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An Analysis of the Functions of the Director of Medical Education in the Teaching Hospital

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AN ANALYSIS OF THE FUNCTIONS OF THE DIRECTOR OF MEDICAL EDUCATION IN THE TEACHING HOSPITAL

by

Elaine Philip Lee

A Dissertation Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

May 1988
The purpose of this study was to investigate and describe the functions of the Director of Medical Education in the teaching hospital. The study objectives were to determine and analyze the responsibilities of the DMEs by examining the frequency with which they performed certain functions, regarded the importance of the functions, and identified functions difficult to manage in terms of Luther Gulick's POSDCoRB model of administrator functions.

Data were collected by on-site interviews with nineteen Directors of Medical Education (or their equivalents) at teaching hospitals in the metropolitan Chicago affiliates of medical institutions utilizing teaching hospitals for student and resident training.

Research instruments included a sorting instrument of forty-seven DME functions, an interview schedule, and a
demographic instrument. To broaden understanding of responsibilities of the DME, information regarding resources, limitations, role perceptions of DMEs, their managerial styles, and significant accomplishments was acquired and analyzed.

The study contributes to current literature on the role of the DME in the teaching hospital. It is hoped that the analyses provided will assist administrators interested in medical education to understand roles and responsibilities of the DME, an educational administrator in the hospital setting.
ACKNOWLEDGEMENTS

My gratitude is extended to Dr. M.P. Heller, Director of the dissertation committee and Chairman of the Department of Educational Leadership and Policy Studies in the School of Education at Loyola University of Chicago, who delineated the parameters of the study. Throughout my years as a doctoral student at Loyola University, Dr. Heller consistently challenged me in order to further develop my leadership and analytical skills.

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I also thank the Directors of Medical Education who generously participated in the study and the numerous others involved in medical education who were always able
to find a moment to counsel me. My thanks are extended to Mrs. Susan Diederich for the typing of the manuscript.

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VITA

The author, Elaine Philip Lee, is the daughter of John Philip and Mary Galo Philip. She was born on May 30, 1935, in Chicago Illinois.

She received her elementary education at Hibbard and Stone Schools in Chicago and was graduated from Saint Scholastica High School in 1952. She attended Saint Mary's College in South Bend from 1952 to 1954 and was graduated from Loyola University of Chicago with a Bachelor of Science in Natural Science Degree in 1957. She taught Mathematics, English and Biology for five years in the Catholic grade and high schools in the Chicagoland area. She attended the Graduate School of Loyola University for one year at the Stritch School of Medicine where she studied Anatomy, Neuroanatomy, Physiology, Histology and Embryology. In 1978, she entered the graduate program in Curriculum and Instruction and received her M.Ed. in 1980 from Loyola University.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

Education may be acquired in any number of settings. Whether in schools, colleges and universities, professional training institutions, hospitals, business and other organizations, educational programs are available to individuals in all of these enterprises. The administration of activities necessary to maintain the structure and operation of the educational program in each of these requires the abilities of individuals who utilize the basic principles of the administrative process. The features and requirements of administration, even those as specialized as occur in education, are common to administrators in a variety of educational situations.

Regarding the director of medical education and discussing that role in medical school continuing medical education offices, Dillon states

The director of the office, for example, can be a physician with a special interest in Continuing Medical Education (CME), an educator with a background in medical education or an administrator without any specific training in either medicine or education.1

Full service directors of medical education in teaching hospitals serve as integral participants in the institution's administrative organization. Their administrative functions consist of a variety of tasks that are basic, not only to their specialized type of educational institution, but to managers in many organizations.

Though studies regarding productivity of residents, effectiveness and evaluation of continuing medical education programs, funding of programs and health care delivery systems are readily available, research regarding the role and functions of the director of medical education reflects a paucity of current evaluations or descriptions of the administrative process relevant to the director in the teaching hospital. The scarcity of literature and current research emphasizes the significance of the present study as a contribution to research in this area.

There is a need to examine the processes involved in the administration of education and its structure in the teaching hospital. It is hoped that the information and conclusions resulting from this study will define the functions, resources, strategies required for management activities and resolution of some problematic and conflict situations. Skills utilized by the administrator involved in medical education to effectively carry out the functions required of his position will be analyzed. The results of
this study may be beneficial to educational administrators in similar positions or organizations and whose functions require activities and resolutions as presented herein.

**PURPOSE**

The purpose of this research is to identify the individual responsible for the administration of medical education programs in the teaching hospital and to examine the administrative functions he performs. These directors serve the institution, providing professional and/or academic services in patient care, research and teaching. The position of director of medical education involves the coordination of various programs in training for students and residents as well as the continuing education of practicing physicians. The function is not unlike that of a departmental chairperson, dean or school superintendent whose activities require expertise in the orchestration of the various components of the educational process. Duties may include monitoring, operation within budgetary guidelines, counselling, orientation, maintenance of records and documents, needs assessments and the evaluation of students, staff and programs.

Descriptors that pertain to the administrative process which have been reported in the literature include planning, decision-making, organizing, programming, staffing, resource assembling and allocation, and directing.
Others, such as communicating, coordinating, reporting, controlling and evaluation are additional terms applicable to activities performed by the administrator.²

Some descriptors are interchangeable with others. Stimulating, leadership and influencing may be viewed as synonymous with directing; others such as coordinating, may include and require communication skills as integral components of the function. Budgeting requires control and evaluation of systems and staff to assure containment within funding parameters. Gulick includes a planning component to the budgetary process with accounting and control (monitoring).³

A review of the literature describing the administrative process was completed analyzing the work of Fayol⁴ (1916), Gulick⁵ (1937), Sears⁶ (1950),


Gregg⁷ (1957), Newman, Sumner and Warren⁸ (1967), Jensen and Clark⁹ (1964) and others whose discussions describe the functions of the administrative processes and responsibilities including those listed above.

A theoretical model which draws together and simplifies the administrative processes into a sequential order was developed by Luther Gulick. It was in December, 1936, while Gulick served as a member of the President's Committee on Administrative Management, that he developed his "Notes on the Theory of Organization" and in which he included special references to coordination and planning considerations for the United States government. It was Gulick's intent to "... delineate the functions of management ... and provide a sort of administrative prescription which should be followed by a competent administrator."¹⁰ The functions of the administrator as


delineated by Gulick formed the acronym POSDCoRB. Those elements, as described by Gulick are:

**Planning**, that is working out in broad outline the things that need to be done and the methods for doing them to accomplish the purpose set for the enterprise;

**Organizing**, that is the establishment of the formal structure of authority through which work subdivisions are arranged, defined, and coordinated for the defined objective;

**Staffing**, that is the whole personnel function of bringing and training and maintaining favorable conditions of work;

**Directing**, that is the continuous task of making decisions and embodying them in specific and general orders and instructions and serving as the leader of the enterprise;

**Coordinating**, that is the all important duty of interrelating the various parts of the work;

**Reporting**, that is keeping those to whom the chief executive is responsible informed as to what is going on, which thus includes keeping himself and his subordinates informed through records, research and inspection;

**Budgeting**, with all that goes with budgeting in the form of fiscal planning, accounting and control.¹¹

The POSDCoRB model forms the structure by which the functions of the director of medical education may be analyzed by examining the frequency, importance and difficulty of his tasks. The scope of these administrative functions performed by the director as well as the distribution of these functions by Gulick's

¹¹Gulick, p. 13.
categorization will be analyzed. Gulick's questions regarding the director, "What is the work of the chief executive? What does he do?"\(^{12}\) will be addressed in terms of the POSDCoRB model. Further inquiries through interviews will enable the investigator to analyze how he performs his work and the manner in which he utilizes resources, perceives his role, and strategizes to cope with some of the limitations, problems and conflicts that impinge upon the management responsibilities of his position.

Administrative theory is rooted in the fundamentals of scientific management. An early conceptualization of the rationale for efficient and effective operation of organizations by utilization of certain administrative functions was set forth by Henri Fayol who defined these as planning, organizing, coordinating, commanding and controlling.\(^{13}\)

These functions were further clarified and broadened by Gulick, Urwick and others who agreed on the essential components of administrative responsibility and activity though not necessarily on the sequential ordering of the

\(^{12}\)Ibid., p. 13.

\(^{13}\)Lyndall Urwick, "The Function of Administration, with Special Reference to the Work of Henri Fayol," Papers on the Science of Administration, p. 119.
functions. Jensen and Clark also listed common descriptive terms of the process and state that "all authorities seem to agree that there is some kind of sequential order for the elements in the process, but the agreement as to what elements are to be included is much less pronounced."14

Planning, in which forecasting may be included, is the initial function whose results are the outcome(s) after the intervening functions have been addressed or performed. Gulick's ordering stands as a logical, inclusive process in which each element develops and incorporates previous portions of the process in order to move toward both succeeding functions and accomplishments.

Analysis of the process of administration reveals that the functions Fayol and Gulick emphasized with POSDCoRB are not mutually exclusive in essence or in times. I listed them individually just to be sure that not one of them be overlooked in any analysis of the management function. Obviously, no one can concentrate on staffing without also wrestling with the budget, planning, coordination, the organization structure and several other faci. It is also important to note that the comparative importance of the several functions changes with time. At 9:00 a.m. planning may be tops, while at 4:00 p.m. you may be deciding or reporting.

Though in 1936, I listed deciding and leading under D for "Directing", I would use the current phrase "decision-making" were I writing today, and I would stress the leadership responsibility and management even more vigorously.15

14Jenson and Clark, p. 52.

15Luther Gulick, from a letter written to the investigator, May 12, 1987.
Each function, though apparently distinct, interfaces with others and contains elements common and/or intrinsic to all. The acquisition and use of skills in all areas should assist the administrator in accomplishing the responsibilities required of his position in a logical, organized manner.

RESEARCH QUESTIONS

The following questions were considered in the development of the function list and interviews on which this research is based.

1. How does the classification by DMEs by frequency, importance and difficulty of functions of the DME relate to Gulick's model?

2. How do DMEs define and manage the most difficult functions in terms of the POSDCORB model?

3. What are the variables associated with the position of DME?

4. What is the profile of the administrators and institutions in this sample?

DEFINITIONS

Medical education: the continuum of education which includes undergraduate, graduate (including fellowships) and continuing medical education.

Undergraduate medical education: the traditional four year professional education leading to acquisition of the Doctor of Medicine degree (M.D.)
Residency: training acquired after the granting of the Doctor of Medicine degree at a teaching hospital and with the intention of board certification in a specialty area.

Board certification: competency and qualification of proficiency to practice in a specialty.

Continuing medical education: educational activities of a formal or informal nature during the physician's professional life.

Director of Medical Education: the individual responsible for the administration of medical education activities.

Teaching hospital: a hospital which is involved in patient care, research and full service clinical education.

METHOD

The initial focus of this study was a survey of directors of medical education in institutions affiliated with the Council of Teaching Hospitals (COTH). Teaching hospital or corresponding memberships in COTH require the applicant institution to have

... documented affiliation agreement with a medical school accredited by the Liaison Committee on Medical Education and a letter recommending membership from the dean of the affiliated medical school. Teaching hospital membership is limited to those hospitals which sponsor, or significantly participate in at least four approved, active residency programs, two must occur in the following specialty areas: internal medicine, surgery, obstetrics-gynecology, pediatrics, family practice, or psychiatry. Corresponding members include non-profit, governmental hospitals and medical
education organizations (e.g. consortia, foundations, federations).\textsuperscript{16}

Institutions which are teaching hospitals are involved in the administration of educational programs for residents, fellows and, in some instances, medical students depending on their type of affiliation. The continuing education of physicians is inherent in any hospital by the nature of the professional practices and activities of its members and is recognized in group and individual consultations, meetings and any number of self-educative practices. These may include the reading of professional medical journals, research and self-teaching. Activities in education require administrators to act as liaisons between the hospital and its medical school affiliate in order to insure the operation of programs as required as well as the coordination of physician continuing medical education programs.

Five of the COTH members of the initial sample were found to be academic medical centers, i.e. schools of medicine with their own hospitals. It was determined by early site visits and interviews that the organizational structure of the medical school, with its own hospital and

school governance, utilized a decentralized administrative set of components and operation that would not require a single individual, the director of medical education, to be responsible for the managerial tasks required in medical education programs. Faculty in the medical school serve as faculty and chairpersons in those university hospitals, maintaining dual status and individual responsibility. In these situations, chairpersons serve as administrator and/or director for his department or division, thus eliminating the need for an all-department director.

A stratified sample of the applicable COTH members and affiliates selected from the Accreditation Council of Graduate Medical Education Directory for 1987-1988 was selected. The purpose of the directory is to identify institutions to medical students which are accredited for graduate medical training. These institutions identified from the ACGME Directory in the Chicago and metropolitan Chicago area were selected because of the scope of their involvement in medical education, both in undergraduate and graduate programs. This allowed an opportunity for investigation of a large group concentration of teaching hospital members, medical schools and

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physicians involved in medical education at the various levels described.

The metropolitan Chicago area thus presents itself as an outstanding center for all levels of medical education. Six of the seven medical schools in the state of Illinois have their principal facilities within the city of Chicago or suburban areas. This group of medical schools includes one school in the public sector, the University of Illinois College of Medicine at Chicago and five private schools of diverse backgrounds. In addition, as previously indicated, fifteen of the twenty-four members of COTH are in the city of Chicago and another six in the metropolitan area.

Twenty-two institutions were contacted by telephone through the Department of Medical Education in order to determine whether or not a director of medical education or an equivalent was employed at the hospital. Letters were sent to individuals thus located in order to introduce the investigator and to request appointment time. Two of the institutions were not utilized in the sample selected because of their unique organizational structure, size and corporate relationship which decentralized its administrative position in medical education. One institution did not elect to participate.

Those institutions which did not apply to the sample, as well as four academic medical centers, were visited,
however, to acquire general and medical education related information. In these institutions, key individuals such as deans of medical schools, graduate medical education program directors, continuing medical education directors, as well as lay administrators, were interviewed in order to broaden the investigator's knowledge regarding the institutions' educational structure, policies and method of operation. This information thus acquired was not, however, utilized as part of the study.

A list of functions was prepared and included forty-seven items which presented characteristic functions of the director of medical education. This instrument was prepared by selecting and combining functions from job descriptions on record at the Association of American Medical Colleges and sent on request to the investigator. This instrument was administered to five directors of medical education outside the sample and evaluated as to the method of administration, completeness, clarity and terminology. Their recommendations, comments and suggestions were reviewed and modification of the instrument was made accordingly. The forty-seven items were initially distributed to six directors of medical education, continuing medical education and undergraduate medical programs outside the sample to identify the functions by Gulick category. It was found that the technicality of identifying functions did not result in a uniform
agreement greater than 70% by this group of directors of medical, continuing and undergraduate educational programs outside the sample. Identification may also have been hindered by the large number of responses required for consideration even though thirty-one of the functions identify Gulick's categorization in the body of the description. Items were subsequently identified by the investigator according to descriptions as grounded in the literature.

A set of cards was prepared in triplicate. Each director was requested to sort each set by categorizing the items as to frequency, importance and difficulty. These coded answers were utilized in order to make analyses regarding their range of responsibilities.

The initial portion of the interview focused on the question set categorized as difficult and the three most difficult functions were selected by the director of medical education. A summary and analysis of comments in narrative form regarding their perceived problems, common themes and possible causes and resolutions of those problems were made in order to more fully clarify the results and dimensions of the categorization and interview. Other questions regarding the director's perceived role in the office of director, limitations in his work, utilization of resources and managerial style were also addressed and analyzed.
The responses given by each director in the category designated as "difficult," as well as resources they found to be beneficial and necessary, limitations of their position, administrative accomplishments and strategies for problematic and conflict areas and management style were examined. The results of the difficult function categorization initiated the interview portion of the search whose purpose was to clarify the investigator's understanding of the responsibilities, roles and activities beyond the functions that had been categorized and sorted according to frequency, importance and difficulty.

The sorted data set was analyzed in terms of administrative theory as described by Gulick. The information acquired through the interviews was analyzed by noting similarities, differences, patterns, and unique responses in order to give broader understanding of the activities performed by the director of medical education as well as various strategies that enable him to deal with the broad range of functions required of the director of medical education.

LIMITATIONS

1. The population in this study is limited to affiliates of medical schools in the Chicago metropolitan area. The stratified sample was chosen based on the following criteria:
a. The hospital is a teaching hospital involved in educational programs including the three levels of medical education.

b. The individual, the Director of Medical Education, (or his or her equivalent as identified by the institution) is responsible for the administration and coordination of those programs in the hospital.

2. This study describes the roles and responsibilities as described by the director and is limited by the accuracy, honesty and time constraints of the participants involved in the study.

3. The participants were members of a stratified sample in the metropolitan Chicago area. Other teaching hospitals in the State whose perspectives may have added to this study are not included. Hospitals with limited affiliations and which are also involved in some clerkships and graduate educational programs to a lesser degree were not utilized and whose responses may not be surmised.

4. The length of time required to complete the classification and interview, which entailed the rendering of thoughtful, problem solving responses may have somewhat influenced the span of attention, concentration, completeness and interest in responses given. However, the professional posture of the interviewee maintained throughout
indicated a willingness to continue and contribute the information requested.

5. The size of the sample is limited by stratification. Larger N with which to make statistical analyses other than those used in this study could not be utilized.

**SUMMARY AND OVERVIEW**

The purpose of this study is to describe the spectrum of activities involved in the administration of educational programs in the teaching hospitals in the metropolitan Chicago area with major affiliations to medical schools. The study focuses on directors of medical education or an equivalent in those institutions. In addition, this study provides data and information which describe management processes of individuals and programs in this setting.

The study is organized into six chapters. Chapter I introduces the problem and rationale upon which it is based. It also includes the design, purpose, questions to be addressed, definitions, method and limitations of the study.

Chapter II presents a review of the literature regarding various authors' perceptions of the administrative process and broadens the meaning of Gulick's seven functions. Also reviewed is the literature relevant to teaching hospitals and their history, the director of medical education, and continuing medical education. The
dissertations reviewed focus on other aspects of medical education and administrators, and though not specifically related to this topic, they lend auxiliary information to the study.

Chapter III describes the research procedures and the analytical tools utilized in this study.

Chapter IV consists of the presentation and analysis of the data which was obtained through use of the instruments and related interviews regarding the forty-seven functions of the DME. Demographic data of individuals and institutions is also included in Chapter IV.

Chapter V consists of the presentation and analysis of the data obtained through the interviewing procedure following the sorting of DME functions. This data includes information and analyses of the variables associated with the directors of medical education who participated in this study.

Chapter VI presents the conclusions and recommendations of the study which are based on application of the literature review and the analyses of instruments and responses in terms of administrative theory.
CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

A search through University Microfilms International, ERIC documents, journals, books and Index Medicus revealed a paucity of literature and research on the role or topic of the Director of Medical Education. The purpose of this review is to provide information which will give insight into educational administration in the teaching hospital.

This review covers a broad range of topics. Essential is a discussion of Gulick's description of the administrative process and functions which is the basis for elaboration and clarification by many administrative theorists. This review of the literature examines Gulick's theory of administration, the history of teaching hospitals, the origin of the position of director of medical education, and an overview of continuing medical education. A portion of the information regarding the role of the director of medical education in early and later directorships and affiliations was obtained through personal conversations with administrators and physicians over a period of several months. Their comments
contribute to and confirm information previously gathered from the small number of related references in the literature.

This review consists of five parts. The first focuses on administrative theory regarding the processes involved and is presented as a model elaborated upon by others. Part II presents a history of the teaching hospital and related current issues. Part III addresses the evolution of the position of the director of medical education as shown in documents in the 1960s. The results of a survey conducted in 1982 are presented and analyzed to demonstrate current characteristic responsibilities of directors of medical education or equivalents. Part IV reviews the history and growth of continuing medical education, and current responsibilities and handbooks available in that area. Part V identifies dissertations regarding aspects of medical education. Although these dissertations do not focus on the topic of this dissertation directly, they provide supplementary information and demonstrate the scope of research in this area.

Early Administration

Although administration and management are somewhat modern terms, the beginnings of administration were present as early as primitive man. The appointment of one
member to secure food for the group was a delegating activity in which the performance of the task served to maintain the life of the organization. Later civilizations utilized the principles of administration to conduct business and public affairs, build cities, keep the law, maintain regiments in war, for trade or to establish status hierarchies. In all of these, the seed of administrative principles was present.

A dominant and growing approach in the 1700's with a scientific method to manage the state was an early model for administration of public affairs. The Cameralists of Austria and Germany, influenced some two centuries before by Osse, "combined professional posts with public service to the emerging German Nation." \(^{18}\) The term management, often related to finance and the economy, demonstrated a scientific investigative method for the operation and maintenance of state affairs. \(^{19}\) Of interest are the delineation of ways in which activities were carried out in this scientific approach.

The Cameralists demonstrated the influence of the approach by

1. the reexamination and revision of previously existing activities;

\(^{18}\)Campbell and Gregg, p. 85.

\(^{19}\)Ibid., p. 86.
2. invention and development of new activities and systems;

3. collection and ordering of many different kinds of knowledge pertinent to government systems;

4. development of new patterns of human organizations within government systems for coordinating performance of functions;

5. to some extent, the revision of concepts with respect to the growing system as a whole.20

A brief analysis of these approaches to deal with organizations reveals that the elements of administration were clearly present. In "reexamination and revision of previously existing activities" we note evaluation, planning and organizing processes. The "invention and development of new activities and systems" entail planning and organizing. The "collecting and ordering of knowledge" relates to reporting and documentation. That "human organizations developed in new patterns for coordination" reflects staffing and coordinating components, and the "revision of concepts with respect to the governing system" is clearly decision-making and policy related. In American public administration, through the operation of governments and the spread of scientific inquiry and methods in industry, the life, existence and evidence of the science of management were confirmed.

20Ibid., p. 86.
In Germany, Weber\textsuperscript{21} was formulating his theses on bureaucracy, division of labor and hierarchy, while in America, Frederick Taylor\textsuperscript{22} was approaching the division of labor mechanistically. Although Taylor extended his principles of scientism to management, it remained for Fayol, and more systematically Gulick and Urwick, to emphasize rational administration.\textsuperscript{23}

The early twentieth century was the period in which the antecedents of administrative theory were crystallized. Two major approaches to management existed: rational administration which emphasized economy and efficiency on the one hand, and human relations administration, focusing on benevolent and caring leaders with a concern for the social process on the other. Characterized by Bennis as organizations without people and people without organizations,\textsuperscript{24} the goals of each were tempered from seemingly opposite poles.


\textsuperscript{22}Frederick W. Taylor, \textit{The Principles of Scientific Management} (New York: Harper and Brothers, 1911).


\textsuperscript{24}Ibid., p. 36.
Frederick Taylor's emphasis on efficiency and divisions of labor was further limited by his neglect of the human dimension. In France, Henri Fayol, in an effort to save his organization from bankruptcy, devised a progression of functions with which to accomplish that task. Including forecasting in his plan, he decided, that by using a sequence of managerial functions, his problems could be resolved. Fayol's scheme contained the five functions that are now so familiar to students of management: planning, organization, command, coordination and control. His concerns also included, however, attention to the human relations movement in that he advocated tenets of kindness and justice to his employees.

Luther Gulick broadened Fayol's series of functions to seven in his acronym POSDCoRB, and it was Lyndall Urwick who discussed the span of control and delegation of authority. Urwick's addenda emphasized, however, Weber's divisions of labor and hierarchical approach.

The establishment of the National Institute of

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25Ibid., p. 33-35.
26Knezevich, p. 13.
27Monahan, p. 35.
Industrial Psychology in England in 1921 which stimulated increased interest in the health of employees\textsuperscript{29} was one of the signs of the new wave of administrative concerns. This grew with the work of investigators such as Elton Mayo and the Hawthorne Studies and Mary Park Follett's focus on social processes in organizations. The personal characteristics of workers, their feelings and morale took on significance as administrative theories began to develop and administrative theory incorporated the classical with creative emergent theorization.

The Elements of Administration

A review of authors of the administrative process reveals a similarity, overlapping and clarification of the elements defined by Fayol and Gulick reviewed earlier in Chapter I. Gulick's administrative process model serves as a structure upon which to build a synthesis of administrative functions and to elaborate on those functions of the administrator as seen by various authors. Though Gulick's framework has been expanded and narrowed, it stands as a simple, structural basis to describe administrative functions.

According to Campbell, Corbally and Ramseyer,

\textsuperscript{29}Monahan, p. 37.
administration functions are given more descriptive terminology while retaining the basic elements and they state that "for our purpose the process is cyclical and contains the following components: decision-making, programming, stimulating, co-ordinating and appraising" and that the "... administrative process, while variously defined and still subject to further refinement, represents a useful concept."³⁰

Gulick defined the planning process as the working out in broad outline the things that need to be done and the methods for doing them to accomplish the purpose set for the enterprise.³¹ Gregg precedes the planning process with appraisal of all information appropriate to the solving of problems which confront the executive and the organization. After careful analysis, interpretation, alternative actions and assessment of effectiveness of the alternatives, the most satisfactory option is selected.³²

Planning is intelligent preparation for action. It also gives meaning to action, for only as goals and objectives are clearly conceived do reasons for programs

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³²Campbell and Gregg, p. 276.
and activities become apparent.\textsuperscript{33} Newman states that the basic process of planning includes the consideration of decision choices, clarification of objectives, establishment of policies, mapping job programs, determining specific methods and procedures, and fixing day-to-day schedules.\textsuperscript{34} Whether the plans are made for a specific operation or to be used again as standard operating procedures, the executive should consider:

1. what types of plans will be most useful to him
2. how far it will pay to go in preparing such plans
3. what procedure he should follow in arriving at decisions.\textsuperscript{35}

In long range planning, programs for implementation and maintenance may be developed. The future-oriented approach requires steps and resource utilization to achieve goals, requiring establishment of clear cut goals and objectives. In preparing such a long range plan, Newman, Sumner and Warren list essential characteristics of such a plan. The master plan should be comprehensive, cover all major elements of the business, and be

\textsuperscript{33}Ibid., p. 281


\textsuperscript{35}Ibid., p. 29.
integrated into a balanced and synchronized program for the entire operation. 36

Urwick further commented on Fayol's characteristics of a good plan of operations as having unity, continuity, flexibility and precision and incorporated these in his list of functions. These characteristics should be considered as a guide for action for with acquisition and consideration of additional information, the plan may be altered before it is implemented. 37

Newman describes the following phase in plan development:

1. diagnose the problem properly
2. conceive of one or more good solutions
3. project and compare the consequences of such alternatives
4. evaluate these different sets of consequences and select a course of action. 38

By adhering to a systematic procedure that reduces the process to a few factors, the planner may more easily "manipulate or compare the possible alternatives and consequences of each." 39


39Knezevich, p. 45.
The organizing process takes into account the planning that preceded it and delineates, distributes and restructures the components required to accomplish the goals of the organization. Knezevich states that Fayol and others' interpretations of the organizing function referred to rather general structuring and the itemization of some specific details while Urwick defines the functions as determination of activities necessary to purpose or plan and arranging them in groups which may be assigned to individuals.

It is by organization that the coordination function emerges, for it is by unified efforts to accomplish the goals of the organization that the plan becomes operational and effective. In describing organizing activities, Campbell describes it as one of the administrator's primary responsibilities. "Without organization, the accomplishment of goals is not possible, resulting in dissipated effort, wasted resources and results." The work of the administrator who organizes is to determine practices and tasks systematically. Such tasks are arranged into parts that are not only independent of one another, but also interdependent to accomplish the purposes of plans.

41Urwick, The Elements of Administration, p. 36.
42Campbell and Gregg, p. 286.
into a working harmony. 43

The systems approach examines the various components and subdivisions of the organization, analyzing their specific roles and interrelating them with the organization itself. 44 Knezevich also states that the outcome of organizing processes is "a formal and systematic means for differentiating functions, distributing decision-making authority, structuring work patterns, coordinating resources . . . and clarifying objectives." 45 As a result of the organizing process, utilization of the various talents of organizational members is possible as well as simplification of tasks involved, resulting in efficiency in organizational procedures.

The staffing process requires specifically the selection, evaluation, training and assignment of individuals to tasks in the organization. The staffing function may also include the maintenance of morale and opportunity for growth. In discussing the many facets of staffing, Sears addresses the school but his comments apply equally in a variety of organizations.

One does not get a strong faculty by wishing for it. He must know what abilities to select, have an efficient method of attracting talent, able to arrange their work in a manner that pleases them, and know how

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43Jensen and Clark, p. 2.
44Knezevich, p. 140.
45Ibid., p. 28.
to stimulate their growth in the service. The question of initial salary, question of the number of annual salary increases to provide for, proper recognition of experience and training, and the question of rewarding for high efficiency suggest some of the important angles to this question.46

In addressing the directing function, Fayol states that "To command is to set going the services defined by planning and established by organization."47 Directing then, moves the plan, organizing principles and staffing elements to operate as a process. The term directing, used by earlier authors in educational administration literature, has been revised and improved upon by later writers. Sears felt the term directing to be adequate and that whether the problem be in any area of responsibility of the director, a decision causing action would require direction. "It is often made effective indirectly through written words or documents . . . to serve as controls or set forth plans or establish coordinations or create organization."48

Directors, though endowed with authority in their positions, must utilize bases other than that authority to move workers to function cooperatively and accomplish institutional goals. By guidance, motivation, counsel,

46Sears, pp. 52-53.


48Sears, p. 142.
and perhaps hands-on assistance to subordinates or peers, effective administrators may accomplish significantly more than by simply ordering. Newman, Sumner and Warren clarify the administrative role by using the term *leading*. "Personally and actively working with subordinates, the leader guides and motivates, while establishing lines of communication that facilitate modified leader behaviors and future planning."49 These considerations beyond simple command or directing give added dimension to influence others to carry out their responsibilities in the context of organizational effort and goal achievement. Knezevich states that whatever the term, it is "the process that depends upon authority to make decisions as well as to demonstrate the leadership necessary to keep going and on course."50

The function of coordinating is of eminent importance to the administrator, particularly the director of medical education. Coordinating the efforts of individuals and groups into an integrated pattern of purpose-achieving activity is essential. It is coordinating that is the process of unifying the contributions of people, materials and other resources to achieve a recognized purpose.51

49Newman, Sumner, Warren, p. 574.
51Gregg and Campbell, p. 397.
Communicating and influencing are also important activities in accomplishing satisfactory coordination.\textsuperscript{52} The investigator concludes that the dissemination of information or reporting are elements of but not synonymous with communication as in the coordination function. Although communicating is required in some aspect of all functions, it is intrinsic to coordination and supercedes communication as defined in reporting. Through effective dialogue and the establishment of rapport with organizational members and external to it, the skillful, successful administrator may develop smooth working relationships with the individuals with whom he interacts.

The coordinating function involves awareness of information that may impinge, favorably or not, on the operations of the organization and requires communicating skills in order to manage people, relationships, and maintain and focus on goals. Mooney states that "coordination is the determining principle of organization, the form which contains all other principles, the beginning and end of all organized effort".\textsuperscript{53}

The purpose of \textit{reporting} is to allow the administrator to inform and be informed of activities in the organiza-

\textsuperscript{52}Ibid., p. 308.

tion. Individuals in the organizational structure are required by the relationships of their positions to disseminate information relevant to their work to designated others. By the same token, administrators acquire control by receiving information and thus maintain the operations of individuals and systems toward the goals of the institution. Implicit in that control is the evaluation of individuals and processes for the same purpose.

Gulick's description of the reporting function "includes keeping himself and his subordinates informed through records, research and inspection." It is the latter activity that includes supervision and monitoring.

Budgeting responsibilities include any activities that rely on fiscal support for their maintenance. This includes the appropriation, distribution and expenditure of monetary funds. The acquisition and use of funds determines numbers of position (staffing), programs or processes and their limitation or control. Sears states "that to effect control over funds, we devise a budget and enact it as a law." It is through this function that the administrator controls or affects the operations of the institution and therefore, to a great extent, its achievement of goals and purposes.

55Sears, p. 207.
The Teaching Hospital

Recognition and need for teaching hospitals today contrasts to its place in medical education at the turn of the century. It is appropriate for this study to briefly discuss medical education and the reasons that teaching hospitals become accepted and necessary elements of the medical education process.

Until the Flexner Report in 1910\textsuperscript{56}, it is widely known in the field of medical education that the teaching of medical students took place infrequently in grudgingly given hospital wards of hospitals that looked upon physicians as unwelcome visitors. Contrary to the scientific method used in research laboratories, students in medical schools learned primarily and essentially as group spectators. Medical schools, unless publicly funded and able to build their own hospitals, lacked facilities to involve students as participatory, active learners in patient care. The instruction occurred in store front and proprietary schools with the essentials of hands-on learning and involvement virtually absent.

The Flexner Report, primarily concerned with the upgrading and standardization of medical curricula and the

\textsuperscript{56}Abraham Flexner, "Medical Education in the United States and Canada," a Report to the Carnegie Foundation for the Advancement of Teaching (New York: Carnegie Foundation, 1910).
endowments of schools, drew attention to medical education. Few teaching hospitals were available and fewer opportunities for student learning existed. Clerkships, as we know them today, were rare or non-existent. However, between the years 1910-1930, a number of issues, mergers and changes in hospital philosophies were instrumental in implementing changes in schooling but more importantly, in affiliation. Ludmerer (1983) presented a scholarly treatise on the origin and development of teaching hospitals. 57

Medical educators began to aggressively cultivate relationships between medical schools and community hospitals by encouraging liaisons which emphasized education and research as important parts of the hospitals' mission statements. Some teaching hospital affiliations had already been established, and among these, Johns Hopkins was the leader. Europe and Great Britain had already set precedents in teaching hospital use, importance and affiliations. It was the goal of medical educators in the United States to establish needs and relationships with hospitals in order to have the movement take hold. 58 Before Flexner's report, medical schools'


58Ibid., p. 390-392.
weaknesses lay in the lack of standardized, structured programs within and between schools, thus encouraging a low regard for physicians. As more citizens began to rely on sound medical treatment, and became more aware of well-being and longevity, the insistence upon excellence and uniformity in training followed in tandem.

In 1910, several powerful and successful affiliations between medical schools and hospitals kindled the new trend toward affiliations throughout the country. A number of schools, among them Georgetown, Harvard, Cornell and Columbia, had begun earlier to provide the clerkship for their students. The uses of other hospital facilities, which were inadequate for education and not controlled by schools, had severely limited instruction. Columbia in New York with Presbyterian Hospital, Harvard in Boston with the Peter Bent Brigham Hospital, and Washington University Medical School with Barnes Hospital and St. Louis Children's Hospital in St. Louis united, acquired affiliations, funded by philanthropic bequests and modeled on the successful Johns Hopkins Medical School. These early relationships allowed privileges between school and hospital with staff appointments and use of hospitals for teaching and research. The primary concern of these

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assist others outside their immediate hospital walls.  

Financial considerations played their part in encouraging affiliations. The medical school would staff and manage the laboratories, if the hospital would allow the use of those laboratories. Would this not benefit both financially? The effective affiliations in Boston, New York and St. Louis energized the growing acceptance and desirability of such affiliations. As the population moved from rural to urban settings, these shifts and growths found medical centers focusing and locating in cities as well.

With the establishment by the 1920's of these hospitals as learning centers, the clerkship as a part of the medical curriculum also became established as an integral facet of training.  

"By 1921, every medical school had affiliation with a hospital, which often it either owned or controlled."  

These affiliations were made primarily because of the zeal of physicians and medical educators who, like crusaders, persuaded trustees and governments to encourage and contract affiliations with teaching hospitals. The

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62 Ibid., p. 399.
63 Ibid., p. 410
crusade spread across the country so that not being in an affiliation of that nature equaled a loss of status. 65 For some two decades, even with this giant step in place as mentioned, some facets of medical education were still questioned. Physicians who were teaching, some without formal training or desire to teach, and those performing minimal research were criticized for lack of pedagogical training and insights. The later efforts of George E. Miller, a pioneer in formalizing medical education and others in the early 1950s, encouraged examination and use of educational principles in medicine to improve instruction relevant to practice, particularly in the structuring and evaluation of continuing medical education. 66 By the end of World War II, after the exposure to the trauma of man in war and disease, the government manifested a growing interest in medical


research and its support. 67

With increased growth in technology, populations, standards of living and longevity, public interest was turned to education, nutrition and research. Medicine, as a science, its schools and numbers of students and faculties grew in response to that awareness. 68 But though the impetus to perform research and improve schooling was present at that time, the movement did not follow immediately after the stimulus. It was not until the 1950's that the organization, expansion and development of medical education occurred. 69

Substantial endowments facilitated new curricular reforms such as changes in residencies, including changes from straight to rotating residencies, specialization, and development of creative program funding to restructure instruction. This change in residencies may substantiate, in part, the value of the clerkship which likewise rotated to various teaching hospitals in the course of training and improved the depth and quality of that experience. Resident numbers increased from some 5000 in 1941 to some 26,000 in 1955 due to in place and developing affilia-

67Jarcho, p. 365.
68Ibid., p. 365-366.
69Lester J. Evans, The Crisis in Medical Education (University of Michigan, 1964), p. 3.
tions, the increased interest in science and medicine, and the general post-war interest and funding of education.\textsuperscript{70}

Smith states:

Enormous changes have occurred in U.S. medical schools according to data compiled by the AAMC. Between 1959 and 1982, the federal commitment increased the number of schools by 48% (from 85 to 126), the number of students 124% (from 29,614 to 66,485), and the number of residents by 208% (from 15,417 to 47,449). With increased federal support for more schools, more students, and more research, the increase in faculty members associated with these changes was 419% (from 10,350 to 53,748).\textsuperscript{71}

Since those post-war years, teaching hospitals have evolved as critically important and necessary elements of the medical education process. What characteristic features distinguish them from the community hospital not involved in teaching?

The three-legged stool upon which the teaching hospital rests is composed of teaching, research and patient care bases. These include the necessity of hospital realization and support of medical education as an integral part of its mission, and requiring a responsibility to the community in terms of tertiary care facilities. Expanding on these three roles, the Association of American Medical

\textsuperscript{70}Jarcho, p. 373-376.

Colleges included consideration of external controls, organizational structure, innovative pursuits and costs when attempting to compare the teaching hospital with the community hospital. Medical education research directives, state controls and university policies are all examples of external controls which are present, to varying degrees, in teaching hospitals. The Accreditation Council for Graduate Medical Education and the Resident Review Committee, which establish standards of curricula, as well as the National Institutes of Health and institutional review boards which monitor research procedures on patients, stand as controls on teaching hospitals.

Primary to the mission of the teaching hospital is the commitment to clinical medical education. The following thirteen characteristics represent, in varying degrees, variables that may be attributed to teaching hospitals. They are:

1. the size of the intern and resident staff;
2. the number of fellowship positions;
3. the extent to which the full range of clerkships are offered to undergraduate medical students;
4. the volume of research undertaken;
5. the extent to which the medical faculty is integrated with the hospital medical staff in terms of faculty appointment;
6. the nature of the affiliation arrangement;
7. the appointment or employment of full-time salaried

72 Ibid., p. 4.
73 Toward a More Contemporary Public Understanding of the Teaching Hospital (Department of Teaching Hospitals, AAMC, May, 1981), pp. 10-11.
chiefs of service;
8. the number of other salaried physicians;
9. the number of special service programs offered;
10. the level of complexity demonstrated by the diagnostic mix of patients care for;
11. the staffing pattern and ratios resulting from the distinctive patient mix;
12. the scope and intensity of laboratory services;
13. financial arrangements and volume of services rendered in outpatient clinics and emergency rooms.74

A review of the above characteristics reveals, even to the casual observer, the complexity of interpersonal relationships that are present in teaching hospitals and consequently, the broad responsibilities and skills required by all individuals, especially administrators, in these settings.

Smith states further that:

Sensitive relationships include those between full-time and part-time faculty members (the traditional "town-gown" arena), between chiefs and members of their departments, and between attending physicians and house staff members. In addition, teaching hospital staffs are usually two or three times larger than non-teaching hospital medical staffs. Questions of university versus hospital allegiance and goals also complicate the situation.75

These areas and considerations that administrators are required to address and the preceding information should serve to describe the milieu of the educational administrator in the teaching hospital.

74 Ibid., p. 8.
75 Smith, p. 4.
Current and Recent Issues

The following review will be presented in two parts. The first relates to current and recent issues presented in medical and other professional literature that bear on medicine, medical practice, health care and education. The second portion presents pertinent reviews concerning administrative issues.

Medical practice in recent years has been influenced by numerous and rapid changes. These include, among others, the increase in technical complexity, an aging population, substantial increases in costs through much of the 1970s and continuing, for a large part, into the 1980s. A number of constraints on medical practice include DRGs (Diagnostic Related Groups), increased numbers of physicians and students, the emergence of a variety of practice organizations such as HMOs (Health Management Organization), PPOs (Preferred Provider Organization), and IPAs (Independent Physician Association), the relative emergence of both for-profit and not-for-profit hospitals, multi-health care systems as corporate giants, and medical liability issues. The complexity and concerns of the new and changing scene in medical education have been emphasized in numerous references since the 1980s.

The difficulties of organization and management status of the nation's sixty-five university-owned hospitals was
discussed by Westerman. He cited some instances of comparison which have some bearing on the teaching hospital finding its place somewhere between the university hospital and the local community acute care hospital. To quote Westerman:

As public concerns begin to shape community hospital programs through trustee involvement in program planning, university hospitals remain insulated and lack strong governance. Sophisticated management techniques are being applied to community hospital and community hospital systems while university hospitals struggle under the burden of irrelevant or inappropriate educationally structured management systems.77

While the typical teaching hospital may share many of the management features of the community hospital because of its educational mission and involvement, it may also share some of the more complex administrative features of the outrightly owned university hospital. The teaching hospital structure seems to indicate that successful management is more readily accomplished in institutions having certain characteristics. These may include board response to community opinion and interest, community owned membership and limited size and complexity. Further-


77Ibid., p. 17-18.
more, the teaching hospital mode, apart and free standing with that type of governance, could lend itself as a model for improvement of university hospital governance.

Blendon et. al., reported on the severe implications for health care institutions during the 1980s based on the national economic situation and the social priorities in the United States. They expressed concerns about the reduction of funding for medical education.

Many of the nation's hospitals, public health agencies and academic health sciences centers will find themselves financially hard pressed because of their dependence for more than one half of their operating funds on what will be much more financially constrained public and philanthrophic support.

In a rather extensive and detailed study published in 1983, Sloan, Feldman, and Steinwald applied a variety of cost determinants, including casemix, stating that:

Failure to include casemix in hospital cost analysis clearly leads to serious omitted variable bias. Since teaching status and casemix are highly positively correlated, teaching effects on cost and output per case can be greatly overstated if casemix differences are not recognized.


79 Ibid., p. 1845.

From the analysis of these variables, they concluded that teaching hospitals additional expenses varied from 10-20% beyond the costs of institutions without teaching programs. Thus, it can be readily shown that institutions with substantial commitments and involvement in educational programs are increasingly at risk during a time when cost containment and reduction in budgetary allocation to education are a reality.

Some of the key features of teaching hospitals which impact on their cost of operation are discussed by Smith. Teaching hospitals represent 5.5% of the nation's hospitals but represents 18.7% of the beds. The patients in teaching hospitals are more seriously ill and they operate large out-patient programs. Furthermore, while teaching hospitals admit fewer than one fifth of those patients hospitalized in the United States, they are involved in the education of nearly three-fourths of all residents. In addition, because of the patient population served, these institutions manage nearly one third of so-called bad debts involved with patient care and provide close to one half of all hospital charity care.

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81 Ibid., p. 25.
82 Smith, p. 3.
In summary, one can say that teaching hospitals work harder, and by the nature of their work, clientele and educational mission, carry a rather disproportionate and impressive financial burden. This kind of economic posture indicates that these institutions are operating in economic jeopardy.

Tyson and Merrill discussed both the economic and political issues of the changing environment in which health care institutions operate in the 1980s. Among other factors such as increasing reliance by teaching centers on patient generated revenues and the anticipated continuing restrictions on Medicare reimbursements, these authors project a decline in the percentage of national health care expenditures compared with the gross national product for the years 1970-2000. Thus, teaching hospitals are particularly affected and subject to change by the dramatic changes in the methods of financing health care in the United States.

Schwartz, et al., also expressed serious concern about the continued existence of the teaching hospital


84 Ibid., p. 775.
and alluded to it as a possibly "endangered species." 85 His concerns were based on the considerable involvement of these institutions with care of those who are increasingly coming under restricted reimbursement policies, especially those in Medicare and Medicaid, though other programs are also affected in the private sector as well. Teaching hospitals so seriously affected may be those in large urban centers or those closely associated with some medical schools. 86

There are optimistic aspects for medical education as well. Stern editorialized that while the first era of education was associated with the dawn of the progression and self-interested voluntarism, the second phase in the 1960s emphasized continuing study by professionals and establishment of minimal performance levels by all physicians. The third era of the late 1980s involved raising the optimal level of performance by all practitioners. 87 In a similar constructive stance, Watts indicated that many factors are converging on the

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85William B. Schwartz, M.D., Joseph P. Newhouse, Ph.D. and Albert P. Williams, Ph.D., "Is the Teaching Hospital an Endangered Species?" New England Journal of Medicine 313, no. 3 (July 18, 1985), pp. 157-162.

86Ibid., p. 157.

desirability for practitioners to participate in continuing medical education. It is not only professionally and philosophically desirable, but a real, practical, economic requirement. Uhl discussed the fundamental role of the hospital in continuing medical education. While he acknowledged the difficulties of the present, he concluded citing Sir William Osler on an optimistic note. Osler said: "the hospital will sustain traditions even as current forces change . . . its direction of growth to conform with the needs of the times." 

Administrative Issues

Notwithstanding the numerous and far reaching changes affecting the technology of medicine, curriculum changes in medical education, activities involving undergraduate, graduate and continuing medical education, the literature of the past decade since 1977 includes repeated references to the critical role of the manager, administrator or supervisor of various educational activities in the spectrum of medical education.


Finestone and Bowler reported on the need for cooperation for better continuing medical education. They described a training program in emergency medicine for physicians which took place only because of a thorough group cooperative effort involving six medical schools and their affiliated hospitals. If the appropriate administrative structure and cooperation had not been brought into alignment, the program would not have been accomplished.90

Cooperative efforts between medical schools and hospitals may be enhanced by affiliations with other sources lending management skills and direction. Spencer discussed the contribution of hospital management firms to quality and cost effective health care. The discussion included educational aspects and that some management companies operated departments which helped to develop cost-conscious, results oriented programs designed to improve managerial performance at the department level.91 While these are a step or two away from medical education itself, they demonstrate the importance and awareness of such


activities on the part of management groups whose primary mission is not only management but profitability.

Brozovich and Loftus discussed physician-administrator decision making for high technology purchasing.\textsuperscript{92} Again, while not focusing on the educational aspect of medical and health care, the discussion indicated the importance of a decision strategy in which essential interaction between physicians and administrators are emphasized. Also indicated is a substantial progress over earlier activities in which medical staff individuals might simply have voiced a felt need for an activity, equipment or procedure. Multi-disciplinary committees were thus involved in the selection of high technological equipment and in a particular instance, the Delphi technique was utilized.\textsuperscript{93}

At the University of Wisconsin in Madison, an educational curriculum for clinician-executives has been developed and reported by Detmer and Noren. The courses offered in the program may be taken for graduate credit leading to a masters degree in preventive medicine, administrative medicine or simply for continuing medical


\textsuperscript{93}Ibid., p. 67-68.
education credit.\textsuperscript{94}

The success of the program indicates a need for more formal education in management and other areas for physicians beyond that offered in the medical curriculum. As reported by Wilkinson in a 1982 survey of twenty-eight United States graduate schools with programs in health care administration, ten of the fourteen institutions that offer executive programs in health management had experienced increased registration and/or interest by physicians.\textsuperscript{95} Of interest is the fact that many of the physicians that may participate in such programs are those who have been graduates, in practice or involved in other activities for some years. The age range of participants in the programs included those from the late twenties to the late fifties.\textsuperscript{96}

Osborne reported in some detail regarding 765 programs that were eligible for category I credit offered by 35 community hospitals in the state of Illinois. The data collected indicated how needs were assessed, who was


\textsuperscript{96}Ibid., p. 23.
responsible for conducting the needs assessments, and what influenced the choice of method employed.\textsuperscript{97}

Also in the same year, Lawrence and Peoples reported on the collaboration of both educators and managers in establishing hospital wide education programs. A model was developed and utilized at a particular institution. The planning process was well regarded in that it obtained input from and support by educational managers and the staff. These authors felt that the model could be applied in variations and to numerous settings.\textsuperscript{98}

In 1983, Bennett discussed the possible future implications of various activities of departmental chairpersons. He described them as entrepreneurs, creative custodian of standards, and as politicians.\textsuperscript{99} As previously indicated in this dissertation, the role of the director of medical education shares many similar features with chairpersons and considerations of these administrative qualities is germane to that position. Bennett also noted that despite

\textsuperscript{97}Charles E. Osborne, Ed.D., "Assessing Needs for Community Hospital Continuing Medical Education," \textit{Medical Care} 20, no. 9 (September 1982), pp. 967-971.

\textsuperscript{98}Dorothy Lawrence, Ed.D., and Robert J. Peoples, "Managers, Educators Collaborate for Hospitalwide Educational Programs," \textit{Hospital Progress} (September 1982), pp. 36-39, 60.

the deadlines, budgetary demands and other forms of administrative accountability associated with the chairmanships as compared to the role of a professor who is not a chairman, more than 80% of the participants responded favorably as to whether they would be interested in continuing to serve another term of office in that position.100

Petersdorf discussed at some length on a method to manage the revolution in medical care. Among other possibilities, he considered increasing specialization or development of a platoon system in which clinically oriented faculty would lead medical school teaching while other top-rank, qualified investigators would spend their time in research. He suggested that universities divest themselves of teaching hospitals by making them separate fiscal entities related to but not part of the fiscal entities as they stand today. The present situation holds the university financially responsible for the external conditions that affect teaching hospitals. He encouraged increased relationships of alliances of not-for-profit hospitals with the universities, a circumstance which is in place with teaching hospitals.101 This reiterates Westermann's suggestions

100Ibid., p. 56.

regarding the restructuring of the hospital affiliated with the medical school university.

This theme is furthered by Heyssel in 1984 in which he sets forth ten principles for governance and management in academic medical centers. The interesting thrust is that the teaching hospital which should and would have definite relationships with the university also would have a board which represents the community it serves and to which its chief executive officer reports. This implies that there is a relationship and administrative tie, but a degree of true separatedness between the university and the teaching hospital, and points to a broad overlying administrative consideration. The role or position of the person acting or serving as director of medical education would need to find a pertinent locale which supports and confirms his level of administrative authority and independence.

Organizational development in academic medicine was examined and discussed by Aluise et al in 1985. They examined the situational leadership of chairpersons, factors of emerging organizational needs, task orientation of the chairperson and situationally appropriate leader-

Again, while considered in a purely academic or university setting, many features of leadership and chairmanship responsibilities are discussed. David Belsheim in 1986 discussed three models for professional continuing education. These include an educational model, a social change model and a problem based model. The focus on each model varies. However, each requires an appropriate model of leadership on the part of the DME.

Brown and McCool discussed qualities of high performing managers, and their corresponding attributes into the decade of the 1980s. They discuss some of the features of successful leaders using descriptors such as hard working, energy giving, creative, mission oriented and to some extent, visionary qualities. They indicate, and it is equally applicable to medical education, that health care, like no other field, rewards the diligent network builder, that person who cultivates relationships and who seeks and provides assistance to multiple

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consultants. The successful director of medical education will certainly utilize such attributes.

The ongoing struggle and difficulties of professionally educated people who seek or are thrust into managerial situations continues. Lorsch and Mathias indicate some of the intrinsic difficulties in such working relationships. They state:

Professionals enjoy the content of their work. They usually find it intellectually challenging and demanding. But managers must often involve themselves in details that can seem (and often are) unglamorous. They may often have to create or monitor a new administrative process, advise a young person about career concerns, or figure out whether to open a new practice area.

They further indicate that all of the various administrative features of people skills, building fiefdoms and the boundaries of managers' operating areas provide tension, need for constructive interplay, and the development of long-ranged goals.

While this is true in virtually any managerial situation, it is certainly true in the highly charged


107 Ibid., p. 79.

108 Ibid., p. 81-83.
setting frequently found in the medium or large sized teaching hospital where the variety of professionals and diverse personalities holding senior and important positions must frequently and effectively interact with each other to accomplish the goals and objectives of the institution.

The Director of Medical Education

As early as 1940, the position of the director of medical education was recommended as a hospital appointment with responsibility for the hospital based education programs for house and attending staff. 109 As previously addressed, after World War II, government and medical educators became increasingly interested in medicine. This was reflected in the substantial increases in medical and graduate education programs and consequently, the number of administrative responsibilities. Uhl commented that the position was established "... out of sheer necessity and certainly not in response to academic leadership; community hospitals appointed directors of medical education to provide some administrative planning." 110


110Ibid.
By 1956, the Association for Hospital Medical Education was formed to provide assistance in the form of institutes, updating skills, and information regarding national and legislative issues to DMEs. This organization still serves as a nationwide resource for DMEs and is dedicated to assist them in management and to lend awareness of current issues, problems, solutions and contacts. 111

In March of 1962, Uhl observed that the prediction of the Commission on Graduate Medical Education in 1940 of increasing numbers of students and programs in hospitals would require creation of the position of director, and which position would be necessary in the light of two factors. The National Intern Matching Program's demand for reliance on excellent educational programs and the inverse relationship between graduates and available programs created a buyer's market. Teaching hospitals were required to compete for students and by 1961, 357 full and 493 part time DME positions were in existence. 112

111James H. Thorpe, M.D., F.A.C.P., "AHME After Three Decades," AHME News - Association for Hospital Medical Education (September, October 1986), pp. 1, 2, and 4.

The American Medical Association published a guide establishing characteristics and responsibilities of the DME in June of 1965. Bacastow et al listed the qualifications, appointment, rank, functions of the DME and included educational, coordinating and critic activities, administrative relationships and collateral activities of the position. The DME would serve as a catalyst, teacher, coordinator and critic of educational faculty and programs. His functions regarding recruiting would be advisory. Regarding administration, the budget would be his responsibility though policy regarding house staff needs would be an advisory function. Liaison activities would be required with alumni, affiliated medical schools, administration and staff. The authors concluded with a summary statement that defined an essential characteristic regarding the DME. "The director of medical education who achieves a harmonious relationship with his medical staff will be most effective. Leadership by example and moral suasion is the key-note in developing a cooperative and effective faculty."


114Ibid.

115Ibid., p. 118.
Freymann commented later in 1965 that the role of the DME was becoming obsolete. He based the observation on the fact that as more full-time physicians became involved as clinical heads of departments, administrators and deans, the responsibilities of such a person would be assumed by others. He pointed to another broader role, the Director of Clinical Services, which proceeded beyond the educational responsibilities initially delegated to the DME. In this role, the director would have the power to make plans and executive decisions described in terms of the modern hospital. Of primary importance was the bridging of relationships within the hospital between physicians, administration and trustees. Budgetary coordination through administration and then to clinical departments would allow control of an indirect nature. Teaching coordination to focus on patient care and the supervision of continuing medical education would be required and selection of projects and policy setting in research would be included as part of his responsibilities. Freymann stated:

To name a few of the unsolved problems there is a need to extend hospital standards of care into ambulatory clinics, nursing homes and home-care programs, to establish criteria of medical need, to measure efficiency of utilization, to set up quality control

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care, to coordinate the educational and preventive facilities of public health agencies with those of the hospital, to plan regional coordination of health agencies and to improve the standards of care for chronic diseases, with particular reference to rehabilitation.\textsuperscript{117}

It is especially interesting to note that many of the formulations proposed by Freymann in 1965 regarding medicine have, in part, come to pass or are in development. However, these changes have not come about under the auspices of the director of medical education or director of clinical services as Freymann suggested. Medicare and Medicaid became a national law in the 1960s, the cost of medical care increased continuously and soared in the 1970s. These facts along with financial constraints and health care concerns on the part of hospitals, federal, state and local governments, major employers, insurance companies and increasingly well informed and demanding common publics, all contributed to initiation of many programs that Freymann encouraged, but not necessarily under the auspices of the Director of Medical Education or Director of Clinical Services. In fact, they became some of the major concerns of the administration and medical staff of any hospital as well as government, insurance carriers and others mentioned above.

Uhl stated that during the 1960s, more hospitals

\textsuperscript{117}Ibid., p. 1256.
began to hire full-time chiefs of departments and by the mid-1970s, with more money available, other full-time individuals were in place. The teaching hospitals became the mini-model of the university hospital with more DMEs functioning in full time positions, involved with allied health, personnel and community areas. As medical schools expanded, the need for teaching hospitals as part of the educational curriculum was emphasized.\textsuperscript{118}

In discussing the role of the DME in the 1960s when major affiliations were taking place in Chicago, the following describes the requirements of the position as required by the university medical school.

At that time, it was necessary for university medical school administration to have an individual at the teaching hospital level who would be responsible for coordinating the educational program for the school. That position would require a person to act as liaison to the dean's office, particularly in matters of student affairs. In those early years, the DME function was primarily involved with undergraduate medical education and with responsibility for continuing medical education. The DME would serve on the curriculum and appraisal committee, and

communicate on a monthly basis with deans, associate deans, the chief executive officer, chiefs of staff and others to discuss budgets, problems, facility utilization, media and student records. He would be the primary means of contacting students in emergencies or other need. In some cases, he would administer examinations to the students and would be responsible for the organization of their orientation programs.

Joint conference committees were formed in which department chiefs at the school would meet with their counterparts at the teaching hospitals, discussing educational policy and examinations. As these unions grew in strength and importance, the educational coordinating role of the DME began to diminish. The administrative aspect was altered because of increasingly responsibility being allocated among the various department heads at the teaching hospital.

In the early stages of affiliations, the DME was a policy maker when programs were smaller and fewer. The functions were centralized in one individual and gradually evolved and exist today in a more decentralized structure.119

119Personal communication, Associate Dean, Major University Medical School, Chicago. Tape recording, July 2, 1987.
Blayney in 1967 reported the results of a national study of DMEs in the Journal of Medical Education. His study revealed a diverse role, modified by hospital size and affiliation and included many non-educational responsibilities. Among these non-educational responsibilities were medical staff organization, research, fundraising, liaison activity and salary negotiations. 120

In 1969, Kroeger reported evidence of "high frustrations" and indications of full-time chief replacement of DMEs a real probability. Need for authority, full-time service chiefs, medical staff executive and joint conference committee membership, larger budgets, closer ties with the board and university affiliation were prime concerns of those polled. Others expressed interest in teaching as opposed to "housekeeping" duties. Trends at that time indicated full-time chiefs of service accepting responsibilities of medical education in their services. Those remaining in the position of DME have focused on CME which Kroeger indicated as the essential function of the role. 121


121 Hilda H. Kroeger, M.D., "What Does the Director of Medical Education Do?" Modern Hospital (April 1960), pp. 85-87.
In 1974, Berridge spoke of the DME in terms of a study in survival and saw the role as divided between "housemaster, recruiter and public defender." The position has been, however, according to Berridge, a valuable impetus in education. 122

The results of a survey published in 1982 substantially reflects contemporary practice and involvement in DME or similar positions. In summary, the following represents an analysis of the survey by Sandlow. 123 In dominant roles, where responsibility ranged from 71-85%, activities in CME showed directors involved in CME as 76% and who also initiated educational programs, set administrative policy, assessed needs, reviewed, approved, designed and evaluated programs. Major roles, where involvement ranged between 37-76%, undergraduate and graduate medical education were shown between 37-56%, with major involvement of 76% in CME.

Liaison and coordinating activities were evident in undergraduate and continuing medical education. In the graduate medical education area, policy setting, administration of programs, rule and regulation compliance,

123Leslie J. Sandlow, M.D., "DME Profile," AHME News Association for Hospital Medical Education (September 1982), p. 4.
learner and program evaluation were primary activities. In CME, budgetary, media and faculty development and learner evaluation were major activities.

In the category which included 20-39\% responsibility, undergraduate medical education remained a major director activity, but was an advisory activity in graduate and continuing medical education. Governance of professional staff and clinical review, and staff advisor were important roles. DME responsibilities to set administrative policy, initiate educational programs, registrar, compliance, budget review, liaison, needs assessment, curricular design and media assistance were demonstrated.

Graduate medical education activities included registrar, budget, curriculum design and media services. Minimal involvement of 0-19\% were indicated in nursing education, allied health, patient education, recruitment and evaluations of learners, program and faculty.

The DME, regardless of those changes or scope of function, is the important contact between the medical school and teaching hospital whose expertise as liaison and overall coordinator facilitator of educational activities within and between institutions remains in place today in varying degrees. As a result of the development of the position, the administrative component of medical education is an integral part of the teaching hospital.
Continuing Medical Education

The thread of medical education present in community, teaching and university hospitals is continuing medical education. By the nature of the profession, physicians in practice continue to learn by any of a variety of methods. By healing the sick, consultation with their peers, attendance and participation in conferences, medical and specialty society meetings, and through affiliations within and external to the institution, doctors may have opportunities for educational activities. The reading of professional journals, scholarly writing, structuring or organizing programs and involvement in research are other methods by which the physician may enrich his knowledge and continue to learn.

Richards, Shepherd and Moore have presented historical reviews of continuing medical education in the United States. A particularly informative review of education and research including the past thirty years was presented in 1982 by O'Reilly et al. The following summary

of their account of the past fifty years in continuing medical education gives an overview of developments and trends in that area.

As has been noted previously, the lack of standardization in medical education left gaps and inconsistencies relevant to learning and practice, and continuing medical education in the early third of the 20th century was basically remedial. The authors note that attention was focused during the 1930s and 1940s on current advances in medicine and correction of deficiencies incurred by physicians whose medical programs were shortened because of involvement in World War II. It was not until the 1950s that the task of preparing and presenting CME programs was assumed by academic centers. These programs were largely lecture presentations, with relatively low attendance and ineffective evaluation procedures. Because of the establishment of twenty-four medical schools between the years 1950-1970, federal funding of research programs (and therefore interest and participation by physicians), the pool of students, residency programs, resident and physicians increased. Numerous courses in CME were approved by the American Medical Association and by sheer number of programs and participants, concerns regarding evaluation and effectiveness emerged once again.

A national program was recommended which would
utilize physicians to teach through various facilities and incorporate many media techniques into the process. Basic to these programs were analyses of real situations and subsequent direction of educational answers to address them. This program, however, was not implemented by the AMA but by further efforts by Miller and Williamson which focused on programs built on physician needs input and a sound educational approach.125

Brown and Uhl in 1970 stressed an approach called the Bi-Cycle approach which utilized audits of diagnostic conditions through medical records. These audits were analyzed by staff in order to set criteria regarding patient care/physician performance. Evaluations could then be made by comparing and evaluating performance against the model.126

By 1971, states began to use continuing medical education as a requisite for relicensure and by 1978, twenty states had mandated that physicians acquire 120 credit hours over a three year period for that purpose. A poll of physicians in 1976 showed that the majority of physicians favored continuing medical education credit


126 Brown and Uhl, pp. 1663-1668.
for relicensure.\textsuperscript{127}

The O'Reilly et al treatise comments on some possible adverse effects of mandatory CME such as physician resistance, external and internal involvement by industrial corporations and entrepreneurs, and some preference for didactic rather than process-oriented programs. Three areas are identified for consideration in designing CME programs.

Organizational needs would include a national level establishment of policy regarding CME which would guide state and local programs to be carried out in community hospitals and standardized professional societies. Funding would be given through governments, insurance carriers, patient care dollars, physician fees and program provider fees.

Programmatic needs would include consideration of the development of physician-teachers and programs, their assessment and various innovative ways of providing CME. Competence and performance would be the basis for assessing physician needs to structure programs in medical schools and teaching hospitals. The teaching hospital appointed directors of CME would manage these programs. Physician needs for continuing medical education should be initiated

\textsuperscript{127}O'Reilly, p. 822.
and encouraged during medical school and evaluated by physicians' assessments of their performance in practice.\textsuperscript{128}

These need categories in continuing medical education reflect directly to the director of medical education or the CME director whose knowledge of the field, current issues and trends and use of educational principles in program structure and implementation are addressed in the area of continuing medical education program management responsibility.

Continuing medical education manuals and handbooks are available to directors of continuing medical education programs. Among these are guides by Bunnell (1980), Bergin and Holmes (1979) and a primer by Rosof and Felch published in 1986.\textsuperscript{129} In Rosof and Felch's primer, the elements of managing CME offices are discussed as well as external resources and funding available to the CME director and institution. These current texts are carefully planned,

\textsuperscript{128}Ibid., p. 822-825.

thorough approaches to render assistance to directors in this area.

**Dissertations**

A Ph.D. dissertation by Moore (1982) examined both organization and administration of continuing medical education in six medical centers. He utilized a field study and survey approach in order to determine the relationship between organization and administration of CME programs and performance. Moore discussed planning and methods of conducting CME programs in terms of output, increases in output, efficiency, adaptability and management satisfaction.¹³⁰ His lengthy review of the literature is a scholarly textbook in itself which comprehensively presents the evolution of continuing medical education and the role of CME as an integral part of the practicing physicians' education.

Coker (1979) examined the support systems available to CME physician educators and administrators. His sample included all of the health science centers and medical schools participating in CME activities in Texas. The conclusions of the study indicated that organizational

¹³⁰Donald Edward Moore, Jr., "The Organization and Administration of Continuing Education in Academic Medical Centers," (Ph.D. dissertation, University of Illinois at Urbana-Champaign, 1982) Ann Arbor, Michigan: University Microfilms International No. ADG82-09610, p. 4
patterns varied but were most often centralized, with physicians participating as faculty input, on committees and as participants in programs. Planning was performed by faculty regarding objectives, content and methodology whereas CME administrators coordinated the planning process, assisting in budgeting, marketing, facility logistics, and record keeping.  

Dickerson (1981) studied the role of the pharmaceutical industry to determine its role in continuing medical education programs. Her data were gathered through a study of the literature in the field and interview methods to formulate the study and conclusions.  

Bill (1978) studied characteristics and patterns of administrators of teaching hospitals. The focus of his work was directed to chief hospital administrative officers in order to demonstrate a comprehensive profile. His conclusions demonstrated that most administrators held masters degrees, a substantial portion holding other degrees, that


women have little impact in top level positions in teaching hospitals and a spectrum of other characteristics regarding reasons for entering the field, academic rank and mobility.133

CHAPTER III

Research Methods and Procedures

Introduction

The purpose of this study is to provide insights into the administration of educational programs provided by teaching hospitals in the metropolitan Chicago area and to describe the administrative responsibilities, roles and variables associated with the directors of medical education in those institutions.

Chapter III includes the research methods and procedures utilized in this study and are presented in four sections:

1. The rationale for selection of teaching hospitals in the metropolitan Chicago area as a focus of the study
2. Instrumentation and the types of data collected
3. A detailed account of the procedure used in data collection and
4. Data analysis

Selection of Teaching Hospitals

Teaching institutions were identified initially through the Council of Teaching Hospital Directory (COTH)
for 1987-1988. Institutions listed which were university medical schools with their own teaching hospitals were deleted from the sample. Their highly complex academic organizational structures do not identify one individual, a director of medical education or an equivalent, responsible for the three levels of medical education. In these university medical school organizations, dual responsibilities at both the school and its own hospital decentralize the responsibilities among departmental divisions. University faculty appointments correspond with faculty appointments in the medical school's own hospital whereas the director of medical education position is a free-standing teaching hospital appointment. It is for this reason that the university medical schools in the COTH Directory were not included in this study.

Four academic medical centers outside the sample were visited, and deans, directors and other administrators, both lay and physician, were interviewed in order to familiarize the investigator with organizational structure, procedure and terminology relevant to this study.

As defined earlier, medical education encompasses three levels of learning. The medical school curriculum

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is involved with the education of students whose introduction to clinical learning and participating experiences are typically acquired in the third and fourth years of medical school. After the acquisition of the doctor of medicine degree, the graduate physician learns and teaches in an accredited hospital with the intent of receiving training and accreditation to practice medicine in a specialty area.

The physician who is licensed and certified continues his or her medical education through formal and informal means during the remainder of his professional life. The formal activities in which he may participate may be a part of the continuing medical educational programs at a hospital, other institutions or sites at local, state and national levels through a variety of affiliations. The informal learning he receives may be acquired in his practice or by self-directed or initiated activities such as the reading of medical journals, research, patient contacts or spontaneous and prepared conferences with other physicians or researchers.

In order to identify other institutions involved in these levels of learning, the Accreditation Council of Graduate Medical Education Director was consulted. Those hospitals thus located would supplement COTH members already identified. This Council is composed of the
following members: the American Board of Medical Special-
ties, the American Hospital Association, the Association of American Medical Colleges, the Council of Medical Specialty Societies, a non-voting federal government appointed member, a public member chosen by the Council, and the Residency Review Committee.\(^{135}\) The purpose of the directory is to identify institutions to medical students which are accredited for graduate medical training.\(^{136}\)

Those institutions with affiliations, three specialty training opportunities, and with programs involving medical students, residents and fellows were selected from the Accreditation Council of Graduate Medical Education Directory. The stratified sample chosen consisted of institutions in the ACGME and COTH directories with involvement in medical school and residency programs. This combination of factors would indicate that a director of medical education (as defined in Chapter I) or his or her equivalent would function in the teaching hospitals that were selected. This was confirmed by contact with the institutions' medical education departments.

\(^{135}\)Accreditation Council of Graduate Medical Education Directory, p. ix.

\(^{136}\)Ibid., p. vii.
Chicago was chosen as the area to stratify the sample because of its role as a major focus of medical education institutions, physicians and hospitals. Key cities in the United States offering medical education are Philadelphia with 71.4% of the medical schools in the state located in Philadelphia, 50% located in New York and 85.7% in Chicago. Of the COTH teaching hospitals in those states, fifteen of twenty-four are located in Chicago (62.5%), thirty-three of forty-seven are located in New York (70.2%), and seventeen of thirty-nine are in Philadelphia (43.6%).

This large concentration of institutions, their proximity and accessibility for site visits and a variety of features such as physician numbers, programs and affiliations were an integral part of the rationale for selecting the Chicago metropolitan area for this study.

**Instrumentation and Types of Data**

In order to familiarize the researcher with the areas of administration and medical education, a thorough and extensive review of the literature regarding these areas was conducted. Included in this review is the work of administrative theorists, whose perceptions regarding

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Based on information compiled from the COTH Directory listed by State, pp. 46-58.
position functions has been presented in Chapter II. Literature regarding teaching hospitals, programs of medical education, the development of the position of the director of medical education, continuing medical education and current issues in administration regarding medicine and medical education were also reviewed. Dissertations in the area of continuing medical education were similarly reviewed. This information contributed substantially in familiarizing the researcher with the organizational structure and procedures that occur in academic medical centers and teaching hospitals. The information regarding the preceding topics is also included in Chapter II.

The review of the literature and visits by the researcher to academic medical centers preceding the gathering of data for this study were helpful in formulating the questions and instruments utilized in the interview process. Information acquired from visits was not included with data acquired in the study itself. However, the perspectives gained by visits to institutions outside the sample were useful in forming interpretations and evaluations of data acquired from the sample population.

Quantitative data were obtained by the use of a sorting instrument of functions of the director of medical
education. The source of the forty-seven function utilized in the sorting instrument was the Association of American Medical Colleges\textsuperscript{138} which supplied job descriptions of DMEs to the researcher. These job descriptions were synthesized to develop a group of forty-seven responsibilities which would be inclusive of those performed by individuals in both small and larger teaching hospitals.

The instrument was administered to five individuals two of whom are physicians and who previously held positions of DME. Three individuals hold Ph.D.s. Of these three, one is currently a department chair in a Chicago university, the second is a DME and the third held a position as Director of Continuing Medical Education. This pilot testing procedure enabled the individuals described to assist the researcher in the refinement of the instruments developed for this study. Suggestions and comments were requested, volunteered, examined and evaluated in order to assess the completeness of functions and clarity of terminology including the sorting instrument. Their assistance in evaluation and recommendations were useful in organizing the final instrument administered to the sample population.

\textsuperscript{138}Association of American Medical Colleges, One DuPont Circle Northwest, Washington, D.C. 20036.
The range of functions in the sorting instrument was judged to be fully representative by the pilot group of responsibilities performed by the DME. That range of functions as representative was further substantiated by the sample of nineteen DMEs who did not add functions to the list of forty-seven in the event any may have been omitted. All participants were able to respond to and sort functions as presented into the stated categories.

In addition to the sorting instrument, a demographic survey instrument was designed focusing on the personal characteristics of the sample participants. The demographic instrument included items such as job title, age, experience in areas of medicine, health and administrative areas, professional area of specialization, academic degrees and years in the position of DME. Also included was a request to order three of Gulick's functions as to perceived frequency. Through the interview process, the specialty of the administrator was defined.

Data regarding the participating institution were obtained from the directors and, in instances when accurate figures were not at hand by the directors, the Directory of Graduate Medical Education Directory was consulted.\(^{139}\)

Other information obtained in this demographic instrument included size of the medical education budget, hospital and staff size, residency training opportunities, types of institutions and their affiliational relationship with medical schools.

Qualitative data were also obtained through personal interviews conducted with DMEs in nineteen teaching hospitals. The interview time was utilized as the opportunity to administer the sorting instrument and to enrich responses regarding areas of responsibility as well as describing functions considered most difficult. Further questions in the interview process addressed resources and limitations that were important and influential in assisting or hindering the work of the DME. Perceptions of two roles per DME and competencies required to carry out those roles were described during the interview as well as the description of a significant accomplishment in administration.

The interview schedule was designed so that responses regarding management style and roles of the administrator would be addressed by the interviewees within a standard frame of reference. A model of management style and a chart displaying administrative roles were briefly described to the DMEs in order to have a uniform basis with which to compare responses of the individuals so interviewed.
The interview process allowed the participants the freedom of responding in the areas of difficult tasks, resources, limitations, roles and accomplishments "in their own words to express their own personal perspectives." The interviews resulted in the collection of a broad range of data in the form of personal responses which added substantially to data obtained from the sorting and demographic survey instruments. The interview schedule was administered uniformly and without variation to all participants so that data obtained could be compared and analyzed based on uniform standards.

Data Collection Procedure

Twenty-two institutions were contacted by telephone in order to locate the individual responsible for the administration of medical education in the institution. Two of the institutions contacted did not qualify by the criteria given and one institution did not elect to participate in the study. Letters of introduction and requests for participation were sent to each institution and appointments for interviews were made by telephone within two weeks of receipt of the letters of introduction. The

communique consisted of a letter of introduction and endorsement by the president of one of Chicago's medical societies and a letter from the investigator. Because of the length of time necessary for interviewing and travel, one institution was usually scheduled per day for visits. Approximately forty-five minutes or more were allowed per interview. Two months were required to complete the collection of data.

The interview process began with the administration of three sets of cards, each set containing forty-seven cards. Each card contained the description of one of the functions. Directors were asked to take each set and sort the cards into categories of high, moderate, low or not applicable for each variable of frequency, importance and difficulty. This categorization resulted in one hundred forty-one responses from each individual with the exception of one director who selected one, not three, functions as difficult. This resulted in a total of 2677 responses for the group. The response groups, as completed, were placed into individually labeled envelopes, sealed and recorded on specially prepared forms for each director after the completion of the interview in a setting apart from and following the interview.

At the completion of the initial sorting, the responses classified as high difficulty were further
sorted. The DME selected the three functions perceived to be most difficult. Each of these three was addressed in terms of cause(s) of difficulty and the strategies or usual ways to deal with them. By their responses, directors were able to give ways by which they managed or dealt with the most difficult or troublesome aspects of their position. This initial portion of the interview utilized an average of thirty-five minutes in the sorting and discussion of the three most difficult functions.

Following the sorting and identification of the difficult task portions of the interview, DMEs were requested to discuss some resources and limitations of their work.

The responses regarding resources and limitations were analyzed so that sorted data and the organization of resources merged into clusters and categories into which the resources and limitation information, thus reduced, could be assigned and analyzed further. A table of role titles drawn from Knezevich's description of roles and competencies of administrators was presented to each director. Knezevich's model was chosen because it broadens the directing and coordinating functions of Gulick. The sorting instrument contained more than one

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141Knezevich, p. 16-18.
half of the functions relating to these two roles. Utilization of Knezevich's model allowed for more clarity and depth in describing the two primary responsibilities of the position of the DME. These twelve roles were examined and serve as the basic frame of reference from which each individual could select two roles which he felt most representative of his role in the position of DME in his institution. The two roles were then described by each DME as to how he carried out or performed in the roles. This source of data presented rich descriptions to be utilized for subsequent analyses.

In the management of one's duties, and particularly in situations involving many others who are professional practitioners, students, administrators and staff, the contact with a variety and number of personalities requires behaviors that may focus on the importance and accent on the task or the relationship behavior of the manager. These behaviors may vary, but managers may demonstrate a usual, preferred or consistent mode in dealing with individuals with whom they interact.

The situational leadership of Hersey-Blanchard

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was selected as a model for this study because it considers both of these dimensions of behavior. The dimensions are arranged on two axes: the vertical axis represents behaviors demonstrating relationship activities and the horizontal axis represents behaviors representing emphasis on task. Thus, by examining the quadrants resulting from division of dimensions, descriptors of behavior may be applied to each quadrant as well as the activity performed in it.

The Hersey-Blanchard model is a flexible one, relatively uncomplicated and bears application to everyday situations, in business or other settings. It allows by categoric identification, a selection of primary and secondary management styles which enables characteristic orientation indicating high or low task and relationship behaviors of the manager, also identifying a managerial style or activity in each quadrant.

This model was briefly described to each director in order to present a basic uniform frame of reference in order to select a style with which he felt most comfortable in his day-to-day activities. By using such a model, responses given through a standardized means allowed better tallying and comparable analyses of the responses given by all DMEs. The directors then selected a secondary style of management by the same method.
The final portion of the interview was used to elicit responses which described the actualization by the DME of a significant administrative accomplishment. The nineteen directors responded by describing eighteen such accomplishments, one director named no accomplishment.

At the completion of the categorization of functions and interview, a demographic instrument was completed by each DME.

All interview sessions were tape recorded. The information obtained was reviewed by auditory review immediately after each interview session. Notations were also made after the interviews to note significant, interesting or unusual responses and to note areas where further clarification should be attempted. Ten directors were telephoned to clarify responses or to gain information which was not available at the time of the interview.

In all instances of interviewing and subsequent contact, the DMEs displayed a genuine willingness and interest to cooperate with the researcher. Ten of the DMEs stated specifically appreciation for the opportunity to participate and five also stated "I didn't realize how much I do in this position."

The tapes were transcribed into typewritten, single spaced form shortly after the interview. One hundred fifty-one pages of transcriptions containing the
discussions and responses of the DMEs interviewed in the sample as well as the notations by the researcher as mentioned previously were used as references in the analysis of the data.

**Analysis of Data**

The data obtained from the sorting instrument are quantitative in nature and analyzed by utilizing the Statistical Analytical System (SAS) program which organized the data per function by frequency of responses and percentage responses. The responses were also analyzed in terms of Gulick's model which contains the seven functions of the administrator. The functions and number and percentage response figures were clustered and presented in terms of the categories of planning, organizing, staffing, directing, coordinating, reporting and budgeting.

The sorting responses were first analyzed by calculating the mean responses of the total sample participants in the seven categories of Gulick in order to determine high, medium and low means of responses in terms of frequency, importance and difficulty. By determining frequency, importance and difficulty of the functions by mean responses, functions could be identified as high, medium or low as to Gulick categories and frequency, importance and difficulty. Thus, the sorting responses
were analyzed by grouping them by means and percentages into seven function categories and high, medium and low frequency, importance, and difficulty to identify clusters of responses. This procedure demonstrated functions as significant by frequency of performance, their importance to the DME, and relative difficulty in carrying out the performance of those functions.

The sorting instrument was also analyzed by individually organizing the forty-seven functions by Gulick's category and presented in tabular form with respondent numbers and percentages for each function. This data is addressed in terms of identification and descriptions of the range of percentages of responses. By this method, functions are specifically identified as percentages of various degrees as to frequency of performance, perceptions of importance and difficulty.

Responses obtained in the initial interview process, in which DMEs described their most difficult tasks, are analyzed by description of difficult tasks within the Gulick categorization to which they apply. The patterns of behavior utilized by sample participants in resolving certain types of difficult tasks by area are described in narrative form. The researcher subsequently has made interpretive and evaluative comments regarding those responses as to difficulty and their means of problem
resolution. The evaluative and interpretative comments were based on insights gained through the literature review, synthesis of information and personal experiences obtained by the researcher through preliminary interviews, personal employee experience in one of the teaching hospitals as an administrative intern, and logic. Re-examination of the data and, in some cases, discussion with medical personnel, confirmed the validity of the interpretations and comments drawn.

Throughout the analysis of interview data acquired in this study, the Constant Comparative Method of Analysis was utilized. 143 By using this method, interview responses are coded and compared. Notations are made in order to elude categories of responses. By this method categories quickly emerge and allow the researcher to reduce the large quantities of qualitative data to general categories and properties that are characteristic of the sample population of the study. By utilizing this method, the information in each of the areas of resources, limitations and accomplishments was found to evolve into three categorizations for each variable. These categories were used subsequently to distribute all responses. This

data reduction in the areas cited above enabled the researcher to prepare displays in the form of charts, figures and graphs which included quantification of responses by number and percentage. This organizing procedure allowed further analysis in the form of conclusion drawing and verification of results so displayed.\(^{144}\)

The data acquired regarding the managerial styles of DMEs was analyzed by ordering the data in terms of the Situational Leadership Model of Hersey Blanchard\(^ {145}\) and presented in the form of a figure. The figure demonstrates the distribution of primary and secondary managerial styles of the DMEs in the sample. Further analysis is given in a narrative interpretation of the management style characteristics of the sample and the relationship results to the model.

Data obtained from the sample population regarding role selection were analyzed by data reduction in the form of matrices to which paired combinations of roles were assigned. As a result of this analysis, a display demonstrating the distribution of role selection responses and further interpretive comments are presented.

\(^{144}\)Matthew B. Miles and A. Michael Huberman, Qualitative Data Analysis (Beverly Hills, California: Sage Publications, Inc., 1984), pp. 21-23.

\(^{145}\)Hersey and Blanchard, pp. 149-192.
Additional qualitative data such as descriptions of each of the roles is presented as narrative summaries pulling together the characteristics of each role type from descriptions by DMEs who portrayed that role. These profile combinations are compared to Knezevich's model and the competencies the DME requires and demonstrates in the performance of the role.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA: PART I

Introduction

The presentation and analysis of data are discussed in Chapter IV and Chapter V. Chapter IV contains the demographic data of the individuals in this sample and their institutional affiliations. The responses of DMEs to a survey sorting instrument of forty-seven functions of the director of medical education and their relationships to Gulick's model are presented. Chapter IV also includes descriptions and analysis of the functions which the DMES identified as most difficult and some resolutions to deal with those difficulties. These are analyzed, interpreted and evaluated in terms of administrative theory and serve to answer the following research questions:

Research question 1: How does the classification by DMEs by frequency, importance and difficulty of functions of the DME relate to Gulick's model?

Research question 2: How do the DMEs define and manage the most difficult functions in terms of Gulick's model?

Research question 4: What is the profile of the administrators and institutions in this sample?
The data in Chapter IV are primarily quantitative as to research question 1, presented in tabular form and addressed in terms of ranges of responses by percentage. Table 2 contains the calculated mean responses in terms of Gulick's model. Table 3 presents the total responses to the sorting procedure in terms of Gulick's categorization and demonstrates the responses by number and percentages.

Table 4 relates to research question 2 and is interpreted in terms of clusters of responses distributed to Gulick's functions and also to the various areas of management associated with the position of DME.

Research question 2 is also analyzed qualitatively in terms of the three most difficult tasks selected by the sample participants. The responses in this area are grouped according to the functions they represent in terms of Gulick's model in order to address possible similarities and differences in types of problems and their resolutions. These responses are presented in narrative form utilizing the information gained through the interview process. Interpretive and evaluative commentary is presented by the researcher throughout the narrative to clarify, evaluate and present implications of the reported difficulties and their methods of resolution.

In order to familiarize the reader with the characteristics of the individuals and the affiliated institutions in the sample, a table presenting the
demographic information obtained from individuals and the Directory of Graduate Medical Education Programs for 1987-1988 is analyzed. These data address research question 4.

The data in Chapter IV is presented apart from the data obtained and analyzed in Chapter V because it serves as a unit of analysis of primarily quantitative data, related to individual and institutional characteristics and to the sorting of the forty-seven function instrument.

The discussion of the most difficult tasks is also included in this chapter because it is directly related to the sorting procedure and, as a source of both quantitative and qualitative data, broadens understanding of the difficult situations through analysis of responses obtained through the interviewing process.

Chapter V presents analyses and interpretations of additional qualitative data obtained through the interviewing process. These data were subsequently quantified and analyzed by noting similarities of the various responses and grouped into clusters of related groups. The quantified results are presented in tabular form, figures and graphs. These tables, figures and graphs present a conceptual framework enabling further analyses and serve to more clearly demonstrate factors which influence the DME in the performance of his responsibilities.

The purpose in presenting the range of questions
in Chapter IV in the form of quantitative sorting procedures and demographic data as well as the information obtained through the interviewing process is to broaden understanding of the milieu in which the director of medical education carries out his administrative work.

Research question 3: What are the variables associated with the position of DME is addressed in Chapter V. The variables addressed and analyzed demonstrate factors which assist and impinge on DME activities, present their modes of managerial style, their role perceptions, and describe the range of significant administrative, coordinating and/or educational accomplishments of the directors. With this carefully developed set of variables and analyses, the nature of administrative activity of the DMEs participating in this research is clearly demonstrated.

**Individual and Institutional Profile**

The data acquired from the demographic instrument are presented to demonstrate individual and institutional characteristics of the sample. These data are presented as the initial portion of the data description and analysis in order to familiarize the reader with the sample population characteristics preceding discussion and analysis of the subsequent data regarding the functions of the DME. Presentation of the demographic information acquired from
the sample is found on Table 1.

This sample of nineteen directors is predominantly male (89.47%), physicians (89.47%), two of whom, in addition to the Doctor of Medicine Degree, hold Ph.D. degrees. Two of the members of the sample are specialists in Educational Administration holding Ed.D. degrees. The most frequently appearing job title is Director of Medical Education (52.6%) followed by Associate Chief of Staff for Education and Research (15.78%). The remaining job titles are represented individually by Chairman of Medical Education, Educational Coordinator, Associate Medical Director of Planning, Education and Research, and Vice-President, Education and Research. Specialties of the administrator are distributed across nine areas with individuals in Internal Medicine (42.1%) having the greatest representation, Surgeons (15.78%) second most frequent representation, Education (10.52%), and the remaining specialties such as Emergency Medicine, Pediatrics, Physical Medicine/Rehabilitation, Plastic Surgery, Psychiatry and Urology each represented by one individual (5.26%).

Age is represented between groups of ages from categories of 26-35 to 56 and above in the following percentages: seven are in the age group of 36-45 (36.84%), seven are 56 and above (36.84%), four are 46-55 (21.05%) and one is (5.26%) is in the 26-35 age category.

Individuals in their positions for six to ten years form
TABLE 1

Demographic Questionnaire Data of Sample Frequencies and Percentage Responses

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<td>3 Associate Chief of Staff</td>
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<tr>
<td></td>
<td></td>
<td>for Education and Research</td>
<td></td>
</tr>
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<td></td>
<td>1 Chairman, Medical Education</td>
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</tr>
<tr>
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<td></td>
<td>1 Chairman, Department of</td>
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<td></td>
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<td>10 Director of Medical Education</td>
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<td>1 Director of Residency and CME</td>
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<tr>
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<td></td>
<td>1 Educational Coordinator</td>
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<td></td>
<td></td>
<td>1 Vice-President, Education</td>
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<tr>
<td></td>
<td></td>
<td>and Research</td>
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<td></td>
<td>1 Plastic Surgery</td>
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<td>6-10 years</td>
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*Information from Directory of Graduate Medical Education Programs, pp. 498-501. Bed occupancy and physicians on staff may vary. Specialty training programs include hospitals' own residency programs and those of the affiliated medical school whose residents may rotate selectively through hospitals.
the largest group represented (47.36%), seconded by those who have been in their present position between one and five years (31.57%). Three have held the position for eleven to fifteen years (15.78%) and one DME has been director for more than twenty years.

Full-time employment is represented by fourteen DMEs (73.7%), five are part-time (26.31%), eighteen (94.74%) are salaried, and one is not (5.26%). The distribution of medical education experience, most frequently some form of teaching in medical education or administration is demonstrated as the largest area of experience category with seven (36.84%) of the individuals with twenty or more years of such experience.

Seven individuals have twenty or more years of medical education experience (36.84%), five have 11-15 years (26.31%), and two DMEs each have 1-5, 6-10 or 16-20 years (10.52%) of such experience. One individual (5.26%) has no medical education experience. Health education experience such as nursing, teaching or public health, is shown by nine (47.36%) having no such experience while four (21.1%) show 1-5 years, two each indicate experience (10.52%) of 11-15 and 20 or more years of experience of this type. One individual (5.26%) has 6-10 years experience and one (5.26%) has 16-20 years. Education experience which is not medically or health related, and may be of administrative nature, is indicated by nine
(47.36%) of the members of the sample as having no such experience, five (26.31%) have 1-5 years experience, three have 6-10 years (15.78%) and one (5.26%) in each of the categories has 11-15 or 20 or more years experience. There are no responses in the area of education experience with 16-20 years experience.

DMEs requested to list three functions on the demographic instrument which they considered to be most or highly frequent activities are represented by three groupings. Coordinating (7 responses chosen as highest performed) is the highest response, followed by directing and organizing, each with four responses, planning with three and staffing with one response. Chosen as second in the highest perceived performance function is organizing (7), and planning, directing and coordinating each represented by four responses respectively. Of the third most frequent activities, highest perceived frequency is shown as reporting (5), coordinating (4), planning and directing each with three responses, and budgeting and organizing shown with two responses per function.

Thus, of the total responses given, coordinating (15) is shown as the most frequently performed function, organizing is shown by thirteen (13) responses, directing with eleven (11), planning with ten (10), reporting with five (5), budgeting with two (2) and staffing with one (1) response.
The teaching hospitals in this sample are distributed by ownership. Three are Federal institutions (15.78%), fifteen are not-for-profit, privately owned (78.94%) and one (5.26%) is a county owned institution. These hospitals are affiliated to their medical education institutions as major (55.9%), graduate (23.5%), and limited (20.6%) affiliates. Hospital size ranges from 70 to 1343 beds. Twelve of the hospitals in the sample range in size from 265-500 beds. Physician numbers on staff range from 31-605 with 52.63% of the hospitals having between 201-300 physicians and 31.57% of the hospitals having 400-605 physicians on the staff.¹⁴⁶ The remainder of the institutions have between 31-200 physicians on staff or 15.78%.

Medical education budgets range from $250,000 to $16 million dollars. The majority of hospital budgets range between $1 and $3.5 million dollars and include eleven institutions.¹⁴⁷ This budget figure includes salaries for full-time medical education directors, departmental chairpersons, program coordinators, faculty, continuing medical education program expenses, administrative staff expenses and residents' salaries.


¹⁴⁷Information from sample participants.
Residency specialty training opportunities at hospitals include the distribution of such opportunities offered by the institutions in the sample. These residency specialty training opportunities available at hospitals include individual institution programs and those utilized as a part of medical school training rotations. One to five programs are offered by seven of the hospitals in the sample (36.84%), six to ten programs are offered by six (31.57%) of the hospitals, eleven to fifteen programs are offered by two (10.52%) hospitals, sixteen to twenty programs are offered by three (15.78%) and one hospital (5.26%) offers twenty-four such training opportunities.

Of the medical schools with which the teaching hospitals are affiliated, Loyola Medical School and the University of Illinois claim five major affiliations, Rush-Presbyterian-St. Luke's Medical School has four major affiliations, Northwestern Medical School has three major affiliations, while Chicago Medical School maintains two major affiliations. This major affiliation indicates that the hospital is an important part of the teaching program of the medical school and a major unit in the clinical clerkship program. Graduate indicates that the hospital is used by the school for graduate programs only, while limited indicates that the hospital is used only to a limited extent. Thus, a hospital used for undergraduate clerkship teaching will be one designated as either major
The sorting procedure by nineteen DMEs (or their equivalents) as to frequency, importance and difficulty resulted in the acquisition of 2,677 responses. These were grouped by frequency and percentage using the Statistical Analysis System (SAS) for each of the function in categories of high, moderate, little or not applicable frequency importance or difficulty. In order to group the responses for analysis, functions belonging to each of the seven categories of Gulick were arranged into the appropriate categories and addressed as group responses by numeric and percentage means. By this grouping according to the seven categories, the clustered responses reduce the complexity involved in dealing with such large numbers and enables a more focused study of the responses in terms of the model.

148Directory of Graduate Medical Education Programs, p. 483.
**TABLE 2**

**Numeric and Percentage Means of the Sorting of the Functions of the DME**

### FREQUENCY

<table>
<thead>
<tr>
<th>Function</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>6.40(33.68)</td>
<td>*7.80(41.05)</td>
<td>3.20(16.84)</td>
<td>1.60 (8.42)</td>
</tr>
<tr>
<td>Organize</td>
<td>4.33(22.79)</td>
<td>6.33(33.32)</td>
<td>5.33(28.05)</td>
<td>3.00(15.79)</td>
</tr>
<tr>
<td>Staff</td>
<td>4.67(24.58)</td>
<td>5.67(29.84)</td>
<td>5.44(28.05)</td>
<td>*3.30(17.53)</td>
</tr>
<tr>
<td>Direct</td>
<td>5.53(29.11)</td>
<td>5.61(29.53)</td>
<td>5.33(28.05)</td>
<td>2.53(13.30)</td>
</tr>
<tr>
<td>Coordinate</td>
<td>6.00(31.58)</td>
<td>6.00(31.58)</td>
<td>4.75(25.00)</td>
<td>2.25(11.84)</td>
</tr>
<tr>
<td>Report</td>
<td>6.17(32.47)</td>
<td>7.00(36.84)</td>
<td>4.83(25.42)</td>
<td>1.00(5.26)</td>
</tr>
<tr>
<td>Budget</td>
<td>*7.80(41.05)</td>
<td>3.60(18.95)</td>
<td>*5.80(30.53)</td>
<td>1.80(9.47)</td>
</tr>
</tbody>
</table>

### IMPORTANCE

<table>
<thead>
<tr>
<th>Function</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>*9.60(50.53)</td>
<td>5.80(30.53)</td>
<td>3.40(17.89)</td>
<td>0.20(1.05)</td>
</tr>
<tr>
<td>Organize</td>
<td>6.00(31.58)</td>
<td>7.00(36.84)</td>
<td>5.00(26.31)</td>
<td>1.00(5.26)</td>
</tr>
<tr>
<td>Staff</td>
<td>5.00(26.31)</td>
<td>5.33(28.05)</td>
<td>*6.67(35.11)</td>
<td>*2.00(10.53)</td>
</tr>
<tr>
<td>Direct</td>
<td>6.60(34.74)</td>
<td>5.48(28.84)</td>
<td>5.00(26.31)</td>
<td>1.92(10.11)</td>
</tr>
<tr>
<td>Coordinate</td>
<td>6.83(35.95)</td>
<td>7.00(36.84)</td>
<td>3.75(19.74)</td>
<td>1.42(7.47)</td>
</tr>
<tr>
<td>Report</td>
<td>5.83(30.68)</td>
<td>*7.83(41.21)</td>
<td>4.83(25.42)</td>
<td>0.50(2.63)</td>
</tr>
<tr>
<td>Budget</td>
<td>7.20(37.89)</td>
<td>6.60(34.73)</td>
<td>4.80(25.26)</td>
<td>0.40(2.10)</td>
</tr>
</tbody>
</table>

### DIFFICULTY

<table>
<thead>
<tr>
<th>Function</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>*5.00(26.30)</td>
<td>*8.60(45.26)</td>
<td>5.20(27.37)</td>
<td>0.20(1.05)</td>
</tr>
<tr>
<td>Organize</td>
<td>3.00(15.79)</td>
<td>5.67(29.84)</td>
<td>*9.30(49.11)</td>
<td>1.00(5.26)</td>
</tr>
<tr>
<td>Staff</td>
<td>2.33(12.26)</td>
<td>5.33(28.05)</td>
<td>9.00(47.37)</td>
<td>*2.33(12.26)</td>
</tr>
<tr>
<td>Direct</td>
<td>2.92(15.27)</td>
<td>6.15(32.37)</td>
<td>7.92(41.68)</td>
<td>2.00(10.53)</td>
</tr>
<tr>
<td>Coordinate</td>
<td>2.50(13.16)</td>
<td>6.66(35.01)</td>
<td>8.17(43.00)</td>
<td>1.67(8.78)</td>
</tr>
<tr>
<td>Report</td>
<td>2.33(12.26)</td>
<td>7.17(37.72)</td>
<td>8.67(45.63)</td>
<td>0.83(4.38)</td>
</tr>
<tr>
<td>Budget</td>
<td>4.60(24.21)</td>
<td>6.00(31.58)</td>
<td>7.40(38.95)</td>
<td>1.00(5.26)</td>
</tr>
</tbody>
</table>

Mean responses of 19 DMEs to categories of administrative functions of Gulick.

*Indicates administrative activity with highest mean response of POSDCORB per high, medium, low, N/A frequency, importance and difficulty.
Table 2 represents the responses by category of Gulick and demonstrates the calculated numeric and percentage means of the responses for each of the categories. The directors of medical education participating in the study responded to a survey instrument comprised of forty-seven inquiries. The responses were related by the investigator to the major administration and management acronym by Gulick, namely POSDCoRB. The assignment of each function to a category was based on a thorough review of category descriptions and their characteristics as found in the literature reviewed for this study. The directors were queried as to which functions they had encountered based on the three major categories namely frequency, importance and difficulty.

Throughout, some diversity of responses is noted. Those activities included in high frequency by the directors were led by matters of budgeting (41.05%), followed by planning (33.68%), reporting (32.42%) and coordination (31.58%). Considerations regarding medium frequency were led by planning (40.29%), reporting (36.84%), organization (33.22%) and coordination (29.53%).

Those activities in the importance category which were considered highly important were led by planning (50.5%), followed by budget (37.89%), coordinating (35.95%) and directing (34.74%). Thus, budgeting, planning and coordination which were highly frequent activities by the
directors were also considered to be highly important.

When the administrative activities means were considered in terms of difficulty, a large number of activities were judged to be of medium, or more likely, low difficulty by the participants. Between 41-49% of the respondents included organization (49.11%), staffing (47.37%), directing (41.68%) coordination (43.0%) and reporting (45.63%), all within the province of low difficulty. Similarly, budgeting (38.94%) and planning (27.37%) demonstrated low difficulty for almost one third of the sample. Of the highly frequent activities of budgeting, planning, reporting and coordination, only a mean percentage of 26.3% for planning activities and 24.21% in budgeting were considered to be highly difficult.

Comparison of selected categories indicates that somewhat more than 50% considered planning activities important with one third considering them also high frequency activities. Only five considered them to be highly difficult or 26%. The pattern of responses in terms of importance and difficulty suggests that the DMEs, in a large majority, felt that any of the major constituents of POSDCoRB to be of medium or low in difficulty with only rather small numbers of individuals in the group equating such activities as planning and budgeting to be highly difficult.
In the three areas considered, namely frequency, importance and difficulty, it is interesting to note that "not applicable" responses are generally restricted to small numbers of respondents. Not applicable responses in frequency average 10.8%, 6.39% in importance, and 7.65% in difficulty. This tends to substantiate that the PDSCoR categories established by Gulick are reliable in encompassing nearly all of the essential administrative and management activities in which DMEs participate.

When frequency and importance are considered, a ratio distribution of responses involving the categories high, medium and low frequency is indicated by a ratio of 3:4:2 and importance is indicated by a ratio of 3:3:2. Whereas, when difficulty is considered, the ratio indicating difficulty in the areas of PDSCoRB is shown by a ratio of 1:3:4 in responses and low difficulty.

Planning and budgeting were perceived as most frequent, important and difficult functions by mean responses with percentages ranging from 24.2% to 50.53%.

Through subsequent interviews, it was found that planning functions were dependent on funding available and consistently posed difficulty in terms of short and long term planning. Organizing and reorganizing plans in order to adjust to budgetary schedules were possible consequences of budgetary limitations and may account for the frequency of planning and budgeting activity as well as concern for
and importance of those activities.

Thus, Table 2 demonstrates the means and percentages of the sample's responses to functions categorized by the seven administrative processes as defined by Gulick.

Frequency, Importance and Difficulty of Sorted Responses

Table 3 presents all function responses by frequency and percentage of responses and is organized according to the seven categories of Gulick. Each of the categories is represented, with more than one half of the forty-seven inquiries distributed among directing and coordinating functions.

FREQUENCY

Items to be considered of very high frequency, that is 50% or more of the respondents, included: direction of graduate medical education, supervision of the employees assigned to the medical education office regarding fair treatment to recipients of medical education, and attendance and participation in board administrative, staff and medical council meetings. Also included are participation in management committees, advising staff and administration of problems and policies, and the responsibility for preparation and administration of the medical education budget. Thus of the six dominant considerations regarding
### TABLE 3
Responses to Sorting Functions by Frequency, Importance, Difficulty

<table>
<thead>
<tr>
<th>POSDCoRB: Planning</th>
<th>Frequency</th>
<th>Importance</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High n%</td>
<td>Medium n%</td>
<td>Low n%</td>
</tr>
<tr>
<td>9. Develop organizational plans.</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>16. Plan current, long term plans.</td>
<td>8</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>19. Plan management systems for programs and budgets.</td>
<td>3</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>17. Analyze and determine objectives annually.</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>41. Plan for general welfare and morale of house staff.</td>
<td>7</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Organizing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Program procedures and accomplishment techniques.</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>33. Secure guest lecturers.</td>
<td>3</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>42. Provide program of undergraduate education.</td>
<td>4</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Staffing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Recruit medical staff.</td>
<td>1</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>30. Assist department chairs to recruit house staff.</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

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### TABLE 3 (continued)

Responses to Sorting Functions

<table>
<thead>
<tr>
<th>POSDCoRB:</th>
<th>Frequency</th>
<th>Importance</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High n/%</td>
<td>Medium n/%</td>
<td>Low n/%</td>
</tr>
<tr>
<td>31. Recruit medical, house staff students for med programs.</td>
<td>36.84</td>
<td>31.58</td>
<td>15.79</td>
</tr>
<tr>
<td>1. Direct graduate medical education.</td>
<td>10</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>52.63</td>
<td>31.58</td>
<td>15.79</td>
</tr>
<tr>
<td>2. Direct continuing medical education.</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>36.84</td>
<td>31.58</td>
<td>26.32</td>
</tr>
<tr>
<td>7. Manage outpatient department, patient education programs.</td>
<td>3</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>15.79</td>
<td>47.37</td>
<td>36.84</td>
</tr>
<tr>
<td>8. Act on applications of staff for change in status.</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>15.79</td>
<td>10.53</td>
<td>31.58</td>
</tr>
<tr>
<td>20. Direct management control, information systems to assess qualifications/functions for continuing operations.</td>
<td>2</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10.53</td>
<td>47.37</td>
<td>15.79</td>
</tr>
<tr>
<td>25. Consider complaints and/or appeals from staff and member applicants.</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>15.79</td>
<td>15.79</td>
<td>47.37</td>
</tr>
<tr>
<td>26. Directions to directors of medical education to insure quality residency training programs for accreditation.</td>
<td>7</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>36.84</td>
<td>26.32</td>
<td>36.84</td>
</tr>
</tbody>
</table>
### TABLE 3 (continued)

Responses to Sorting Functions

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>FREQUENCY</th>
<th>IMPORTANCE</th>
<th>DIFFICULTY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH n/%</td>
<td>MEDIUM n/%</td>
<td>LOW n/%</td>
</tr>
<tr>
<td>28. Review, evaluate department operations approving changes in goals, priorities and objectives when indicated.</td>
<td>2 10.53</td>
<td>13 68.42</td>
<td>4 21.05</td>
</tr>
<tr>
<td>32. Give directions to house staff through a variety of teaching methods.</td>
<td>5 26.32</td>
<td>6 31.58</td>
<td>6 10.53</td>
</tr>
<tr>
<td>34. Responsibility for AV center, media and/or photography.</td>
<td>7 36.84</td>
<td>2 10.53</td>
<td>7 36.84</td>
</tr>
<tr>
<td>35. Control use of auditoria, teaching, seminar, lecture rooms and effective use thereof.</td>
<td>6 31.58</td>
<td>4 21.05</td>
<td>5 26.32</td>
</tr>
<tr>
<td>38. Assure adherence of policies, procedures, rules, regulations applying to medical educational programs, participants.</td>
<td>7 36.84</td>
<td>7 36.84</td>
<td>5 26.32</td>
</tr>
<tr>
<td>39. Supervise employees assigned directly to office of medical education: supervisory assistance cooperatively with faculty to recipients of medical education.</td>
<td>13 68.42</td>
<td>6 31.58</td>
<td>10 52.63</td>
</tr>
</tbody>
</table>
### TABLE 3 (continued)

**Responses to Sorting Functions**

<table>
<thead>
<tr>
<th>POSDCoRB: Coordinating</th>
<th>Frequency</th>
<th>Importance</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High n%</td>
<td>Medium n%</td>
<td>Low n%</td>
</tr>
<tr>
<td>3. Attend, participate in boards, on committees as the president of medical staff/chairman of board of directors may designate.</td>
<td>12</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>63.16</td>
<td>31.58</td>
<td>5.26</td>
</tr>
<tr>
<td>4. Coordinate medical education activities for graduate medical education.</td>
<td>7</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>36.84</td>
<td>47.37</td>
<td>10.53</td>
</tr>
<tr>
<td>5. Coordinate medical education activities for CME of other departments.</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>26.32</td>
<td>36.84</td>
<td>21.05</td>
</tr>
<tr>
<td>10. Participate in local, national committees, and board activities.</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>31.58</td>
<td>36.84</td>
<td>26.32</td>
</tr>
<tr>
<td>11. Participate on management committee.</td>
<td>11</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>57.89</td>
<td>15.79</td>
<td>26.32</td>
</tr>
<tr>
<td>13. Support, participate in research programs.</td>
<td>1</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>5.26</td>
<td>31.58</td>
<td>42.11</td>
</tr>
<tr>
<td>21. Coordinate activities of full-time education directors.</td>
<td>6</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>31.58</td>
<td>21.05</td>
<td>31.58</td>
</tr>
</tbody>
</table>
### TABLE 3 (continued)

**Responses to Sorting Functions**

<table>
<thead>
<tr>
<th>Function Description</th>
<th>Frequency</th>
<th>Importance</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POSDCoRB:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Represent staff in all matters of professional standing and conduct.</td>
<td>10.53</td>
<td>36.84</td>
<td>21.05</td>
</tr>
<tr>
<td>25. Act as liaison between house staff officers and administration.</td>
<td>47.37</td>
<td>36.84</td>
<td>47.37</td>
</tr>
<tr>
<td>26. Participate in medical/community activities promoting fund raising, development</td>
<td>10.53</td>
<td>36.84</td>
<td>47.37</td>
</tr>
<tr>
<td>27. Coordinate medical education activities for clerkships.</td>
<td>5</td>
<td>36.84</td>
<td>63.16</td>
</tr>
<tr>
<td>28. Coordinate education activities through/sponsoring medical institutions.</td>
<td>31.58</td>
<td>36.84</td>
<td>47.37</td>
</tr>
<tr>
<td><strong>Reporting:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Submit annual reports.</td>
<td>21.05</td>
<td>36.84</td>
<td>63.16</td>
</tr>
<tr>
<td>30. Inform medical staff of medical education policies and procedures.</td>
<td>63.16</td>
<td>36.84</td>
<td>47.37</td>
</tr>
<tr>
<td>31. Provide reports to administrative authorities of the hospital.</td>
<td>47.37</td>
<td>47.37</td>
<td>47.37</td>
</tr>
</tbody>
</table>
### TABLE 3 (continued)

<table>
<thead>
<tr>
<th>POSDCORB:</th>
<th>Frequency</th>
<th>Importance</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High n/%</td>
<td>Medium n/%</td>
<td>Low n/%</td>
</tr>
<tr>
<td>36. Report to public, other interest positions descriptive of the institution's medical education programs and developments relating thereto.</td>
<td>2</td>
<td>10.53</td>
<td>42.11</td>
</tr>
<tr>
<td>37. Inform members, officers, committees of medical/administrative staffs of info important to discharge responsibilities.</td>
<td>9</td>
<td>15.79</td>
<td>47.37</td>
</tr>
<tr>
<td>40. Inform responsible officials of medical education or clinical practices in conflict with medical staff by-laws, rules, policies, procedures.</td>
<td>7</td>
<td>36.84</td>
<td>26.32</td>
</tr>
<tr>
<td><strong>Budgeting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Prepare budgets for graduate medical education.</td>
<td>9</td>
<td>47.37</td>
<td>26.32</td>
</tr>
<tr>
<td>15. Prepare, administer, control medical education budgets for CME.</td>
<td>9</td>
<td>47.37</td>
<td>15.79</td>
</tr>
<tr>
<td>29. Responsible for preparation, administration of medical education budget.</td>
<td>10</td>
<td>52.63</td>
<td>21.05</td>
</tr>
</tbody>
</table>
### TABLE 3 (continued)

Responses to Sorting Functions

<table>
<thead>
<tr>
<th>FOSDcoRB:</th>
<th>Frequency</th>
<th>Importance</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High n/%</td>
<td>Medium n/%</td>
<td>Low n/%</td>
</tr>
<tr>
<td>43. Obtain funding from outside agencies for development of various aspects of medical education programs.</td>
<td>4 2 7 6 4 6 7 2</td>
<td>21.05 10.53 36.84 31.58 21.05 31.58 36.84 10.53</td>
<td>36.84 21.05 31.58 36.84</td>
</tr>
<tr>
<td>44. Monitor all medical programs to assure operation within budgetary guidelines.</td>
<td>7 4 6 2 4 8 7</td>
<td>36.84 21.05 31.58 10.53 21.05 42.11 36.84</td>
<td>15.79 47.37 36.84</td>
</tr>
</tbody>
</table>
frequency, two involve directing, three involve coordination and one involves the area of budget.

Those that involved between 40-50% of respondents indicating high frequency included: development of organizational plans, current and long-range planning, liaison activity between house staff and administration and providing reports to administration. Also included are preparation of the graduate medical and continuing medical education budget. In this area, two items in this category involve planning, one involves coordinating, one reporting and two budgeting.

When categories involving high frequency between 30-40% are reviewed, sixteen specific responses are included. Two involve planning, one involves organizing, two involve staffing, five directing, four coordinating, one reporting and one budgeting. In the responses obtained in this percentage grouping of highly frequent activities, all of the seven Gulick categorizations are represented.

Several functions bear attention as to their **low or not applicable** frequency. The development of and implementation of recruiting programs to secure medical staff (#22) is usually the responsibility of a full time medical director under board authorization. This responsibility was responded to by thirteen members (68.42%) of the sample as low frequency or not applicable. Applications for new medical staff review or change in status (#8) are
typically reviewed by departmental chairpersons and/or medical credential committees and was responded to as low or not applicable by fourteen (73.69%) of the DMEs. The management of outpatient departments and patient education programs was also designated by sixteen (84.21%) of the sample as low or not applicable to the position of DME.

This work may be assigned to an education department serving patients and managed by a variety of hospital staff members and employees. Complaint consideration and appeals from staff or member applicants and the representation of staff in matters of professional standing and conduct were each represented by 13 (68.42%) of the DMEs as low or not applicable.

These activities may be shared responsibilities between officers and specific committees (eg. credentials, judicial, executive committees) of the medical staff organization and closely interrelate with the senior administration of the institution. Senior administration includes its president or chief executive officer and the board of trustees or directors.

Participation in medical and community activities to promote fundraising and development for the hospital is represented by 12 (63.16%) DMEs as low/not applicable. Public relations activities such as these may be a responsibility of the DME in a smaller hospital but may usually be a role of the medical director or elected
president of the medical staff. Participation and support of research is represented as low/not applicable by twelve (63.16%) of the DMEs. In smaller hospitals, the DME may encourage and act as a catalyst to individual members of the medical staff to perform research. In these cases, the DME may assist in an administrative way. In larger institutions, the chairmen of individual departments may be involved in encouraging research. The above functions usually seem to be distributed among positions other than that of DME. Such responsibility, however, may be assumed by DMEs in smaller institutions by preference of the DME or delegated to him as the most appropriate individual to be so involved in his particular institution.

IMPORTANCE

Response items that were considered important by 50% of the respondents were quite numerous. These included: organizational planning, planning document preparation, planning for general welfare of the house staff, providing programs for undergraduate medical education and the direction of both graduate and continuing medical education. Also considered highly important were the direction of activities of directors of medical education to insure quality residency training programs to meet accreditation standards (68.42%), supervision of employees of the medical education office to insure fair treatment to
recipients of medical education and attending and participating in meetings (52.63%). The coordination of graduate medical education activities (68.42%) and activities of full time directors (57.89%), liaison activities between house staff and administration (52.63%), advising the staff of policy and procedure adherence (52.63%), preparation of graduate (52.63%) and general medical education budget (57.89%) were additional functions considered to be highly important.

Of the activities in the highly important category, seven activities relate directly to graduate medical education, six to general management and staff activities, one to undergraduate medical education and one to continuing medical education responsibility. In all fifteen items were included in this cluster of highly important activities. Three involved planning, four directing, five coordinating, one organization and two involved the budget. This cluster of highlighted activities strongly serves to identify those management activities identified by the directors of medical education as very important. Thus, all items identified as high frequency activities, except continuing medical education budget preparation, reports to administration and management committee participation, are considered not only by their high frequency of performance but also rated as highly important.
The previously described sequence demonstrates a strongly representative cross-section of the items responded to by the participants. It includes so many features that are considered to be important, involving 50-60% of the respondents, that as a result, only a single item remains in the 40-50% highly important range, namely, that associated with giving directions to house staff.

In total, fourteen responses occurred in the 30-40% ranges as highly important. These included two in planning, two in staffing, one in direction, five in coordinating, three in reporting and one in budgeting. Planning activities considered important in this range include the analysis of data and determination of objectives annually and the planning of management systems to deal with budgets and programs. Important staffing functions include the assistance to department chairs to recruit house staff and general recruitment for educational programs. Directing and budgetary functions of importance include assurance of adherence of all policies and procedures, rules and regulations having application to medical educational programs and participants and the preparation and administration and control of the continuing medical education budget. Coordination activities considered important include the coordination of continuing medical education, clerkships and activities with sponsoring institutions, and the participation on
management committees, national and local committees and activities. The reporting functions include advice and counsel to administrative authorities of the hospital and the correction and identification to responsible officials of medical education or clinical practitioners in conflict with the by-laws and policies all within the 30-40% range of highly important activities.

DIFFICULTY

The directors of medical education felt capable in responding to the administrative and supervisory challenges of their positions. None of the responses indicating high difficulty elicited 50% or more in any category. Furthermore, only three responses fell within the 40-50% range. These specifically included organization of programs and accomplishment techniques (42.11%), gaining support for a participating in research projects (42.11%), and development of management systems for programs and budgets of the medical education department (42.11%). In the responses between 30-40%, five items were found. These included long range planning (36.84%), direction of management control systems (31.58%), review and evaluation of departmental operations (31.58%), annual report preparation (31.58%), and obtaining funding from outside agencies (36.84%) to be highly difficult.
It is interesting to note those activities which were moderate to high in difficulty and which were performed infrequently or not at all. Comparing these items, it was found that dealing with complaints from staff were categorized as low or not applicable (68.42%), as well as organization of procedures and accomplishment techniques (52.63%), support and participation in research activity (53.16%), coordination of full time directors (47.37%), monitoring the budget (42.11%), and giving directions to directors of medical education (36.84%). Also of low frequency were functions of coordination of continuing medical education (36.84%), and informing individuals and administration of medical education practices in conflict with medical staff by-laws, rules policies and procedure (36.85%).

The activities mentioned were infrequently performed and also found to be difficult. Difficult functions involved hearing complaints, research participation, monitoring of full time directors of education programs including medical education activities, and in the giving of directions. The aforementioned all require interactions with other staff members and some activity requiring correction, direction or supervision. In this area of education and in dealing with professionals, directive actions that impinged on individuals' professional domain and activity may have presented situations
that were not only difficult but unpleasant. The low frequency performance may also, in part, account for the difficulty and thus further reduce opportunities to develop rapport in order to resolve difficult issues.

The coordinating functions of CME, those involving coordination with sponsoring institutions and full time directors as a DME function, may be delegated to the department chairs and may enforce the reality of the advisory position of the DME. In these instances, his (her) assistance or counsel may be subject to the authority and decisions of department chairs and enhance the difficulty and ability of the DME to perform and participate fully in those activities.

Research activity promotion may involve problems of conflict, or clinical practice and the desire, need and time to perform research. Funding in this area may be difficult to realize because of the realities of setting priorities for patient care activities as part of the physicians' and hospital's mission over educational issues.

Autonomy of department chairs may make activities difficult for DMEs when they feel it is their responsibility to act by monitoring department budgets, coordinating and giving directions, as well as informing physicians of practices in conflict with rules, by-laws and procedural observance.
In this survey, the further away an activity was from direct, professional or educational involvement, or activities closely associated with those functions, the more directors realized an increase of difficulty and apprehension. Furthermore, three specific areas were regarded as consisting of medium difficulty by 50% or more of the sample. These involved planning, whether current or long range documents (52.63%), coordination activities with medical institutions (57.89%), and providing information to members or officers of the administration of medical education for proper discharge of their responsibilities (57.89%). A broad spectrum of various activities was considered to be of low difficulty.

Interestingly, the single strongest item of agreement in that group was the response regarding the provision of programs in undergraduate medical education (73.68%). Those activities, involving medical students and their clerkships or rotation through various hospitals, have been well established in the teaching hospitals for twenty or more years. The requirements for such rotations are structured by the medical institution and contractually agreed upon by both institutions. Supervision and teaching may take place by directors of medical divisions, program coordinators and/or residents. This particular response equaling nearly three fourths of the respondents indicates low difficulty and, again, substantiates the
observation that the closer the intrinsic professional or medical education activity, the more favorably it is managed and viewed by most directors of medical education.

It was noted that clusters of responses were evident in relation to some functions and evenly distributed across others. In an attempt to explain each director's pattern of responses, their individual response tally was:

1. Numerically coded on a Likert type scale as follows: High responses were assigned the number 3, medium = 2, low = 1, and not applicable = 0.

2. All functions per categorization of Gulick according to this numerical method were totalled and a mean response was calculated.

3. Depending upon the number of functions, a single numerical mean value was assigned for each director's responses for each Gulick category for frequency, importance and difficulty.

4. Numerical responses for each director were then converted back to a single high, medium or low categorization for planning, organizing, staff, directing, coordinating, reporting and budgeting.

5. This procedure resulted in a profile of each director's responses represented by high, medium or low mean responses for each of the seven Gulick categories.

These individual response records were then cross-tabulated and compared between:

1. age group of DMEs
2. years in the position
3. hospital size, numbers of staff physicians
4. specialty of the administrator
5. managerial style
6. role perception of the DME

The cross-tabulations and analyses resulted in a diverse and unpatterned set of data responses. It was
determined, therefore, that the variables thus cross-tabulated did not account for the variances in responses and that some other variable or variables not addressed in this study were responsible for the distribution of responses. These may include hospital climate, individual differences of DMEs, relationships with affiliate institution, administrative control and/or support in the hospital, financial concerns, characteristics of the staff, security of DMEs position and other factors which could be examined in other studies.

**RESPONSES PERCEIVED AS FREQUENT**

The questionnaire administered to the DMEs contained a question regarding their perceptions of the seven categories as to the frequency with which they were performed. Their responses indicate that coordinating, organizing, directing and planning are most frequently performed. By mean responses shown on Table II, the activities of budgeting (41.05%), reporting (32.47%), planning (33.68%), coordinating (31.58%) and directing (29.11%) are the range, respectively, of highly frequent activities. In the area of medium frequency, planning (41.05%), reporting (36.84%), organizing (33.32%) and directing (29.53%) are shown as moderately frequent.

When the functions are addressed in terms of importance, planning (50.53%), budgeting (37.89%), coordinating
(35.95%), directing (34.74%) and organizing (31.58%) are considered highly important. This is a significant observation. The importance of the functions may add weight as to frequency perception of the DMEs as well as explain those functions being cited in terms of difficulty as shown on Table 4.

**Difficulty and Areas of Management**

As Table 4 indicates, directing, coordinating and planning functions emerge as difficult by numbers of responses. The sorting of functions presents the actual frequencies of performance rather than function perceived and are perhaps influenced by their importance and difficulty when addressed broadly or non-specifically as in the demographic survey instrument.

In order to obtain the information regarding tasks perceived as most difficult, the administrators were requested to select three of the functions they had sorted as very difficult. Fifty-five responses were given, one DME selecting one function as difficult. Table 5 presents all responses and Table 4 presents the responses in terms of two variables. These variables are the seven management areas of the POSDCoRB model and the six categories of responsibility of the director of medical education. The management categories used to classify their responsibilities are defined as follows:
I. General Management Activities: activities not specifically relating to a staff activity, budget or continuing, graduate or undergraduate educational activities.

II. General Staff Activities: all activities not specifically relating to general management, budgeting or the areas of continuing medical education, graduate medical education or undergraduate medical education and requiring participatory activity with staff and meetings.

III. General Budget Activities: those activities dealing with budgetary practice on a broad basis, not delegated to specific areas such as continuing medical education, graduate medical education or undergraduate medical education.

IV. Continuing Medical Education: any activities specifically designated by function definition as pertaining to continuing medical education.

V. Graduate Medical Education: any activities defined as pertaining to house staff (residents) and/or direction of residency programs.

VI. Undergraduate Medical Education: any activities pertaining specifically to medical student (clerkship) education.
### TABLE 4

*Distribution of the Three Most Difficult Functions by POSDCoRB Category to Areas of Management*

<table>
<thead>
<tr>
<th>POSDCoRB Category</th>
<th>Plan</th>
<th>Org.</th>
<th>Staff</th>
<th>Dir.</th>
<th>Coord.</th>
<th>Report</th>
<th>Budget</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Management</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>General Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>General Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Graduate Medical Education</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Continuing Medical Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Undergraduate Medical Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td>12</td>
<td>5</td>
<td>10</td>
<td>55</td>
</tr>
</tbody>
</table>

Responses obtained from sorting of most difficult functions are entered to the six areas of management to which they apply. Gulick categories demonstrate POSDCoRB functions' distribution and indicate number of respondents' selection of the most difficult functions.
Each of the functions perceived as most difficult was assigned to one of the categories defined above and entered on Table 4 as to area category. Three areas were deemed most difficult by the largest number of responses. In this table, it is shown that general management activities, with a total of eighteen responses, emerge as the most difficult area with seven planning, three organizing, four directing and four reporting functions selected as difficult. General staffing activities, with a total of fourteen responses, stand as the second area of management most difficult with eight coordinating responses, four directing and one response in each of the classifications of staffing and reporting. In the area of graduate medical education activities, with ten responses, directing with four responses, coordinating with two responses and budgeting with two responses are shown as difficult. Planning and staffing are each represented by one response in each. In continuing medical education, five responses are given, directing with three responses and coordinating and budgeting, each with one response and indicate areas of difficulty. Undergraduate medical education was chosen as difficult with one response with the area of difficulty indicated in coordinating.

Although the distribution indicates that the most difficult areas of management as perceived by this group are general management (18 responses), dealing with the
staff overall (14) and graduate medical education (10), the POSDCoRB response distribution clearly shows that directing (15) and coordinating (12) responses are the specific facets of management found to be most difficult. These functions of directing and coordinating require interaction, authority, and decision-making activity, as well as communicating and mediating skills. Their distribution may be noted as occurring in tandem clusters in general staff, graduate medical and continuing medical education activities, respectively.

POSDCoRB activities found to be difficult of a basically formal, management oriented nature are those found in general management activities and include substantial difficulty as indicated in planning (7), organizing (3), directing (4) and reporting (4). If one examines the general budget category and includes with it the general management area as essentially business functions not involving interaction/relationship activities, the total number of responses of the combined categories would equal 45% of the functions sorted as most difficult. Thus, as the data from this sample indicate, DMEs find the areas of management most difficult to be those which require management skills which are farthest away from the specialty areas of the majority, that of the practice of medicine.
The strong inclination of these professionals to respond in recognition of general areas of difficulty in management indicates a need for administrative, management and educational experience to be introduced as a part of their background or current training. Typically, the curricular demands of the usual medical school curriculum are such that, almost totally, the emphasis is on purely professional, clinically directed patient care, diagnostic work and possibly some research activities. Increasingly, there has been recognition by physicians, either newly emerging as residents or even those who are more senior physicians and practitioners, to have need of such administrative educational background and principles. Such principles have bearing on anyone operating in an institution of moderate to large size, and would apply to a community, teaching hospital or medical school situation. An example of this is the modest but persistent trend for some physicians to pursue studies leading to an MBA or other degrees in addition to their professional education. (See Chapter II) Thus, the planning and coordination activities would appear to be those that involve concepts, principles and abstractions differing from concrete daily activities of a professional medical nature.

Reviewing areas of distribution of difficult function responses, several items stand out as noteworthy in their
frequency of response rate. The single most noted item is coordination in general staff activity. The next two equal in response are planning in the general management area and budgeting in general budget area. Thus coordination, general management planning and budgeting are the three areas regarded as the most difficult to manage indicated by a total of 39 of 55 responses.

By comparison, the areas of continuing medical education and undergraduate medical education are considered less difficult than the others. It is interesting to note that when all responses in Table 4 are reviewed as a generic category, graduate medical education emerges somewhat more difficult than an item such as general budget. It is possible that this may reflect the albeit professional but complex relationships between DMEs, department chairmen, directors of programs, and the complexities of dealing with younger physicians being educated in graduate medical programs in the institution.

**Distribution of Difficult Functions**

Table 5 represents 55 responses by DMEs as to the functions perceived as most difficult and the distribution and enumeration of the 31 functions so addressed. The table describes the function, its number, the number of individuals selecting each function as difficult, and the areas of management to which each applies as well as the
TABLE 5

Distribution of the Three Most Difficult Functions:
POSDCoRB Category, Function Description, Area of Management

<table>
<thead>
<tr>
<th>Function Number and Category</th>
<th>Function Description</th>
<th>Number Responding</th>
<th>Area of Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANNING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Long range planning documents.</td>
<td>4</td>
<td>General Management</td>
</tr>
<tr>
<td>17</td>
<td>Analyze data for annual departmental objectives.</td>
<td>2</td>
<td>General Management</td>
</tr>
<tr>
<td>19</td>
<td>Plan management systems to deal with programs, budgets.</td>
<td>1</td>
<td>General Management</td>
</tr>
<tr>
<td>41</td>
<td>Welfare, morale house staff.</td>
<td>1</td>
<td>Graduate Medical Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>8</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ORGANIZING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Organize programs and accomplishment techniques.</td>
<td>3</td>
<td>General Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>STAFFING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Assist department chairs to recruit house staff.</td>
<td>1</td>
<td>Graduate Medical Education</td>
</tr>
<tr>
<td>31</td>
<td>Recruit staff for educational programs.</td>
<td>1</td>
<td>General Staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DIRECTING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Direct medical education for graduate medical education.</td>
<td>2</td>
<td>Graduate Medical Education</td>
</tr>
<tr>
<td>2</td>
<td>Direct CME activities.</td>
<td>3</td>
<td>Continuing Medical Education</td>
</tr>
<tr>
<td>8</td>
<td>Act on applications for members and staff.</td>
<td>1</td>
<td>General Staff</td>
</tr>
<tr>
<td>20</td>
<td>Management control systems for quality assurance of continuing operations.</td>
<td>2</td>
<td>General Management</td>
</tr>
<tr>
<td>25</td>
<td>Consider complaints, appeals from staff</td>
<td>2</td>
<td>General Staff</td>
</tr>
<tr>
<td>26</td>
<td>Directions for residency program directors.</td>
<td>2</td>
<td>Graduate Medical Education</td>
</tr>
<tr>
<td>28</td>
<td>Review operations for change.</td>
<td>2</td>
<td>General Management</td>
</tr>
<tr>
<td>38</td>
<td>Assure adherence to policy, procedures, rules for programs and staff.</td>
<td>1</td>
<td>General Staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 5 (continued)

Distribution of the Three Most Difficult Functions

<table>
<thead>
<tr>
<th>Function Number and Category</th>
<th>Function Description</th>
<th>Number Responding</th>
<th>Area of Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COORDINATING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Attend meetings as board may require.</td>
<td>1</td>
<td>General Staff</td>
</tr>
<tr>
<td>4</td>
<td>Coordinate activities for graduate medical education</td>
<td>1</td>
<td>Graduate Medical Education</td>
</tr>
<tr>
<td>5</td>
<td>Coordinate CME for departments.</td>
<td>1</td>
<td>Continuing Medical Ed.</td>
</tr>
<tr>
<td>10</td>
<td>Attend local, national meetings</td>
<td>1</td>
<td>General Staff</td>
</tr>
<tr>
<td>13</td>
<td>Support and participate in research.</td>
<td>3</td>
<td>General Staff</td>
</tr>
<tr>
<td>21</td>
<td>Coordinate activities of full-time directors.</td>
<td>2</td>
<td>General Staff</td>
</tr>
<tr>
<td>27</td>
<td>Liaison between house staff and the administration.</td>
<td>1</td>
<td>Graduate Medical Education</td>
</tr>
<tr>
<td>45</td>
<td>Participate in medical, community activities in promotion for the hospital.</td>
<td>1</td>
<td>General Staff</td>
</tr>
<tr>
<td>46</td>
<td>Coordinate medical education activities for clerkships.</td>
<td>1</td>
<td>Undergraduate Medical Educ.</td>
</tr>
</tbody>
</table>

REPORTING

| 6                            | Prepare annual reports.                                         | 4                | General Management       |
| 40                           | Inform of medical education practices conflicting with by-laws, rules, policy. | 1                | General Staff            |

BUDGETING

| 14                           | Prepare budgets for GME.                                        | 2                | Graduate Medical Education|
| 15                           | Budget preparation for CME.                                     | 1                | Continuing Medical Education|
| 29                           | Prepare medical education budget.                               | 3                | General Budget            |
| 43                           | Obtain funds from outside agencies for medical education activities. | 3                | General Budget            |
| 44                           | Monitor medical programs to maintain within budget.             | 1                | General Budget            |

Total responses: 55
POSDCORB category of each function.

Planning activities considered most difficult drew eight responses, seven of which applied to the area of general management and one to graduate medical education. Among the functions so selected, six involved long range planning and the analysis of data for annual departmental objectives. The planning of management systems to deal with programs and budgets and for the welfare and morale of house staff were also cited as difficult.

One organizing function considered difficult in the area of general management was selected by three individuals and involved the difficulty in organizing programs and methods of accomplishing goals.

Staffing functions in graduate medical education and the securing of house staff and recruiting staff in general staff activities were each selected by one DME as difficult.

Eight directing functions were selected as difficult by fifteen DMEs. Four of these were in the area of general management activities, four in the area of graduate medical education, three in continuing medical education and four in the area of general staff activities. The functions applying to graduate medical education included difficulty in directing medical education itself and the direction of residency program directors. The continuing medical education function considered difficult was the direction of
activities for CME. Staff activities considered difficult included acting on applications for members and staff, consideration of appeals and complaints from staff, and the acting by DME to assure adherence to policy, procedures, and rules involving staff and their programs, each selected by one DME.

Coordinating activities resulted in twelve responses to nine functions. Eight responses were given in the area of general staff activities, two in graduate medical education, and one each in continuing and undergraduate medical education. Functions selected as most difficult included attending meetings, whether hospital, local or nationally based, support and participation in research, coordination activities of full time directors, and the participation in medical and community activities involved with promotion for the hospital were representative of general staff activities. Graduate medical education coordinating functions selected as difficult were those involving coordinating of activities for graduate medical education and liaison activities between house staff and administrators. The coordination of medical education activities in continuing medical and undergraduate areas were also selected as difficult functions.

Reporting functions in the areas of general management resulted in four responses in the preparation of annual reports perceived as difficult and one in general
staff activities. One respondent selected the informing of individuals in instances of medical educational practices in conflict with by-laws, rules and policy as difficult.

In the area of budgets, ten responses were given for five functions selected as difficult. Seven of these were in the area of general budget and involved the preparation of the general medical education budget, the monitoring of medical programs to assure operation within budgetary guidelines each drawing one response, and the obtaining of funds from outside agencies for medical education activities with three individuals selecting this as difficult. Two responses in the area of graduate medical education involved the function of preparing the graduate medical education budget and one respondent stated that the budget preparation for continuing medical education was difficult.

These fifty-five responses represent the total responses obtained from nineteen DMEs in selecting thirty-one functions as most difficult. The responses obtained, resolution and interpretation of the most difficult tasks as shown on Table 5 are addressed in the following narrative analysis.
Planning

Planning functions chosen as most difficult involved the planning of current and long range medical education documents and the analysis of departmental objectives. General management functions were selected by three DMEs who gave time and limitation of financial resources as causes of difficulty to effectively plan both long and short term documents and, in the process, deal with the analysis of departmental goals and objectives.

Funding for programs of an educational nature is obtained through patient costs for treatment and hospitalization. The DMEs in this sample were concerned regarding reimbursements by government and other agencies including Medicaid and Medicare. The government restrictions in such funding have become more increasingly limited, resulting in shorter patient stay and consequent reduction in monies available for educational and other programs. These concerns were frequently cited by DMEs throughout the study and indicated awareness of such restrictions inhibiting ability to plan and continue programs as they would like them to exist in teaching hospitals. As a result of cutbacks, hospital administrators evaluate and seriously weigh overall institutional objectives in terms
of the mission of the hospital: patient care and continuance of educational programs. Thus, the priority of patient care over educational concerns leads to reduction of monies allocated for programs, particularly those of a long-term nature.

The DMEs in this sample have limited their planning to short term considerations with continual evaluation, re-evaluation and curtailment of new, current and long term considerations. They have recently implemented committees to locate sources of alternate funding to maintain some programs. These committees have been formed in an attempt to utilize physician input into administrative decision making.

Because of the advisory position of the DME, the roles of directors of residency and other programs remain stronger than those of the DME and increase difficulties on the part of the DME in influencing departmental decisions and outcomes.

In one large hospital, administrative control of the medical education budget had been recently questioned by the Medical Education Committee. The Medical Education committee, consisting of departmental chairmen, program directors and with administrative representation, was described as the "guiding force of education in the institution" by the DME. A group of individuals from the committee conducted group interviews to determine the
importance of residency programs departmentally and extracted dominant issues deemed broadly important to all departments in terms of long-term educational planning. With the assistance of educational research staff in the hospital, a questionnaire was prepared relating the importance of residency programs to patient care referrals, the concept of being a medical center without residents, and other issues.

The results of the research were presented in a report to the administration defining the effects and importance of physicians presence, both in patient care and educational programs, and the effects of such activity on hospital finances and long-term plans in education. The physicians have found that such concerned, planned and unified approaches tend to give more authority and credibility to requests, the administration's appreciation and awareness of long-term program and physician commitment in terms of the educational mission of the hospital.

The effectiveness of medical staff organization, whether through new or existing, ad hoc, or medical staff membership, cannot be underestimated. When members of the administration are encouraged or forced to thoughtfully relate and respond to the serious wishes and intentions of medical staff members, there is a greater likelihood that positive results will be forthcoming as compared to comments and complaints of individual medical staff
members offered in an offhand or casual manner.

In a large community medical hospital in the current study, more than one hundred residents representing several major medical specialties are part of the medical programs in the institution. As a cost saving device, a small number of physicians were eliminated from various portions of the program. The results in less than a year were interesting to observe. It was quickly learned through staff, medical, medical education and executive committees and officers of the medical staff, that one of the strong features of the institution (encouraging physicians and their patients to seek its services) was the presence of ample resident physicians to assist in the provision of high quality service to the community. When this fact was made known through the various offices and directors, the hospital administration sought to find means to restore most, if not all, of the physicians whose positions had been eliminated. A physician in the institution, involved in residency programs and serving on several committees, stated that the decision due to the impact of the activity and input of concerned medical members.

This sort of situation serves to demonstrate how fully the educational function has been established in many hospitals. Furthermore, whatever form the educational presence and administration takes, the functions originally ascribed to the DME are present today in the
teaching hospital. In many circumstances, these functions may be shared between a DME and various department chairs, particularly those who are directors of residency education programs. One may say that from a purely administrative outlook, such dual interests may provide an element of healthy competition in the institution. It is equally true that if such activities are excessive in any direction, they may limit the constructive activities of the DME and possibly the department chairs, as well.

Historically, and at the present time, it is often true that even well-educated physicians that are genuinely interested in educational activities beyond their direct professional practice may be limited by time, circumstances and the demands of patient care. However, since medical staffs do have structured, operating organizations in the institution, their legitimate needs or interests may be best presented to the administration by utilizing those organizations for group counsel, as well as documenting their approaches.

In the planning of annual objectives and goals, difficulty was described in terms of DME input regarding formation of objectives because of the advisory position of the director of medical education. Direct recommendations were also found to be difficult because of the autonomy of divisional directors in managing departments. Two DMEs found that in order to have input into depart-
mental decisions, frequent use of suggestions, in the form of memoranda demonstrating their viewpoints and requests for feedback, were successful in bringing DME concerns to the attention of program directors for consideration.

This highlights the importance of communication which may include individual spoken communication, communication by way of memos, or other written instruments and involvement in committee or other meetings. The administrative involvement of the DME in several critical and legitimate activities of the medical staff and the institution at large provide the organizational forum for the DME to present programs, to elicit support of the group and its individuals, and in some cases, to provide the positive atmosphere which may call for the cooperation of an otherwise reluctant participant or supporter of a program, such as an individual departmental or divisional chair might be.

Implementation of new programs or making changes in present programs, though planned at the beginning of the year, was seen as difficult by another director and involved decision making activity in terms of evaluation and priorities for such programs. AIDS issues and programs focusing on encouragement of employee morale, teamwork development and organizational unity were current and notable themes. Implementation of these newer programs decreased or eliminated emphasis on other programs and
reassessment of the value and continuation of programs temporarily de-emphasized. The director in that situation found himself deciding at year's-end on the value of programs to be rescheduled or deleted based on evaluating the overall needs of individuals employed in this institution.

Planning of events, whether short or long term, is essential. When a professionally educated person assumes the position of DME, whether the background of that individual is primarily medical, educational, research oriented or administrative, a period of time is necessary for him to become knowledgeable, comfortable and effective in the role. This fact, coupled with the often rapidly occurring changes and demands of everyday work, may effectively limit long range planning even for several years. While circumstances may militate against it, it is still important for the DME to establish long range goals and objectives for the institution consistent with the realities of the institution and its budget. Realistically, almost anyone would hope to do more than the limits of time and money make possible. Nevertheless, it is better to establish a list of goals and objectives for a three to five year period and modify them as one proceeds, rather than operate on a day-to-day or month-to-month basis.

Thus, budgetary concerns involving funding for programs on a long term or priority basis may restrict
planning though not necessarily active DME and medical staff support for maintenance of such programs. Committee formation based on strong staff unity and participation, research activities and documentation presented to administration may be effective in retention of programs and their rescheduling, and an increased commitment and support by hospital administration to medical staff proposals and requests. Physician involvement for alternative funding sources may also encourage initiative to administration to actively solicit other means of monetary support. There are increasing examples of a variety of joint ventures involving physicians and hospitals. While at this point they relate to patient care activities, in at least some instances, educational and research activities might be supported by outside funding rather than individuals attempting to acquire these resources alone.

Planning for the general welfare and morale of house staff was demonstrated, in one case, to be difficult for an institution with involvement in six of its own residency programs and thirteen programs of lesser involvement with the affiliated medical school. The DME stated that individuals at the residency level require considerable individual attention and assistance. This may require one-on-one counseling and realization of the necessity of full DME interest in student, resident and organizational needs and requirements. Thus, a strong
time commitment is also necessary on the part of the
director of medical education.

The DME who addressed the task of interfacing with
students and residents found himself in a demanding role
but did involve himself by allocating the time and energy
to assist those requiring counseling. Situations which
required additional assistance were handled by enlisting
other specialists' professional help. The DME in this
situation stressed the importance of maintaining a favor­
able climate in the institution and was willing to expend
the time and effort in order to do so.

This posture indicates that the DME places the
overall improvement and maintenance of a favorable work
situation and morale of the residents above the difficul­
ties experienced on a personal level. The institution's
strong commitment to education and its members and a
strong personal interest in staff is seen to be the
motivation which encouraged the DME to continue these
difficult activities in order to cope with this particular
situation.

In addition, the expectation of residents to have some
source of counsel or advice is important. The availability
of an interested DME, particularly in a larger institution,
may be an important administrative asset. In such situa­
tions, either the department chair or his designee within
the department, directs the residency program in that
specialty. Often enough, those two individuals may be relatively or very active in part or full time medical practice, and almost certainly have a number of other administrative and research demands on their time. Their administrative and medical responsibilities may restrict the degree of practical assistance available to resident physicians. It is here that the DME, in many circumstances, may be a relatively accessible, interested and willing counselor. The DME may serve as an objective third party in cases where a resident physician may feel that some phases of his residency program may not be as well managed as they could be. Factors may include work load, time devoted to learning and teaching time, on-call schedule, or other matters of serious importance to the physician in specialty training. It is in this situation of resident concern and assistance that DMEs may render invaluable and far reaching assistance.

Development of management systems to deal with programs and budgets was also seen as a difficult planning function because the control of the budget is in the hands of the administration. In one hospital, a medical committee was formed to initiate and utilize physician controlled management systems for the budget. Credibility of committee members was enhanced by thorough research, specific areas of assessment of physician worth, and interest, concern and knowledge regarding budgetary
allocation and management. The product of the committee research demonstrated a measure of physician thoroughness and expertise to the administration. The committee felt that this was an important step in acquiring the preliminary establishment of credibility and value of organized physician input into budgetary issues.

It seems evident that the above situation serves as yet another example of the value of working to accomplish goals through an organizational structure. Typically, busy physicians are organized in the care of their patients, and sometimes, if not often, are not attuned to the extensive and intensive level of organization of the institution. As a result, they may feel left out, neglected, not consulted and not involved in significant decision making. To the extent that they can participate even to a modest degree in a medical staff organization, their opportunities for input, contributions and satisfaction are certainly more likely to be enhanced.

Organizing

The organization of program procedures and methods to accomplish goals were seen as difficult by three institution's DMEs. Two noted that the difficulty involved determination of and evaluation of needs for those involved in programs. In one of those institutions, the length of resident training time from the affiliate
medical institution required evaluations of students and residents for one month of rotation service. By frequent dialogue with the medical school, the DME extended the time to a two month period, resulting in additional time for director evaluation as well as student feedback. Monthly assessments by resident and attending physicians, as well as increased personal interviews and feedback systems, assisted in producing a more efficient and reliable method of evaluation.

Additional and frequent contacts were also a part of the continued evaluation procedure and were obtained one or more years after residents had left the training institution. This was helpful in implementing and reforming procedures in their current and future programs.

Organization of program procedures was also found to be difficult because of the development and preparation of needs assessments and in the selection and development of employee programs. Instruments were prepared and utilized and the DME's decision and judgment, based on compromise on across-the-board benefits to the greatest number were utilized in the preparation of future programs.

The various considerations just discussed indicate the value of the presence of the DME. A too brief service rotation, formats and methods of evaluation, and organization of programs are more likely to be enhanced by the presence of an involved and interested director of medical
education. In the absence of this individual, the above concerns are less likely to be addressed in a timely fashion in the busy division setting where the concerns of patient care tend to defer other considerations.

Another DME found that the organization of procedures and methods to accomplish goals were again linked with money and logistics. Considerable numbers of students and the funding linked to the cost of medical care limited the DME's ability to realistically manage such programs. In order to resolve the difficulty, he was forced to devise and utilize "creative ways" to deal with those difficulties and encourage involvement and assistance of faculty members to satisfactorily organize such procedures.

Just as in situations involving residents and their programs, similar features of the above focus on the additional contribution to be made by the DME. Medical students might have a poor educational experience or lose the value of a period of time spent in the institution were it not for the special, creative efforts of the DME. Often enough, what the DME perceives as troublesome or a difficult activity to deal with, may well be the very thing that, through his efforts, makes a significant contribution to the student, the program and the effectiveness of the hospital as a teaching institution.
**Staffing**

Staffing functions in two institutions considered difficult included those functions involving recruitment of residents for hospital residency programs and recruitment for medical education programs of students and residents. This latter activity related to the three levels of medical education responsibility.

Residents were selected partially based on an interview by representatives of the institution's medical education programs. This is typically done by department chairpersons in interview sessions requiring considerable time because of the sheer numbers of applicants. Individual interview time, however, may be brief per prospective resident and may be less than sufficient for both the resident and the director evaluation.

An effective method to deal with the interviewing process was accomplished by the implementation of a large committee approach. Individual interviewing by physicians and the Ed.D. coordinator was structured so that each interviewer accepted responsibility for evaluation and focus on one criterion area. The distributed evaluation was then similarly reviewed with all appraisals included and resulted in a fuller evaluative technique which approached the prospective resident from several dimensions and requirements of the program.
Residents of the staff were also utilized to participate in promotional activities. The DME prepared attractive brochures for prospective residents as well as invitations to wives and families in a number of hospital visits and social activities. These techniques were used in order to familiarize prospective residents and their families with the hospital's programs and enhance their perception of the institution, meanwhile promoting it as desirable for training and affiliation. Again, the presence of the DME and an active educational office may substantially contribute to obtaining high quality residents and physicians for educational programs.

Recruitment for medical education programs of students, residents and medical staff was described as difficult because it involved the constant awareness of and necessity to maintain a level of excellence in programs, knowledge of current literature, statistics and information regarding other institutions and current trends in medicine. The underlying issue in this regard is the maintenance of an image of excellence by institutions. Time demands in his work, and the realization that it would require an active, creative awareness and mode, made this activity difficult for one DME. However, through participation in the educational council, the forum for all levels of education, considerable group interest, stimulation and cooperation was acquired. The
product of committee work on this council stimulated increased liaison reporting and promotional activities with the affiliated medical school and were effective in attracting new staff to the hospital.

This particular situation emphasizes the leadership component which, when exercised through committee work, may encourage group support necessary for initiation and success of any number of projects or programs.

Another consideration in this regard is that relationships with university medical schools can be typically complex and demanding. These institutions tend to be quite large and have substantial requirements for any hospital participating in their programs. Understandably, the medical schools must provide broad and particular curricular specifics so that the hospitals are acceptable to reviewing bodies. These institutions must strive for uniformity in curricular offerings and while these may be complex at the university level, become increasingly so when one or more independent but affiliated institutions participate in their programs. In these circumstances, the DME may be challenged in a variety of tasks including some comparable to registrar, department chair or even an associate dean. Ordinarily, these situations are governed by mutually agreeable contractual arrangements so that members of the senior hospital administration and legal counsel will be involved with associated deans of the
school itself. Such activities are far removed from the professionally educated physician making hospital rounds, seeing patients in a clinic or office, or for that matter in teaching a medical school class in a medical school subject.

**Directing**

Fifteen DMEs found directing functions difficult. Directing medical education for graduate medical education and continuing medical education brought varied responses. To effectively direct graduate medical education activities, the preparation of a valid evaluation instrument addressing skills acquired and/or utilized in graduate medical education programs was developed by a DME. The physician, one of two with Ph.D. degrees, prepared an instrument which measured cognitive, non-cognitive and procedural skills of program participants. With this instrument, he was able to utilize a standard procedure for direction and evaluation of programs in the institution. As this procedure was increasingly and successfully utilized, more responsibility for program direction was decentralized to department chairs, resulting in individual members of departments taking responsibility for some of the DMEs activities.

While this particular physician may have been able to accomplish this goal with medical education experience
exclusively, one may be inclined to conclude that his graduate education, and educationally oriented insights associated with it, enabled him to more constructively work toward the development of this evaluation procedure.

In one of the largest institutions in this sample, directing department chairs was seen as difficult because of the advisory position of the DME regarding departmental directions, decisions and responsibilities. Such departmental autonomy supercedes management by DMEs and impinges on their decision making ability since each department may operate as an independent, self-managing entity. The DME in this institution related that he preferred to leave departmental control as it stood, recognize their autonomy and only in matters of rule conflict, regulations or policy was he able to instruct or advise.

This situation reflects similar observations set forth by Etzioni who noted the conflict between professional authority and administrative power. He discussed the autonomy allowed professionals in order to carry out their professional work. The DME, a physician, finds himself in conflict with other physicians who acquire

such autonomy in their domain of medical education management, and in so doing, allow conflictual situations with their fellow professionals. Etzioni states that the "...ultimate justification of an administrative act, however, is that it is in line with the organization's rules and regulations and that it has been approved — directly — or by implication — by a superior rank." 150

The DME thus may find himself advising and directing in situations in conflict with organizational rules and regulations and forced to limit his own professional or administrative opinions that impinge on divisional areas.

Continuing medical education activities direction in two institutions were found to be difficult because of lack of interest in such programs and, consequently, resulting in a lack of commitment and support by physicians in CME activities. In those institutions, committees were formed by DMEs to address needs evaluations for CME programs and appointment of department chairs as key figures on those committees. As a result of this group effort, and with departmental representation for program development and needs assessments, greater satisfaction in attracting physician participation was realized.

CME accreditation relies on approved programs for

150 Ibid., p. 29.
relicensure in Illinois and other states. Continuing medical education credit is distinguished by two types of program activity which are approved for credit. Category I credit includes carefully planned educational programs whose approval requires detailed itemization of program structure according to state and AMA guidelines. These essentials include statements of objectives, means to accomplish objectives, evaluation methods and needs addressed by programs. Previously, a given number of hours to be acquired over a two or three year period were required in Category I for relicensure, the remaining hours accepted and applied to Category II. Category II credit would include more informal methods of learning such as participation in meetings, research activities and other less structured and independent means of acquiring medically related learning experiences. This process of itemizing and describing programs for Category I credit as to hours has currently been modified somewhat. Physicians in this sample, however, are continuing to maintain structured programs based on sound, exact educational bases because of future indications of reinstatement of specific Category I requirements. They feel, in majority, that the procedure required for documentation is tedious and more than necessary. This seems to indicate that they feel that their level of commitment and professional skill presume the excellence of such programs, their structure
and implementation, and should not require such detailed documentation.

While many DMEs may regard the details of establishment, complying with and recording specific aspects of CME and its accrediting process, in its own way, this is indicative of newer and more detailed requirements of health care and medical practice. Physicians are educated as independent professionals and, for the most part, their primary concern is patient care. They tend to view other related activities as distractions. Nevertheless, increasing requirements to have physicians document their activities for admission, detailed aspects of diagnosis, utilization, risk management and professional review organization committees, as well as requirements by Medicare and Medicaid, insurance companies, etc. have all served to make medical practice more complicated over the past 10-15 years. The ability of the professional to manage these details is important and the administrative demands placed on the DME are yet another manifestation of this detail.

The function of acting on applications of new staff for review of change of category was chosen as difficult because of implications for future liability issues. Individuals who are refused participation in programs or removed from programs may elect to sue the institution for damages. To deal with this, DMEs have become increasingly
aware of the due process procedures necessary to avoid legal suits and rely frequently on legal counsel that is provided by the hospital.

Actually, due process has become much more important throughout the hospital as an institution. Its details and demands are sought to be carefully adhered to by personnel departments in hiring, affecting residents and doctors themselves. Similarly, procedural matters involving relationships of new members of the hospital staff, residents and attending physicians are carefully followed. Failure to adhere to these procedures may result in awkward embarrassments to the institutions and incur legal suits. The availability to and use of legal counsel has become an important resource and has been so acknowledged by DMEs interviewed in this sample.

Directing management control and information systems to assess for continuing operations was addressed in terms of software systems at an institution classified as large. In this institution, difficulty was described as "troublesome," involving the changes to new software systems and resulting in current department chairs operating without usable computer systems. Out of frustration, physicians purchased their own desktop computers to deal with the lack of institutional hardware. The DME responding to this function discussed the computer shortage in terms of directing of management systems by acquiring evaluations
and feedback from all other departments. This was accomplished by strong and frequent committee participation, particularly executive committee work, and circulation of multiple division reports. In this manner, the DME was able to manage and plan ahead efficiently.

The collection, interpretation, evaluation, collation, and reporting of data to peers, colleagues, and superiors is essential. While it may not be more complicated than circumstances require, the receipt on a regular basis of reports is important. For the DME, some means of periodic reports from department chairs, directors of residency programs (if separate persons) and special or technical education programs in an institution, are crucial. Frequently, the DME may assist himself in this regard if a specially prepared form or format is provided (to those from whom reports are expected within time limits for submission of reports) and frequent memoranda are utilized.

Both respondents discussed the administration of directions to directors of medical education department chairs to assure quality of residency programs. They stated that the independence of chairs and autonomy of their positions required the DME to carefully avoid conflictual issues unless they infringed upon hospital policy. Directed efforts to establish rapport and non-threatening relationships with each department enabled
them to have more input into decisions affecting departmental decisions and smoother working relationships. They also realized more readily accepted personal suggestions regarding program maintenance and/or improvement. It was noted by the researcher that eight of the sample members, because of longevity in the institution, senior age and experience, as well as additional authority as department chair, found the variables mentioned beneficial to their role as DME.

Reviewing department operations and approving changes in goals and objectives were found to be difficult because of the diversity and numbers of personalities involved. Other difficulties were present by virtue of division independence in management and operation of individual programs. Financial and governmental constraints also influenced changes in priorities that eventually forced changes in goals and program structure. DMEs found persuasion and utilization of non-corrective approaches effective in such cases. When DMEs made implications known in terms of "repercussions" of avoiding to DME suggestions, division heads and others were able to adjust and accept changes. One DME referred to this as "coming from around the corner and slipping in the directive from another direction."

Thus, tact, committee participation, persuasion and rapport were methods diligently cultivated in giving non-corrective approaches to resolve difficulties involving
issues in areas outside the jurisdiction or directing power of DMEs.

**Coordinating**

Twelve DME responses were given to nine coordinating functions. Participatory activities on boards and at meetings as required by administration and in local and national committees were found to be difficult because of time commitments which included not only DME activity, but activities as practicing physicians. One respondent acknowledged that the volume of participation on committees as department chair and as DME demanded much of his time. This led to his decision to attend mostly meetings he personally chaired. If specific educational problems were to be addressed, and DME participation and leadership was requested, sessions would be attended. Education council meetings were always attended because the issues discussed directly involved or were of interest to the position of DME.

While it is true that those individuals who are involved in full time administration typically find the demands of numerous meetings to be substantial, it is true that a better sense of "pulse of activity" in an institution may be obtained by attendance of as many meetings as possible. Circumstances will inevitably arise that will prevent someone from attending at least some of the
meetings that they prefer or are obligated to attend. However, if activity is substantially restricted only to those meetings in which the person serves as chairperson, individuals may find themselves unaware of useful or important information which may have been discussed at those meetings. Eventually, in some way, their effectiveness may be diminished and tend to make them a bit more provincial than desired.

Another respondent acknowledged the demands on time in attending many meetings, particularly national meetings, but was, nevertheless, very active in this regard. This director was the youngest member of the sample in the smallest institution, involved in and responsible for the design, presentation and maintenance of the residency program in that institution. His specialty area, one of the less populated specialties, demanded interest and commitment in building local and national participatory support and excellence by personal efforts in building residency and undergraduate medical programs. He was thus involved in assuming a leadership role and securing involvement and cooperation by networking through personal contacts, membership and serious involvement through local and national meetings of a monthly or annual nature. This involved planning and design of week-long educational programs for as many as 2000 attendees. Meetings were organized and promoted by six members of a program
committee with the administrator also dividing his energies as department chair and educational program developer. He was also involved in other activities such as securing speakers, whom he located by networking activities and through local and national committee participation.

While such activities as just cited are extremely demanding, they serve the institution and its programs by further establishing the institution's reputation and serious accomplishments in education and research. Many administrators, who are quite effective and occupied with their own local activities as they must be, might find themselves better administrators and accomplish more in the broad picture, if at least some of their time is directed to selected outside activities. Such activities would further contribute to the enhancement of the reputation of the individual in the professional community whether on a regional or even a national basis.

Coordination of GME, CME and full time director activities were also found to be difficult by four respondents. One found the difficulty in lack of support through the hospital's mission statement regarding both GME and CME. This attitude was prevalent among medical staff as well, and the DME found himself isolated from the group. From the standpoint of attempting to serve as an effective administrator, the DME who finds himself in an
institution that does not have support for graduate or continuing medical education will probably ultimately find himself in a very frustrating situation. Unless by some exceptional circumstance he is able to develop teaching interests in the institution and among the staff, he may continue to find himself isolated and leave the position.

Through attempts to secure committee involvement in coordination and problem solving, some degree of success was achieved. However, because of lack of interest, one DME cited above found himself apart from the staff as a group, resigned himself to the disinterest and lack of cooperation after serious and planned efforts to change attitudes were not realized.

This is certainly an unfortunate circumstance but one that is inevitable. Sometimes, such circumstances may change through dramatic personnel or other changes in administration or sense of direction by the board of trustees. In this particular case, the position of DME was eliminated.

Other respondents stated that unless department chairs were in some measure of jeopardy, and came to the DME for problem resolution, the burden of problem solving was left with individual divisions. In order to cope with the autonomy in such situations, it was evident that DMEs consistently maintained efforts to establish and maintain rapport. As a result, in problem or conflict situations,
suggestions through personal, initiated conferences were more readily heard, considered and accepted.

In some situations, department chairpersons would seek problem resolution with the DMEs's assistance. In those situations, the DME assumed a non-corrective or facilitative posture in dealing with involved individuals. It is interesting to observe here that those DMEs who perceived their role as one of problem solver, all were in the age category of 56 and above, the most senior category of age in the survey. This suggests that the experience and judgement of such individuals who also demonstrates longevity in the institution is useful and sought after in the resolution of problem situations.

Another DME found that participation in medical and community activities for hospital fundraising and development to be difficult. The activities were performed in addition to his work as DME, were time consuming and required extra travel and preparation of presentations to attract patients to the institution. He was able to adapt these activities into his schedule, primarily because he found the actual work of these events both enjoyable and rewarding.

In the liaison between house staff officers and administrative activities, DMEs stated that those activities primarily involved resolution of conflict between residents and medical staff officers. Dialogue in the
hospital was usually of a formal nature, taken at busy times where discussion was inappropriate and uneasy. This situation was resolved by the formation of breakfast club meetings on a monthly, small group basis between directors and residents. This open forum type of activity relaxed the one-on-one, formal position usually encountered and opened the discussion of problematic issues to groups of interested and involved peer groups. This group session activity was and continues to be a meaningful and valuable means to have an active, fraternal, open exchange between residents and directors for problem resolution.

Coordination of medical education activities for clerkships was found to be difficult because of time required for counseling, logistics of dealing with large numbers of diverse populations and the money available to initiate involvement by other professionals in the institution. The director in this situation took it upon himself to be recognized as personally responsible for counseling and managerial activities required by situations as they arose. He stated that he "internalized and interpreted the problems brought to his attention and called individual students and residents in on a regular basis to discuss their problems with them." These counseling and advisory sessions required setting time aside to evaluate situations and the creative planning of procedures to motivate the counselees. Aware of the
success of this activity, and realizing the importance of motivational and institutional support to strengthen morale and promote welfare, the DME contemplated securing another full or part time individual to assist him in this area.

Support and participation in research programs was cited as difficult by three institutions in the sample. Aside from financial restrictions in funding for research, a primary difficulty in doing so is the emphasis on patient care both by physicians and institutions. This results in a conflict of interest: the desire, funds available and ability to perform research contrasted with the hospital mission and focus on patient care. One may think of research as being performed, usually, outside the basic practice of the physician, sometimes requiring the physician to locate and secure his own sources of funding through pharmaceutical and philanthropic funding and grants.

In order to promote research, two of the institutions enlisted DME involvement in fund and grantwriting, and in the formation of advisory committees with the Institutional Review Board to examine and located possible additional sources of monies for this purpose. Yet, another director was successful in securing outside funding because of his own personal interest though recognizing inherent difficulties and constraints. This was
accomplished by making outside contacts as possible sources of funding and actively encouraging and attracting colleagues to participate in his research work.

Admittedly, this is an unusual circumstance and while it has much to recommend it and may be a desirable course of action, realistically, it is a difficult mode to achieve.

Reporting

Preparation of the annual report was found to be difficult by four administrators, primarily because of the large amounts of information to be presented relevant to yearly activities of all departments. Two institutions, finding it "troublesome" rather than difficult, were public institutions. The reasons given were that funding allocations were made well into the year. The delay in reimbursement resulted in "catch-up spending" and reporting. Also mentioned was the difficulty in distributing work procedure records back and forward over a year period. To enable administrative assistants to complete the documentation materials more effectively, one director rephrased the technical terminology for the staff, simplifying it in order to reduce work involved in order to complete reports on time. Another gathered departmental information and input and would simply "bear down" as the deadline approached.
In a private hospital, the educational coordinator found that board review on a quarterly basis and administrative monthly review resulted in diverse appreciation and understanding of reporting procedures. She resolved this difficulty by preparing a scaled down report in outline form with explanations of two or three descriptive sentences. This method presented the pertinent information of the annual report concisely, easy to scan and understand. The DME reported this method to be effective and appreciated a 100% improvement of administrators' and board assimilation and addressing of items thus presented. Thus, the DME, one of two with Ed.D. degrees, brought administrative order with utilization of a simple outline procedure and "down to the essentials" detail.

Correcting and identification to responsible officials of medical education or clinical practices in conflict with by-laws or policies was found to be difficult because of the conflict of interests between practicing staff and academic medical staff (those involved in teaching programs).

Resolution of this type was brought about by scheduling open forum meetings utilizing a fully participative approach which allowed involved and concerned individuals to work out the solution with the DME, president of staff and directors present. Committee input in an open forum approach rather than an individual
directive, was not only useful but essential in conflict resolution.

**Budgeting**

Ten directors selected budgetary functions to be difficult. Areas of budget preparation included preparation of medical education, continuing medical education and graduate medical education budgets. Difficulty in the preparation of GME budgets involved the large financial allocations of the area, as this included all department, program, and resident stipends. A similar response was given for CME budgets. In these institutions, separate financial advice through budgetary counselors provided by the hospital was used. The responsibility of the DME in these cases involved close work with the finance division and monthly reporting, monitoring and evaluation of individual department managers. Thus, the involvement of management and administrative departments and expert counsel facilitated not only budget preparation but allowed monitoring on a monthly basis. DMEs have hospital resources which are available for their use and the particular sample in this study did, in fact, utilize such resources frequently, particularly in legal and financial areas.

Since medical education funding is largely obtained through government reimbursements and reflects severe
current and continuing cutbacks in funding, difficulties arise in persuading administration to continue to support programs and positions across all departments. Monitoring by the hospitals' chief executive officers required DMEs to work closely with finance management system personnel frequently to maintain current budget accuracy. In an instance of proposed cutbacks of programs, DMEs utilized consultation with department heads to justify program retention and the use of well documented and researched approaches, avoiding the deletion and/or curtailment of programs.

Another committee approach was used to secure physician support, involvement and commitment by presenting similarly documented data, demonstrated interest and expertise of doctors to the administration. Through doctor involvement, by committee and group approaches, attention was gained from the administration by physician acquisition of more budgetary management expertise in an effort to have more control of such budgets. Thus, the unified active committee approach, carefully planned and researched, has been found to give physicians more expertise and overall administrative control in matters that directly affect their areas of management and educational activity.

Obtaining funding from outside agencies for development of various aspects of medical education
programs was found to be difficult for three DMEs because of the time and effort required for grantwriting and the awareness of bias in receiving funding for community hospitals as contrasted with the university hospitals. Limited funds are available through pharmaceutical corporations and local foundations and the competitive market is large. This requires active contacts to these supportive institutions and considerable networking to be included in the work of hospital administrators. Department heads as well as DMEs have become involved in these activities in order to prepare documents and justify the needs of the hospitals' teaching program. Their value as administrators, coordinators, and organizers in this regard reflects again the importance and broad range of DME responsibility and assistance in maintaining educational programs.

One aspect that was found to be unpleasant to one DME was his taking the role of public solicitor for the hospital in securing funds. As a matter of principle, such activity was "distasteful" and he commented that such activity encouraged a "beholdenness to pharmaceutical companies" in exchange for support. In spite of his personal feelings, his participation was required by the CEO and was included whenever required, as a part of his DME responsibilities.

Monitoring of all medical programs to assure
operation within budgetary guidelines has become increasingly difficult because of a common denominator mentioned in several previous responses, namely limited funds. One DME has found himself increasingly setting priorities in the selection of programs and projects and/or abandoning programs that he felt would be beneficial to the hospital's educational mission. This is, in part, the dilemma that faces medical education at any level: either additional resources must be forthcoming to public and private institutions or activities and programs will continue to decline.

Summary

As a group, the DMEs in this sample exemplified excellent communication and interaction skills. Their ability to maintain operations and lead committees in educational councils and other meetings, as well as their coordinating and problem resolution skills, made them useful as spokespersons to their respective hospital administrations in several instances of problem resolution.

Difficult situations as described by the sample population indicated a variety of sources. Budgetary allocations and fluctuations seem to be one of the more prominent limitations which hinder planning procedures in terms of medical education programs. Advisory relationships of the DME and department chair require development and cultivation of people skills. These skills may include
frequent, non-threatening or demanding communicating behaviors. Leadership opportunities may be enhanced by frequent and active participation on committees. Organization of physicians by committee approaches to administration using documented research in the area of interest is shown to be effective in acquiring budgetary and program request consideration and involvement.

Cultivation of organizational climate and morale of residents as well as improvement of dialogue exchange between department chairs and others may likewise be achieved by organizing groups and individual conference approaches to deal with problematic areas.

The skills required by DMEs, as demonstrated by this sample, focus on coordination and its component, communication. Some of the difficulties experienced in general management reflect the uncertainties regarding budgetary allocations which, in turn, increase the complexities of long and short term planning.

In the areas of management specially involved with human interaction, directing and coordinating are difficult and reflect the strength of individually managed areas. Resolution of difficulties is found to be effectively dealt with by acceptance of existing relationships and positions while continuing to assist and build rapport in the interest of maintaining institution unity, staff support and improvement of the institution's educational programs.
CHAPTER V

PRESENTATION AND ANALYSIS OF DATA: PART II

Introduction

Chapter V presents the analysis, interpretation and evaluative comments relevant to research question 3: What are the variables associated with the position of the DME?

The qualitative data obtained through the interviewing process regarding resources, limitations, role perceptions, managerial style and accomplishments were analyzed by comparing and contrasting the various responses and drawing inferences from the data. Categories containing responses that were related within groups and independent of other categories were organized and summarized in tabular form following the initial analysis. Tables are utilized in presenting data regarding resources, limitations and accomplishments. Figures are utilized to graphically present by percentage, the resource and limitation responses of DMEs by age and years in the position of DME. Conceptual figures are utilized in the presentation of the data involving managerial styles and role perceptions of the DMEs.

Additional information obtained through the interview
process such as descriptions of the resources, limitations, roles and accomplishments are presented in narrative form with interpretive commentary in the discussions of the tables and figures that have been analyzed.

The data and analyses as presented in this chapter serve to broaden the understanding of the position of the DME. Factors which assist or hinder the director's work, managerial style, role perception and an administrative accomplishment further serve to inform the reader by analysis of the various dimensions of the role of the DME in the teaching hospital's setting. By this carefully developed set of inquiries of variables associated with the DME, the administrative activities of the DMEs in this sample of nineteen institutions is demonstrated.

Variables Associated with the Position of DME

Resources

The directors of medical education were asked to identify the resources they used in performing the responsibilities of their position, describing those perceived as not only helpful but essential to their administrative position. Since responses were not limited, each individual was free to identify as many resources as he deemed representative of his particular situation. A total of 85 responses was obtained, responses averaging 4.5 per DME. These responses were
carefully sorted, compared, resorted and classified by observing key similarities and differences. By this method of comparing and refining data, the responses clustered into three categories.

Category I responses specifically involve attendance and participation in medical and business meetings and on committees within or external to the institution. Also included are active communicating and networking activities which are valuable in establishing or maintaining rapport or in gaining information to facilitate acquisition of broad management insights and information.

Category II responses include personal attributes cited by DMEs which enable them not only to satisfactorily perform their work but enhance their effectiveness as administrators in dealing with administration, peers and staff members.

Category III includes those resources which are available to the DME primarily through the institution itself such as expert assistance in specific areas of management, lay and professional personnel, financial support and other services. These three categories draw together and include the various sources of assistance deemed valuable, helpful and necessary to the DME.
### TABLE 6

Resources Cited by DMEs

<table>
<thead>
<tr>
<th>Category I</th>
<th>Category II</th>
<th>Category III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliations</td>
<td>Personal</td>
<td>Hospital Based</td>
</tr>
<tr>
<td>Committee participation within/external to institution</td>
<td>Rapport with staff</td>
<td>Good administrative staff</td>
</tr>
<tr>
<td>13 (59.1%)</td>
<td>7 (25.9%)</td>
<td>12 (33.3%)</td>
</tr>
<tr>
<td>Rapport with medical school</td>
<td>Longevity at hospital</td>
<td>Good faculty</td>
</tr>
<tr>
<td>3 (13.6%)</td>
<td>5 (18.5%)</td>
<td>8 (22.2%)</td>
</tr>
<tr>
<td>AHME membership</td>
<td>Rapport with CEO</td>
<td>Strong mission statement</td>
</tr>
<tr>
<td>3 (13.6%)</td>
<td>6 (22.2%)</td>
<td>3 (8.3%)</td>
</tr>
<tr>
<td>Networking activities</td>
<td>Persuasive ability</td>
<td>Legal counsel</td>
</tr>
<tr>
<td>3 (13.6%)</td>
<td>3 (11.1%)</td>
<td>3 (8.3%)</td>
</tr>
<tr>
<td>Organizational skills</td>
<td>Scholarly activity</td>
<td>Finance counsel</td>
</tr>
<tr>
<td>2 (7.4%)</td>
<td>3 (11.1%)</td>
<td>3 (8.3%)</td>
</tr>
<tr>
<td>Ed.D. degree</td>
<td>CME counsel</td>
<td></td>
</tr>
<tr>
<td>1 (3.7%)</td>
<td>3 (8.3%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good documentation, instrumentation, computers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 (8.3%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Media services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (2.8%)</td>
<td></td>
</tr>
</tbody>
</table>

Responses per category:

| Category I: 22 | Category II: 27 | Category III: 36 |

Percentage of category responses to total:

| Category I: 25.88% (22 responses) | Category II: 31.76% (27 responses) | Category III: 42.35% (36 responses) |

100.00% (85 responses)
Table 6 presents the resource responses obtained and
the categories to which they belong.

This table also enumerates the resources and
categories by presenting the number of responses and
percentage in each category of responses. Of 85 resources
given, Category III (hospital based resources) contains
36 of the responses, Category II (personal resources)
contains 27 responses and Category I (affiliative
resources) contains 22 responses. Thus of the 85
responses, 42.35% of the responses are in Category III,
31.76% are in Category II, and 25.88% are in Category I.

The largest numbers of responses in the hospital
based resource category are found to be represented by
appreciation of administrative staff 12 (33.3%) and
faculty 8 (22.2%) as resources. Consultants in the
hospital comprise the next most significant number of
hospital based resources and include Finance, CME and
legal consultants represented by 3 (8.3%) for each group
respectively. Total responses for counsel is represented
by 24.9%. The remaining non-personal hospital based
resources are shown by a strong hospital mission
statement 3 (8.3%) and media resources represented by 1
(2.8%) of the responses. The responses in Category III
equal 36.

Category II, personal resources show active communi-
cative personal power and rapport activities to be important, such as rapport with the chief executive officer of the hospital 6 (22.2%), and with the staff 7 (25.9%) as well as persuasive ability of the DME 3 (11.1%). The longevity of the DME in the institution with 5 (18.5%) of the responses in this category, scholarly activity 3 (11.1%) and organizational skills are represented by 2 (7.4%) of the responses.

One DME holding an Ed.D. degree sees his degree as an asset in the position as indicated by 1 (3.7%) response. The 27 responses noted represent the personal resources deemed important with a total of 27 responses.

Category I, affiliative resources, demonstrates a total of 22 responses, with 13 (59.1%) of the responses naming committee participation, whether within or outside of the institution, as important. Affiliations with the medical school(s), membership in the Association for Hospital Medical Education and general networking activities, whether of a local or national nature, are each represented by 3 (13.6%) of the responses and deemed valuable resources. Those responses in Category I total 22 responses.

It is to be noted that whatever stated relationships the DME may feel or have regard for in the institution in which he operates, the hospital based resources are widely recognized by the group as substantial and important.
resources for their effective work. Also, there is a wide recognition and appreciation of good administrative staff as indicated by a positive response by slightly more than 33.3% of responses given. The presence of a good faculty which would be drawn by the members of the medical staff is appreciated by more than 20% as a real, hospital based resource.

Small numbers of responses include a variety of responses such as hospital support through its mission statement, counsel in areas of finance law and continuing medical education, media resources and documentation procedures and equipment.

Personal resources, such as rapport with staff and chief executive officer and the persuasive ability of the DME, are quite important leading the personal resource category. Following the initial cited personal resources, longevity in the hospital is considered to be a valuable personal resource.

Those personal resources within the individual, such as personal rapport, substantially supercede such activities as organizational skills and scholarly activities. Thus in the complex bureaucratic situation, there is considerable reliance on those qualities of a personal nature namely, relating with ones peers or superiors in attempting to accomplish a particular mission.

One DME listed his Ed.D as an asset in the position
and stated that his background enabled him to acquire and develop skills and experiences to deal with the whole management picture "in terms of educational management."

In the category considering affiliations, external or internal, the strong number of responses of nearly 60% indicate the great usefulness as a resource of committee participation both within and outside the institution. These positive responses and reliance on the effectiveness of committee participation and communication further endorse the responses by participants in the interview process in which it was recorded that many difficulties were resolved in committee work. Some participants indicated a reluctance to attend a large number of meetings that were found to be time consuming and are typical of those who have administrative responsibilities. Nevertheless, the large number of respondents speaking in such a supportive way about committee activity would endorse it as useful and even necessary as a significant part of accomplishment of ones work.

Additionally, in this category of resources, emphasis was also placed on working relationships with other areas such as cultivating rapport with medical schools, membership in the professional organization of DMEs, the Association for Hospital Medical Education, and various networking endeavors outside of the institution. All of
the associative activities may be sources that may inform the DME as well as present opportunities to share problems, trends and other information relevant to the area of medical education and its administration.

**Resources by Age and Years in Position**

Figure 1 presents in graphic form the resources previously described and is organized according to age category. In the various age groups, the following percentages are given. In the 26-35 years age group, 50% of the responses apply to Category I, 25% to Category II and 25% to Category III. In the age group 36-45, 27.58% of the responses are in Category I, 31.03% are in Category II, and 41.38% are in Category III. In the 46-55 age group, 28.57% are in Category I, 28.5% are in Category II and 42.8% are in Category III. In the most senior age group, 21.05% of the responses are in Category I, 34.2% are in Category II, and 44.7% are in Category III.

When resources are tabulated by years in position as presented in Figure 2, the following percentages are found. For those in their position 1-5 years, 25% of the responses are in Category I, 31.25% are in Category II, and 43.75% are in Category III. In the years in position category of 6-10 years, 29.41% of the responses are in Category I, 32.35% are in Category II, and 38.24% are in Category III. In the 11-15 years in position category,
FIGURE 1

Resources Cited by DMEs

Percent of Responses per Age Group

Age of Respondents

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-35</td>
<td>(1)</td>
</tr>
<tr>
<td>36-45</td>
<td>(7)</td>
</tr>
<tr>
<td>46-55</td>
<td>(4)</td>
</tr>
<tr>
<td>56-</td>
<td>(7)</td>
</tr>
</tbody>
</table>

Legend:
- III Hospital
- II Personal
- I Committees, Affiliations
FIGURE 2

Resources Cited by DMEs

Percent of Responses Per Years in Position Group

Years in Position of DME

1-5  6-10  11-15  20-

(n)  (6)  (9)  (3)  (1)

I Committees, Affiliations

II Personal

III Hospital
28.57% are in Category I, 28.57% are in Category II, and 42.86% are in Category III. In the most senior group, no resources are cited in Category I, 40% of the responses are in Category II, and 60% are in Category III.

It is to be noted that the first age category of 26-35 has only one member as does the 20 and above years in position category whose only member has held his position for over twenty years. Also to be noted is the absence of a 16-20 years in position category as demonstrated by this sample.

This figure was designed by taking the total number of resource responses given by each DME per age group, totaling the responses, distributing them across the three categories of resources and calculating the percent of responses for each category per age group. This resulted in percentage responses for category I, II and III for each age group. This procedure was also utilized in organizing and calculating data regarding resources as to years in position and in developing a table to graphically demonstrate similar relationships regarding limitations.

The aging process may affect the perceptions of the director of medical education and his perception of resources with which he works.

Initially, the role of personal resources (II) appears to be strong though it declines somewhat over the next two major age intervals in the graph and once again
increases in the eldest age group of 56 and above. In consideration of affiliational resources based on participants' age, this role early on in the younger participant is the lowest category. Appreciation of affiliations (I) is high with the youngest DME, remains steady over the next two decades to the fifties, with some decline to the more senior group. Finally in Category III, the hospital or institution itself is represented in the 25% range but increases over the next two decades to 50% to increase slightly in the senior group.

If we view this graph in terms of the three age categories of 36-45, 46-55 and 56 and above, an interesting pattern is seen to emerge. Throughout, save for the younger members, the hospital resource maintains its prominence as the leading resource and number one position as perceived by DMEs at any age. In the younger group of 36-45, in position 2, personal resources are next listed, with affiliated activities as the lowest resource. When we look at the 46-55 age group, the hospital continues its leadership role and the affiliated activities are perceived equally important and contributory as are the personal attributes. In the third group, namely 56 and above, the hospital is the dominant resource, but interestingly enough, the personal attributes (II) have assumed second position of importance while the affiliated activities are in third position.
It should be noted that in all of these cases, these changes indicate trends and not dramatic changes in percentage of responses.

It may be concluded from a study of Figure 1 by age that the hospital is an important source of many resources and recognized as such, especially by the older individuals in this sample. The strong affiliation resources take a somewhat forward position to personal resources only to drop slightly as the position and person become more senior and experienced.

When the criteria are applied to the relationships of these resources based on years in the position, (see Figure 2) a similar pattern emerges. The hospital stands as the leading resource throughout, and that the personal resources are spread evenly over the first three years in position categories. Personal resources rise in the longest held position. Affiliational resources hold steady. The most senior category did not name the affiliative activities as valuable perhaps because these types of activities are part and parcel of the DMEs work and assumed necessary or routine in the performance of the work at hand.

Limitations
## Table 7

Limitations Cited by DMEs

<table>
<thead>
<tr>
<th>Category I</th>
<th>Category II</th>
<th>Category III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td>Personal</td>
<td>Non-personal, non-interpersonal</td>
</tr>
<tr>
<td>Autonomy of depart-</td>
<td>Advisory position</td>
<td>Financial</td>
</tr>
<tr>
<td>ment chairs</td>
<td>6 (54.55%)</td>
<td>13 (41.93%)</td>
</tr>
<tr>
<td>Powerful administra-</td>
<td>Too many roles, responsibilities</td>
<td>Time</td>
</tr>
<tr>
<td>tion</td>
<td>6 (26.09%)</td>
<td>5 (16.12%)</td>
</tr>
<tr>
<td>Diverse personalities</td>
<td>Ed.D. degree</td>
<td>Litigation concerns</td>
</tr>
<tr>
<td></td>
<td>3 (13.04%)</td>
<td>5 (16.12%)</td>
</tr>
<tr>
<td>Conflict of educational practice with</td>
<td></td>
<td>Manpower shortage</td>
</tr>
<tr>
<td>clinical practice importance</td>
<td></td>
<td>3 (9.68%)</td>
</tr>
<tr>
<td></td>
<td>3 (13.04%)</td>
<td>Logistics</td>
</tr>
<tr>
<td>Complaints</td>
<td></td>
<td>Computer system changes/inadequate systems</td>
</tr>
<tr>
<td></td>
<td>3 (13.04%)</td>
<td>2 (6.45%)</td>
</tr>
</tbody>
</table>

Responses per category

| I : 23 | II : 11 | III : 31 |

Percentage of category responses to total:

- Category I: 35.38% (23 responses)
- Category II: 16.92% (11 responses)
- Category III: 47.69% (31 responses)

Total: 100.00% (65 responses)
Table 7 presents the limitations of DMEs who were asked to name limitations in and of their work. Obstacles or difficulties which, if removed, would enable them to carry out their work more efficiently, happily and effectively were given.

In this group of responses, 65 were given with an average of 3.42 responses per DME. These responses were carefully sorted, compared, resorted and classified until it was found that three categories emerged.

Category I responses include the limitations of an interpersonal nature, those involving interaction with other administrators, peers and/or other staff.

Category II includes personal traits or responsibilities of the DME himself and which are felt to hinder the DME administrative processes performed in the institution.

Category III includes all other limitations of a non-interpersonal or personal nature. This would thus include limitations found in the institution itself and would involve considerations such as time, money, legal and logistical factors.

A total of 65 responses was obtained. Of these, 23 (35.38%) are in Category I, 11 (16.92%) are in Category II, and 31 (47.69%) are in Category III.

Perceived as limitations in terms of power positions, departmental autonomy 8 (34.78%) and administration 6
(26.09%) represent the highest number of responses. Diverse personalities to deal with 3 (13.04%) and conflict of educational and clinical practice importance issues 3 (13.04%) are perceived as limitations as well as the day to day dealing with complaints from staff 3 (13.04%).

Category II responses demonstrate that the personal limitations in the advisory position of the DME 6 (54.55%) and too many roles, responsibilities 4 (36.36%) of the DME are considered limiting. One member of the sample holding the Ed.D. degree 1 (9.09%) perceived having educational rather than professional background limiting.

In Category III, financial 13 (41.93%) constraints are limiting as well as time available to perform the work 5 (16.12%). Litigation concerns 5 (16.12%) are also considered limiting as well as logistics problems and manpower shortage each indicated by 3 (9.68%). Computer system changes or inadequate systems are perceived limiting as indicated by 2 (6.45%) of the responses.

In many respects, limitations may be viewed as operational difficulties of ones role or mission in the institution.

In the first category, interpersonal limitations are considered. It is not surprising that bureaucratic areas of departmental or operational domains come into question. Nearly 35% of the respondents indicate that a limitation of the role and function of the DME is the autonomy of the
departmental chairpersons. Typically, the department chairperson has broad responsibility for the professional activity of the members of the department as well as a large variety of educational, budgetary and staffing considerations which are integrated thoroughly into the department and its role in the institution. Obviously, the DME, who may be attempting to coordinate a variety of other programs, may impinge on departmental authority. Since the authority of the departmental chairperson is so broad and powerful in his area, it renders somewhat more difficult the task of a DME to approach him with suggestions, recommendations or request for participation in some education activity or guidance function. Such suggestions may be perceived by the chairperson as someone from "the outside" being presumptuous in telling him to perform his tasks. This notion tends to substantiate the stated value on the part of the various respondents of the necessity and desirability of the cultivation and maintenance of rapport with staff members and peers.

It is possible that the function of the DME and division chairmen may be enhanced or more clearly defined by a position description outlining specific and general areas of responsibility. Relationships based on between individual situations or perceived self images may vary considerably and, at times, a strong departmental chairperson may look upon the DME as an academic
handmaiden to serve his needs at times of perceived interest on his part.

Conversely, the DME may seek to assume overriding authority in areas which are, in fact, legitimately in the province of the department chairman. Thus, again, clearly defined tables of organization, successful interaction through various committees and rapport based in part on a personal relationship may all serve to assist in making the work more satisfying and effective for all individuals involved and in clarifying the parameters of responsibility.

The DMEs also perceive a powerful administration as a limitation to their area of responsibility. This may restrict their influence in the institution, i.e., their relationship with chairs and others that are essential for their work. Finally, in terms of staffing and budget, the administration in the institution may have the ultimate control and further restrict the director's activities.

Responses in the areas of diverse personalities and complaints present a substantial number of responses as to limitations. Expression of conflicting opinions, perceived needs and goals each may contribute an element of limitation or sense of frustration to the DME within the institution. It may, in a broader sense, reflect on the climate in the institution and in that light, an additional comment is forthcoming.
If there is some degree of conflict between the importance of educational and clinical practice, it is important to view the role of the institution. The realities of life indicate that even in large teaching hospitals, medical schools, universities and even smaller institutions, while an educational mission is stated and supported, nevertheless, in terms of budget and related activities, the vast number of funding action almost always pertain to clinical needs existing to serve patients.

Personal limitations are, in an overriding number of situations, perceived by the DME as having to function in an advisory position or having too many roles and/or responsibilities.

The researcher has noted that the nature of the position is multifaceted, involving relationships with a wide number of people, committees and institutions. It happens, all too often, that these individuals have too little authority to initiate policy, respond to policy and carry out various activities. In other words, they tend to view themselves as pulled and strained in many directions and, in the final outcome, find themselves serving only in an advisory capacity. They may be perceived as serving the community in roles of coordination, communication and in attempting to elicit cooperation between parties but, in the final analysis,
have little or no authority in making some things definitively happen.

One respondent indicated feeling some limitation operating in a medical institution with a professional degree in education. In spite of the management and supervisory skills of the individual in the institution, the climate in which he (she) is required to operate with hospital administrators and professional physicians tends to limit his sphere of influence or realization of the full promise that his education and experience may bring him. This individual stated that the M.D. degree would enable her to have more authority to the position.

The category of non-personal and non-interpersonal limitations evoked the largest number of responses from the participants in the interview, namely 47.69% of the responses.

This is a very diverse group, but in spite of that fact, the largest area is the financial limitation in which some 41% expressed perceived limitation in funding. Time 5 (16.12%), litigation concerns 5 (16.12) and manpower concerns in shortages 3 (9.68%) are considered to be other significant non-personal limitations.

Based on the interview process and in terms of the concerns repeatedly expressed in literature in recent years, part of the financial concerns are found to be
not only on institutional or program operation but on the very existence of the position of DME. In a time of increased fiscal constraints, the future of educational activities and the existence of certain education positions in certain hospitals have been a matter of question. Many of the ancillary educational schools which may educate technologists, cytotechnologists, therapists and in some cases, nurses, have been cut back or eliminated in the face of these concerns about costs. Similar activities are, in some situations, even impinging on residency educational programs or other areas of medical education. Depending on the requirements, or absence thereof, regarding continuing medical education as to renewal of state licensure, this may also have an impact on the interests of institutions so involved.

Recent legislation has made the requirements for Category I credit more obscure. Previously, relicensure required a defined number of hours to be acquired over a period of time by physicians which were structured according to special guidelines. The latest legislation has a defined number of hour requirements, but the specifics relating to such Category I credit are more vague. The continuing medical education component for relicensure requires careful attention to the development, implementation and promotion of such programs which
the DME assumes as his responsibility. If this structure is no longer required, responsibilities by DMEs may consequently be reduced or eliminated.

Limitations by Age and Years in the Position of DME

Figure 3 presents the graphic representation of the limitations of the directors of medical education by age. Limitations by age category of 26-35 (represented by one DME) demonstrates no limitations in the interpersonal Category I, 33.3% of limitations are ascribed to Category II (personal limitations) and 66.6% are represented by Category III, non-personal, non-interpersonal. In the 36-45 age category, 44.8% of the responses are in Category I, 10.34% are in Category II, and 44.8% are in Category III. In the 46-55 age category, 33.33% of the responses are in Category I, 16.66% are in Category II, and 50% are in Category III. In the most senior group, 28.5% of the responses are in Category I, 23.8% are in Category II, and 47.6% are in Category III.

When the limitations are considered by years in position, (see Figure 4), 28.5% are in Category I, (interpersonal), 19.04% are in Category II (personal) and 52.38% of the responses are in Category III (non-personal, non-interpersonal). In the 6-10 year category, 41.9% are in Category I, 16.12% are in Category II and 41.9% are in Category III. In the 11-15 years in
FIGURE 3

Limitations Cited by DMEs

Percent of Responses per Age Group

Age of Respondents

26-35 (1) 36-45 (7) 46-55 (4) 56- (7)

I Interpersonal
II Personal
III Non-personal, non-interpersonal

(n)
FIGURE 4

Limitations Cited by DMEs

<table>
<thead>
<tr>
<th>Years in Position of DME</th>
<th>I Interpersonal</th>
<th>II Personal</th>
<th>III Non-personal, non-interpersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>(n)</td>
<td>(6)</td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td></td>
<td>(9)</td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td></td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>20-</td>
<td></td>
<td>(1)</td>
<td></td>
</tr>
</tbody>
</table>
position category, 27.27% are in Category I, 18.18% are in Category II and 54.5% are in Category III. In the 20 years or more years in position category with one individual represented, Category I indicates 50% of the responses, none of the responses are in Category II and 50% of the responses are in Category III.

When limitations and resources are considered by age and years in position, similar data are elicited. By age in limitations, as in resources, the non-personal, non-interpersonal category is viewed as dominant throughout. Limitations such as finance, time, concerns about litigation and manpower are viewed by the participants as the leading limitation at any age the respondents happen to be. The second limitation namely interpersonal limitations (I) is shown as the second limitation listed in the 36-45, 46-55 and 56 and over category. Initially interpersonal limitations occur with the younger (36-45) individual and lessen as the person ages. This possibly reflects the rapport and more comfortable approach in dealing with administrators, chairs and staff with the passage of time and measure of success in the operations of the DMEs.

The fact that the personal limitations is shown as the least limiting from ages 36 to 56 and above age group may indicate that those factors are outweighed by the institutional and interpersonal factors and that their
own personal limitations may become somewhat blunted with the passage of time or their increasing age.

In Figure 4, showing limitations by years in position, it may be noted that throughout, limitations are perceived primarily as institutional with interpersonal and personal limitations second and third in rank. The awareness of the institution as limiting may be brought about as the individual, new in his position, is required to learn about his position and conform to the rules and regulations applying to his work in the institution.

During the 6-10 year period, the leading limitation is perceived to be interpersonal relationships. This may be caused by increasing numbers of individuals to deal with both personally and in committee as well as resident interaction. The third position is represented by the personal dimension possibly resulting from adjustments and setting priorities. In the 11-15 years in position category, the strong dominant limitation in excess of 50% is the institution whereas both personal and interpersonal limitations are much lower.

Throughout, as the individual remains longer in the position, his knowledge and skills are increasingly called upon to deal with issues in areas of budget, litigation and within time constraints. He may also be more aware of the implications of these limitations by
experience and is strained to deal with and resolve problematic areas. This is indicated by high concerns mentioned in Category III.

Personal limitations are lowest and contended with throughout all years in position groups. In the longest held position, no specific limitations were cited.

Roles

The directors of medical education were asked to reflect on two roles which they perceived were most characteristic of their activities as DME. In order to have a uniform frame of reference for these individuals, a tabulated list of twelve role titles was presented to the DME from which each interviewee selected two representative roles.

Knezevich's classification of roles was utilized in this study because the roles selected clarify and broaden additional characteristics of DME roles. These roles more fully encompass the parameters of the forty-seven functions, and enhance interpretation of the dimensions of the seven functions of management as postulated by Gulick. Directing activities are further separated into roles of direction setter, decision maker, leader/catalyst and problem manager. The role of coordinator is represented by role titles such as "communicator" and "public relator". Conflict manager activities may be
involved in either categorization. Thus, the Knezevich model is useful in further refinement of Gulick's basic categories of administrative functions, particularly DME activities such as directing and coordinating.

The list was carefully examined and two roles were selected by each DME. The directors then gave a brief description of the ways in which they carried out those roles.

The data from this portion of the interview is presented by description of the patterns that evolved in the DME selection of two roles by display, a narrative of composite descriptions drawn from cumulative responses and their comparisons to Knezevich's description of competencies of each role.

Role Selection

Figure 5 presents the results of the DMEs role selections. Below each circle the predominant role and number of responses to the role are shown. The divisions of the figure represent the second roles selected by DMEs, each segment representing one administrator's selection. The outer ring, thus, represents the primary role all members have selected. In Figure 5 the circle

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151Knezevich, pp. 16-18.
FIGURE 5

Role Perceptions of DMEs*

*Role indicated below each figure represents one of the roles identified. Each section represents a second role selected. Each inner figure section combined with role beneath figure represents two roles selected by each member of the sample.

DMEs N= 19 Roles: N=38
in the upper left (A) illustrates that leader/catalyst was selected by seven DMEs as a role and was combined with organizer in 3 selections, decision maker in 2 and communicator in 2. The circle in the upper right (B) shows that coordinator was selected by 7 DMEs and combined with conflict manager in 3 instances, problem solver in 2, planner and organizer each with one response. In the lower left circle (C) it may be noted that direction setter was selected as a role by three DMEs combined with each as organizer, problem solver and decision maker. The lower right circle (D) demonstrates that conflict resolver was chosen by two DMEs combined with problem solver and decision maker by each of two respondents. Thus, Figure 5 presents the two role selections of each of the 19 participants.

It is apparent that the majority of selections made by the DMEs in this sample felt leadership skills were characteristic of their positions as evidenced by seven leader/catalyst responses and direction setter with three responses. Interaction and mediational skills are indicated by the selection of coordinator by seven individuals and conflict resolver indicated by two responses. These selections also substantiate the fact that DMEs realize and perform a considerable amount of their responsibilities with and among many individuals in the institution, whether they are colleagues or other members of the
institutional staff. This strong interactional activity may consequently reduce or influence the amount of time they may have to perform the purely administrative or business responsibilities in the position and may, in part, be one of the reasons that general management, as demonstrated previously, was found to be a strong area of difficulty.

As shown in Table 4, the common activities that were most difficult in areas of general and staff management, GME and CME are those of Directing and Coordinating and are, in fact, those activities represented by role selection as the major components of the majority of respondents. This indicates that what DMEs perceive as their role (s) and is a frequent activity is also their greatest area of difficulty. The frequency of role perception and performance, in these cases, has not enhanced an easier management of the various areas to which they apply and difficulty may well be attributed to the autonomy of department chairs and the advisory position of the DME. The DMEs in this sample have indicated their perceived roles and may not have the satisfaction of a greater ease in managing and dealing with their peers as a result. This would seem to indicate that a change in approach or a more clearly defined role by the institution to delineate and enforce the parameters of their position is in order. This may create a clearer
role and one that is more on a peer level, perhaps reducing the conflicts and frustrations encountered by many DMEs when involved with individual departments and other staff.

**Composite Role Competencies as Demonstrated by DMEs**

From information acquired through the interview process, each DME's responses by role was organized in such a way as to allow the researcher to describe a narrative portrait of each role. Their responses were sorted and clustered so that roles in the following categories could be described: DME as leader/catalyst, coordinator, decision maker, organizer, communicator, conflict manager, problem solver, planner and direction setter. The following narrative serves to describe their activities in carrying out their perceived roles.

**Leader/Catalyst**

The DMEs who responded that they perceived their roles as leader/catalyst demonstrated a variety of competencies. Frequent active contacts, previously not developed or carried out involving residents trained at the institution, were initiated by the leader to assist in encouraging communication with the training institution. In one speciality area which required promotion and active
stimulation of colleagues for support, the DME tackled the
time-consuming but rewarding task. Active networking in
local and hospital based and national committee activity
were primary means used to stimulate others. Acceptance
of responsibility and desire for leadership was the
primary motivation. Hands-on approaches and involvements
to encourage staff participation were given as the
preferred means to attract followers and interest.

Active involvement on medical education committees
resulting in DME chairmanship by peer election confirmed
another DME's leadership abilities and interest by
utilizing the committee approach to work with and
influence others. Problems with administration regarding
management and distribution of funds for medical education
were resolved by the leader/catalyst DME who organized and
presented data to the administrative board.

Stimulation of staff to call attention to structuring
of CME activities and their importance was accomplished by
frequent communication of various sorts of meetings with
memos, attendance at informative AAMC meetings for current
issues and trends, and by taking strong, positive stances
in decision-making activities for recruitment of
residents. Involvement and active participation on boards
to call attention to the needs of medical education
presented many examples through which DMEs could give
input on critical and general issues. Such active
leadership activity enabled DMEs to execute program planning procedures that upgraded the institution's programs and to gain input from other involved physicians. Realizing that few full-time individuals were employed by the institution to set procedures in motion, the leader DME assumed that responsibility and was assured of his competency in the role by hearing the by-words for his office are "If you want something done, see ...." He found himself frequently called upon by others to further stimulate, assist and encourage staff as well as counsel others in the resolution of problematic situations.

The competencies defined by Knezevich in leadership include leading, motivational, stimulating and influencing dimensions.\textsuperscript{152} The leader/catalyst DME exhibited those behaviors through activities such as networking, hands-on approaches, assuming leadership and involvement on committees. Frequent communication attempted by DMEs also demonstrates and confirms the interest level of the DME and group dynamic approach described by Knezevich as one of the competencies.

\textsuperscript{152} Ibid., pp. 16-18.
Coordinator

Essential to coordinating activities was assisting other speciality departments to work out the complexities of their educational programs. The coordinator provided insights into areas of laboratory work and patient workup programs to staff in order to intermesh clinical and educational activities. Activities to orient new students were a personal responsibility undertaken to contribute to a warm, open, institutional climate. DMEs provided assistance regarding applications for staff and residency matching programs, and increased involvement was activated by the DME with other hospitals' training programs including graduate medical education. Thus, people skills utilized to maintain harmonious and active relationships demonstrated DME knowledge and interest in various aspects of hospitals' training programs.

Responsibility in coordination of all CME programs, symposia and activities in education as well as active liaison activities between departments to promote communication were other traits shown by the DME coordinator.

Plans designed by the DME were presented to groups of staff to promote discussion and revision. Where difficulties occurred between departments in resident rotations, frequent and intense contacts were developed between house staff members and faculty and "rap" sessions
were developed to promote open dialogue. Active efforts to increase individual and group participation was achieved by the DME's involvement, presence, cooperation and persuasion. These activities assisted in the development and improvement of programs and subsequent feedback and evaluation methods.

Coordinator characteristics, as leader/catalyst traits, include active communication through formal and informal methods, supervision and reporting. The liaison activities as well as ready assistance to various departments and individuals by the DME serve to confirm the relationship between activities and competencies defined by the term coordinator. Committee work and efforts to initiate and cultivate rapport further demonstrate coordinator functions. Hands-on approaches in rendering assistance to others involve an element of coordination that may be useful in simultaneously accomplishing supervisory and reporting tasks. The researcher notes that the DME coordinator may well be described with other terms that more clearly define the role such as bridge-builder and facilitator. The DME coordinators defined by these descriptors encourage others' performance within the context and needs of organizational structure and goals.

153Ibid., p. 17.
Organizer

The DMEs who described the role of organizer demonstrated such skills as creative ways to improve clerkship programs even through contending with financial, logistical and time constraints. The improvement strategies required the development of innovative approaches to restructure programs in relation to the organizational teaching requirements of the institution. By encouraging assistance of faculty to lend active interest and involvement to new systems and their implementation required broad understanding of methods and means to set them in motion that could be operational within time, logistical and financial limitations.

"Rap" sessions for residents and alumni contacts were developed by two DMEs. Another DME, viewing the overall operations in the institution, took it upon himself to reorganize the table of organization of the institution and included a structured table for the department of education. To encourage physician interest in scholarly activity, the DME furthermore prepared, administered and evaluated an instrument to determine the amount of scholarly activity generated by the medical faculty. The results of the evaluation plan were published in the hospital newspaper in order to alert staff members to "assets and debits" in the area of scholarly educational activities. He thus also demonstrated his knowledge of
desirable professional activities and organized a means to restructure and/or alert faculty regarding their attitudes and activities.

Another DME, finding a lack of enthusiasm and cooperation by staff (in general) for continuing medical education, organized committees, enlisting department chairpersons and others to participate as leaders on committees. With a commitment to such activities, a measure of satisfaction was gained by physicians and the DME by increased attention to issues related to continuing medical education. The DME described also developed a computerized system for the recording of all CME credits acquired by staff in the institution. The instrument was successfully utilized and is available to other institutions through personal contact with the DME.

Yet another DME took it upon himself to examine areas of education in the institution and budget that were problematic and not operating at top efficiency and efficacy. The problem areas were restructured with alternative methods of operation and involved the participation of medical staff to work on further improvements of current or long standing projects. The restructuring was accomplished as a result of organized agenda prepared by the DME and through serious committee commitment.

Knezevich describes the work of the organizer as involving the restructuring of existing or creation of
new systems within the context of institutional structure and behavior. Competencies particularly descriptive of and exhibited by the organizer/DME include the management of programs within the financial and other constraints and the creation and implementation of plans to bring the staff together on a regular basis to accomplish organizational goals. The creation of a new table of organization demonstrates a most interesting and truly significant competency of the DME. By the restructuring of all levels of the educational/clinical process and its management, the DME presents a broad programs' knowledge of the educational process and accomplishment techniques. Knezevich refers to this competency as "understanding of the process of education." 155

Decision-Maker

The decision-maker DME in a small hospital was solely responsible for structuring graduate programs in his institution and enjoyed taking this responsibility because of an intense interest in his specialty. Program structure was designed and developed by the DME through a lecture series which he also taught. Interested in

154Ibid.

155Ibid.
research, the DME removed, broadened or maintained projects according to the budgetary guidelines established for his area. His decisions, then, were based on his own evaluation and priorities concerning programs and, hence, their maintenance or elimination. Another DME similarly decided the type and content of programs in his area, determined points of emphasis, and the methods for achieving them.

A DME, because of longevity in the institution and familiarity with institutional resources and limitations, was able to work closely with the administration and budget counselors to make decisions in graduate medical educational programs within that framework.

A DME with authority vested in him by his superior stated that a considerable amount of his activity was involved in decision-making. He utilized his own judgement in developing programs for staff in the institution. By creating programs and documentation of success of such programs, he continues to gain commendation and authority from the superior.

Knezevich describes competencies in decision making such as problem solving, use of decision theories and systems analysis. The decision-maker arrives at a

156 Ibid.
point when selection or choice must be made in terms of the institution's goals, resources and limitations. Budgetary considerations, knowledge of educational program needs in the institution, as well as consideration of the current issues and alternative choices are all part of the decision-making scenario.

In the development of programs, one DME stated that his decision-making activity required thorough familiarity with current topics in education as well as prioritization and implementation of those programs. These requirements necessitated action in relation to institutional goals and recognition of employee needs. It is evident that decision-makers require expertise across many levels of management from the organization as a whole to its individual members.

**Communicator**

DMEs who identified themselves as communicators stated that the characteristics of their behavior included consistent and omnipresent contacting activities in the institution among its members. This was accomplished by using honest, open and pleasant individual or committee contacts. Perceptions of the role of communicator were affirmed by their frequent dialogue and discussions with staff. Considered to be equally important was frequent involvement in as many committees as possible. In so
doing, the DME was able to learn about problems or accomplishments by various department persons and utilize the forum to recognize and discuss such issues publicly. Another DME found that frequent dialogue with department chairs on a regular or even spontaneous basis made for better working relationships. Meetings produced opportunities for discussions of current issues and problem areas and to promote rapport.

Active involvement with residents was confirmed and appreciated when resident evaluation forms stated that the DME "was always available, looking out for us." Thus, in problem areas with residents and department chairs, DME input was requested as a result of his "open-door policy." Open dialogue was consistently attempted and was found to facilitate good working relationships.

Knezevich describes interaction activities, within and external to the institution, as competencies of communicators. The above cited committee and interpersonal approaches confirms that the communicators were aware of the importance of such activities and utilized them as part of their responsibility to promote organizational harmony.

157 Ibid.
Conflict Manager

In most conflict situations, DMEs found that the effective approach was based on a common statement: "there are always two sides to a story." The DMEs in this sample were always willing to listen and assist in resolving conflict. Whether the conflict involved department chairs and residents or were among other faculty members, the method of handling the situation was basically uniform. The DME would speak to the involved parties on a one-to-one basis. The DME would act as mediator when parties were brought together. In situations where the conflict was the result of individual behavior, the DME suggested a time frame and special behaviors to reach a resolution. Follow up DME activity, in most cases, found the problem resolved.

Another DME stated that "word gets around of conflict in one area or another and they know they can come to me because I will approach things clinically, diagnostically and humanely." This DME felt that best approach was to "talk things out, one-on-one, hear both sides of the story and bring them together for resolution."

Yet another DME felt that one-on-one approaches and "hallway politics" would assist in resolving many conflictual situations. If the problem was continuous or serious, an ad hoc committee would be formed to assist in "ironing out and resolving the problem."
The overall feeling of the conflict managers was that all individuals should be aware of the importance of a "good climate" and realize that "the organization cannot exist if they do not work together. All conflict situations have to be resolved in terms of what is best for the whole in order to have a happy relationship."

Knezevich refers to competencies in conflict resolution as the ability to recognize sources of conflict as well as mediational skills and strategies. The motivation to avoid and resolve conflict in this sample was demonstrated by the desire to maintain organizational unity and peace. It was evident by the comments made by the DMEs that all of them wanted to maintain a neutral posture, acting as mediator and intent on resolving the difficulties of conflictual situations.

**Problem Solver**

By counseling residents, anticipated problems may be resolved before they become more frequent and bloom into conflictual situations. It is important to realize that all problems are not necessarily conflict situations. The DMEs in this sample displayed a sincere interest in the welfare of residents and cultivated relationships in order

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158Ibid., p. 18.
to create an awareness of DME interest and concern for problems occurring in resident arenas.

One DME acknowledged that his strong mediational skills were useful. These skills may be considered a personal power that could assist in problem resolution for clinical, medical and educational issues arising in the hospital as well as in presentation of area issues to administration. By facilitating preparation of educational programs and procedures, and committee leadership roles, DMEs found themselves frequently called upon to help in many types of problem resolutions as well as in decision-making situations.

DMEs with expertise in educational activity administration and development, committee work, and in addition, holding departmental chair positions, were frequently called upon to assist in problem resolutions in the institution. One of these DMEs stated that "he made it a practice not to invade the lives of others, tried to get to know everyone, and found that these types of activities brought people to him." Another DME tried not to interfere with activities and responsibilities of department chairs unless "I hear about it ... and then I take action. I would never go about looking for problems, but when they come back to me, I meet the crises as they come along as fairly as I can."

Knezevich addresses competencies in problem manager
roles as those associated with the diagnosis (awareness) of the problem and its nature, how to deal with it and devising some sort of management of the problem.\textsuperscript{159}

The overall interest and sincerity of DMEs was evident throughout the acquisition of data, whether quantitative or qualitative. All DMEs seemed to be available to assist staff in any capacity as well as to attempt various strategies to maintain organizational and especially departmental unity. The group, as a whole, cannot be faulted for lacking interest, sincerity, expertise and sound management strategies to enhance the optimum function of the medical education areas.

\textbf{Planner}

The planning for all educational programs, lectures and acquisition of guest lecturers were listed as frequent activities by the planner DME. Such planning requires short and long term perspectives regarding departmental programs in medical education as well as budget considerations. These planning processes conformed to requirements delineated by the reviewing bodies to assure compliance with directives.

\textsuperscript{159}\textit{Ibid.}, p. 18.
After thorough planning with staff input, a plan which succeeded in attracting residents utilizing a group institutional evaluation process was also developed.

Knezevich refers to planning competencies in terms of anticipation, preparation and designing management to deal with previously mentioned guidelines. DMEs who planned on both short and long term bases as well as preparing plans in the framework of the parameters established by institutional guidelines demonstrate the planning skills and activities of the planner DME.

**Direction Setter**

As the reader progresses through the various roles selected by DMEs as perceptions in their positions, it becomes apparent to him that there is an overmeshing and interweaving of roles and competencies. Just as coordination may require communication as an integral part of its actualization, so, too, direction setter, decision-maker and leader/catalyst may draw together identical role competencies.

Direction setters in this sample indicated that in order to do so, they relied on hands-on approaches with their colleagues. Such activities were utilized in areas

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160Ibid., p. 17.
of special interest to the DMEs. By enlisting others in such group projects, enthusiasm and support was acquired. Setting time aside for personal counseling with residents and students was productive in uplifting morale and, in the resolution of problem areas and issues with increased assistance from staff by DME example, the organizational climate in the institution was improved.

Two DMEs who acknowledged an active interest in trends and politically critical issues concentrated on these foci as a basis of discussion. Using their expertise and longevity in these areas, DMEs were able to promote certain programs and to influence administrative decision-making activities in favor of physician preferences in the institution.

In another institution, the DME desiring to increase staff attention and commitment to educational programs, structured the methods by which "the departments could go as far as they wanted in education and I assisted them in this regard." He based his methodology on current functions and previous accomplishments in the area of medical education. This methodology required a rather substantial encouragement in committee activity by which the DME was able to improve staff attitudes towards medical education and its importance in the institution.

Thus the direction setter, in terms of Knezevich's parameters, plans, organizes, sets goals and measures
objectives and incorporates activities of other roles. The critical factor in all of these roles is the observation and acknowledgment that role activities requires competencies and components of other roles.

It is important to remember that most of the competencies truly require a talent and expertise. Expertise or competency could necessarily involve a thorough awareness of current issues, personnel needs, what is required to maintain organizational unity, communication skills and effective strategies to deal with problematic situations, whether they be conflicts, complaints or problems. The awareness of this range of issues requires a broad overview of the organization's purpose and not only the ability but desire to maintain it.

**Primary and Secondary Managerial Styles of DMEs**

In order to draw responses on the managerial style of the sample, the Situational Leadership Model of Hersey and Blanchard was utilized. This model was selected to query the DMEs because it is behavior rather than attitude oriented, indicates how people behave, and serves as a uniform frame of reference and allows a structured basis

161 Hersey and Blanchard, p. 95-103.
to compare and analyze their responses. The model (Figure 6) is partitioned into four frames. Behaviors demonstrated on the vertical dimension indicate relationship behaviors while the horizontal dimension indicates task behaviors. Each quadrant is identified with a behavior that represents a combination of high or low task and high or low relationship behavior. Delegating, participating, selling and telling are the behaviors assigned to the quadrants.

Associated with the Situational Leadership Model, and also addressed by Hersey and Blanchard, are the maturity levels of the followers in terms of competence and confidence of performance. By assessing the maturity level of the followers, the leader may select the appropriate style of leadership in order to influence behavior or induce compliance. Individuals who demonstrate low to low moderate maturity respond to rewards, punishment or sanctions and are influenced by leader power bases of coercion, connection, reward and legitimate power. Thus, in dealing with individuals or followers of low average and low maturity, leaders would be more effective utilizing selling and telling behaviors.

162 Ibid., p. 181-182.
Individuals who have an above average or high maturity regarding their tasks and are capable in accepting responsibility respond to leaders whom they recognize as having expertise, information and referent power bases. Leaders involved with followers of above average or high maturity regarding task responsibility should primarily accomplish their leadership functions through participation and delegation.\(^{163}\)

The researcher described the managerial behaviors of Hersey-Blanchard. The individuals in the sample were then requested to select a primary management style in dealing with the staff. They were then asked to select a secondary or alternate style of behavior. Figure 6 demonstrates the responses of the sample participants regarding their management behaviors.

Of the nineteen members of this sample, fourteen chose participation as the primary style, three chose selling and one each selected delegating and telling. Of the secondary styles chosen, fourteen chose delegating, five chose selling, and no telling or participating responses were selected as secondary categories. The primary styles are represented by the letter A, secondary styles by the letter B.

\(^{163}\)Ibid., p. 184-185.
FIGURE 6

Primary and Secondary Managerial Styles of DMEs:
Relationship and Task Behavior

Managerial Style
A Primary Style  B Secondary Style

Primary Style:
Participate  14  Participate  0
Sell  3  Sell  5
Delegate  1  Delegate  14
Tell  1  Tell  0
n= 19  n= 19
The figure indicates that the fourteen members who selected participating as a management style demonstrate high relationship behavior but are low on emphasizing the task. In ten instances, DMEs delegate responsibility, the low relationship, low task behavior dimension. Four of the individuals who participate as their primary style utilize a selling mode as secondary style in order to influence followers' behaviors. Selling demonstrates a high relationship/high task behavior. Three DMEs utilize selling as a primary behavior and delegating as a secondary behavior. One member utilizes delegating primary and selling as a secondary behavior, while only one individual tells and then delegates.

Individuals who utilize selling as a primary or secondary mode of behavior choose to or are required to sell in order to accomplish their goals. Their followers respond to this high relationship and task emphasis. It was found through subsequent probing questions that the individual who used the telling mode was given the power to act in this high task/low relationship mode by superiors who appreciated and desired that type of behavior.

We may conclude that individuals attribute levels of power to the leader based on their own maturity level in their particular settings or situations. The fact that department chairs have acquired formal, professional
training and the knowledge necessary to manage their departments and programs, infers that they are of a high average or high maturity level in accepting responsibility. The appropriate leader behavior to manage those types of individuals in a most effective manner would be the participatory and delegating modes of behavior. The responses obtained substantiate that the DMEs in this sample do manage by utilizing those styles.

The researcher notes that those individuals who demonstrated selling modes of behavior were found to be those who perceived their roles to be leader/catalyst (5) and coordinator (3). Both of these role categorizations require leadership qualities involving decision-making, organizing and communicating skills.

Roles associated with those directors who indicated they utilized selling managerial style, either as primary or secondary styles, were found to be leader catalyst combined with decision maker, communicator and organizer. Planning, organizing and conflict resolver were other roles presented by DMEs who perceived themselves to also be coordinators and who managed by selling.

**Relationship and Task Behavior**

High relationship behavior is demonstrated by seventeen individuals who chose fourteen participatory and three selling modes of management as their primary style.
Of these, fourteen are high-relationship/low task behavior and three are high relationship, high-task behaviors. Secondary styles of management which are high relationship behaviors are demonstrated by five individuals who selected selling as their management mode. Secondary behaviors of a low relationship/low task nature are shown by fourteen individuals who delegated as their alternate style of management and which is described by the model as low-task/low relationship activity. One individual delegated first and sold as the second mode of management, while one other individual told and delegated.

From the above information, it may be noted that this group of DMEs is primarily people oriented in its behavior. Fourteen individuals participate (73.7%) and three sell (15.8%) as a primary mode of managing while one each (5.26%) either tell or delegate as primary activity. It may be seen from this data that participation, whether on an individual or group/committee basis, is the primary means of management of the sample of DMEs. Of interest is the distribution of secondary styles.

By delegation, the defined task is given to and accepted by the delegatee as his responsibility. This delegation may have occurred as a result of the discussion process. The task is defined and assigned to
another for completion. The discussion may be a committee or individual one-on-one process or, as shown by the sample responses, a selling activity on the part of the DME. The task is then delegated to responsible individuals. In the four instances where participation is followed by secondary behaviors of managerial selling, one may note that managers may exhibit strong leadership communication, skills and direction setting activity. Basic styles, however, indicate a participatory managerial style which includes processes such as definition, discussion and/or persuasion to complete the work at hand. After clarification, work is delegated and responsibility taken by appropriately specified individuals or groups.

Accomplishments

The directors of medical education were requested to describe what they considered to be significant or noteworthy accomplishments which they were able to carry out while in the position of DME. Their responses were coded and analyzed to note similarities of accomplishments by members of the sample.

Table 8 represents the responses and the categories to which they apply. Category I includes those accomplishments or administrative satisfactions of eight DMEs and is represented by accomplishments that improve the quality of medical education programs in their
TABLE 8
Accomplishments of DMEs

<table>
<thead>
<tr>
<th>Category I</th>
<th>Category II</th>
<th>Category III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Program Improvement</td>
<td>Cultivating Relationships</td>
<td>Administrative Negotiations</td>
</tr>
<tr>
<td>Upgrade residency programs</td>
<td>Breakfast &quot;rap&quot; sessions, residents and faculty</td>
<td>Reorganization of medical education department: decentralize</td>
</tr>
<tr>
<td>4 (21.05%)</td>
<td>1 (5.26%)</td>
<td>2 (10.53%)</td>
</tr>
<tr>
<td>Coordinate ambulatory care/patient workup program</td>
<td>Organization of alumni contact network</td>
<td>Persuade administration to retain medical education budget by organizing faculty</td>
</tr>
<tr>
<td>1 (5.26%)</td>
<td>1 (5.26%)</td>
<td>2 (10.52%)</td>
</tr>
<tr>
<td>Continuous involvement in academic medicine: state, local, hospital activities</td>
<td>Organize, lead committees to change attitudes in favor of education</td>
<td>Sold administration on funding symposium</td>
</tr>
<tr>
<td>1 (5.26%)</td>
<td>1 (5.26%)</td>
<td>1 (5.26%)</td>
</tr>
<tr>
<td>Organized educational programs for institution</td>
<td></td>
<td>Used $$ to plan, build library</td>
</tr>
<tr>
<td>2 (10.52%)</td>
<td></td>
<td>1 (5.26%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work with administration to build affiliations with two institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (5.26%)</td>
</tr>
</tbody>
</table>

Responses per category:

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

Positive responses: 18  No response: 1

N = 19
institution. Four of the DMEs stated that by careful planning and organization, utilization of resources and faculty participation and involvement, they were able to improve the quality of residency programs. This was accomplished by developing and utilizing evaluation procedures, securing excellent staff and personal commitments of time and effort on the part of physicians in order to do so. Two DMEs (2) stated that they were instrumental in the development of educational programs which they felt would enhance employee and/or patient performance and participation and would therefore be useful in improving performance. One of these programs was the implementation of a Stop-Smoking Clinic and the other was a program to improve employee morale, efficiency and the organizational unity.

Another DME developed a more efficient procedure for the coordination of ambulatory care patient workup systems to be utilized by residents. One DME felt his accomplishment in the areas of continuous, active and serious involvement in all phases of medical educational activity was significant. This was demonstrated by his selection as leader in areas relevant to improvement and development of medical education programs as well as political affiliations which would impact and possibly improve and correct problematic areas in medical education.
Category II includes those accomplishments which involved the cultivation of relationships and specifically, the development of continuity between individuals. Three responses were given in this category dealing with relationship activities. One DME initiated and recruited assistance from department chairs in developing "rap" sessions for residents. This open-forum approach was and remains a valuable means to promote interchanges regarding everyday residents' concerns as well as dialogue of a general nature in which problematic situations may be effectively dealt with by residents, their peers and department chairpersons.

Another DME was able to establish communication and visits with residents who had acquired their training at the institution. Through letters and a newsletter, a kindling of relationships and contact was made by the DME with residents, most of whom are now practicing physicians in the metropolitan Chicago area and elsewhere. This DME also published a research document which demonstrated the amount of scholarly activity performed by faculty in the way of publications. It was felt that this review alerted faculty to deficiencies and accomplishments and was instrumental in promoting such activity in the institution.

The third DME whose accomplishment was in Category II felt, that by his assertive activity and knowledge of
the importance of serious commitment in medical education, and noting that such feelings were not forthcoming in his institution, utilized the committee approach. He was able to persuade members of the medical staff to participate on the medical education committee and to develop a serious rapport with those members regarding his concerns. Although he was not able to foster a commitment as deep as he had hoped, he felt that their faculty attitudes were more positive as a result of their involvement on committee.

Category III responses were classified in this group because the accomplishments involved use of persuasion in the form of personal communication skills and serious research documentation to accomplish their goals. In this category, seven DMEs described their accomplishments.

Two DMEs stated that they were able to plan and organize a new structure for the medical education department relative to the DME position in their institutions. The functions and responsibilities were assigned to individual departments and in one instance, the position was dissolved. In the other, individual department DME activities were assigned to departmental individuals serving as departmental DMEs. Active DME dialogue in two instances involved negotiations by the DME in order to resolve conflictual issues between the medical staff and administration.
A symposium promoted by another DME was perceived to be a valuable educational activity. The funding for this yearly symposium entailed considerable expense. For example, one year, a prominent heart surgeon was the primary speaker and required substantial funding for the phases of promotion and other costs. Through networking activities with possible funders and by weekly and monthly approaches to administration, the DME attempted to justify the value to the institution of maintaining such symposia. She demonstrated the value to the institution in terms of public relations, income, and marketing and was successful on organizing and presenting the symposium. Thus, with persistence and carefully worked out benefits and projections of profit, the idea was "sold" to administration.

One DME, one of two with Ed.D. degrees, worked with the administration of his hospital in order to initiate a broadening of the institution's educational affiliations to improve nursing education programs. This required knowledge of curricular and contractual responsibilities between institutions as well as the ability of the DME to work with administrations of all the institutions so involved.

A physician-Ph.D. director stated that she was able to accomplish a major project and that it was one she was "happy to pull off." Finding that the library contained
only 1500 square feet of space and that a building subject for demolition might be a possible site for a library, the DME took the following steps. She designed a plan for a learning resource service in the form of a proposal. This included the "building of a large professional library, a closed-circuit kind of arrangement for nursing wards and a TV studio and production area. Also upgraded was the medical illustration media production service." The project required two years of work utilizing the services of engineers and architects. The DME stated that it "fell into place because the (name of the hospital) had money to spend. It became clear to me from the beginning, that if you have a good idea and you can justify it, putting the bits and pieces together such as good cost analysis and time tables, it falls into place."

Such activity further substantiates the importance of awareness of needs in the institution and monies that may be "waiting for a project." It is also important to realize the effects of carefully planned and documented procedures when approaching administration.

In an overall look at the area of accomplishments, the DMEs in this sample, irrespective of their time and activity, gave a variety of eighteen accomplishments. One person indicated no sense of accomplishment. Approximately one third of the respondents cited satisfaction in
improving residency programs, other educational programs, as well as continuous involvement in academic medicine at various levels.

In the area of cultivating relationships, individuals felt they had made contributions in diverse activities such as "rap sessions," organizing alumni contact networks or leading and organizing committees to improve or change attitudes.

In the category of administrative negotiations, decentralization of the position of DME, retention of a medical education budget with organized faculty input into negotiations, and the rebuilding and financing of the institutional library were significant accomplishments. Also included in this category as significant was the development of affiliations with other schools to improve educational programs in the institution.

Understandably, participants highlighted their contributions to the medical education programs in general. It may be noted that the areas of rapport which are viewed with difficulty by many of the participants, were positively responded to by a small number, namely three, who, through various means, cultivated various relationships. It may be concluded that similar efforts on the part of additional members of the group might have served to develop further relationships with the administration and staff. This activity could contribute
further effectiveness and ease in their work than occurred.

The researcher also notes that eight of the group indicated substantive administrative accomplishments in their institutions. These included decentralization of the DME position or retaining a medical education area with its budget, or contributing to symposia maintenance or development, libraries and inter-institutional formal arrangements. Thus, while all may have wanted to accomplish more, there are many notable activities in the medical education, administration or relationship areas that were, in fact, accomplished.

Also of interest is the contribution of four DMEs who felt they were instrumental in the upgrading of residency programs. This may highlight the fact that the relatively small number that accomplished this facet (improving the residency programs) may have been increased had there been a closer working relationship with departmental chairs. Furthermore, it is likely that many of the individual items of accomplishments cited by respondents may not have been accomplished at all without the presence of the position of the DME or the position of the individual who held that position.
Summary - Chapter V

The variables addressed in Chapter V demonstrate the types of resources and limitations that relate to position of the DME in the teaching hospitals, managerial styles, role perceptions and some of the administrative accomplishments achieved by the same participants.

Resources that assist the DME and facilitate his work may be grouped into three categories. Affiliational resources such as meetings, networking activities and participation in a variety of committee activities and attributes DMEs found to be beneficial of a personal nature such as longevity, scholarly activity, rapport and organizational skills are two such categories. The predominant source of assistance to the DMEs in this sample is the institution, itself, from which the DME draws resources such as strong mission statements by the institutions, good faculty and staff, and counseling services in the areas of law, finance and continuing medical education.

Limitations that may impinge on the management of the DME are similarly grouped into categories. Interpersonal limitations may include autonomy of departmental chairpersons, diverse personalities and complaints to be dealt with, administrative control and conflicts of educational practitioners with clinical practitioners in terms of importance of these two areas. Personal limitations
include the advisory position of the individual in the role of DME and limitations regarding the numerous responsibilities and roles required of the position. Non-personal limitations include financial, time and logistics constraints as well as litigation concerns, computer system inadequacies and manpower shortage.

The managerial style of the sample is primarily participative with delegating demonstrated to be the secondary managerial style exhibited by the group.

Two role selections by each DME demonstrates nine predominant roles. Of these, leader/catalyst and coordinator were chosen by seven members of the sample as representative of their perception of their role in the institution. Conflict manager (5), problem solver or manager (4), organizer (5), decision maker (4), direction-setter (3), communicator (2), and planner (1) are other roles selected by DMEs demonstrating two role selections per individual.

In the area of accomplishments, three categories or types of accomplishments were described. Program improvements, whether in the institution itself, or through active involvement in a variety of medical education activities were described by eight DMEs. Accomplishments were also described in the area of cultivating relationships by active initiation of the DME of communication activities in the form of rap sessions and committees and
formal alumni network systems. The third group of administrative accomplishments related to achievements working with and through administration. Accomplishments in this category were realized by reorganization of departments, persuasion by individual or committee methods, and by working closely with administration and other institutions to promote affiliations.
CHAPTER VI

SUMMARY, CONCLUSIONS, RECOMMENDATIONS,

IMPLIEDATIONS FOR FURTHER STUDY

Summary

The purpose of this study was to describe and analyze the role of the Director of Medical Education (or his or her equivalent) in the teaching hospitals in the metropolitan Chicago area. The administrative functions as postulated by Luther Gulick and elaborated upon by others provided the theoretical basis to analyze the director's functions. The study demonstrates that Gulick's acronym of POSDCoRB applies to educational administrators in the sample population used in this study.

The director of medical education is the administrator in the teaching hospital whose responsibilities may include the three levels of medical education. These levels are undergraduate medical education, including responsibilities relating to the education of medical students in the hospital; graduate medical education, involving residents (graduate physicians desirous of specialty training); and the continuing medical education of practicing physicians who require and participate in
educational activities for personal knowledge, advancement or relicensure.

Historically, the position of DME achieved prominence during and after World War II when medical training institutions began to seriously encourage community hospital affiliations as part of their training programs. The director's position was used to coordinate and perform the responsibilities which were essential to establish continuity of goals and functions between institutions.

The research in this study involved nineteen directors. Participant selection was based on their affiliation with the six major medical schools in Chicago. Metropolitan Chicago was identified as the location of the study because of the large concentration of medical education opportunities and physicians in this area of Illinois.

A survey instrument consisting of forty-seven functions of the director of medical education was administered to each director. Interviews were conducted with each DME in order to sort the functions and to clarify areas of difficulty in the performance of certain functions. The interview questions broadened understanding of the responsibilities of the DME and especially his utilization of resources, acknowledgement of limitations, role perceptions, managerial styles and accomplishments.
Four research questions were structured which encompass functions and variables associated with the position of the DME. They are:

1. How does the classification by DMEs by frequency, importance, and difficulty of functions of the DME relate to Gulick's model?
2. How do DMEs define and manage the most difficult functions in terms of the POSDCoRB model?
3. What are the variables associated with the position of the DME?
4. What is the profile of the administrators and institutions in this sample?

Instrumentation and Methodology

The data acquired in this study were both quantitative and qualitative. The survey instrument was prepared by synthesis of position descriptions of DMEs and contained forty-seven functions. These functions were grouped according to the seven categories of Gulick, namely, planning, organizing, staffing, directing, coordinating, reporting and budgeting. Analyses of the quantitative data were made by interpretation of mean, numeric and percentage responses in terms of frequency, importance and difficulty. Specific functions found to be most difficult were further assessed through the information acquired during the interview process.
Causes of the difficulty reported by the participants and possible resolutions to deal with the difficulty were described in narrative form and subsequent interpretive analyses were made. In-depth interview questions were designed and presented by which DMEs were able to describe resources, limitations, role perceptions, managerial styles, and significant accomplishments. Responses were initially analyzed by data reduction, grouped, tabulated and graphed for further analyses.

In the final portion of the interview, a demographic questionnaire was administered which further described the individuals who participated in the study as well as their institutions. Information which was not available in exact numbers from the participants was acquired through the Directory for Graduate Medical Education Programs.

The depth and scope of information gained by the study demonstrates the parameters of responsibility of DMEs in the teaching hospitals in the metropolitan Chicago area and should serve to contribute to current information regarding the responsibilities and position of the director of medical education.
Conclusions

The following conclusions are based on the findings and analyses as reported in Chapters IV and V. The conclusions are addressed in terms of the major research questions of the study. Interpretive comments based on the conclusions are indented and indicated by an asterisk (*).

Research Question 1: How does the classification by DMEs by frequency, importance, and difficulty of functions of the DME relate to Gulick's model?

1. There is a variety and no complete uniformity of responses given by DMEs as to frequency, importance, and difficulty.

2. There are common functions, however, that Directors of Medical Education do perform. Examples of common functions include:

   A) Responsibility for the direction, coordination, monitoring and budget preparation for graduate and continuing medical education.

   B) Assistance is required to department chairman regarding adherence to educational requirements of affiliated medical institutions, licensing bodies and the guidelines for the preparation, recordkeeping and
documentation in the area of continuing medical education.

C) Meeting participation and attendance, liaison activities within and external to the institution, and direction and coordination of undergraduate clerkship educational activities are additional responsibilities of the DME.

D) Research, public relation activities, fund-raising and clinic management activities may be performed by DMEs by preference or by the institution's administration so requiring those activities as DME responsibilities.

3. The frequency with which these functions are performed vary with the institution but do include the seven functions common to administrators as postulated by Gulick.

4. The survey instrument results were in agreement with DME perceptions of high frequency of coordination and planning functions. However, directing and organizing functions were somewhat less frequently performed as shown by actual calculated means.

*DME perception of frequency may be influenced by the importance or difficulty of certain functions and may, consequently, affect DME perception of their actual frequency.
5. DME perceptions of frequency of certain functions may indicate those Gulick functions which are major areas of responsibility.

6. While there is an even distribution of responses regarding frequency and importance of the functions, the DMEs indicated that, in general, the functions are not highly difficult.

*The functions may not be found to be difficult because of the DMEs own capabilities, the support of the staff, and assistance from other institutional resources.

7. DMEs indicate difficulty in the performance of some aspects of their work.

*There are various means to reduce or diminish some of those difficulties. Delegation of activities, characteristic of participatory management, may contribute to the easing of difficulties in the performance of certain functions.

8. The Gulick function that predominates across all categories of frequency, importance and difficulty is planning.

*Planning is the initial function on which all subsequent functions rely and affects programs, attainment of organizational goals and staff responsibilities of administrative and medical personnel.

9. Based on the findings acquired through the interview process, the reductions in funding to medical
education bring attention, importance and a measure of difficulty to the DMEs who are required to adjust long and short-range planning activities.

Research Question 2: How do the DMEs define and manage the most difficult functions in terms of the POSDCoRB model?

1. The largest number of POSDCoRB responses as to difficulty are in the area of General Management.

*Difficulties encountered by DMEs may be partially due to lack of managerial experience, interest, insight, ability or formal training of the administrator.

2. General staff, graduate medical education and continuing medical education areas of management indicate particular Gulick functions as difficult, namely directing and coordinating.

* These functions are particularly demanding in terms of interpersonal activity involvement. The difficulty encountered may result from a need for educational or administrative experience, the decentralization of authority within and between departments, and/or the advisory position of the DME which limits the scope of his authority.

3. Based on the findings, many difficulties may be resolved by working within the operating systems of the organization for group and individual decision-making, by
clearly establishing priorities and demonstrating a willingness to respond to change as the administrative and medical staff of the organization require.

4. DMEs have found needs assessments and evaluation techniques important in the preparation, maintenance, restructuring and assessment of educational programs, and have attended to those important functions in various situations and with various methods and approaches.

5. DMEs have stated that committee meetings and related liaison activities presented further demands and difficulties.

* In spite of that difficulty, these activities are critically important in order to establish and maintain rapport at individual and group levels.

6. The data indicated that a personal, advisory or hands-on approach is more appropriate to the role of the DME rather than an authoritarian one which may be intimidating or non-productive.

7. Based on the data, frequent and regular accumulation of information from department Chairmen and other staff can make report and document preparation less difficult and more efficient.

8. Budgeting is fraught with difficulty because of the variety of procedures utilized in the accumulation, disbursement, and accountability for use of resources. The process of budgeting has become more difficult with
general restrictions of available funds and consequently restructuring of plans during the fiscal year.

*Ongoing difficulties in all areas, thus, may be directly related to budgeting.

Research Question 3: What are the variables associated with the position of the DME?

Resources

1. The DME depends heavily on the institution rather than external means of assistance and support. The institution provides employment, funding and staffing for residents, administrative and physician staffing, continuing medical education activities and undergraduate programs.

2. The DMEs recognize the institution as the major, sustaining resource of their work.

3. The DMEs recognize the existence and importance of various personal, interpersonal, and institutional resources available to assist them in their work.

*An administrator who is not aware of resources may limit his productivity. DMEs recognition of resources may enable them to be more contributory to the needs and mission of the institution and its programs.

Limitations

1. The institution, itself, though a source of a number of resources, also emerged as a contributor to
limitations.

2. DMEs have demonstrated awareness of a number of institutional, personal and interpersonal limitations.

*Limitations in one's work may be defined as difficulties and may be inhibitory in terms of positive planning and execution of the responsibilities of the position of DME.

3. Personal limitations are noted as least limiting by age or years in the position of DME. There are no overriding difficulties associated with the personal categories of limitations.

*The advisory nature of the position in most instances does serve as a built-in limiting factor in spite of the well established nature of the position and its functions.

Roles

1. The roles, as demonstrated by DME selection, seem to be similar roles as shown by other administrators such as those found in schools, banks, government agencies and other professions in accordance with the functions as described by Gulick.

2. DME descriptions of those roles and the competencies required confirm the interpersonal, interactional activity required of and demonstrated by the DMEs in this sample.
3. The roles selected lend further depth particularly to the DMEs' frequent directing and coordinating responsibilities as elucidated by Gulick.

*Leader/catalyst, decision-maker, planner and organizer role selections indicate the directing and leading qualities of the DMEs, while conflict and problem solver and communicator role selections emphasize coordinating activities and competencies of the administrators in the sample.

Management Style

1. Participatory management is the primary style of management of the DMEs in this sample, and delegation is the secondary style selected as most frequent.

*Individuals utilizing these managerial styles devote substantial amounts of time to committee work and working within the institutional structure and infrastructure of the institution.

2. Of the total number of responses given, the majority, almost two-thirds, indicates that the DMEs function in a high relationship type of behavior and one predominantly low on emphasis of task.

*This low emphasis on task indicates that the individuals with whom the DME relates are capable of defining, accepting and delegating the work to be accomplished in terms of the group's expertise, information,
and referent levels of maturity in accepting tasks.

3. The DMEs are people oriented individuals who, by need or interest, manage by participation.

Accomplishments

1. Accomplishments described by the DMEs in this sample encompass areas of improvement in educational programs, in the cultivation of relationships and accomplishing goals through and with the administration and staff.

2. The types of accomplishments, as described by the sample participants, indicate that besides administrative, directing and coordinating activities, they have improved various aspects and relationships in the educational system of the teaching hospital.

3. As a result of their efforts, the DMEs have demonstrated an interest in issues apart from their designated functions.

*The broad range of accomplishments implemented indicates that they may be more productive in the institution than even they may fully appreciate themselves.*
Research Question 4: What is the profile of the administrators and institutions in this sample?

1. There are many titles applying to the individual responsible for the administration of the various levels of medical education in the teaching hospitals. These titles vary with the institution. In many instances, the title of Director of Medical Education is not used to name the administrator who actually performs the functions of that office as addressed in this study.

*One may best ascertain the person performing this role by examining the functions and the responsibility for their execution rather than the title.

2. The findings of the study indicate that the DME is predominantly male and a physician.

*Increased entry of females has not occurred in this particular area of medical administration. As numbers of women have increased in medical school enrollments, the numbers of DMEs who are women, may, likewise, increase. Nevertheless, when candidates for such positions are sought, frequently enough, administrators may find entry into the DME position difficult because the M.D. or Ed.D. is cited as a necessary or desirable requisite.

3. Based upon the findings, the DME enjoys a relatively stable tenure in the office.

*In this sample, persons occupying the position have sufficient time to establish themselves in the work and
familiarize themselves with the institution and its processes.

4. The position of DME is usually occupied by individuals in the early or later stages of their medical careers.

*This would suggest that, to M.D.s, medical practice is more attractive for individuals who are at mid-point in their careers. Individuals in the initial stages of their careers interested in teaching may be attracted to this position as well as individuals at later stages of their careers while reducing their involvement with patient care and private practice. A benefit from enlisting individuals in the later stages is that they may bring more medical and educational experience to the position. However, this may not necessarily reflect concomitant administrative expertise or experience.

5. Medical educational backgrounds of the DMEs in this sample are primarily in general areas of medicine such as Internal Medicine and General Surgery rather than in more specific areas of medicine such as Neurology or Neurosurgery.

*Preference for the position is for those with a broad medical background rather than for those who are formally prepared in administration.

6. The majority of DMEs in this sample are salaried and full-time personnel.
The position is administratively important and a practical need in the institution.

7. The majority of administrators have experience in medical education. Those individuals who are DMEs generally have more practical experiences as administrators rather than being graduates of formal programs in administration.

*This may be due to the fact that there are few or any external accreditation requirements delineated by the institution, its affiliates, or the State requiring formal coursework in administration.

8. Many DMEs experience difficulties in coordinating and directing activities and mobilizing human resources to achieve institutional goals.

*Lack of formal training in administration or business management may contribute to difficulty in those areas. Since DMEs may play a multi-functional role involving teaching, patient care and administration, the position should be considered a demanding one in which it is difficult to establish priorities regarding time and energy.

9. Though the majority of teaching hospitals in the sample are private institutions, teaching hospitals belong to the public sector of ownership as well.

10. Teaching hospitals maintain various types of affiliational relationships with medical schools.
*These affiliations are determined by the opportunities deemed useful and necessary by the mutual needs of the institutions for the training of students, residents and fellows in those teaching hospitals.

11. The hospitals, as a group, offer ample patient numbers and physician staff to serve the medical institutions' needs with teaching and training opportunities.

12. The medical schools in the Chicago area use the facilities and resources of a substantial number of teaching hospitals other than their own hospitals for teaching purposes.

*The use of other hospitals substantiates the value and need for educational experiences outside of medical school institutional organizations.

Recommendations

1. Individuals involved in administrative positions in this area, regardless of specialty, would benefit from administrative, educational, and business management training. Addition of an appropriate course or courses to the medical school curriculum would better prepare physicians for administrative situations, as well as many other areas of medical practice management and their relationships with institutions such as hospitals and medical schools.
2. The responsibilities of the DME should be clearly defined and line authority in specific areas should likewise be clearly stated. In institutions where no tables of organization exist, such tables should be prepared with relationships and responsibilities clearly and specifically indicated.

3. Participation in many committees in medical education, at affiliate institutions and those with board members and the administration, could establish more authority and credibility to the DME. Time commitments to participate on as many committees as possible could be well worth the effort in terms of administrative DME input and authority.

4. Preparation in simple outline form to reduce the complexity of information for annual reports should be utilized in conjunction with full reports. Data for such documents should be frequently and regularly accumulated and reviewed. Such an organized procedure may also reduce the difficulties encountered when preparing the final document.

5. DMEs should ascertain and utilize the resources available to them within and external to the institution. By cultivation of resources, DMEs may reduce the limitations which impinge upon and make difficult certain aspects of their responsibilities.
6. Thorough research and documentation with input from educational specialists as well as the medical staff may assist the medical education department in securing support in the acquisition of general and/or specific need requests. Physicians in the institution should continue to utilize professional assistance in organization of such documents as well.

7. DMEs should involve residents, physicians, program participants, administrative staff and faculty to determine specific needs, feedback and evaluative commentary for programs. Evaluation methods should be carefully structured in order to improve the quality of the educational programs in the teaching hospital.

8. Committees formed of unified, purposeful groups of physicians should also encourage individual and group leadership in dealing with educational and financial issues with the administration. Strategies should likewise be planned by DMEs, faculty and physicians to deal with reduced funding. These strategies should include alternative means to acquire funding to maintain programs deemed important to the educational mission of the hospital.

9. Educational consultants should be utilized by DMEs in the preparation of documents regarding planning, maintaining, or improving the educational programs in the
Educational administrators may find opportunities for administrative and research oriented work in the setting of the teaching hospital.

Implications for Future Study

1. Investigation should be made by surveying a larger group of active DMEs to determine means individuals should cultivate to prepare for entry in the position of DME or other areas of administrative responsibility in teaching hospitals or medical schools.

2. A revised set of functions should be administered to DMEs and administrative personnel responsible to the DME to analyze their responsibilities for possible overlap. This procedure could be useful to more clearly define and distribute activities and responsibilities for those individuals.

3. Replication of this research could be useful in the acquisition of data to determine whether or not similar types of problems found in the metropolitan Chicago area are typical of those found in other institutions. Trends in the evolution of the position may indicate other areas of medical educational administrative opportunities on which administrators may focus.

4. Research should be conducted to determine ratios of physicians and non-physician individuals in the posi-
tion of DME as well as causes of changes, if any, in those ratios. What are possible reasons for hiring an educational administrator rather than a physician for the position and has the position description changed by doing so?

5. A more manageable set of functions should be sorted by asking, "Do you or do you not perform these functions?" The sorting procedure utilized in this study was somewhat cumbersome because of the large number of functions that required sorting into three categories and into four additional groups for each category. Further sorting and interviewing according to difficulty could elicit information helpful to other administrators in similar positions. These data could be formulated into a handbook with guidelines for dealing with problem situations.

6. A study should be conducted regarding the impact of lowered funding on medical education programs and on the responsibilities of the DME in a stratified or random sample of teaching hospitals.

7. Research should be conducted on the impact of state mandates on continuing medical education programs to determine whether or not mandates have altered the manner in which category programs are developed, presented, received, and assessed. Data could be acquired from
participating physicians and program directors.

8. Directors of residency programs should be interviewed in order to determine difficult areas related to educational restructuring and maintenance of programs and their administration. These directors could also be queried regarding their specific needs in programming and requirements for optimal working relationships with DMEs in order to resolve difficult issues. Directors' input could likewise assist in more clearly defining the role of the DME.

9. Some DMEs are not physicians. A comparative study similar to the current one could be made to ascertain differences in responsibilities between those who are and who are not physicians. Comparisons of responsibilities and problematic areas could be analyzed to note similarities and differences, if they exist.

10. Research should be conducted to ascertain which area(s) of medical education utilizes the professional skills and education of the DME and whether focus into specific area of medical education with more authority would be more satisfying to such directors.

11. Further recommendations for study could be structured by the Association for Hospital Medical Education with input on needs, problems and other issues. Further areas for study could be acquired from directors at the AHME Annual Conference.
Concluding Statement

It has been both interesting and contributory to assess, in some detail, the role of a professionally educated person in a responsible administrative position in the teaching hospital. The DME participates in this process using, to various degrees, the classic functions of the administrator as advocated by Gulick.

The directors are aware of and able to define clearly the resources and limitations within their work as well as their positions or roles in the institution. Those that appear to be more satisfied or successful in their work are, in part, those who have demonstrated capability to work within the institution, using its resources rather than strictly relying on their professional health care education. The participatory managerial style utilized by the majority of the sample members indicates the necessary means to work with and resolve issues with the large number of administrative and medical personnel in the institution. The large number of responsibilities required of the position still allows for personal satisfying improvements and accomplishments by nearly all of the DMEs.

There seems little doubt that these professionals would generally gain by some formal education in management principles as a part of their education, preferably
as an integral part of the medical school curriculum. The present study supports the concept that education, including its critically important management functions, has become an accepted and necessary part of the teaching hospital organization. It is no longer present as a visitor casually stopping by briefly to visit a hospitalized friend but has become part of the organization as important, in its own way, as a vice-president for finance or personnel, a chief operating officer or the Board of Trustees. The needs and interests of the teaching hospitals, universities and medical schools and requirements and expectations of organized medicine all suggest that the functions of the Director of Medical Education have become a permanent part of the teaching hospital. Tables of organization, budgets, and several decades of operation indicate the permanent nature of the functions of the position if not the position itself.

The DMEs share similarities with other administrators and it has been appropriate to judge them by administrative criteria that are external to the hospital. The non-physician administrator is limited by not being a physician by possible non-conversance with the field of medicine. Nevertheless, it is equally important that the individual who is a DME be a capable administrator to provide sound leadership, management and coordinating skills to the position.
BIBLIOGRAPHY

Books


Campbell, Roald F., and Gregg, Russell T., eds. Administrative Behavior in Education. New York: Hoynes and Brothers, 1957.


Periodicals


Bennett, John J. "What Lies in the Future for Department Chairpersons?" Educational Record, (Spring 1983), 52-56.


Freymann, John Gordon, M.D. "Whither the Director of Medical Education?" New England Journal of Medicine, 273, no. 23 (December 2, 1965), 1253-1257.


Kroeger, Hilda H., M.D. "What Does the Director of Medical Education Do?" Modern Hospital, (April 1960), 85-87.

Lawrence, Dorothy, Ed.D., and Peoples, Robert J. "Managers, Educators Collaborate for Hospitalwide Educational Programs," Hospital Progress, (September 1982), 36-60.


Miller, George E. "Medical Care: Its Social and Organizational Aspects, the Continuing Education of Physicians," New England Journal of Medicine, 269, no. 1 (August 8, 1963), 295-299.

Miller, George E. "Why Continuing Medical Education," Symposium on Continuing Medical Education, Bulletin of the New York Academy of Medicine, 51, no. 6 (June 1975), 701-706.


Osborne, Charles E., Ed.D. "Assessing Needs for Community Hospital Continuing Medical Education," Medical Care, 20, no. 9 (September 1982), 967-971.


Sandlow, Leslie J., M.D. "DME Profile," AHME News - Association for Hospital Medical Education, 59 (February 1984), 79-90.

Schwartz, William B., M.D., Newhouse, Joseph P., Ph.D., and Williams, Albert P., Ph.D. "Is the Teaching Hospital an Endangered Species?" New England Journal of Medicine, 313, no 3 (July 18, 1985), 157-162.


Spencer, David S. "Contribution of Hospital Management Firms to Quality, Cost-Effective Health Care," Topics in Health Care Financing/Management Contracts, (Summer 1980), 1-9.


Thorpe, James H., M.D., F.A.C.P. "AHME After Three Decades," AHME News - Association for Hospital Medical Education, (September, October, 1986), 1, 2, 4.


Dissertations


APPENDIX A
Composite Functions of the Director of Medical Education

1. Direct medical education activities for GME including evaluation.
2. Direct medical education activities for CME including needs assessments and evaluation.
3. Attend, participate on boards and on committees as the president of the medical staff or chairman of the board of directors may designate.
4. Coordinate medical education activities for GME.
5. Coordinate medical education activities for CME of other departments.
6. Submit annual reports.
7. Manage outpatient department and patient education programs.
8. Act on applications for members of new medical staff, review of staff members or change in category.
9. Develop organizational plans to carry out functions of your position.
10. Participate in local, national committees and board activities.
11. Participate on management committee.
12. Inform medical staff of medical education policies, procedures.
13. Support and participate in research programs.
14. Prepare medical education budgets for GME.
15. Prepare, administer, control medical education budgets for CME.
16. Plan current and long range medical education planning documents.
17. Analyze data and determine department objectives annually.
18. Organize program procedures and accomplishment techniques.
19. Development of management systems to deal with programs, budgets.
20. Direct management control and information systems to assess qualifications and functions for continuing operations.
22. Develop/implement recruiting programs to secure medical staff.
23. Provide reports to administrative authorities of the hospital.

24. Represent staff in all matters of professional standing and conduct.

25. Consider complaints and/or appeals from staff or member applicants.

26. Give directions to directors of medical education to insure quality residency training programs to meet accreditation standards.

27. Act as liaison between house staff officers and administration.

28. Review, evaluate department operations approving changes in goals, priorities and objectives when indicated.


30. Assist department chair to recruit new house staff.

31. Recruit students, house staff, medical staff for educational programs.

32. Give directions to house staff through a variety of teaching methods.

33. Secure guest lecturers for staff functions.

34. Responsibility for audio-visual center, media and/or photography.

35. Control use of auditoria, rooms used for teaching, seminars, lectures and effective use thereof.

36. Report to public and other interests positions descriptive of the institution's medical educational programs and developments relating thereto.

37. Inform members, officers and committees of medical and administrative staffs of information important to discharge responsibilities.

38. Assure adherence of all policies and procedures, rules, regulations having application to medical education programs and participants.

39. Supervise employees assigned directly to office of medical education: supervisory assistance cooperatively with faculty to recipients of medical education.
40. Inform responsible officials of medical education or clinical practices in conflict with medical staff by-laws, rules, policies or procedures.

41. Plan for general welfare and morale of medical house staff and assure fair/equitable treatment to all house staff members.

42. Provide a program of undergraduate education for medical students.

43. Obtain funding from outside agencies for development of various aspects of medical education programs.

44. Monitor all medical programs to assure operation within budgetary guidelines.

45. Participate in medical and community activities to promote fund raising and development for the hospital.

46. Coordinate medical education activities for clerkships.

47. Coordinate education activities through and with sponsoring medical institutions.
INTERVIEW SCHEDULE

1. Now that you have completed the sorting, do you find that there are functions that could be included?

2. Of those items that you chose as very difficult, please select three that are most difficult.
   a. Would you describe the aspects of performing that function that make it difficult?
   b. Any strategies to ease or resolve the difficulty?

3. In your position as DME, what resources do your activities require?
   a. What resources do you cultivate?
   b. What resources enable you to perform your work?

4. Please describe the managerial style with which you are most comfortable. (Interviewer describes Hersey-Blanchard Model)
   a. You may relate that style to peers, students, others.
   b. If you find that there are obstacles that get in the way of that primary style, what is your secondary style?
   c. Is there any particular way that you handle conflict?

5. Please address any two of these roles as especially characteristic of your position. (Interviewer displays list of roles)
   a. Would you describe your position in terms of these roles?
   b. What do you do and how do you carry out the roles?

6. Can you comments, please, on any things that limit you in achieving the goals in your position as director?

7. Can you describe an accomplishment in this position that you felt was a success?
   a. How did you bring the accomplishment about?

8. How did you acquire this position?
APPENDIX C
**DEMOGRAPHIC INFORMATION**

1. What is your job title? 

2. Your age: 25-35 ___ 36-45 ___ 46-55 ___ 56- ___

3. Number of years in this position:
   1-5 yrs. ___ 6-10 yrs. ___ 11-15 ___ 16-20 ___ 21- ___

4. Degrees:
   M.D. ___ D.O. ___ Ed.D. ___ Ph.D. ___ Master ___

5. Employment: DME full time ___ Part time ___
   Paid ___ Voluntary ___

6. Medical Education experience:
   1-5 ___ 6-10 ___ 11-15 ___ 16-20 ___ 21- ___

7. Health Education Experience (not medicine: nursing, public health)
   1-5 ___ 6-10 ___ 11-15 ___ 16-20 ___

8. Education experience (not medicine or health: teaching, administration):
   1-5 ___ 6-10 ___ 11-15 ___ more than 15 years ___

9. This institution has: medical school affiliation
   # residency programs ___ residents per yr ___ clerkships ___
   How many on medical staff? ___

10. Please rank #1, #2, #3 with #1 activity you perform most in the course of a year.
    Plan ___ Organize ___ Staff ___ Direct ___
    Coordinate ___ Report ___ Budget ___

11. What is the size of your medical education budget? ___

12. Funding for the following?
    CME budget ___
    GME budget ___
    UME budget ___
APPENDIX D
ADMINISTRATIVE ROLES*

1. DIRECTION SETTER
2. LEADER/CATALYST
3. PLANNER
4. DECISION MAKER
5. ORGANIZER
6. COORDINATOR
7. COMMUNICATOR
8. CONFLICT MANAGER
9. PROBLEMS MANAGER
10. INSTRUCTIONAL MANAGER
11. RESOURCE MANAGER
12. PUBLIC RELATOR

APPENDIX E
Dear

Your institution is one of the twenty-four Illinois members of the Council of Teaching Hospitals. As such, the Director of Medical Education (or his/her equivalent) is the subject of my Doctoral Dissertation at Loyola University titled: An Analysis of the Functions of the Director of Medical Education in the Teaching Hospital: the Illinois Setting. This purposive sample requires individual contact with each Director involving but thirty minutes of his/her time and herewith request your assistance.

I have received materials from the Association of American Medical Colleges and from COTH for use in my study. It is essential that I receive your assistance in order to complete the work at hand. Identification of your institution or you by name will not be utilized.

I will telephone your office within the next two weeks regarding a time convenient to you for a brief visit.

I would like to thank you at this time for the assistance you may render to this important work.

I remain,

Sincerely,

Elaine Philip Lee
(Mrs. Robert E. Lee)
APPENDIX F
Dear

This letter is written to introduce Elaine Philip Lee, M.Ed., a doctoral candidate in the School of Education at Loyola University of Chicago. Her doctoral dissertation is titled:

"An Analysis of the Functions of the Director of Medical Education in the Teaching Hospital."

Mrs. Lee's academic background is extensive. She completed virtually all coursework toward a master's degree in Anatomy when we were both graduate students. She has had primary and secondary level teaching experience in biology, other science and non-science subjects. Her master's degree in education focused on curriculum development and her doctoral program in the area of administration and supervision has included a series of outstanding courses in school law, school finance, statistics, research methodology and industrial relations.

In the fall of 1985, she served as an administrative intern at Lutheran General Hospital in Park Ridge, Illinois, a major teaching affiliate of the University of Illinois College of Medicine at Chicago. The internship was served in the office of Richard R. Short, Ed.D., Vice-President for Education and Research at Lutheran General Hospital.

Apart from her academic background, she has been active in various charitable fundraising and educational activities involving Loyola University, churches and secondary school. She is widely recognized as an outstanding teacher, an exceptional and energetic organizer and a capable and cooperative administrator.

I share her enthusiasm for the topic she has selected and believe you will also. Her study will involve contacting you, your completion of a survey instrument and possibly, in some cases, an interview. She is optimistic that at least some of the information studied and collated may be published. It should be an interesting contribution to this very special area of medical education.
Her advising professor and director is Melvin P. Heller, Ed.D., Chairman of Educational Leadership and Policy Studies at Loyola University. Michael Bakalis, Ph.D., is Dean of the School of Education. I wish to thank you in advance for your participation in this interesting work.

Sincerely yours,

Robert E. Lee, M.D., Ph.D.
Associate Pathologist
Lutheran General Hospital
Clinical Associate Professor of Pathology
University of Illinois College of Medicine at Chicago
The dissertation submitted by Elaine Philip Lee has been read and approved by the following committee:

Dr. Melvin P. Heller, Director
Professor, Chairperson, Educational Leadership and Policy Studies, Loyola

Dr. Gerald L. Gutek
Professor, Educational Leadership and Policy Studies and History, Loyola

Dr. Steven I. Miller, Professor, Educational Leadership and Policy Studies, Loyola

The final copies have been examined by the director of this dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

March 23, 1988

Date

Director's Signature