>, XXI (January, 1967), 8.

7_{Ibid}.

⁸Lloyd Vann Seawell, <u>Hospital Accounting and Finan-</u> <u>cial Management</u> (Berwyn, Illinois: Physicians' Record Company, 1964), p. 233.

reporting utilization of budgets replied that they did not use position control plans.

Question Five.--As indicated in Table III, 93.3 percent of all respondents answering question five have a formal organization chart. The adoption of such a chart is the first step in identifying responsibility centers and in establishing a chart of accounts adequate for management purposes. That fact that two small size hospitals and one medium size hospital replied that no formal chart is used is not significant enough for further investigation since all three facilities answered question nine (breakdown of direct costs on the chart of accounts) affirmatively. These hospitals thus appear to have established a chart of accounts on a more informal basis.

Question Six.--"Has the controller/business manager developed a Formalized Inservice Educational Program on Budgeting to be given to all people involved in the budgeting program?" Everett Graff cites the need for all people involved in the budgeting program to "know why a budget is prepared, how a budget is prepared, the coordination involved . . . . "⁹ He says that the business

⁹Everett E. Graff, "Working Tools of Budgeting," <u>Se-</u> <u>lected Papers of the American Association of Hospital</u> <u>Accountants' Annual National Institute - 1964</u> (Chicago: manager or controller should develop a formalized budget education program on a continuing basis.¹⁰ The responses to question six, however, show that only 11.9 percent of the forty-two hospitals replying to this question do have formal budget education programs. Moreover, the small size hospitals appear to be more progressive in this area than do the medium and large size hospitals. One possible explanation for this difference may be that it is easier to conduct such programs in small facilities because of the smaller number of people involved and the closer working relationship between the business manager or controller and supervisors. Perhaps the significance of the replies to this question can be seen most clearly when it is realized how many institutions utilize budgets but have little formal training on budget implementation.

<u>Question Seven</u>.--This question asks if department heads periodically develop a position paper regarding present and future labor status in the department. The question can be compared with question two, in that both concern future projections by department heads. Question seven, however, deals with only one aspect of departmental

American Association of Hospital Accountants, 1964), p. 28. 10_{Ibid}.

operations--labor. The percentage distributions of responses to these two questions, as shown in Table III, indicate that, for all hospitals, the proportion of department heads submitting reports of a general nature is greater than the proportion submitting reports dealing with labor only. For hospitals of medium size, 12.3 percent more respondents report general departmental projections than report labor projections. For large hospitals, the difference is 10 percent in favor of the general pro-The slight excess (5.2 percent) of small size iections. hospital respondents reporting labor projections (question seven) over general projections (question two) is represented by a difference of only one hospital. In summary, the distributions of percentages for questions two and three of Table III indicate that the majority of large size hospitals rely on departmental projections, but that as size decreases, such projections occur less frequently. (See also the discussion of question two.)

Question Eight.--Of forty-two total responses to question eight, thirty-five (83.3 percent) indicated an understanding of the service ideals and financial goals of the institution on the part of all individuals involved in budget preparation. It is interesting to note that small size hospitals reported a higher percentage (92.9) of understanding than did large hospitals (80.0). One of

the two negative answers from large size hospitals was qualified with the words "in process." Part of the reason for this difference may possibly be explained by reference to the results of question six, which show that a greater proportion of small size hospitals than large size hospitals answering the questionnaire have established a formalized budget education program. Certainly, one of the purposes of such a program is the imparting of this understanding of the institution's service ideals and financial goals. A precaution should be taken in coming to this conclusion favoring the small hospital, however. It may well be that in the smaller hospital fewer individuals below or outside the administrative level are involved in budget preparation. If this is the case, comparisons between different sizes of institutions lose some of their meaning, because, while smaller hospitals are guilty of not involving operating personnel in budget preparation on the one hand, larger hospitals are guilty of insufficient budget education on the other.

Question Nine.--The importance of identifying direct costs on a departmental basis with adequate subclassifications as to types of costs and the activities responsible for incurring the costs is apparently well recognized by hospitals of all sizes, since 100 percent of all respondents answering question nine replied affirmatively.

Question Ten.--Table III shows that of forty-five responses to question ten, only slightly more than onehalf (53.3 percent) of the hospitals represented have written procedures on the accumulation of statistical data. Small size hospitals appear stronger in this requirement than the larger facilities. All questionnaires returned by both small and large size hospitals were examined in an effort to determine possible reasons for this disparity, but none could be isolated. The administrator of one large institution qualified his negative reply with "but we agree such should be the case." The American Hospital Association states that "an organized system of nonmonetary statistics . . . " is as important to successful budgeting as the functional account system.¹¹ Formal written procedures would insure some degree of consistency in collecting and reporting departmental statistics. They would also appear to be helpful in training new personnel to accumulate such statistics. From the responses to question ten, it is apparent that hospitals of all sizes need improvement in the area of accumulating statistical data.

¹¹American Hospital Association, <u>Budgeting Procedures</u> for Hospitals (Chicago: American Hospital Association, 1961), p. 5.

and American Hospital Association, <u>Cost Finding for</u> <u>Hospitals</u> (Chicago: American Hospital Association, 1957), p. 100.

Question Eleven. -- Historical costs are separated into fixed and variable elements by 73.3 percent of all hospitals (forty-five) completing question eleven. Four of the twelve hospitals replying negatively to the guestion indicated that they did not use budgets. Of the eight remaining hospitals replying negatively, five reported using comprehensive budgeting, two reported partial budgeting, and one did not indicate the type of budgeting used (see question twelve under Procedures in Budgeting). The questionnaire definition of comprehensive budgeting includes "operations" budgets (income and expense). Some question arises, however, as to the value of comprehensive budgeting in those institutions not separating costs into fixed and variable elements. Without such separation, only fixed or "target" budgets can be prepared. The American Hospital Association favors flexible budgets over fixed budgets, as evidenced by the following:

There is a probability that the type of patients served in the future will be proportionately similar to that of the current period. However, consideration must be given to the possibility of changes in facilities, medical staff, types of patients, operating procedures, population shifts, introduction of new drugs and other factors which may influence the service requirements of the institution. <u>Flexibility</u> in the budget, to meet these varying demands, is therefore essential.¹² (Italics mine.)

¹²American Hospital Association, <u>Budgeting Procedures</u> for Hospitals, p. 7.

Table III shows that 25 to 30 percent of all respondents from each size category do not identify costs by fixed and variable components. The writer of this thesis believes that all hospitals should give careful consideration to classifying costs into these components and to the adoption of flexible budgeting. See also the discussion of the responses to question one under <u>Analysis of</u> Responses to Questions Concerning Procedures in Budgeting.

<u>Question Twelve</u>.--Chapter I pointed out the necessity for co-operation between the administration and the medical staff and the significant contribution to forecasting that the medical staff can often make. The administration should remember that the hospital goal is patient care. On the other hand, the medical staff should recognize the importance of planning. Seawell stresses this importance in the following statement:

A hospital building, disarranged machinery and equipment, an unorganized staff of doctors, nurses, technicians, housekeepers, and other personnel, a few thousand dollars, and an unattended pile of medical and surgical supplies will not provide hospital services.¹³

Yet, out of a total of forty-four replies to question twelve, which deals with the administration's opinion of the adequacy of understanding between the medical staff

¹³Seawell, <u>op. cit.</u>, p. 5.

and other hospital personnel, only sixteen positive answers were received (36.3 percent). Medium size hospitals appear to have the most severe problem, since only 15.7 percent of total responses in this category are positive. Examination of the sixteen questionnaires with negative responses from medium hospitals does not uncover any significant trends or any one outstanding reason for this lack of understanding, although three responses are supplemented with comments blaming the medical staff for the existence of the problem. It is safe to assume that at least several of the thirteen remaining respondents place much of the blame upon the medical staff. The 3.4 percent difference between small and large size hospitals is not significant enough to warrant investigation. In any case, the administrator and his staff must seek to foster a better spirit of co-operation between all personnel if the institution is to attain its service and fiscal objectives. Improved communications, more effort to see the other side's point of view, and the solicitation of opinions and advice from the medical staff are a few of the means by which this gap in understanding can be closed.

Question Thirteen. -- This question in the section on basic requirements for budgetary procedures asks if any

phases of the hospital's accounting routines have been automated, and if so, what these phases are. The ascending percentages of positive answers from small to large hospitals are not unexpected. Many hospitals are just now discovering the opportunities for savings in clerical time which automation presents, but some administrators of small facilities are not convinced that their volume of transactions necessitates the automation of payrolls, billing, accounts payable, and other procedures. Table IV was constructed from the replies to question thirteen and gives some idea of the extent to which the various sizes of hospitals have automated their operations. Five hospitals using computers for some phases of operation failed to indicate what these phases are. Only one institution reported using data processing equipment for any aspect of budget preparation and follow-up, although the capabilities in this area should be recognized by all institutions using budgets.

### Summary

In order to summarize the preceding discussion concerning the existence of basic requirements for budgetary procedure in Virginia hospitals, Table V was constructed, using a rating scale of "strong" (existent in a significant number of hospitals in the class), "average" (exis-

TABLE IV

# AUTOMATED ACCOUNTING ROUTINES IN SMALL, MEDIUM, AND LARGE VOLUNTARY, COMMUNITY, GENERAL HOSPITALS IN THE STATE OF VIRGINIA

Accounting Routine (See Question 13, Section B of QuestionnaireAppendix A)	Number Report	Number of Hospitals Reporting Automation of Routine	년 년 8 0 8 0 8	Number of Hc Automation Percentage of Res (See	umber of Hospitals Reporting Automation of Routine as a Percentage of Total Number of Respondents (See Table I)	porting as a unber
	Small	Medium	Large	Small	Medium	Large
	(100 beds and under)	(101 to 300 beds)	(Over 300 beds)	(100 beds and under)	(101 to 300 beds)	(Over 300 beds)
Accounts payable	•	M	(°)	•	14.3	33.3
All accounting	•	• •	N	•	•	22.2
All patient charges (daily billing) and accounts receivable	N	9788994279427 9788994279427 9788994279427	(	10.5	<b>19.0</b>	7. 9
Budget comparisons	•	•	<b>p-4</b>	•	•	11.1
Budget worksheets	•	•	<b>1</b>	•	•	4 • •
Daily patient census	•		еч		•	4.4
Discharged file	•	•	M	•	0	ri Fi Fi
General ledger	•	•	~		•	52.2
Inventory	•	•	N		•	55 - 5 5 7
Monthly departmental cost sheets		•	4		•	64 • 64
Payroll	8	S	~	10.5	23.8	77.8

## TABLE V

# RATING OF THE EXTENT TO WHICH BASIC REQUIREMENTS FOR BUDGETARY PROCEDURE EXIST IN HOSPITALS OF DIFFERENT SIZES

Question (See Section B of Questionnaire Appendix A)	Small (100 beds and under)	Medium (101 beds to 300 beds)	Large (Over 300 beds)
1	Strong	Strong	Strong
2	Weak	Weak	Strong
3	Strong	Strong	Strong
4	Weak	Average	Strong
5	Strong	Strong	Strong
б	Weak	Weak	Weak
, <b>7</b> , , , , , , , , , , , , , , , , , , ,	Weak	Weak	Average
8	Strong	Strong	Strong
9	Strong	Strong	Strong
10	Average	Weak	Average
11	Strong	Strong	Strong
12	Average	Weak	Average
13	Weak	Average	Strong

Source: Tal

Table III.

tent in a reasonable number of hospitals in the class, but needs to be extended to more hospitals), and "weak" (nonexistent in a significant number of hospitals in the class, indicating a need for extensive improvement). A strong rating was given to the situation where 70 to 100 percent of the respondents replied that the indicated requirement was being met, an average rating to the situation where 50 to 69 percent of the respondents replied that the requirement was being met, and a weak rating where less than 50 percent of the respondents replied that the requirement was being met. This table will be useful in analyzing the responses to the questions concerning procedures in budgeting, which are discussed below.

# Analysis of Responses to Questions Concerning Procedures in Budgeting

Tables VI and VII show the distribution of responses to the nineteen questions designed to determine what budgetary procedures are used in those hospitals indicating use of a budget and to compare these procedures among the different sizes of hospitals. Questions seven, twelve, and fourteen require the respondent to indicate in the space provided what procedure is being used. The remainder of the questions in this section require only a "yes" or "no" answer.

۲
TABLE

# RESPONSES TO QUESTIONS CONCERNING PROCEDURES IN BUDGETING--

RESPONDENT		
BY SIZE OF HOSPITAL RESPONDENT		
BY SIZE		

		e* 0	•	់	•••	•	15.0			71.8	s.	~	~		47.1		ۍ ۱		40.0	ທີ	•	×
	·	No.	•37	ထ	Ø	ထု	9	27.		28			22	:	70				16			
	Tota	م د د		ه	<u>б</u>		85.0				<u>د</u> ،		7.		52.9		~	-	60.0	\$	'n	
		.on	36				34 O			Н					87				24			
	beds)	NO S	•	14.3	~		•	25.0	(cao)ik+	22.3		•	55.6		57.2		-	ۍ ،	25.0	ທ		
	950 100	NO	•		(m)	•	•	2		2		•	5	-	~		ም 	2	2	2		
-	La. (Over 3	Yes Vo. &	100.	85.	62.	100.	8 100.0	75.		-	80	100	& C.		3 42.8		62.	75.	6 75.0	75.	90.	
		Z			rociaes senejize	a na sa			agant the							CORANG.					an a	
	beds	8 ON	-	6		÷	11.1	ŵ		2	•		2.		26.6		\$	ŝ	33.3	å	\$	
	Medium to 300	.ov	5	ហ	~	2	2	91	IIV	7¢	თ	2	100	VII	<b>4</b> 8	VII	ດ	5	ଡ଼	တ	ço	
	Med (101 to	es es	8				80	11.	ble	-	•	8	2.1	ble	73.4	ble	 		.9	2	ີ. ເ	
	•	Y. ON	Ч.	-1	Ч	-1	r-1		se			Ч		se		se			Ч			
	under)	NO Su	•	ີ ເຄື	1.4	2.9	8.6 8	5.0		\$	0.8	3.1	2.9		66.7		4.7	4.3		<b>б</b>	m	
	all and	NO.	3	2	m	0	~	<b>6</b> 7		12	¢,	m	ଡ଼		00		11	ດ	00	σ	11	
	Sma Sma 100 beds a	Yes	с.	\$	8	-	72.4	ۍ ،			<i>б</i>	76.9	-		33.3		15.3	ໍ່ຄ	42.9	•	9	
	(100	. on	12			œ	10	ო		-	бл	20	ŝ		<b>4</b> 5°		2	ഗ	0	4	4	
	Question Number (See Section C of	Questionnaire Appendix A)	e-1	8	ŝ	•	<b>ω</b> .	Q	7	¢¢	S.	10	77	12	е М	77						

TABLE VII

RESPONSES TO QUESTIONS CONCERNING CONTINUOUS VERSUS PERIODIC BUDGETS, COMPREHENSIVE VERSUS PARTIAL BUDGETS, AND FREQUENCY OF COMPARISONS OF FORECASTED AND ACTUAL FIGURES--BY SIZE OF HOSPITAL RESPONDENT (Questions 7, 12, and 14 under "Procedures in Budgeting")

Size	Continuous versus Periodic Budgets	s versus Budgets	Comprehensive versus Partial Budgets	ge ts ts	H H	equency of Forecaste Figu	Fréquency of Comparisons of Forecasted and Actual Figures	8) –4 C el
Сатедоту	Continuous No.	Periodic No. 8	Comprehensive No.	Partial No. 9	Monthly No.	Quarterly No. 8	Semi- annually No. 8	Annually No.
Small (100 beds and under)	•	12 100.0	11 84.7	2 15.	8 61.5	4 30.7	•	00 - C - T
Medium (101 to 300 beds)	33•\$	10 66.6	7 43.9	9 2 6	9 64.2	2 14.3	2 14.3	7.3
Large (Over 300 beds)	5 62.5	3 37.5	8		å 57 <b>.</b> 1	3 42.9	•	
Total	10 28.5	25 71.5	26 70.2	<b>11 29.8</b>	21 61.7	9 26.3	2 6.0	2 6.0

### Analysis of Responses to Each Question

Question One .-- This question asks if the budget is flexible. The discussion of the responses to question eleven under the heading Analysis of Responses to Questions Concerning Basic Requirements for Budgetary Procedure concluded that all hospitals should give careful consideration to the adoption of flexible budgeting. Table VI indicates that 36 out of a total of 40 respondents to question one (90.0 percent) do have flexible bud-However, the responses to question eleven of the gets. section concerning basic requirements showed that only 33 out of 45 respondents separate historical costs into fixed and variable elements. A tabulation of the responses to the two questions showed the following reasons for this lack of correlation: Five institutions answering question eleven (separation of costs) did not answer question one (flexible budgeting) or indicated that the question was not applicable since an indication had already been made that budgeting was not used. In fact, there is less correlation between the replies to the two questions than the distributions indicate. Six institutions (three medium, two small, and one large) reported no separation of fixed and variable elements of costs, but do use flexible budgeting, offset by three institutions (one from each size cate-

gory) which, although separating costs, do not use flexible budgeting. While it appears feasible that an institution may classify costs into fixed and variable elements yet fail to utilize flexible budgeting concepts, it is much more difficult to understand how an institution claims to practice flexible budgeting without breaking down costs. The only plausible explanation for this lack of consistency would seem to be that several institutions are not practicing true flexible budgeting, but instead have several fixed budgets based upon different levels of activity. Discounting the possibility of varying meanings of "flexible budgeting," the spread from 85.8 percent of small facilities to 100.0 percent of large facilities reporting use of the technique appears reasonable. As indicated above, three of the four facilities with negative answers have the capability of readily adopting flexible budgeting.

<u>Question Two</u>.--Table VI shows that 79.5 percent of all respondents do use budget reports. Hahn has described budget reports as . . . "essentially action reports. They are designed to disclose the extent to which the budget is being realized."¹⁴ Hinderer makes this statement about such reports: "Budget reports are not intended to provide man-

¹⁴Hahn, <u>op. cit.</u>, p. 48.

agement with answers to problems but rather to indicate areas that require investigation."¹⁵ It should be recognized by all hospitals employing budgets that clear, accurate, and timely budget reports are essential if management is to effectively use the control features of budgeting. Question two does not explore the efficiency of the respondents' report system, but herein lies an opportunity for the controller to assert his part on the management team.

Hahn says that the controller must ask himself and successfully answer the following questions:

- Where is the deviation and what does it indicate?
- 2. How can it best be demonstrated?
- 3. How can it best be understood by the person receiving the report?
- 4. Are charts or financial statements the best method of explaining it to the group to whom the report is given and for whom the required action is necessary?¹⁶

As the distribution of responses to question two points out, the percentages of respondents reporting the

15_{Harold Hinderer}, "Accounting and Financial Management," Hospitals, XXXIX (April 1, 1965), 39.

¹⁶Hahn, loc. cit.

use of budget reports in small and large size hospitals are almost identical (84.7 and 85.7, respectively). Only 73.7 percent of medium size hospitals use these reports, however. One of the five medium size institutions replying negatively to the question does not prepare a budget and thus must be eliminated from the comparison. The remaining four institutions all give evidence of considerable weakness in other aspects of budgetary control, including the lack of formal budget education, the absence of formal written procedures for the accumulation of statistical data, and insufficient frequency of comparison of forecasts with actual statistics. In summary, priority should be given to the initiation of an effective budget report system in those institutions lacking in this re-In those institutions with a system already estabgard. lished, critical appraisal should be made of the system to assure that it is accomplishing its purpose.

Question Three.--The distribution of the total responses to question three, which asks whether or not budget reports show comparative data for other periods, is the same as that for question two, i.e., 31 out of 39 respondents answered each of the questions affirmatively. Differences in distributions within each of the three size categories result from (1) a statement by one small hos-

pital respondent that "annual reports are compared with monthly and period reports," implying that some effort is being made to accomplish the intent of the question, although the respondent does not utilize budgets as such, (2) a reply by a respondent from a medium size hospital that is apparently erroneous, since he indicated that budget reports are not utilized, but answered "yes" to the question concerning the form of such reports, and (3) the exclusion of a "yes" and "no" reply from one large size hospital respondent to question two. Because of these discrepancies, it is not possible to conclude with complete certainty that large size hospitals have less meaningful budget reports than small hospitals. It should be evident to all users of budget reports that the inclusion of comparative data greatly enhances the value of such reports.

Question Four.--This question asks if projected financial statements are an integral part of budget preparation. In Chapter II, it was pointed out that projected financial statements are a means of relating the established operating performance objective and financial position objective of the hospital to all who are concerned with the future of the hospital. These statements summarize the results of planned activity as expressed in the

budget of the institution. By comparing statements of actual results with projected statements, management is able to see to what extent financial objectives are being achieved and what areas need corrective action.

The tabulation of responses to question four, shown in Table VI, reveals that medium and large size hospitals are far ahead of small hospitals in the area of projected financial statements, only 57.1 percent of the respondents from the latter reporting preparation of such statements. The questionnaires from the six small hospitals whose administrators stated that projected statements are not prepared were examined in an attempt to detect the reasons for the negative answers. One institution does not prepare a budget and thus would have little basis upon which to prepare statements. The questionnaire of another institution revealed considerable reservations about the value of budgeting, as evidenced by opinions that it was not a time-saver and that the idea of budgeting carried a bad connotation in the minds of a significant number of personnel in the institution. One administrator stated that he would like a more sophisticated budgeting program, but that inexperienced personnel prevented development of such a No reasons could be detected for the negative program. answers from the three remaining institutions. McClary may have shown some discernment as to how small size hospitals

exercise financial control over their operations when he said that some of these facilities . . . "do not budget at all, preferring to keep close watch on financial changes in their accounting reports and adjusting rates periodically as balance sheet trends become significant."¹⁷ The writer of this thesis feels, however, that all hospitals employing budgets should prepare projected financial statements, since the data already exist for their preparation, and their value is well recognized.

Question Five.--"Is the budget prepared on a basis compatible with the classification of accounts?" Preparation of the budget on a basis compatible with the classification of accounts is a prerequisite to preparation of projected financial statements, since pro-forma balance sheets and income statements must be comparable with historical balance sheets and income statements if their value is to be realized. This relationship is seen in comparing the responses to questions four and five of Table VI for the medium and large size hospitals, but some explanation is needed for the differences appearing in the small hospital category. In this category, the tabulation shows two more hospitals preparing budgets on a basis compatible

¹⁷Jack A. McClary, "Hospital Budget Philosophy," <u>Hospital Accounting</u>, XXI (November, 1967), 12.

with the classification of accounts than the number preparing projected financial statements and conversely for the negative answers. These differences are accounted for by two of the same hospitals discussed under question four, i.e., one which showed considerable reservations about budgeting and one which attributed budgetary weaknesses to the lack of experienced personnel. Once again, it appears that these two institutions have the capability of obtaining the control furnished by projected financial statements. It is up to the administration to use this capability.

<u>Question Six</u>.--"Are budgets expressed in quantities or time units as well as in dollars?" The contribution made to the control aspects of budgeting by expressing budgets in quantities or time units as well as in dollars has been pointed out in Chapter II. "Statistical budgeting," involving projections of occasions of service (see <u>Selected</u> <u>Definitions</u>), facilitates the follow-up of budget deviations, since operating personnel are usually more familiar with quantities and time units than they are with dollars. It should be noted that this question is related to question ten under the heading <u>Basic Requirements for Budget-</u> <u>ary Procedure</u>, in that accurate and consistent statistical data from the originating activities are necessary before

statistical budgets can be prepared.

As Table VI shows, there is a significant amount of variability in the responses to question six. Seventyfive percent of large size hospital respondents report that their budgets are expressed in quantities or time units as well as in dollars, while only 11.1 percent of medium size hospital respondents reported using these statistical data. Individual questionnaires of small and medium size hospitals were examined in order to compare the responses concerning the existence of formal written procedures on the accumulation of statistical data with those concerning the inclusion of quantities and time units in budgets. This comparison is made because of the apparent failure to recognize the capability of incorporating statistics into operating budgets. Six small and nine medium size hospitals replying that formal written procedures for accumulating statistical data were being used also replied that quantities and time units were not being included in their budgets. Thus, this is another area of budgetary control where much improvement is needed.

<u>Question Seven</u>.--This question asks whether continuous or periodic budgets are used, continuous budgets being defined as those which are reviewed, revised, and projected one month or quarter further as each month or quarter expires, and periodic budgets as those which are pre-

pared only at certain intervals of time. Continuous budgeting, if done properly, should result in more accurate projections, since changing internal and external factors dictate modification of original estimates made with less knowledge of the future. Table VII shows that none of the twelve small size hospitals responding to this question practice continuous budgeting, while approximately one-third of the medium size and two-thirds of the large size hospitals report the practice. If management is to make a significant effort to establish a budget program that is useful in planning and control, it should not weaken the effort by preparing only periodic budgets. Budgeting, by its very nature, is a continuous process. The writer contends that the added benefits from continuous budgeting are more than worth the added effort involved.

Question Eight.--A positive answer to question eight, concerning a comparison of actual productive hours with budgeted productive hours, presupposes a positive answer to question six (expression of budgets in quantities or time units). Before establishing a salary budget, a position budget must be set up based on current needs. Each pay period, all departments report actual hours worked to the accounting department. The actual hours are compared with budgeted hours for the level of activity attained to establish hour control.¹⁸ Table VI shows that 11 out of the 39 hospitals responding to question eight (71.8 percent) do make such a comparison. This distribution of responses is consistent with the distribution of total responses to question six (11 out of 38, or 71.4 percent, reporting use of quantities or time units in budgets). Two of the three small size hospitals answering question six positively, however, do not compare actual hours with budgeted hours. A comparison of the distribution of the responses to questions six and eight in the medium and large size categories reveals an excess of one hospital in each category reporting such a comparison over the number expressing budgets in time units. No explanation for this inconsistency can be given for the one medium size hospital involved. The one large size hospital with a negative answer to question six and a positive answer to question eight stated that it does not prepare a budget. It should be realized, however, that it is possible for an institution to prepare a budget expressed in quantities or time units only. In summary, the same degree of weakness is found in this aspect of budgetary control as that point-

¹⁸Malcolm T. MacEachern, <u>Hospital Organization and</u> <u>Management</u> (Chicago, Illinois: Physicians' Record Company, 1957), p. 910.

ed out under the discussion for question six.

<u>Question Nine</u>.--The value of cash forecasting to the hospital is set forth clearly by Hinderer and by Seawell. The former says that short-range cash forecasting enables the hospital to use its excess funds to earn more funds by dealing in short-term securities. Such forecasting should not be difficult, he says, because payroll obligation and vender payment dates can be determined in advance.¹⁹ Seawell puts the case for cash forecasts as follows:

In the present economic environment and in the financial fairyland in which some hospitals operate, cash budgets and forecasts assume a role of major importance to hospital management. Even though the hospital does no comprehensive budgeting, the preparation of a cash budget alone can become a vital tool of planning and control.²⁰

Thirty-five percent of all respondents do not prepare short-range cash forecasts. Medium size hospitals occupy the weakest position regarding this procedure. (Only 9 out of 18 reporting institutions prepare forecasts.) The one negative reply in the large size category represents an institution which does not prepare a budget at all (but see the discussion under question ten below). In summary,

¹⁹Hinderer, loc. cit.

²⁰Seawell, <u>op. cit</u>., p. 365.

it appears that more small and medium size hospitals need to recognize the importance of short-range cash forecasting.

<u>Question Ten</u>.--Hinderer advocates long-range cash forecasting for two reasons:

- It enables investment in long-term securities, which yield a higher return than do shortterm securities.
- 2. It enables determination of money needs far enough in advance to arrange the most economical means to meet these needs.²¹

For each size category, long-range cash forecasting is performed more extensively than short-range forecasting. The official publications of the American Hospital Association do not differentiate between short and long-term forecasts; however, illustrations in these publications use the current operating period (most commonly twelve months) for cash budgets. The questionnaire similarly did not specify definite periods of time, but it is believed that the vast majority of respondents used twelve months as the point of separation. This belief is based upon a recognition of the parallel between cash projections and projected financial statements, which in most cases cover the hospital's fiscal year. A comparison of the replies to questions nine and ten in Table VI shows that seven more

21 Hinderer, loc. cit.

hospitals in the medium size category prepare long-range cash forecasts than prepare short-range forecasts. (Included in this excess is one institution reporting that it performed no budgeting, apparently considering long-range cash forecasts to be informal projections rather than a form of formal budgeting.) A controller of one hospital offered the suggestion that hospitals making long-range cash projections, but not necessarily short-range projections, are in expansion stages and are planning how to finance receivables and inventories at the same time that payments are required to be made on long-term debt.

Question Eleven.--Table VI indicates that only 47.6 percent of all respondent hospitals do have a budget committee. It is appropriate, however, to comment on the fact that a greater percentage of small size hospitals have such committees than either medium or large size facilities, especially in view of Seawell's assertion that these committees are more prone to be found in these latter two categories.²² It is realized, of course, that the composition of budget committees varies widely, and herein may lie part of the answer to this apparent inconsistency. Taylor and Nelson disagree with Hay as to the inclusion of

²²Seawell, <u>op. cit.</u>, p. 9.

department heads on such committees, the former contending that "committees should not include those responsible for departmental or other limited areas of activity,"²³ the latter contending that "heads of major departments" belong on budget committees.²⁴ The writer of this thesis believes that the composition of the budget committee can best be determined by the management of the individual hospital, but that there is a need for such a committee in order to insure proper planning and control of the budgetary process.

Question Twelve.--Table VII shows that 70.2 percent of the total respondents prepare comprehensive budgets, while 29.8 percent prepare partial budgets. All eight large size hospitals replying to the question use comprehensive budgets. The interesting statistic is the almost doubled proportion of small size hospitals over medium size hospitals reporting use of comprehensive budgets (84.7 percent to 43.9 percent). All questionnaires from medium size hospitals were examined, resulting in the disclosure the the nine responses in the "partial" category included

²³Philip J. Taylor and Benjamin O. Nelson, <u>Management</u> <u>Accounting for Hospitals</u> (Philadelphia: W. B. Saunders Company, 1964), p. 147.

²⁴Leon E. Hay, <u>Budgeting and Cost Analysis for Hos-</u> <u>pital Management</u> (Bloomington, Indiana: University Publications, 1958), p. 135.

one from a respondent who stated that, although his institution used budgeting, it was considered a "guesstimate" only and three from respondents who stated that budgetary controls were presently being strengthened--including the intention to adopt comprehensive budgets. If these latter three replies are subtracted from the total number of "partial" replies, the percentage would be 53.8 in favor of comprehensive budgets, still considerably lower than the 84.7 percent for small size hospitals. It must be concluded that medium size facilities are significantly weaker in this requirement than either small or large size facilities.

Question Thirteen.--As indicated in Chapter II, this question seeks to determine how closely the administrator works with his department heads in budget preparation. By discussing the budget of each department with the head of the department, the administrator gives some assurance to operating personnel that the human aspects of budgeting are not being neglected. Hughes says that "if budget plans and decisions are made by higher management, their lowerlevel managers cannot be expected to consider budgetary control their responsibility."²⁵ He also says that bud-

²⁵Charles L. Hughes, "Why Budgets Go Wrong," <u>Person-</u> nel, XLII (May-June, 1965), 20.

geting and budgetary control problems . . . "involve the reconciliation of group goals with each other and with the goals and desires of individuals."²⁶ Table VI shows that although a slight majority (52.9 percent) of all respondents report that each department head does discuss his proposed budget with the administrator, there is much variability between the three size categories with regard to the practice. Only the medium size category can be rated strong in department participation (73.4 percent positive answers).

Question Fourteen.--This question asks how frequently forecasts are compared with actual results. Table VII reveals that 30 out of the total of 34 respondents (88.0 percent) to question fourteen compare forecasted with actual figures at least every three months. The one small size hospital making annual comparisons has 27 beds and prepares partial budgets on a periodic basis. Even though the size of this facility possibly enables the administration to maintain close personal control over cost trends, it would still appear to be beneficial to make a more frequent comparison in order to further strengthen this control. The one medium size hospital making annual comparisons represents a facility where management recog-

26_{Ibid.}, p. 22.

nizes existent budget laxity and states its intention to make corrections. The table shows that a greater proportion of medium size hospitals make monthly comparisons than do large size hospitals. Contributors to the literature on hospital budgeting are in almost unanimous agreement that comparisons of budgeted and actual figures should be performed at least monthly. The writer agrees with this frequency in all instances where budgets are expressed in monthly amounts and/or statistics, since actual figures on a monthly basis will also be available through the routine operation of the accounting system.

Question Fifteen.--It has already been pointed out that individual departments are in the best position to prepare their own estimates. Question fifteen seeks to determine whether or not the responsibility for preparing these estimates is definitely assigned within the department in order to assure some degree of consistency from period to period. The question also seeks to determine whether or not overall control over the budget is maintained by having one individual responsible for consolidating departmental budgets into a master budget. This individual would most probably be the chairman of the budget committee, whose other members assist in insuring the understanding of, and compliance with, budget policies.

The distribution of the responses to this question shows that as size increases, the responsibility is more definitely assigned. It appears, however, that both small and medium size hospitals are definitely weak on this point and that more large size hospitals should assign such responsibility. The writer recognizes that in some institutions custom has operated to accomplish the intent of the question, even though no written policies exist. This is because certain individuals play a repetitive role in budget preparation and coordination by virtue of their positions. Thus the controller may be habitually expected to assume responsibility for consolidating the budget. Written policies covering budgetary responsibility are advocated in order to preclude the possibility of misunderstanding and disagreement.

Question Sixteen.---"Has a budget calendar been established?" The budget calendar similarly is a device designed to preclude misunderstanding and disagreement. It also enables individuals engaged in budget preparation to plan ahead in scheduling special projects, trips, etc. and in gathering data to be used in the preparation of estimates. Table VI shows small and medium size hospitals to be weak in this procedure, while large size hospitals are fairly strong. In the institution with many departments

and a more complex budgetary process, the budget calendar would seem to be a necessity. Overall, the majority of respondents have not established such a calendar.

Question Seventeen .-- "Are revenue estimates computed on a monthly basis?" The American Hospital Association states that "computation of revenue on a monthly basis is . . . considered highly desirable and necessary . . . . "27 It is not acceptable, of course, to estimate revenue for a year and to divide the result by twelve, for such a procedure does not recognize seasonal variations. Only 60.0 percent of all respondent hospitals compute revenue estimates on a monthly basis. Moreover, small size hospitals are weak in this regard, since only 42.9 percent prepare estimates with such frequency. The writer feels that there may just as much, if not more, need for small institutions to make accurate monthly revenue estimates as for large institutions, because small institutions very probably operate on a tighter cash balance and find it more difficult to obtain short-term financing on short notice. Medium size hospitals, with 66.7 percent positive replies, show average strength in this procedure. Large size hos-

²⁷American Hospital Association, <u>Budgeting Procedures</u> for Hospitals (Chicago: American Hospital Association, 1961), p. 14. pitals, with 75.0 percent positive replies, occupy a fairly strong position.

Question Eighteen. -- "Does management have a long-term fixed asset plan?" Although a plan for the replacement, retirement, and expansion of fixed assets may not be formal enough to warrant designation as a budget, the writer believes that such a plan is an integral part of management's "forward-leaning" posture. Rising construction costs make it mandatory for management to consider how future expansions are to be financed at a time when private donations, community drives, and governmental grants often fail to provide sufficient funds. Sloan has pointed out that "areawide hospital planning councils" are having a significant impact on plant and equipment replacement and modernization.28 Top management should consider the recommendations of these councils when formulating long-range plans for improvements and expansions. Approximately 55 percent of all respondents to question eighteen replied that management does have long-term fixed asset plans. Only large size institutions show a moderate degree of strength in this respect, 75.0 percent of all responses for the category replying positively. Medium size institutions show

²⁸Raymond P. Sloan, <u>Today's Hospital</u> (New York: Harper & Row, Publishers, 1966), p. 17.

average strength (62.0 percent), and small size institutions show a significant need for improvement (30.8 percent positive answers).

Question Nineteen.--"Is depreciation funded?" Table III showed that 88.9 percent of all respondents to question three under the section <u>Basic Requirements for Budgetary</u> <u>Procedure</u> utilize fund accounting. Table VI shows, however, that only 53.4 percent of the respondents to question nineteen fund depreciation. A comparison of answers to the two questions reveals that, for all hospitals replying, eight small size, six medium size, and one large size utilize fund accounting but do not fund depreciation. The American Hospital Association states that the Plant Fund

. . . "carries the resources given to or set aside by the hospital for the purposes of replacing and expanding the plant assets in the future. Many hospitals, for example, "fund" depreciation through periodic transfers of cash from the Operating Fund to the Plant Fund . . . "²⁹ Mikesell and Hay endorse transfers of cash from the Operating Fund to the Plant Fund "in amounts at least equal to periodic

²⁹American Hospital Association, <u>Charts of Accounts</u> for Hospitals (Chicago: American Hospital Association, 1966), p. 17.

depreciation charges."³⁰ It is not possible, of course, to determine how many of the hospitals not funding depreciation set aside cash for the replacement of fixed assets as it becomes available, even though these transfers may bear no relation to the amount of periodic depreciation charges. The writer of this thesis believes that every institution should give adequate consideration to funding depreciation or making other provisions for insuring the availability of sufficient funds to finance plant and equipment betterment, replacements, and additions.

It should also be pointed out that another incentive for funding depreciation arises from the fact that <u>Prin-</u> <u>ciples for Reimbursement for Provider Costs</u>, the publication of the Social Security Administration governing reimbursement under Title XVIII of the Social Security Act as amended (Public Law 89-97), does not require investment income from funded depreciation to be used to reduce interest expense, an allowable cost for reimbursement purposes.³¹

# Summary

In order to summarize the preceding discussion con-

30Rufus M. Mikesell and Leon E. Hay, <u>Government Account-</u> ing (Homewood, Illinois: Richard D. Irwin, Inc., 1961), p. 595.

³¹U.S., Department of Health, Education, and Welfare---Social Security Administration, <u>Principles of Reimbursement</u> for Provider Costs, 1966, p. 11.

cerning the existence and adequacy of budgetary procedures, Table VIII was constructed, using the rating scale discussed in the preceding section, i.e., 70 to 100 percent positive responses ("continuous" for question 7, "comprehensive" for question 12, and "monthly" for question 14) equals a strong rating, 50 to 69 percent an average rating, and less than 50 percent a weak rating.

# Analysis of Responses to Questions Concerning Managerial Uses of Budget Data

Table IX shows the distribution of responses to the four questions designed to determine how management utilizes budget data and the budgetary process in exercising its control over the organization and in insuring financial stability. The budget is not an end in itself. It is useful only so far as management uses it as an instrument of control. Horngren states that budgets, "when administered wisely, (1) compel management planning, (2) provide definite expectations that are the best framework for judging subsequent performance, and (3) promote communication and coordination among the various segments of the business."³²

³²Charles T. Horngren, <u>Cost Accounting</u>, <u>A Managerial</u> <u>Emphasis</u> (Englewood Cliffs, New Jersey: Prentice-Hall, <u>Inc.</u>, 1967), p. 121.

# TABLE VIII

# RATING OF THE EXTENT TO WHICH BUDGETING PROCEDURES EXIST IN HOSPITALS OF DIFFERENT SIZES

Question (See Section C			
of	Small	Medium	Large
Questionnaire	(100 beds	(101 beds	(Over 300
Appendix A)	and under)	to 300 beds)	beds)
1	Strong	Strong	Strong
2	Strong	Strong	Strong
3	Strong	Strong	Average
4	Average	Strong	Strong
5	Strong	Strong	Strong
6	Weak	Weak	Strong
7	Weak	Weak	Average
8	Weak	Weak	Strong
9	Average	Average	Strong
10	Strong	Strong	Strong
11	Average	Weak	Weak
12	Strong	Weak	Strong
13	Weak	Strong	Weak
14	Average	Average	Average
15	Weak	Weak	Average
16	Weak	Weak	Strong
17	Weak	Average	Strong
18	Weak	Average	Strong
19	Weak	Average	Strong

Source: Tables VI and VII.

Question Number (See Section D of	Small (100 beds and	and under)	(101 to	(101 to 300 beds)	(Over 3	(Over 300 beds)	Total	al
Questionnaire Appendix A)	No. Yes	No. &	Yes No. &	No. Ro	No. &	No. 8	Yes No. &	No. &
	5 35.7	9 64.3	7 35.0*	12 60.0*	4 57.1*	2 28.5 ⁴	16 39.0 [*] 23	23 56.2 [#]
2	12 85.8	2 14.2	12 70.6	5 29.4	8 100.0	•	32 82.1	7 17.9
n M	12 85.8	2 14.2	16 94.2	<b>1</b> 2.8	8 100.0		36 92.8	3 7.6
<b>**</b>	10 76.9	3 23.1	12 66.7	6 33.3	8 88.9	1 11.1	30 75.0	10 25.0

TABLE IX

RESPONSES TO QUESTIONS CONCERNING MANAGERIAL USES OF BUDGET DATA--BY SIZE OF HOSPITAL RESPONDENT

### Analysis of Responses to Each Question

Question One .-- The responses to question one, shown in Table IX, indicate that the majority of hospitals replying do not request reimbursements in amounts sufficient to cover expected future operational costs. Large size hospitals are seen to be significantly more advanced in this respect than small or medium size hospitals, i.e., 57.1 percent of large size respondents base requests for reimbursement upon expected future operational costs as opposed to only 35.7 percent of small and 35.0 percent of medium size respondents. One respondent with a negative reply to the question added that third-party agencies (including Medicare intermediaries) pay only for costs actually incurred. However, the so-called "plus" factor has been used in reimbursement terminology for some time and refers to the addition of a specified percentage of all other allowable costs. The whole concept of costs versus charges has a long and complicated history in hospital accounting, but the development of the controversy is not germane to the present discussion.³³

³³The reader is referred to Herman M. Somers and Anne R. Somers, "How Should Hospitals Be Paid," <u>Medicare and</u> the Hospitals (Washington, D.C.: The Brookings Institution, 1967), pp. 154-196, for an excellent capsule discussion of the entire concept of reimbursement. Principle 2-4 under Title XVIII, "Payments to Providers," now states:

Interim payments approximating the actual costs of the provider will be made on the most expeditious basis administratively feasible but not less often than monthly. A retroactive adjustment based on actual costs will be made at the end of the reporting period. At the request of the provider, payment will be made on a basis designed to reimburse currently for services rendered to beneficiaries.34

It should be obvious that adequate record-keeping systems together with accurate budget data will be of much benefit to hospitals at a time when reimbursement formulas are being applied liberally, since those institutions most able to support reimbursement requests with adequate backup data will tend to receive maximum reimbursements.

Question Two.--Approximately eighty-two percent of the respondents to question two replied that budget followup does include analysis of deviations to determine whether they are controllable or non-controllable. All large size hospital respondents perform this analysis; however, it is seen that a larger percentage of small size facilities analyze deviations than do medium size facilities. Unless deviations are analyzed to determine why they occurred, little value can be seen in budgeting. Management loses

³⁴U.S., Department of Health, Education, and Welfare--Social Security Administration, <u>Principles of Reimbursement</u> for Provider Costs, 1966, p. 29. some degree of control over operations and gives the impression that lip-service only is being given to budgetary control. At the same time, operating personnel cannot be held responsible for fluctuations in costs over which they have no control. In summary, every institution using budgeting should analyze budget deviations, breaking them down into controllable and non-controllable elements, and pursue the former to their source.

Question Three .-- "Are variances from budgeted amounts traceable to individual accounts and responsibility centers?" The responses to question three should be compared. with those to question two, since the purpose of separating deviations into controllable and non-controllable elements is to enable the tracing of the former to individual accounts and responsibility centers. For the small and large size categories, there is perfect correlation between the replies to questions two and three. Four medium size institutions, however, indicated that while they do not identify controllable and non-controllable portions of budget deviations, they do trace deviations to individual accounts and responsibility centers. This practice fails to recognize a requisite of responsibility accounting--costs and expenditures in each individual's budget should be limited to those expenses he can control. Top management must look

to itself for explaining fluctuations in non-controllable expenses.

Question Four. -- "Do you believe that the budget has been an effective instrument in stimulating cost consciousness . . . ?" This question seeks to determine management's assessment of the degree of success of its budget Certainly, it is difficult to perceive of a sucprogram. cessful budget program which has not stimulated cost consciousness. Welsch says that "the budget system should include effective control devices which may provide an incentive for individuals."35 Success in stimulating cost consciousness must rest to a large extent on subordinates' ability to relate the budgetary goals to their particular situation. Table IX shows that 75.0 percent of all respondents do believe that the budget has been effective in stimulating cost consciousness. The large size hospitals show the most strength in this regard (88.9 percent positive replies). Small size hospitals have a higher percentage of positive replies (76.9) than do the medium size facilities (66.7 percent). Although no definite conclusions can be reached regarding reasons for this relatively weaker performance by the medium size hospitals, the writer be-

³⁵Glenn A. Welsch, <u>Budgeting:</u> Profit-Planning and <u>Control</u> (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964), p. 368.

lieves that at least part of the explanation is to be found in the discussion under question three, where it was pointed out that four institutions in the medium size category were apparently assigning responsibility for noncontrollable budget deviations to operating individuals. This practice would appear to be detrimental to an effort to stimulate cost consciousness.

#### Summary

More progress needs to be made by all sizes of hospitals in the area of third-party reimbursement rates. This progress in most instances will rest upon improvements in record-keeping, cost-finding, and budgetary procedures. Medicare has already provided the stimulus for much of this improvement. In the areas of analyzing budget deviations and tracing them to their source, all size categories show considerable strength, although several medium size institutions reveal inconsistency in the practice of the two control techniques. Small and large size hospitals appear to have achieved considerable success in stimulating cost consciousness by use of the budget. Medium size hospitals, although showing some strength as a group, need improvement in this effort.

### The Integration of Theory and Practice

It was hypothesized that existent failures to obtain maximum benefits from budgeting result from a multitude of causes, varying from institution to institution. Tables III, and V through IX, and the discussion accompanying these tables bear out this assertion. Although a strong majority of all respondents may be meeting several of the basic prerequisites for budgetary procedure, significant shortcomings are revealed in meeting others, and the result is a weak foundation upon which to initiate an effective budget program. This same weakness is found when current budget procedures are analyzed. Even for the large size hospitals, which have "strong" ratings in most of the nineteen rated procedures (Table VIII), there are several institutions with significant deficiencies. For example, two out of eight (25.0 percent) large hospital respondents have no budget calendars, do not estimate revenue on a monthly basis, and have no long-term fixed asset plans. Finally, it was seen that there is a need for education in the area of relating budgeted financial needs to reimbursement rates.

It is important to emphasize the possibility that, although an institution may exhibit a strong budgetary philosophy, this same institution may be weak in the basic

requirements for budgetary procedure and therefore weak in its budgetary process. It is also possible that the institution exhibiting substantial strength in budgetary philosophy and in the budgetary process itself may lose the benefit of budgeting because its management does not fully utilize the data it has available. In order to assess, on an individual hospital basis, the degree of consistency between theory and practice, Table X was constructed from an analysis of all questionnaires. This table shows that six hospitals not using a budget believe that all hospitals should be using one. The business manager of one small size hospital included in the tabulation stated that both he and the administrator were new and had allowed the implementing of a budget "to take a back seat" for the present, although both felt budgeting to be quite Included in the three medium size hospitals important. not operating under a budget is one institution whose chief accountant projects costs "over a short and long-term This individual says that engagement in building period." programs sometime in the near future may bring budgeting into effect. The administrator of another institution included in the total says that "although I do not operate under a written budget, I do operate under an informal budget. Based on history, current condition, and anticipated future business, non-routine expenditures are or are

TABLE X

A TABULATION OF THE RELATIONSHIP BETWEEN BUDGETARY PHILOSOPHY AND PRACTICE IN INDIVIDUAL HOSPITALS--BY SIZE OF HOSPITAL RESPONDENT

Large (Over 300 beds)	No.	1 1 1 1 1 1 1 1 1 1	1. 12.5	<b>1</b> 20.0
Medium (101 beds to 300 beds)	NO.	3 16.7	7 50.0	3 42.9
Small (100 beds and under)	No.	2 14.3	7 58.3	
		Hospitals which indicate a belief that all hospitals should be operating on a budget, but do not have a budget	Hospitals which indicate their budget to be a financial measure of a preconceived and accepted program, but which exhibit sig- nificant limitations in budget- ary controls	Hospitals which exhibit a strong budgetary philosophy and strong budgetary procedures, but evi- dence improper utilization of budget data or lack of success in stimulating cost-conscious- ness

not made." The business manager of the one large size hospital advocating but not having a budget supplemented the returned questionnaire with a statement that the facility will begin complete budgeting in 1968.

Included in Table X are a total of fifteen hospitals which indicate the existence of a strong budgetary philosophy but are weak in existent budgetary controls. Thus, it may be said that the managements of these hospitals have not gotten beyond the talking stage of budgeting and may be spending too much time on duties of far less value to the well-being of the institution. Also included in the table are four hospitals whose budgetary processes go all the way up to the utilization or control phase but break down at that point. Managements in these facilities need to recognize their shortcomings in making the budget an effective instrument of control while at the same time using it to instill a spirit of co-operation among employees so that the entire organization becomes cost conscious.

This chapter has analyzed in detail the relative budgetary strengths and weaknesses of the three size categories of hospitals. With this background, it is now possible to make recommendations designed to improve budgetary philosophy and procedures in Virginia community hospitals so that managements' efforts to control spiralling costs will be more effective.

## CHAPTER IV

#### SUMMARY AND RECOMMENDATIONS

General. -- The budget has long been recognized as one of the important tools for cost control. This thesis examines the budgetary philosophy and procedures in community, general, non-profit hospitals in the State of Virginia. The study was undertaken in order to form a basis upon which to make recommendations for strengthening budgetary controls. These recommendations are made at a crucial time in the life of the nation's voluntary hospitals, for much governmental pressure is being put upon these hospitals to do something about steeply rising costs. A state-wide study was undertaken because the writer believes that each state must examine its own hospital situation and determine which are the best avenues for effecting improvements in budgetary controls. It is also believed that educational programs will be most effective if coordinated on a state-wide basis.

The study did not undertake a detailed examination of each voluntary hospital in the state. It does, however, serve to focus attention on areas of common difficulty

within each size category of institution. Any concerted program directed toward improving budgetary controls must recognize differences in capabilities and must also recognize the common needs of institutions of all sizes.

Important Findings .-- It was found that, for both small, medium, and large size hospitals, management does recognize the contributions which budgeting can make toward strengthening hospital fiscal performance. However, it was found that lower echelons in the hospital need a better understanding of the budgeting role. In analyzing the existence of basic requirements for budgetary procedure, it was revealed that hospitals of all three sizes need to devote more attention to improving their accounting systems, although large hospitals (300 beds and over) are better off in this regard than the small and medium size institutions. A strong budget system is not possible without a comprehensive, accurate, and uniform accounting Medicare has forced hospital management to take system. a hard look at accounting deficiencies and, hopefully, improvements are being made, however gradual they may be.

A proper attitude and the existence of prerequisites are of no value if they are not used to establish an effective budget system. In the area of budgetary procedures presently being used, the findings show that, with

the exception of the areas of budget committees and department head participation in budget preparation, large size hospitals, as a group, must be rated significantly ahead of small and medium size hospitals.

Finally, it was found that, from an overall viewpoint, hospital managements show considerable strength in using <u>what budgetary controls already exist</u> to (1) pinpoint and trace deviations from planned amounts, and (2) stimulate cost-consciousness. However, a weakness exists in using the budget in connection with reimbursement rates. This weakness is discussed further under the section entitled <u>Recommendations</u>.

## Recommendations

Budgetary Philosophy.--Budget education needs more attention in hospitals than it has been given in the past. This education should start on a state-wide basis and work down into the individual institutions. The appropriate state affiliates of the American Hospital Association, the American Association of Hospital Accountants, and any other organizations concerned with providing hospital services should commence a well-directed and coordinated program designed to provide responsible individuals within each hospital with the motivation and technical knowledge necessary to familiarize operating per-

sonnel with budgetary concepts. It is extremely important that individual managers become aware of the fact that budgeting can no longer be considered something to be put off until more time is available. The pressures for strengthening accounting systems and management techniques are steadily building, and the choice appears to be between self-administered controls and external regulatory controls.

Basic Requirements for Budgetary Procedure.--The following recommendations are intended to strengthen the foundation upon which budgetary procedures are built.

1. Again, education is a necessary starting point. A strong budget program cannot be superimposed on a weak accounting system. Direction and training will have to stem from a state-wide coordinated program, where the time and resources are available for adapting the latest advances in accounting and management techniques to the specific needs of the hospitals, both large, medium, and small. It is felt that the foundation for such a program already exists in the form of the organizations previously mentioned, but that adequate financial backing will have to come from the state itself. The interests of the citizens of the state are at stake.

2. Better means of communication between manage-

ment and operating personnel and between management and the medical staff should be emphasized throughout the hospital. Many of the weaknesses revealed in the area of budgetary prerequisites are attributable to poor communication, both downward to the lowest echelons of the hospital and upward to top management. These weaknesses include lack of reports from department heads on expected accomplishments, lack of formal budget education for those involved in budget preparation, absence of formal written procedures on the collection of statistical activity data, and poor understanding between the medical staff and other hospital personnel. Management has a responsibility to relate the organization's goals to everyone in the organization if it expects co-operation in fulfilling these goals. At the same time, management must be aware of the need for flexibility and personal fulfillment on the part of operating personnel. Improved channels of communication facilitate understanding and co-operation.

3. More small and medium size hospitals should consider initiation of a position control plan. Such a device facilitates better control over labor in that it matches projected work loads with the positions necessary to accomplish these loads. It is generally acknowledged

that the nation's hospitals face a manpower crisis.¹ Any form of strengthened control over labor would therefore seem essential.

4. More small and medium size hospitals need to recognize the opportunities that automation presents to reduce clerical time and to provide accounting and statistical information on a more timely basis. Joint computer centers, service bureaus, and arrangements to use equipment on the manufacturer's premises all hold promise for the facility that cannot afford its own equipment and staff. It should also be pointed out that many levels of equipment below the computer range can be used to reduce record-keeping time.

Procedures in Budgeting.--Suggestions for strengthening budgetary procedures are as follows:

1. A committee should be established in each hospital to make a detailed study of (1) existent budget practices, if any, (2) how these practices compare with published guidelines, and (3) what needs to be done to effect improvements. This committee should be responsive

¹See for example Herman M. Somers and Anne R. Somers, <u>Medicare and the Hospitals</u> (Washington, D.C.: The Brookings Institution, 1967), pp. 96-129, for a discussion of labor problems throughout the entire spectrum of hospital operations. to developments in the field of budgeting and should work closely with state hospital organizations.

2. Budgets should be expressed in quantities and time units as well as in dollars, and actual statistics should be compared with budgeted statistics at regular intervals. Such a practice gives management a measure of productivity and better control than the practice of merely comparing dollar amounts.

3. Continuous budgeting is preferable to periodic budgeting because it forces management to give careful consideration to the future on a continuing basis rather than four times a year or once a year. The budget thus becomes more useful as a means of planning and control.

4. More small and medium size hospitals need to compare actual productive hours by department with budgeted productive hours on a periodic basis. This is an important part of labor cost control. The practice permits the measurement of departmental productivity trends and spotlights those departments needing attention because of declining productivity.

5. Short-range cash forecasting should be practiced by the managements of all hospitals, regardless of size. Most hospitals operate on a very tight cash balance, and the planning of cash receipts and disbursements is essential.

6. All three sizes of hospitals reveal a need for the more wide-spread use of budget committees. These committees are recommended in order to pinpoint the responsibility for proper planning and control of the budgetary process.

7. More medium size hospitals need to initiate comprehensive versus partial budgets. Comprehensive budgets (operations, cash, and plant and equipment) cover the full scope of hospital operations and insure that proper attention is given to the interrelatedness of all operations.

8. Too few small and large size hospitals permit department heads to discuss their proposed estimates with the administrator. These discussions should be encouraged, because they not only give the administrator the opportunity to obtain a more complete understanding of the problems peculiar to each department, but also give him the opportunity to elicit greater co-operation from each department head by personally impressing upon the latter the overall goal represented in the budget.

9. Forecasts need to be compared with actual statistics on a more frequent basis by hospitals in all three size categories. This comparison should be done monthly. Six-month or even three-month old deviations

are difficult to trace and explain.

10. Too few small and medium size hospitals utilize a budget calendar. Such a calendar should be used because it establishes definite dates for the submission and accumulation of estimates. It should also clear up considerable misunderstanding concerning due-dates.

11. Monthly revenue estimates need to be computed by more small and medium size hospitals. In addition, more short-range cash forecasting should be done. Management must often plan ahead in order to obtain shortterm financing for operating and capital needs. Monthly estimates may also facilitate short-term investment planning.

12. Small size facilities reveal a particular need for giving more attention to fixed asset plans. Medium size hospitals as a group are stronger in this area, but room for improvement exists. It is recommended that management realistically appraise the future fixed capital needs of the institution in the light of community trends and trends in medical care. It is recommended that management work closely with area-wide hospital planning councils in order to minimize the duplication of facilities and the waste of resources.

13. It is recommended that all institutions fund depreciation in order to insure the availability of suf-

ficient funds to finance plant and equipment betterment, replacements, and additions.

Managerial Uses of Budget Data.--The following recommendations are made in order to improve management's use of data supplied by the budget.

As pointed out in Chapter III, Medicare pro-1. visions call for interim monthly payments approximating actual costs to be made to the provider of medical services. It was also pointed out that the "plus" factor, the addition of a specified percentage of all other allowable costs, can make a significant difference in the amount of reimbursement to the hospital. Medicare regulations require, however, that providers furnish the Social Security Administration with "adequate cost data . . . based on their financial and statistical records which must be capable of verification by gualified auditors."² It is recommended that all hospitals consider the opportunities which carefully formulated budget amounts can provide for securing interim reimbursements in amounts adequate to cover the financial needs of the institution. In fact, a proposal has already been made that hospitals use their

²U.S., Department of Health, Education, and Welfare--Social Security Administration, <u>Principles of Reimburse</u>ment for Provider Costs, 1966, p. 27.

projected budget costs as a basis for interim Medicare payments, thus permitting the review of expenditures before the money is spent.³ New York City's Blue Cross organization already asks its hospitals to submit their operating cost forecasts for the year ahead as a basis for determining interim Medicare payments.⁴

2. Finally, it is recommended that hospital management become aware of the revolutionary changes in medical care now occurring and destined to occur in the years ahead, and that it adapt policies to successfully adjust to these changes. The Somers have depicted the hospital scene a decade or so hence and project the following developments:

> (1) There will be less emphasis on the construction of new facilities and more on modernizing and increasing the size of existent facilities.

(2) Multiple hospital units under single management will arise, thus permitting the economies of scale and the pooling of scarce managerial talent.

(3) More co-operation between hospitals will

³Somers and Somers, loc. cit., p. 250.

⁴Ibid.

be seen, especially in the referral of specialized cases to those institutions best capable of handling them.

(4) Costs will continue to rise. Per diems averaging \$100 are foreseeable. Because of this prospect, more effective cost control will be essential. This control must be a combination of "strengthened internal organization and management, external surveillance and regulation, and effective community health planning."⁵

(5) Boards of trustees will recognize the need for "strong management, long-range planning, and rational relations with the rest of the community."⁶

Some administrators may look upon the above recommendations as impractical or too costly to institute. In most cases, however, such an attitude will prove to be short-sighted. The nation's hospitals are being asked to provide more extensive, better quality medical care than ever before. As a result, management cannot afford to rely on experiences of the past, intuition, and strong, one-man control to effectively steer the institu-

⁵Ibid., p. 287. ⁶Ibid., pp. 270-286. tion into an uncertain tomorrow. Effective management and accounting techniques do not waste time and money. On the contrary, they save precious managerial time and preserve funds because of proper planning, coordinating, and controlling of institutional resources. Management needs to show the consuming public that it is concerned about rising hospital costs. The most convincing way to evidence this concern is to promote all possible means of combating this rise in costs. Budgeting is one of these means. By following the recommendations of this thesis, hospital management can have a budgetary system which will be an effective weapon against escalating hospital costs. Budgetary reforms should not be delayed further.

## APPENDIX A

#### BUDGET QUESTIONNAIRE

Name of Hospital	***		Litter to or contraction of the	ngilatina kata kata kata kata kata kata kata ka	- 10.000 million de la company de la comp	
Location		11.11.11.11.11.11.11.11.11.11.11.11.11.	· · ·	4. 30% - TO - C - C - C - C - C - C - C - C - C -		an a
Number of Beds	Bassine	ets	10,70-04c2	er of A sonnel	ccount	ing
Individual complet:	ing quest	ionnaire	3			
Position		8.07.077300-0-07.7777-1877-1877-1877-1877-1877-1877-187	SPCFushectorem ^{an} Listinstruiturat			
	_				YES	NC
A. Budgetary Philo	osophy:			· · ·		
1. Would you a	agree with	n one wi	citer w	ho has		

L.	Would you agree with one writer who has
· · · ·	stated that the area of financial bud-
	geting is probably one of the best
	understood areas of hospital operation?

- 2. Do you agree that all hospitals should be operating on a budget, i.e., a basic plan through which expenditures for all purposes and revenues from all sources may be forecast and controlled?
- 3. Is the budget of this institution a financial measure of a preconceived and accepted program, i.e., the overall policy based on objective?
- 4. Is the budget considered a time-saver rather than a burden?
- 5. Do you believe that the idea of budgeting has bad connotations in the minds of a significant number of personnel in your institution?

÷	_		YES	NO
•	Bas.	ic Requirements for Budgetary Procedure:		
	1.	Does administration on a daily basis know 1) daily patient census, 2) in- come record, 3) cash balance of the operating account?		
	2.	Do department heads submit reports on what they expect to accomplish during the coming year?		
	3.	Is fund accounting utilized? (Fund accounting refers to the segregation of the hospital's resources, obli- gations, and capital balances into logical groups according to legal restrictions and administration re- quirements.)		
	4.	Is a position control plan in use?		-
	5.	Is there a formalized organization chart?		
	6.	Has the controller/business manager developed a formalized Inservice Educational Program on Budgeting to be given to all people involved in the budgeting program?		
	7.	Do department heads periodically develop a position paper indicating the experience of the past, justifi- cation of present or increased per- sonnel complement, and some pro- jections for the future?		
	8.	Do all those involved in budget prep- aration have an understanding of the service ideals of the institution, as well as of its financial goals?	an and the state of the second sec	
	9.	Does the chart of accounts break down direct costs (amounts of outlay in- curred for the particular purpose of each department) into departmental cate- gories based upon responsibility and activity?		

- 10. Are there formal written procedures on what statistical data will be collected for each activity and the manner in which it will be accumulated?
- 11. Are historical costs classified into fixed and variable elements?
- 12. Do you believe that there is adequate understanding between hospital personnel and medical staff regarding the expectations of the medical profession and the operating problems of the hospital?
- 13. Have any phases of the hospital's accounting routines been automated?

If so, briefly indicate what areas.

# C. Procedures in Budgeting:

- 1. Is the budget flexible, i.e., responsive to changes in operations?
- 2. Are budget reports utilized?
- 3. If budget reports are used, do they show comparative data for other periods?
- 4. Are projected financial statements, i.e., a projected statement of revenue and expense, a projected balance sheet, a cash receipts and disbursements forecast, and a projected capital expenditures report, an integral part of budget preparation?
- 5. Is the budget prepared on a basis compatible with the classification of accounts?
- Are budgets expressed in quantities or time units as well as in dollars?

YES

NO

an the second		YES	NO
7.	Please indicate whether continuous or periodic budgets are used. (In this questionnaire, continuous budgets are those which are reviewed, revised, and projected one month/quarter further each month/quarter.)		
8.	Are actual productive hours by depart- ment compared with budgeted productive hours on a periodic basis?		
9.	Is there short-range cash forecasting?		neters and the second
10.	Is there long-range cash forecasting?		
11.	Is there a budget committee?		
12.	Please indicate whether you prepare comprehensive or partial budgets. (For purposes of this questionnaire, comprehensive budgets consist of operations, cash, and plant and equip- ment budgets, whereas partial budgets represent only certain activities, such as payroll, capital expenditures, or cash.)		
13.	Does each department head discuss his proposed budget with the administrator	2	nanzayazon - Kabuyayazana pe
14.	Please indicate how frequently fore- casts are compared with actual sta- tistics, revenue and expense, in order to determine the effectiveness of the financial program.		
15.	Does the formalized budget plan in- clude a definition of the responsibil- ities for the preparation of the de- partmental estimates and the accumu- lation of the various forecasts into a master budget?		
16.	Has a budget calendar been estab- lished?		
17.	Are revenue estimates computed on a monthly basis?		

	, .		YES	NO
	18.	Does management have a long-term fixed asset plan?		
	19.	Is depreciation funded, i.e., are periodic transfers of cash made from the Operating Fund to the Plant Fund?		
<b>D</b> .	Mana	gerial Uses of Budget Data:		
	1.	Are rates used in requests for reim- bursement from third-party agencies based upon expected future operational costs rather than on past experience?		
	2.	In budget follow-up, are deviations analyzed to determine whether they are controllable or non-controllable?		100170-01000000000000000000000000000000
	3.	Are variances from budgeted amounts traceable to individual accounts and responsibility centers?	-	10.000 9/11/10/10/00/10/00/00
	4.	Do you believe that the budget has been an effective instrument in stimu- lating cost consciousness (alertness to opportunities to keep costs at a minimum)?		

# APPENDIX B

# TOTAL EXPENDITURES AND AVERAGE EXPENDITURES BY HOSPITAL SIZE FOR SELECTED INSTITUTIONS IN THE STATE OF VIRGINIA--1966

Size Category	Number of Institutions Reporting [*]	Expenditures (in thousands)	Average Hospital Expenditures (in thousands)	
Small (100 beds and under)	1.9	\$10,746	\$ 565.6	
Medium (101 to 300 beds)	24	47,081	1,961.7	
Large (Over 300 beds)	9	43,863	4,873.7	
Total	52	\$101,690	\$1,955.6	

Source: American Hospital Association, Hospitals, XLI (August 1, 1967), 1-20.

*The totals for each size category do not agree with those in Table I, Chapter III, because several hospitals did not report expenditures.

112

#### BIBLIOGRAPHY

#### Public Documents

U.S. Department of Health, Education, and Welfare. <u>Health</u>, Education, and Welfare Indicators. February, 1967.

• Social Security Administration. Principles of Reimbursement for Provider Costs. 1966.

#### Books

- Anthony, Robert N. Management Accounting: Text and Cases. Homewood, Illinois: Richard D. Irwin, Inc., 1964.
- Black, Homer A., Champion, John E., and Brown, R. Gene. Accounting in Business Decisions. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.
- Hay, Leon E. Budgeting and Cost Analysis for Hospital Management. Bloomington, Indiana: University Publications, 1958.

Horngren, Charles T. <u>Cost Accounting, A Managerial Emphasis</u>. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.

Knowles, John H. (ed.) Hospitals, Doctors, and the Public Interest. Cambridge, Massachusetts: Harvard University Press, 1965.

MacEachern, Malcolm T. Hospital Organization and Management. Chicago: Physicians' Record Company, 1957.

Mikesell, Rufus M., and Hay, Leon E. <u>Governmental Account-</u> ing. Homewood, Illinois: Richard D. Irwin, Inc., 1961.

Nelson, Benjamin O., and Taylor, Philip J. <u>Management Ac-</u> counting for Hospitals. Philadelphia: W. B. Saunders Company, 1964.

- Seawell, Lloyd Vann. Hospital Accounting and Financial Management. Berwyn, Illinois: Physicians' Record Company, 1964.
  - . Principles of Hospital Accounting. Berwyn, Illinois: Physicians' Record Company, 1960.
- Sloan, Raymond P. Today's Hospital. New York: Harper & Row, Publishers, 1966.
- Somers, Herman M. and Anne R. <u>Medicare and the Hospitals</u>. Washington, D.C.: The Brookings Institution, 1967.
- Thomas, William E., Jr. (ed.) <u>Readings in Cost Account-</u> ing, Budgeting, and Control. Cincinnati: South-Western Publishing Co., 1960.
- Welsch, Glenn A. <u>Budgeting:</u> Profit-Planning and Control. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964.

#### Articles and Periodicals

- Bertrand, Sister M. "Budget Follow-Up," Hospital Accounting, XIX (March, 1965), 20-21.
- Hahn, Jack A. L. "Budgetary Reporting and Management Action," Hospitals, XXXVII (March 16, 1963), 46-50.
  - . "Setting Service Charges to Meet Total Financial Needs," Hospitals, XXXVIII (May 1, 1964), 26-29.
- Hall, Oswald. "Some Problems in the Provision of Medical Services," <u>Canadian Journal of Economics and Politi-</u> cal Science, XX (November, 1954), 456-466.
- Hinderer, Harold. "Accounting and Financial Management," Hospitals, XXXIX (April 1, 1965), 38-40.
- Hughes, Charles L. "Why Budgets Go Wrong," <u>Personnel</u>, XLII (May-June, 1965), 19-26.
- Humbert, Harry O. "The Computer and Hospital Management," Hospital Accounting, XXI (June, 1967), 23-25.
- Laetz, Ernest C. "Accounting's . . . Contribution to Administration," <u>Hospital Accounting</u>, XV (February, 1961), 1-4.

. "Financial Responsibility Reporting and Interpretation," <u>Hospital Accounting</u>, XXI (January, 1967), 8-10.

. "Unique Aspects of Hospital Accounting," <u>Hospital</u> Accounting, XVII (June, 1962), 14-17, 35.

- Marien, A. E. "Managing Funds through Budgeting," Hospital Accounting, XIX (March, 1965), 15.
- McClary, Jack A. "Hospital Budget Philosophy," <u>Hospital</u> Accounting, XXI (November, 1967), 10-13.
- Mueller, William J. "Financial Management," Hospitals, XL (April 1, 1966), 73-76.
- Newman, Maurice S. "The Essence of Budgetary Control," <u>Management Services</u>, II (January-February, 1965), 19-23.
- Nigrelli, Rose T. "Small Size No Handicap in Adopting Standard Hospital Accounting Methods," <u>Hospitals</u>, XL (June 1, 1966), 95-98.
- Pintado, Jose Manuel. "Responsibility Accounting," <u>Manage-</u> ment Services, II (March-April, 1965), 34-40.
- Shore, Herbert. "Budgeting Theory and Practice," Professional Nursing Home, VII (May, 1965), 14-20.
- Toomey, Robert E. "Financial Management, Planned and Controlled," <u>Hospital Progress</u>, VL (February, 1964), 100-106.
- Viguers, Richard T. "How to Make A Report System Effective," Modern Hospital, CIII (August, 1964), 166.
- Weil, Thomas P., and Roche, Patrick F. "Some Factors in 1967 Hospital Budgeting," <u>Southern Hospitals</u>, XXXIV (December, 1966), 21-24.

Whisnant, I. M. Jr. "The Budget - Its Value to the Hospital and the Community," <u>Southern Hospitals</u>, XXXIV (January, 1966), 36-45.

#### Pamphlets

American Hospital Association. Budgeting Procedures for Hospitals. Chicago: American Hospital Association, 1961.

<u>Chart of Accounts for Hospitals</u>. Chicago: American Hospital Association, 1966.

. Cost Finding for Hospitals. Chicago: American Hospital Association, 1957.

#### Reports

Graff, Everett E. "Working Tools of Budgeting," <u>Selected</u> <u>Papers of the American Association of Hospital</u> <u>Accountants' Annual National Institute - 1964</u>. Chicago: American Association of Hospital Accountants, 1964.

#### Other Sources

Washington, D.C. Personal interview with William M. Bucher, Executive Director, Hospital Council for the National Capital Area, Inc., July 15, 1967.

____ Personal interview with Fred A. McNamara, Hospital consultant, Washington, D.C., July 20, 1967.

. Personal interview with John A. Oley, retired administrator of Columbia Hospital for Women, Washington, D.C., September 13, 1967.

# The vita has been removed from the scanned document

# BUDGETARY PHILOSOPHY AND PROCEDURES IN COMMUNITY, GENERAL NON-PROFIT HOSPITALS IN THE STATE OF VIRGINIA

by

Jeffrey Robert Barnes

## ABSTRACT

This thesis examines the budgetary philosophy and budgetary procedures found in community, general, non-profit hospitals in the State of Virginia, for the purpose of making recommendations for strengthening budgetary controls. Increasing demands are being made upon the nation's hospitals to make every effort to control steadily rising medical costs. Hospital management can no longer ignore the important contributions which effective budgeting can make toward controlling costs.

In order to gather data, a questionnaire was mailed to all community, voluntary hospitals in the State. Questions were classified under four headings: budgetary philosophy, basic requirements for budgetary procedure, procedures in budgeting, and managerial uses of budget data.

Responses were tabulated by three size categories: small (100 beds and under), medium (101 to 300 beds), and large (over 300 beds). The main conclusions of this study are:

(1) The managements of most institutions recognize the contributions which budgeting can make toward strengthening hospital fiscal performance, but the medical staff and operating personnel need more awareness of the budgeting role.

(2) Hospitals of all three sizes need to improve their accounting systems before effective budgetary controls can be initiated.

(3) Large size hospitals are significantly ahead of medium and small size institutions in the use of budgetary procedures.

(4) Although most hospital managements show considerable strength in utilizing what budgetary controls they already have to control unfavorable financial trends, few use budget data to affect adequate reimbursement from thirdparty agencies.

Recommendations are designed to further budget education, correct existing accounting and budgeting deficiencies, and improve management's utilization of budget data in reimbursement requests.