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Hospital characteristics and their relationship to the quality of nurses' work climate

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HOSPITAL CHARACTERISTICS AND THEIR RELATIONSHIP

TO THE

QUALITY OF NURSES' WORK CLIMATE

by

Darlene A. Anderson

DISSERTATION

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DEDICATION

This work is lovingly dedicated

In memory of my grandmother

Elizabeth Mary Rosenow

To my uncle

Willard Herman Rosenow

To my friend

Ruth Cordelia Meidwig

Words alone cannot express the debt I owe to each of these very special persons who have helped to make this dissertation possible. Their contributions have come in many different ways and over the course of many years.

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D.A.A.

ABSTRACT

HOSPITAL CHARACTERISTICS AND THEIR RELATIONSHIP

TO THE

QUALITY OF NURSES' WORK CLIMATE

Darlene A. Anderson, R.N., D.N.S.

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1985

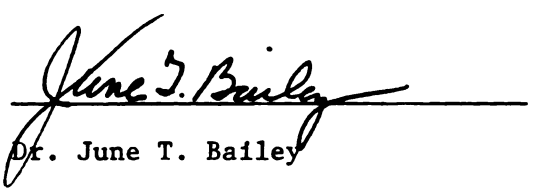
The primary purposes of this study were to: (a) examine the characteristics of six types of contemporary, nonprofit general hospitals; (b) analyze the extent to which environmental conditions and contextual factors determine structural-functional characters of the selected hospitals; (c) explore the relationships between selected hospital characteristics and the quality of nurses' work climate; and (d) develop a descriptive data base for future theoretical and empirical work. The conceptual framework for the study was derived from modern and contingency theories of administration and organizational behavior. A model base on contingency theory was developed to guide the study. The model suggested that the nature and organizing of health care services in acute care hospitals were to a large extent dependent upon external environmental changes and pressures.

Although the overall design of the study was descriptive and cross-sectional in nature, there were elements of comparative design since the study compared six types of acute care, nonprofit general hospitals. In addition, an embedded multiple case study design was used based on the needs to: (a) deal with multiple sources of data; (b) minimize biases of the investigator; (c) increase objectivity; and (d) focus on more than one unit of analysis. Qualitative data from case studies included: observations, records, reports, and interviews with hospital and nursing administrators (n=18). Quantitative data on a selected group of staff nurses (n-544) were obtained through the use of a standardized instrument to measure the nurses' perceptions of the work climate in which they were employed. The quantitative data were derived from a larger research project of which this study was a part (Bailey & Chiriboga, 1984). The data were analyzed using both descriptive and statistical procedures.

The study findings indicated that substantial changes in the structural-functional characteristics have occurred in the study hospitals as a result of changing external environmental conditions. These changes have also influenced the work climate of nurses and subsequently their work attitudes and behaviors.

Darlene A. Anderson

Author



Dr. June T. Bailey

Chair, Dissertation Committee

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THE STUDY PROBLEM

During the last century, hospitals have evolved from primarily charitable refuges for the sick and destitute to one of society's most vital, utilized, and complex organizations. Few other modern, large-scale organizations have a more crucial social function or far-reaching impact upon the nation's human and economic resources. Whether individually or collectively, hospitals ultimately touch the lives of each of us. At the present time, however, knowledge and understanding of the characteristics, functions, and problems confronting hospitals are somewhat limited.

Although numerous investigations of the health care delivery system and its various components have been undertaken, particularly during the 1960s and 1970s, these research efforts have seemingly produced far less then they promised. Weaknesses in current studies of health care delivery systems are summarized by Georgopoulos (1983) as follows:

> It is true that many studies have yielded interesting data. At the same time, they have generated rampant empiricism. All

> too often they were carried out without any theoretical rationale, guiding conceptual framework, or explicit concern for the validity of obtained results beyond the particular research sites. As a consequence, the usefulness and value of the mass results are not easy to discern, and implementation of relevant findings by potential users--researchers as well as practitioners--is both difficult and risky. The numerous, but for the most part, unconnected or poorly interrelated research findings either do not add up or are almost impossible to integrate into a coherent body of knowledge. (p. 11)

Equally problematic is the fact that the economic, social, technological, and regulatory environments in which hospitals endeavor to survive have undergone dramatic changes in recent years. For example, the increasingly turbulent and uncertain environment has forced many hospitals to close, and has also influenced other hospitals to alter major aspects of their traditional character and patterns of organizational functioning. Changing health care organizations do indeed have important implications for the role and responsibilities of practicing nurses and for the quality of their work life. A review of the literature indicates that studies of either the nature or the magnitude of alterations or the differential effects of these changes on nurses' work climate are relatively sparse (McClure, Poulin, Sovie, & Wandelt, 1983; National Commission on Nursing, 1981; Smith & Mitry, 1983; Wandelt, Pierce, & Widdowson, 1981).

The research questions to be addressed in this study include the following:

1. What are the salient characteristics of hospitals?
2. How do these characteristics evolve?
3. How do these characteristics interrelate with each other?

4. How do the characteristics vary among the hospitals studied?
5. How do the questions 1 through 4 relate to the work climate?

Purpose of the Study

The overall purpose of the study is to examine the characteristics of selected, contemporary, non-profit general hospitals. In addition, the study purports to: (a) analyze the extent to which environmental conditions and contextual factors determine structural-functional characters of the selected hospitals, (b) explore the relationships between selected hospital characteristics and the quality of nurses' work climate, and (c) develop descriptive baseline data for future theoretical and empirical work. Case studies of organization-environment relations in six nonprofit general hospitals will be presented. Since nonprofit general hospitals are the core institutional providers of health care in this country (Binder, 1983), these facilities are also the dominant employers of registered nurses in the labor market. Registered nurses are essential to the ongoing operations of hospitals as well as to other health care systems, some of which are emerging.

Nature and Background of the Study

Hospital development in the twentieth century has been characterized by periods of retrogression, progression, and evolution. The evolution has been accomplished in cycles of alternating eras of opportunities and constraints. For example, in 1918 there were 5,323 hospitals in the United States, with a total capacity of 612,251 beds. The depression years reduced bed occupancy rates to a low of 55 percent, making it difficulty if not impossible for many institutions to keep their doors open. During and following World War II, the demands and desire for hospital services became urgent, and federal programs were created to meet the emergency (MacEachern, 1957).

Populations growth, shifts in residential patterns, technology, and rising social expectations contributed to the increased demands for hospital services in the 1940s. The Hospital Survey and Reconstruction (Hill-Burton) Act was passed in 1946 to meet these demands. This program was primarily designed to facilitate the construction and/or expansion and modernization of hospitals in rural and medically underserved areas through the use of federal matching grants, loan guarantees, and interest subsidies. Thus, the Hill-Burton Act marked the entry of the federal government as a major force in the capital formation process for the nation's hospital industry (Barrett, 1980; Goldsmith, 1981b). During the thirty year period ending in 1980, Hill-Burton grants and other federal loan and insurance programs contributed over $26.3 billion (approximately 73 percent) of the total

expenditures for the construction and renovation of hospital facilities. The growth of the hospital industry over the past 62 years is presented in Table 1.

Table 1.

Comparison of the Number of Hospitals and Bed Capacity (1918-1980)

Year	Number of Hospitals	Number of Beds
1918	5,323	612,251
1945	7,015	473,000
1980	6,988	1,370,000

Between 1946 and 1980, the total capacity of the hospital industry as measured by nonfederal short-term general hospital beds more than doubled, increasing from 473,000 beds in 1945 to 1,370,000 beds in 1980. As a measure of productivity in 1945, these 7,015 institutions handled approximately 37.2 million admissions and more than 263 million outpatient visits in 1978 (Cushman & Perry, 1983; Goldsmith, 1981b).

In 1980, there were 6,988 hospitals in the United States employing over 3.8 million personnel and spending approximately $85.3 billion annually. Of this total, 5,923 hospitals or approximately 85 percent were nonfederal short-term general hospitals with a total capacity of

988,000 beds (Cushman & Perry, 1983; Goldsmith, 1981b). Goldsmith (1981b) described the average community or nonfederal short-term general hospital of the mid-1979s as follows:

> The mythical average hospital has a total of 165 beds and is located in a community where there is a 4.5 bed per 1000 population ratio and where there are 169 physicians per 100,000 population...The occupancy in the "typical American hospital" is 75%, with an average length of stay of 7.7 days and an annual inpatient turnover rate of 35.5 percent (pp. 20-21).

Compared to several decades ago, hospitals have become more complex and more costly, as well as larger. From 1950 to 1977 personnel per 100 patient census had increased from 178 to 316, and the percentage of hospitals with less than 200 beds decreased from 84 to 69 (American Hospital Association, 1978; Goldsmith, 1981b). In 1977 the cost per patient day of $174 was close to six times that of $30 in the late 1950s. Between 1965 and 1975, the cost of the average hospital stay more than tripled, from $311 per day to $1,017 per day. During the same time period, the percentage of hospitals with intensive care units increased almost 20 percent, and acceptable care came to mean complex services employing expensive and sophisticated technology (Cushman & Perry, 1983; Goldsmith, 1981b).

The Role of Government in Hospital Services

The enactment of Medicare and Medicaid legislation in 1966 played a critical role in the evolution of hospitals as well as in achieving the kind of health care that is considered acceptable today. In contrast to Hill-Burton, these programs shifted the federal government's role from

one of merely providing capital funds for facilities improvement to one of paying directly for health care services. In combination with the Regional Medical Program--P.L. 89-239 (RMP)--enacted in 1965, Medicare and Medicaid reimbursement schemes provided unprecedented federal subsidy for the continued expansion of hospital services and the rapid implementation of new expensive medical procedures and technologies. The impact of these programs is still being felt in all dimensions of the existing health care delivery system (Cushman & Perry, 1983; Goldsmith 1981a; Shortell & Kaluvny, 1983).

Cushman and Perry (1983) have provided a comprehensive description of the federal government's shifting role in health care delivery. Together with numerous other writers, they have addressed the question of why the government shifted to a payer of health care costs (Barrett, 1980; Davis, 1983; Goldsmith, 1981a; Griffith, 1978; Shortell & Kaluvny, 1983). Reasons frequently given include improving the distribution and quality of health care systems and of controlling the resources used in providing health care. While the data presented suggest that some of these goals have been achieved, there is little evidence that the goals of efficiency have been a priority. Indeed, Griffith (1978) concluded that:

> Decision makers in many communities read this environment of almost unlimited financial support and apparent public enthusiasm as a guideline for expansion and modernization without regard for cost. Not until the 1970s was there extensive concern with the result, an alarming rise in the cost of hospital care. (p. 267)

The Problem of Hospital Cost

In 1966, the total public and private health care expenditures were $42 billion; in 1976, $140 billion; and by 1982, they had increased to $321 billion (Cushman & Perry, 1983; Davis, 1983). During the same time period, the overall growth in the health care share of the Gross National Product (GNP) has more than doubled, with this share increasing at a rate greater than the GNP itself. For example, national health expenditures increased at an annual rate of 14 percent between 1977 and 1981, compared with an annual increase of only 11.4 percent in the GNP. 1981 figures also indicate that more than 40 percent of the nation's health care spending was for hospital costs (Davis, 1983).

By the 1980s, approximately 60 percent of all hospital expenses were reimbursed through the retrospective cost-based formulas of Medicare, Medicaid, Blue Cross, or similar commercial insurers. While the forms of these programs were varied, they shared one common principle--unquestioning reimbursement of costs incurred by hospitals (Davis, 1983). In practice, they removed the incentives for hospitals to reduce costs and served to isolate consumers from the economic consequences of their consumption of health care services (Barrett, 1980; Davis, 1983; Goldsmith, 1981a). One authority claimed that "as much as 80% of the rise in costs can be traced to the availability of this kind of insurance" (Feldman, 1971, p. 870).

The assertion that cost-containment is a major problem in health care has been well documented (Binder, 1983; Cushman & Perry, 1983; Davis, 1983; Department of Health, Education, & Welfare, 1978;

Goldsmith, 1981a; Griffith, 1978; Hillestad, 1983; Shortell & Kaluvny 1983). Since hospitals comprise the largest portion of health care costs, much of the problem evolves around developing reimbursement approaches that will contain the rapid rise in hospital costs.

Approaches to cost-containment. The first approach to the problem of cost-containment was regulatory in nature and designed to control the quality and costs of hospital services. Two important pieces of legislation illustrative of this approach are: (a) the Social Security Amendments of 1972 which mandated the establishment of professional standard review organizations and (b) the National Health Planning and Resources Development Act of 1974 which mandated the enactment of state certificate-of-need programs (Cushman and Perry, 1983).

In essence, both of these regulatory processes were intended to reduce gross excesses and minimize costs by controlling capital expenditures for existing or new facilities, by regulating rates and budgets, by decreasing the volume of inpatient activity and directing more money to out-of-hospital services (Cushman and Perry, 1983; Goldsmith, 1981a). Although certificate-of-need programs have had some impact on reducing widespread duplication of facilities--particularly the diffusion of prohibitively expensive technology--their net result, however, may have been to actually raise hospital costs. For example, Selkever and Bice (1976) concluded from their study of certificate-of-need programs that the various state requirements have had little impact on reducing total capital investments; rather, they

appear to have actually stimulated growth in assets per hospital bed. While there are major differences among the state enacted professional standard review organizations and certificate of need programs, they are all based upon the recognition of the importance of controlling resource use. Like most regulatory efforts, the process of these programs have become political; therefore, vulnerable to manipulation by vested interest groups or local powerholders (Griffith, 1978).

The second approach to the problem of cost-containment in the 1970s was based on competition. Proponents of the competitive approach argued that "the consumer can make rational choices for health care services and, in so doing can contain the increase in health care costs" (Jacobs, 1983, p. 54). This approach has significantly influenced the growth and development of a variety of multihospital arrangements, ranging from simple affiliation agreements to a chain of hospitals under formal corporate ownership and control (Brown & McCool, 1980). While the forms of these arrangements differ considerably, they are based on the concept of shared services as a means to gain economies of scale for hospitals finding it difficult to operate as autonomous cost and service units. Thus, they also reflect a dramatic shift of the hospital industry away from its traditional structure of free-standing, independent, hospital facilities (Brown & McCool, 1980).

The emergence of multihospital or interinstitutional arrangements in the 1970s can be viewed as a major strategic effort by hospital decision makers to stabilize their organizations and address

cost-effective strategies in an increasingly uncertain and turbulent environment (Longest, 1980). According to Longest (1980), such strategic efforts "are often seen in organizations of many types when they face environments similar to those confronted by hospitals during the past decade" (p. 17). Longest (1980) further argues that as the external environment confronting hospitals becomes less supportive, organizational strategies are more likely to seek stabilization through diversification, slowed growth in traditional service areas, and increased horizontal consolidation with other organizations in the environment. Actions such as diversification into ambulatory care and aftercare services, for example, and the formation of regional corporate systems designed to develop more favorable relationships with elements in the external environments of participating hospitals are illustrations of multihospital arrangement strategies (Brown & McCool, 1980; Goldsmith, 1981; Longest, 1980).

The importance of interinstitutional arrangements is evidenced by recent data which indicate that in 1980 some 1,519 or 26% of all short-term general hospitals and 301,894 or 31 percent of all general hospital beds were part of formal multihospital systems. The data further suggest that the proprietary sector is dominated by corporate systems, and that substantial penetration is occurring in the private nonprofit sector as well. Over 375 multihospital systems are currently operating in the United States, nearly double the number reported to be operating in the early 1970s (Barrett, 1980; Brown & McCool, 1980; Brown, Werner, Luehrs, Krueger, & Hatfield, 1980).

Current data indicate that 35 percent of the nation's nonfederal, nonprofit, general hospitals are now participating in some form of multihospital systems arrangement, with the expectation that by 1990 the total will be 65 percent (Fottler, Schermerhorn, Wong, & Money, 1982). This trend suggests that competitive forces from within the hospital industry and legislative initiatives have resulted in the evolution of multihospital systems. Such systems present an opportunity for hospitals to enhance their attractiveness to consumers and simultaneously reduce duplication, and thereby contain costs (Barrett, 1980). Thus, from both the regulatory and competitive perspectives, there are perceived advantages to multihospital systems arrangements. While empirical support for such contentions is sparse, there is growing evidence that through regulatory and competitive systems, sufficient controls can be developed to control health care costs below freestanding, nonprofit competitors (Cushman & Perry, 1983; Fottler et al., 1982; Goldmsith, 1981a).

Beginning in the mid-1970s and continuing to the present, the hospital industry has clearly moved toward a pattern of strategic management characteristic of traditional business practices of organizational restructuring and experimentation with a wide array of strategic alternatives. For example, hospital decision-makers are pursuing organizational growth through planned change which is derived from a systematic analysis of market and institutional contraints and opportunities. Although hospital decision-makers have engaged in some form of long-range planning, strategic perspective is relatively new for

hospital and nursing service administrators and is evolving. The shift away from closed systems financial planning toward strategic planning and management is reflected both in the extant literature and in the emergent new patterns of hospital growth and development (Bopp & Hicks, 1984; Brown & McCool, 1980; Cushman & Perry, 1983; Fottler et al., 1982; Longest, 1981; Shortell & Kaluvny, 1983).

Prior to 1980, few articles on the subject of strategic management have appeared in the literature. However, many hospital and nursing journals are now replete with articles devoted to some aspect of the corporate strategic management philosophy. A growing body of literature attests to the significance of corporate strategic management to the survival of health care organizations (Bopp & Hicks, 1984; Fottler et al., 1982; Goldsmith, 1981a; Hillestad, 1983; Longest, 1981). Goldsmith (1981a) captured the essence of the corporate strategic management philosophy relative to hospitals in the following statement:

> . . . the hospital will be the most stressed component in a maturing health care market. How to manage the transition to a more intensely competitive economic environment, whether created by fiscal pressures or policy changes in health financing, will be the principal challenge facing hospital managers, trustees, and medical staffs. Survival in the tightening health care market will depend upon making sound strategic choices regarding the mission and structure of the hospital as well as on its relationship to its own professional staffs and to other actors in the regional market for health care. (p. 97)

With the passage of precedent-setting health care reform legislation in the early 1980s, the current environment confronting hospitals is one of turbulence and revolutionary change (Bopp & Hicks, 1984). Specifically, the hospital environment is restrictive, lean, risky, dynamic, and also places conflicting demands upon the

organization (Pfeffer & Salancik, 1978). Under these conditions, hospital decision-makers are being compelled to rethink their criteria for planning as well as for judging institutional effectiveness and measuring progress. Consequently, many hospitals are assessing their situation in relation to broader societal demands and are making difficult choices about the use of their resources, as well as determining the nature of their business. A significant result is that both the role and focus of planning in hospitals has changed and continues to portend unforeseen accommodations in hospital operations (Bopp & Hicks, 1984; Shortell & Kaluvny, 1983; Thieme, Wilson & Long, 1981). Acknowledging the need to redefine their role in the context of a changing and less supportive environment constitutes a major step in transforming hospital planning and management into a rational and integrated activity consistent with the tenets of strategic management (Bopp & Hicks, 1984; Cushman & Perry, 1983; Goldsmith, 1981a; Jaeger, 1982; Shortell & Kaluvny, 1983).

The actual adoption of strategic management as the modus operandi of many hospital and nursing administrators appears to have begun in 1979 (Shortell & Kaluvny, 1983). During the last four years, the concept has seemingly galvanized the hospital industry into accepting the notion that diversity and growth, rather than maintaining the status quo or retrenchment, will govern the future evolution of hospitals in this country. Many authors refer to strategic management as strategic decision-making or strategic planning. Regardless of the label employed, strategic management is a problem-solving process that

generates the necessary strategies to achieve, or attempt to achieve, favorable linkages between an organization and its environment. The strategies of a particular hospital, for example, are those sets of decisions that determine the institution's basic character and give it direction in the marketplace (Longest, 1981, p. 18). Elaborating on the work of Peters and Waterman (1982), Bopp and Hicks (1984) suggest that the process of strategic management "involves realigning the organization's structure, systems, style, staff, skills, and shared values to support the organization's new linkages with its environment" (p. 93). In other words, the process of strategic management heightens the need for hospitals to reconceptualize their societal role and to consider the human side of their strategic decisions (Bopp & Hicks, 1984; Shortell & Kaluvny, 1983).

With the trend toward diversification and consolidation well underway, administrations will also be challenged to base their decisions on the concepts and values of basic business policy and practice. More importantly, however, they will be increasingly challenged by the conflicting demands that will be placed on them as they endeavor to serve both the public and private goals and purposes of their organizations. Attempting to strike a balance between public and private interests in the throes of mounting pressures from the dual forces of scarce resources and the new prospective payment system for Medicare patients mandated in the Social Security Ammendments (P.L. 98-21) of 1983, in particular, will require planning and managing for change, "creating organizations which are flexible and responsive to the consumer, the professional, and the cost-conscious insurer" (Goldsmith, 1983, p. 204).

Changing Times: Implications for Hospital Administration and Nursing

Tremendous changes have occurred during the past decade in the ways in which hospitals are administered and patient care is delivered. Contributing to these changes are: (a) rapid advances in medical science and technology, (b) changes in illness trends, (c) changing social norms and priorities, (d) new laws and increased regulation of the hospital industry, (e) new pressures by labor unions and consumer groups, and (f) dramatic changes in the mechanisms for financing health care and containing costs. These factors have had, and will continue to have, a major impact on the structure and functioning of hospitals, the role of the hospital nursing administrators, and health professionals.

Developments in the nursing profession parallel the ferment occurring in the hospital industry. Significant changes in the knowledge and skill requirements for the practice of nursing, the changing division of labor between nursing and allied groups, the professionalization and specialization of nursing, the increasing trend toward unionization, and the high degree of dissatisfaction among hospital nursing personnel are recurring themes in much of the current nursing literature. The recent studies by Wandelt et al. (1981), McClure et al. (1983), and the National Commission on Nursing (McCarty, 1983) address many of these issues, notably, the changing role of nurses in hospital settings, the increasing structural complexity within hospitals, and the importance of structural accommodations as a means to improve the morale and productivity of professional nurses in hospital settings. These studies further support the notion that a healthy and

positive work climate is strongly influenced by the style and quality of leader behavior exhibited by nursing service administrators. When nursing service administrators are perceived as having a major role in top-level planning and policy-making and viewed as strong nurse advocates, nursing staff morale is high. In these hospital settings, nursing leadership is recognized as a key variable in attracting and retaining a well-qualified nursing staff (McClure et al., 1983).

The management of human resources has long been a major problem of hospital and nursing administrations. In recent years, the quality of work life issues have been identified as a critical component of this problem. As Goldsmith (1981a) aptly pointed out:

> Terms like burnout and reality shock creep into the vocabulary of analysis of the problem. These stress factors associated with the delivery of organized patient care are among the highest in the U.S. occupational system. Hospitals in particular offer high-stress environments. When the National Institute for Occuaptional Safety and Health (NIOSH) studied the relative incidence of mental disorders in 130 occupational groups, 7 of the top 27 occupations related to health care. Further, studies have linked high-stress occupations to high-on-the-job and high-off-the-job accident rates. Manifestations of high-stress occupations in the workplace include lower productivity, high turnover, absenteeism, increased work errors, and other factors. (p. 190)

The manifestations of work-related stress in hospital settings were evident in the acute national shortage of nurses which reached crisis proportions during the last three decades. For example, in the early 1950s only about one-half of the close to 355,000 employed nurses worked in hospitals, a proportion considerably inadequate to the burgeoning demands of an increasingly nursing-intensive hospital industry. By the early 1960s, hospital vacancy rates for nurses were the highest ever

recorded, averaging over 23 per 100 budgeted positions. During the 1970s, despite a dramatic increase in the number of nurses in the labor force, the average annual turnover rate for hospital nursing positions rose to over 30 percent. Consequently, hospital vacancy rates for nurses had approached 100,000 budgeted positions by the end of the decade (Aiken, 1984; Goldsmith, 1981a).

The physical, intellectual, and emotional demands of the staff nurse role combined with the increased complexities of high technologic patient care have had a significant impact on the number of nurses employed by hospitals and represent part of the dominant causes of the past and present shortage of nurses. While there is evidence to suggest that the nursing shortage has abated, largely as a result of the present economic downturn, there are other causative factors such as stress, burnout, and reality shock, which continue to inhibit long-term employment (Aiken, 1984). Indeed, the many surveys on nurse participation in the labor force and the numerous studies related to nurses' employment expectations indicate that nonmonetary incentives are equally important as economic rewards in attracting and retaining an adequate supply of nurses in the nation's hospitals (Aiken, 1984; Friss, 1982; Hall, Van Endt, & Parker, 1981; McClure et al., 1983; National Commission on Nursing, 1981; Slavitt, Stamps, Piedmont, & Haase, 1978; Wandelt, et al., 1981). Aiken (1984) reappraised the issues surrounding the nursing shortage phenomenon and reached the following conclusions:

> . . . the undervaluation by physicians and hospital administrators of nurses' knowledge and experience is a major source of nurses' dissatisfaction and frustration with their current roles. Nurses want to be appreciated and respected,

> recognized for their expertise, consulted regarding areas of their responsibility, and to participate in decision-making, have some control over where their talents can best be used , and maintain reasonable personal lives along with work responsibilities. The reorganization of work settings and modifications in interprofessional relationships necessary to bring about these changes do not necessarily involve major monetary investments. They primarily call for modifying traditions that have limited utility in a changing world. (p. 22)

Although the number of employed nurses per 100,000 population increased from 268 in 1960 to 473 in 1980, demands exceeded supply of nurses through the 1970s and is especially acute in large urban public hospitals today (Aiken, 1984). Moreover, of the 1.24 million nurses employed in 1980, about one-third or over 400,000 nurses were working part-time, which translated into a shortfall of approximately 80,000 full-time equivalent nurses available for employment (Aiken, 1984). Thus, while labor force participation of nurses increased to 77 percent in 1980, only 39 percent were employed full-time in health-related jobs (Aiken, 1984). During the same time period, the volume and intensity of hospital care as well as the length of stay of hospitalized patients also increased. Hence, there is growing evidence to suggest that this increased intensity and complexity of hospital services extracts its toll on the cadre of full-time nurses in terms of stress and burnout (Aiken, 1981; Aiken, Blendon, & Rogers, 1981; Chiriboga, Jenkins, & Bailey, 1983; Claus & Bailey, 1980 Jacobson & McGrath, 1983; Maloney, 1982).

One overriding issue that cuts across all of these developments in hospitals and nursing is the general demand for greater organizational responsiveness and accountability. Because these demands often come

from different influence groups with varying notions of accountability, hospital and nursing administrators increasingly find themselves in the position of having to reconcile incompatible objectives. For example, regulatory agencies tend to define accountability in terms of cost-containment and the coordination and regionalization of services as a means to bring costs under control and improve productivity in hospital systems. Local consumer groups, on the other hand, often define accountability in terms of additional facilities and services and greater consumer involvement in the management of individual hospitals. These divergent demands raise important pragmatic and moral issues involving questions of who will receive care in an environment with finite resources and infinite demands (Binder, 1983; Bopp and Hicks, 1984; McClure, 1984 Shortell & Kaluvny, 1983).

In the current environment of extremely limited economic resources and rapidly rising health care costs, hospital and nursing administrations are under intense pressure to reduce the cost of care while maintaining acceptable levels and quality of hospital services. Given that hospitals are labor intensive organizations, it is not surprising that labor costs have been identified as an area which needs attention. A key area in any hospital is the department of nursing service since this department accounts for approximately fifty percent of the total personnel budget and approximately 20 to 25 percent of the total cost of hospital care (Schulz & Johnson, 1983). Attempts at reducing nursing personnel expenditures have generally taken the form of artificially constraining the wage rates of employees, decreasing the

number of positions in the department, or substituting lesser prepared and lower paid personnel for registered nurses (Aiken, 1984). Rather than proving to be cost-effective, research findings have supported the contention that these strategies further exacerbate the problem through high turnover and by the secondary consequences of increased labor relations activity by registered nurses (Aiken, 1984; Atkinson and Schramm, 1982; Fagin, 1982; Rothman, 1983; National Commission on Nursing, 1981; Wandelt et al., 1981). Moreover, these findings have raised important empirical questions concerning the specific monetary and human resource implications of labor relations activity by registered nurses in unionized hospitals.

In 1981, it was estimated that approximately 6.75 million persons were employed in health service institutions (Sekscenski, 1981). This figure suggests that the delivery of health care services is one of the largest industries in the country. Indeed, employment in health care institutions increased 55 percent in the 1970s, compared with 23 percent for the nation's total work force (Rothman, 1983). The influx of persons employed in health care institutions was also accompanied by an increase in the percent of health workers who have organized into collective bargaining units.

Although unionization in hospitals dates back to 1919 (Metzger & Pointer, 1972), it progressed slowly until the 1960s, and was given further impetus with the passage of the 1974 National Labor Relations Act (NLRA) amendments. Metzger and Pointer (1972) reported that by 1968 the percentage of the nation's 7,172 registered hospitals with

collective bargaining contracts had risen to 7.7 percent, and in 1970 it had nearly doubled to 14.5 percent. Immediately prior to the enactment of the 1974 NLRA amendments, it was further estimated that 17.0 percent of the hospitals in the country had at least one collective bargaining agreement in effect (Phillips, 1974). Currently, over 20 percent of all nonprofit hospitals have collective bargaining agreements with either a trade union or professional association (Spirn, 1982), and this is expected to dramatically increase in the future (Rothman, 1983).

In the mid-1960s there were 8000 registered nurses covered by collective bargaining agreements in the nation's health service institutions. By 1980, the American Nurses' Association (ANA), through its constituent state associations, represented over 270,000 nurses in these agreements (Levenstein, 1980). Additionally, national labor organizations have organized from 25,000 to 30,000 nurses, and independent unions about 6,000 (Feldman, 1981). Because of the relative recency of the nurses' collective action phenomenon, few studies have assessed its effectiveness in achieving desired results for nurses or the impact of collective bargaining agreements on hospital operations and patient care services. However, there is evidence to suggest that labor relations activity relative to nurses is related to job dissatisfaction and issues of power and control of practice in extant hospital bureaucracies (Aiken, 1980; Jacox, 1971; Lockhart, 1980; Metzger & Pointer, 1972; Miller & Dodson, 1976; Rothman, 1983; Sekscenski, 1981; Tanner, Weinstein, & Ahmuty, 1980).

Although job opportunities for professional nurses have declined significantly since 1980, there is a dearth of evidence to suggest that neither cost-containment strategies nor economic constraints have influenced the productivity of nursing service. Largely omitted from the recent analysis of the nursing shortage (Aiken, 1984) is the crucial set of factors concerning the highly disruptive and expensive nature of turnover and how limited resources are being allocated to turnover solutions. For example, Fagin (1982) reported that: "The direct cost of replacing each nurse has been estimated to be from $2,500 and $12,000." In the absence of an increased investment in the long-term benefits of productivity-oriented work force policies and compensation systems, collective bargaining actions by nurses are likely to increase substantially in the near future. In a critical period of hospital transition and changing patterns of work force participation by nurses, research is needed to clarify that existing work force strategies are inadequate to the demands for increased productivity of nursing departments in the future. With the shift to prospective payment schemes in progress, the imperative for increased productivity of hospitals is well-established. Increasingly, all health professionals, including nurses, will find themselves working under more stringent cost and quality control standards designed to meet the hospital's need to provide effective care at less cost. To be successful under prospectively set reimbursement limits, hospitals need to determine what services they provide, who is the consumer, and what are the associated expenses and revenues. Hospitals must also assess a variety of

competitive market options as well as be able to anticipate how changes in technology or physician and nursing practices, introduction of new programs and services, or a shift in population demographics can alter their case mix.

Although hospitals with a high Medicare patient population are being forced to plan and control their case mix, increased competition and the adoption of prospective pricing based on the diagnosis-related group (DRG) system by nonfederal health insurers has provided the impetus for all hospitals to define the case mix indicators that will meet their needs (Olson, 1984). In this regard, the mandate of P.L. 98-21 marked the advent of a new era in the way health care will be defined, financed, and delivered. Consequently, hospitals across the country are now preoccupied with designing and refining strategic responses to the contemporary view of productivity in the health care industry. Olson (1984) described this view and the dynamics involved for nursing as follows:

> Even if it were possible to increase the workload with no cost increase, we would not necessarily cut those costs that Medicare will no longer pay. Prospective pricing defines productivity in a slightly new way: costs of treating a given diagnosis successfully enough so the patient can be discharged. (Productivity under retrospectively determined reimbursement rates was the cost of services rendered compared with a standard cost of those services, no matter how effective the service was for the patient.) Therefore, we need to understand nursing productivity in terms of DRGs and to plan strategies that will specifically address the costs and reimbursements from this perspective. While we may have to work harder, we will be more effective if we also work smarter. (p. 22)

Recent literature relative to nursing indicates that prospective pricing has forced critical reviews of human resources and productivity

in nursing service departments. For example, the major multihospital systems reported that they were in the process of trimming their nursing staffs and developing new strategies that will mean dramatic changes in nursing care delivery, nursing staff roles, nursing's relationships with other departments, and the ways that nurses will be working to shorten hospital stays (American Journal of Nursing, 1984, p. 529). Since these systems comprise more than one-third of the nation's hospitals, it is obvious that the same strategies are being pursued throughout the industry. This transformation of hospital characteristics and functional arrangements will continue with even greater force and vigor through the 1980s.

Significance of the Problem

The past two decades have witnessed tremendous changes in the ways in which hospitals are administered and patient care is delivered. Contributing to these changes have been advances in medical science and technology, changes in illness trends, changing social norms and priorities, increasing regulation of the hospital industry, and changes in the mechanisms for financing health care. All of these factors have had, and will continue to have, a major impact on the structure and functioning of hospitals.

To a considerable extent, the developments in the nursing profession parallel the ferment occurring in the hospital industry. Dramatic changes in the knowledge and skill requirements in the practice

of nursing, the changing division of labor between nursing and allied occupational groups, the professionalization of nursing, nursing specialization, the increasing trend toward unionization, and the high degree of dissatisfaction among hospital nursing personnel are recurring themes in much of the current nursing literature. The recent studies by Wandelt et al. (1981), McClure et al. (1983), and the National Commission on Nursing (McCarty, 1983) address many of these issues; in particular: the changing role of nurses in hospital settings, the increasing structural complexity within hospitals, and the importance of structural accomodations as a means to improve the morale and productivity of professional nurses in hospital settings. These studies further support the importance of a healthy or positive work climate. A key area in any hospital is the department of nursing service since this department accounts for approximately fifty percent of the personnel budget (Stevens, 1975). Attempts at reducing nursing personnel expenditures have generally taken the form of decreasing the salary levels of employees, decreasing the number of positions in the department. or substituting lesser prepared as well as lower paid personnel for registered nurses. Rather than proving to be cost-effective, research findings have supported that these strategies further exacerbate the problem through high turnover and by the secondary consequences of increased labor relations activity by registered nurses (Aiken, 1982; Atkinson & Schramm, 1982; Fagin, 1982; National Commission on Nursing, 1981; Rothman, 1983; Wandelt et al, 1981). Moreover, these findings have raised important empirical questions concerning the specific monetary and human resource

implications of labor relations activity by registered nurses in unionized hospitals.

Hospital characteristics and their relationship to the quality of nurses' work climate is significant to the discipline of nursing for several reasons. First, the relative neglect of the effect of the external environment on internal structure and functioning of contemporary, nonprofit general hospitals underscores the urgent need for a study of this nature. Second, the dearth of empirical studies of the impact of collective bargaining agreements on hospital decision-making processes and nursing practice underscores the timeliness of this study. Third, there is a paucity of case studies in the literature that realistically reflect the complexity of hospitals and the impact of change and innovation on professional organization accommodation. Fourth, empirical assessment of hospital characteristics as a determinant of the quality of nurses' work climate across hospitals is of particular importance to nursing service administrators and others interested in furthering the understanding and resolution of the current nurse-related problems in hospital settings. Thus, it is suggested that the empirical evidence derived from this study would increase the knowledge on contemporary, nonprofit general hospitals. In particular, it would contribute to the understanding of the impact of organizational structure and process variables on nurses' work climate across different hospital settings. Finally, the findings from this study would provide health care professionals with increased understanding of how hospital systems work as well as the hospital system's potential for growth and stability.

Summary

This chapter has presented the purposes of the study, the nature and background of the study problem, and the significance of the problem. Chapter II provides the conceptual framework for the study and a review of the literature. Chapter III describes the research design and methodology used to investigate the problem. Chapter IV presents a descriptive case study of each of the six hospital organizations involved in the study. Chapter V reports and discusses the findings of the study. Chapter VI contains a summary of conclusions drawn from the study, implications for nursing service administration, and recommendations for future research.

CHAPTER II

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

This chapter presents an overview of organizational theories and a rationale for selecting contingency theory as an overall framework for the present study. In addition, five components of organizational design and related variables which impact on organizations will be conceptualized and discussed, thus serving as an organizing theme to guide the investigator. A review of the literature and studies relevant to hospitals will also be provided.

Overview of Organizational Theories

As a basis for understanding organizational theories, several important points need to be considered. First, organizational theories are culturally bounded; they are products of the social, political, economic, and intellectural forces of their time. Secondly, the needs of any given era determine the kinds of organizations that emerge. Lastly, organizational theory derives its concepts and ideas from a number of disciplines. Viewed within this context, organizational theories are historical representations of administrative techniques utilized to correct less than favorable social, economic, or political conditions existing at different periods in time.

Organizational theories are not theories in the narrow physical science sense, such as Einstein's theory of relativity, but rather

represent dynamic theories which suggest a particular perspective for studying organizations and their managements. Three theories of organization have been identified in the relatively short history of management studies: classical, neoclassical (human relations), and systems (modern organization) theory (Kast & Rosenzweig, 1979). These theories represent a reflection of the underlying views of human beings held by the theorists and managers who subscribe to them, and have been grouped into three broad classes of propositions about organizational behavior by March and Simon (1958) as follows:

1. Propositions assuming that organization members (employees) are primarily passive instruments, capable of performing work and accepting directions but not of initiating action or exerting influence in any significant way. (Classical theory).
2. Propositions assuming that members bring to their organization attitudes, values, and goals; that they have to be motivated or induced to particicpte in the system of organizational behavior; that there is incomplete parallelism between their personal goals and organizational goals; and that actual or potential goal conflicts make power phenomenon, attitudes, and morale centrally important in the explanation of organizational behavior. (Human relation theory)
3. Propositions assuming that organization members are decision-makers and problem-solvers, and that perception and thought processes are central to the explanation of behavior in organzations. (Systems theory)

The propositions suggest that organizational theories evolved through a process of assimiliation and integration of past knowledge into successive new frameworks which viewed organizations as social systems and human beings as participants in the practice of management. Each new theory provided a fresh approach with a fundamentally different perspective from which to see how individuals and organizations behave in differing circumstances. These theories will be reviewed relative to the sources from which they derive, the techniques they produced, the precipitating conditions of their emergence, and their significant concepts.

Classical Theory

Historically, the most profound impact on evolving organization theories was that of Weber's (1947) assertion that bureaucracy was the ideal organization. In other words, the ideal organization was characterized by specialization, hierarchy, and rules, all to be exercised in an impersonal and rational atmosphere by career officials, and one in which promotion and selection for employment was to be based on technical competence. The notion of rational-legal authority, which includes the right to exercise authority by virtue of position, was crucial to Weber's concept of bureaucracy and remains a mainstay of management practice in contemporary society.

Although our culture regarded bureaucracy with distain and an infringement on personal freedom and dignity, the First World War tended to support the fact that bureaucratic administration was the most effective means at hand to deal with complex corporate structures in an

increasingly industrial society. Prior to World War I, the American business system was dominated by the laissez-faire ethic of Smith's (1776/1925) competitive theory of capitalism and the railroad system was the model for thinking about organizations. The War, however, gave rise to the expansive chemical, engineering, and shipbuilding conglomerates organized as bureaucracies in the United States and abroad. Thus, in response to the needs of modern organizational society--business, government, and the military--bureaucracy seemingly promised rationality, order, system, and the reasonableness of technical competence applied to the management of complex organizations (Kast & Rosenzweig, 1979).

The nature of bureaucracy, coupled with Taylor's (1916) treatise on scientific management, formed the underpinning of the the classical school of thought on organizational theory. Appalled by the hit-or-miss methods of work, and particularly the lack of management in terms of planning and control, Taylor felt that productivity could be vastly improved by the application of science to management. Joined by Frank and Lillian Gilbreth, who invented time and motion study, and Gantt, who advanced production planning and control, Taylor formulated the principles of scientific management theory which are still valid today (McFarland, 1974). These principles include: (a) select the right person for the job, (b) decide by method study the one best way to do the job, (c) develop differential piece-work plans that reward effort, (d) carefully plan the actual work process, and (e) develop line and functional specialization.

While Taylor was not an organization theorist, he provided a number of explicit concepts concerning management which were absorbed into the

development of classical theory; for example, the notion of separating planning from operating, from which the modern concept of line and staff work was derived. Together with Gantt, the Gilbreth's, and Emerson (1912), who originated the term "efficiency engineering" and defined the principles central to it, Taylor forged a school of thought that contended there was no conflict between human and organizational goals. Taylor's concept of the employee was strongly influenced by the so-called Protestant ethic, which emphasized the values of achievement, economic rationality, and individualism. Taylor assumed that employees would be motivated by their economic interests and thus welcome any management process that facilitated this achievement (Etzione, 1964; Kast & Rosenzweig, McFarland, 1974).

Scientific management theory worked as history attests, but at a price. Treated like machines, workers began banding together in shop floor schemes designed to restrict or slow production, displaying an ingenuity that forced industry to seek new solutions to its management problems. Thus, by the late 1920s, the scientific management school had lost much of its momentum in favor of the new approach and insights provided by administrative management theorists who became identified with Fayol (1916/1978) and the management process school of thought (McFarland, 1974).

Fayol, a French industrialist, has been described as the father of management theory. Writing in the early part of this century, he defined administration in terms of five primary elements: planning, organizing, commanding, coordinating, and controlling. Through his observations of the management function, Fayol developed fourteen

prinicples of administration that maybe universally applied by managers in all types of organizations and from any level of command. Fayol was the first of the administrative managment theorists concerned with formal organization structure and the basic processes of management, and his principles provided the foundation for this school of thought (Kast & Rosenzweig, 1979). Fayol's (1916/1978) fourteen principles of management are summarized as "division of work, authority, discipline, unity of command, unity of direction, subordination of individual interest, remuneration, centralization, scalar chain, order, equity, stability of tenure of personnel, initiative, and esprit de corps" (p. 24-36).

While scientific management was essentially concerned with maximizing productivity at the shop floor level, administrative management theorists concentrated on the development of macro concepts and administrative principles applicable to higher organizational levels (Kast & Rosenzweig, 1979, p. 59). Following the trend established by Fayol, administrative management theory was further developed by several other writers--namely Mary Parker Follett, James D. Mooney, Alan C. Reiley, Luther Gulick, and Lyndall Urwick (Kast & Rosenzweig, 1979, p. 61)--who were actively engaged in management and/or consulting practices in industry and government during the 1920s and 1930s.

Although more appropriately identified with the behavioral movement, Follett's recognition of management as a social process and the organization as a social system established her as a managerial philosopher. Folletts's contributions in the areas of authority, leadership, power, and motivation can be viewed as a link between the

classical administrative management theorists and the behavioral scientists (Follett, 1926/1978, p. 48-49; Kast & Rosenzweig, 1979, p. 61).

Mooney and Reily--two General Motors executives--used an historical evaluation of military, religious, and industrial organizations as a basis for their views on the development of organization. Specifically, they concluded that all organizations have common attributes and require coordination, a pyramidal organization structure with a clear delineation of authority, specialization of tasks, and utilization of staff specialists. The principles they set forth led to the establishment of formal organizational charts, position descriptions, and organizational manuals (Kast & Rosenzweig, 1979, p. 62; Mooney & Reiley, 1931/1978, p. 62-66).

Gulick and Urwick--experienced executives in both industry and the military--combined and synthesized the ideas of Taylor, Fayol, Follett, Mooney and Reiley into a unified set of relevant propositions about management structure and process, and provided managers with a common language which could describe work relations in terms of line, function, and staff; explicated the concepts of span of control and unity of command; and specified how delegation and coordination could be achieved (Kast & Rosenzweig, 1979; McFarland, 1974).

Central to Urwick's views on management principles and practices is the notion of rationality, that is to say that logical analysis rather than personalities should determine how organizations are structured (George, 1972, p. 138). Elaborating on Fayol's principles, Gulick advocated departmentalization by purpose, process, persons, and place; and originated the acronym POSDCORB (planning, organizing, staffing,

directing, coordinating, reporting, and budgeting) for describing the administrative functions of chief executives. Additionally, Gulick recommended a narrow span of control throughout the scalar chain, including a minimum of persons reporting directly to the chief executive (Gulick, 1937/1978, p. 60).

Effective contemporary management practice applies many of the concepts and principles of administrative management theory in the structuring of organizations and in providing general guidelines for managers. For example, the concepts of line, staff, and functional management are universally accepted today; and diligent attention is given to the writing of procedural manuals and position descriptions. More recent developments, such as task groups and project management can also be traced to administrative management theory (Kast & Rosenzweig, 1979, p. 63).

Summary of classical theory. Classical theory is based on contributions from three schools of management thought: scientific management, administrative management, and bureaucracy. All three, either explicitly or implicitly, placed emphasis "on process specialization of tasks, standardization of role performance, centralization of decision-making, uniformity of practice, and avoidance of duplication of function" (Katz & Kahn, 1966, p. 293). These emphases parallel the four key pillars of classical organization theory: "the division of labor, the scalar and functional processes, structure, and span of control" (Scott, 1961/1981, p. 34). Lastly, each employed closed-system logic--the rational model--about organizations; that is, attention was focused on only those variables subject to complete

control by the organization and resulted in everything being functional, thus making an optimum contribution to economic efficiency (Thompson, 1976, p. 6).

Although criticisms of classical organizational theory are many and generally relate to its dehumanizing aspects or its lack of scientific validity (Etzione, 1964; Kast & Rosenzweig, 1979; Katz & Kahn, 1966; March & Simon, 1958;), it was compatible with the existing ideologies and the production-oriented economic and political exigencies of contemporary society during the first three decades of the twentieth century.

Neoclassical Theory and the Human Relations Movement

Although the human relations movement in industry began with the Hawthorne studies conducted by Mayo and associates between 1927 and 1932, human relations or neoclassical theories of organization did not become a major force in industrial management until the 1940s. The Great Depression, coupled with the opposition from trade unionism in particular, delayed widespread acceptance of this approach until after World War II and the arrival of the permissive society (Scott & Mitchell, 1967). However, Mayo (1933) is generally recognized as the father of this school of thought. Mayo and an impressive group of behavioral scientists concerned themselves with correcting the excesses and deficiencies of classical theory well into the 1960s.

While criticized from the standpoint of context and scientific validity (Robbins, 1976, p. 39), the Hawthorne studies raised management's awareness of the impact of the human element on

organizational performance and provided the theoretical basis upon which the human relations approach is founded. Most notably, Mayo's conclusions led neoclassical theorists to center the human being back in the work setting and to explicate the informal group phenomenon and its role in determining the attitudes and productivity of workers. They also led to increased paternalism by management and the rather naive assumption that happy employees would be more productive workers (Robbins, 1976, p. 38-39).

The Human Relations School emerged essentially as a reaction to the mechanistic excesses of the scientific management tradition and argued that an industrial organization should be viewed as a social system with concomitant objectives for achieving both labor and management goals. Coupled with the contributions of Mayo and associates, the writings of Follett and Barnard succeeded in directing attention to the psychosocial aspects of organization and management and set the tone for a totally new perspective on management practices (Kast & Rosenzweig, 1979).

Operating from a behavioral orientation, a number of prominent social and behavioral scientists, such as Maslow, Arygris, McGregor, Likert, and Lewin concerned themselves with changing the corporate climate to faciliatate the assimilation of human relations. The interests of these scientists in studying organizations and management practices evolved into a new science of motivational/behavioral theories in management. Through the use of these theories, the neoclassicists--behavioral and management scientists--demonstrated how the pillars of classical doctrine were affected by the impact of human actions and provided the impetus for changing the traditional

bureaucratic organizational environment toward more democratic social systems (Kast and Rosenzweig, 1979, p. 80-84; Scott, 1961/1981, p. 37).

Maslow's (1954) theory of motivation became a foundation from which organizational analysis, as well as worker motivation, was studied. The Needs Hierarchy of Maslow was understandable, could be easily translated into operational terms as a means to analyze and formulate approaches to motivation and morale, and could add to the humanization of the work setting. Maslow's notion of self-actualization has made one of the greatest impacts on management practices and provides a theoretical framework for some schools of organizational thought.

Argyris (1957), expanding on Maslow's concepts of organizational models, demonstrated that many of the notions on which extant organizational society was built had inherent contraditions that ran counter to the natural development of human beings. The research of Argyris (1957, 1971) supported the need for accepting conflict between human and organizational goals as both natural and growth-enhancing. Argyris also espoused participatory management and a democratic leadership style as a means to help workers achieve self-actualization.

Several years later, Herzberg (1959) and associates introduced a two-factor motivation--hygiene theory. According to this theory, people feel good about their work when it provides the opportunity for growth and fulfillment of self-actualizing needs. A "hygienic" environment, on the other hand, produces dissatisfaction and reduces performance. Job content factors (motivators) equate to Maslow's higher-order needs, and job context factors (hygiene factors) meet lower-order needs. Herzberg, like Maslow, suggested that organizational motivation is based on

personal needs and social needs that can be satisfied within the organization (Robbins, 1967, p. 308-311).

McGregor (1960) also built on Maslow's theory, and proposed two distinct views about the nature of human beings that influence the way managers deal with employees--one essentially negative, labeled theory X and the other, essentially positive, labeled theory Y. Under theory X, managers believe that the average employee has an inherent dislike for work; lacks ambition, dislikes responsibility, resists change; and is self-centered and indifferent to organizational goals. According to this theory, the management style most likely to emerge is highly authoritarian and centered on control, direction, and coercion to get employees to work toward achieving organizational goals. Theory Y managers, on the other hand, believe that the average employee has a natural propensity for work, resists change purely as a self-protective mechanism, and will exercise self-direction and self-control in the attainment of objectives to which they are committed. Here, the management style most liklely to emerge is highly democratic and characterized by the successful integration of employee and organizational goals. In theory Y, Maslow's notion of self-actualization appears to be paramount for optimum employee performance and satisfaction as well as for organizational efficiency and profitability. McGregor also directed attention to the overlooked concept of employee alienation and its resultant negative behaviors (McFarland, 1974).

Likert (1961, 1967), drawing from some of these previous works, formulated a Gestalt model of changes in organizational climate designed

to reflect the evolutionary aspects of management and organizational development over the years. Through conceptualizations about organizational management structures, Likert viewed organizations as consisting of many work groups which were linked together by managers who were perceived as "linking pins" and who played significantly important roles as members of overlapping hierarchical groups. Likert's model served to illustrate that as the technology mandates change, human needs expand and different organizational climates emerge. These are management systems which he designated by number one through four, and included exploitive-authoritative, benevolent-authoritative, consultative, and particpative-group. Likert's orientation was to view the organization as a humanistic social system characterized by supportive relationships and participative management. In essence, Likert had moved from an individual human relations approach to his Systems Four model which had, as an essential feature, the integration of structural concepts and group process (Katz & Kahn, 1966, p. 293). This model also advocated a theory Y approach to organizational development and management practices.

Blake and Mouton (1964), building on previous research that demonstrated the importance of managerial concern both for production and for people, developed one of the most widely used approaches to date to dramatize this concern, namely, the Managerial Grid. The Grid provided a systematic framework for understanding leadership/managerial styles in terms of behavioral patterns reflected in the five major orientations to management that this device was designed to describe, and included management styles ranging from authoritarian /autocratic to

participative/team styles. They concluded that effective management required a 9,9 orientation or team approach which involved an integration of high concern for both people and organizational performance or productivity.

Lewin's (1947; 1951) impact on the human relations movement and management thought cannot be minimized (Kast & Rosenzweig, 1979, p. 81). His accidental discovery of the "T Group", or what later emerged as sensitivity training, is considered by some behavioral scientists as the most powerful social invention of the century. The importance of "T Groups" is that they began to make explicit a set of humanistic values and a definite way of behaving which are congruent with the humanistic orientation of organizational development. For example, values such as openness, trust, collaboration, and participation are now integral components of management philosophy.

In addition to pioneering the sensitivity training movement, Lewin (1947; 1951) also formulated a commonly accepted model for bringing about change in his force field theory. Applicable to a wide variety of client systems, the three-phase model of unfreezing, moving, and refreezing has been a valuable tool of theoreticians and practitioners involved in organizational change. Action or operation research was also an innovation of Lewin's and became a vehicle for applying the tools of social science to the knowledge and skills of the change agent. Thus, techniques such as team development and intergroup building emerged as ways the laboratory method of science could be applied to the work setting for improving organizational effectiveness and changing the culture implicit in organizations (Napier & Gershenfeld, 1973).

Drucker (1954, 1974), an economist, introduced management by objectives (MBO) as a means to improve management effectiveness and, in turn, organizational profitability. The philosophy of MBO is strongly supported by many motivational theorists and continues to enjoy widespread application in a variety of organizational settings. Although MBO is manager-oriented, it embraces the notions of decentralization and participatory management. The principles of MBO can be viewed as attempts to integrate individual and group goals with organizational goals, as well as encompassing aspects of long-range planning and quality appraisal systems. It is a result-oriented technique which places the onus of productivity on the manager and which views the worker as the organization's most vital resource.

With the blending of the humanistic management philosophies, sensitivity training, and action research during the sixties, the stage was set to integrate the human element with production processes and factors. In a sense, the human relations movement followed two distinct but related paths. One placed emphasis on human processes in organizations and evolved from the application of laboratory methods to organizational settings; the other, derived from the industrial engineering format, sought to manipulate both human and technical factors which influence productivity. Hence, emphasis on sociotechnical systems emerged with the potential to develop management science as a discipline as well as a possible approach to organizational change. Sociotechnical systems emphasized the process of change rather than the interventional approaches to organizational development, and called for

an eclectic and multidisciplinary approach to organizational improvement and theory development (Kast & Rosenzweig, 1979).

Summary of human relations theory. The human relations movement succeeded in bringing about symbiosis between management and labor, and provided the framework from which behavioral scientists could apply the scientific method, and either validate existing concepts or formulate new ones. However, the advent of the Space Age with its technological, political, socioeconomic and cultural concomitants required the acceptance of a new management ideology or paradigm, namely, systems management. Epoch-making organizational changes resulting from the Cold War and the success of Sputnik called for a philosophy of task management and the need to view organizations as a sociotechnical system requiring the application of quantitative techniques to decision-making (Kast & Rosenzweig, 1979).

Systems Theory and Management Science

Systems management derives from the operations research concept which emerged from the human relations/behavioral science movement and out of the defense needs of World War II. Basically, this approach is a product of the quantitative school of management thought and interchangeably called management science or decision theory. Kast and Rosenzweig (1979) further asserted that:

> Under this view, an organization is not simply a technical or a social system. Rather, it is the structuring and integrating of human activities around various technologies. The technologies affect the types of inputs into the organzation, the nature of the transformation processes, and the output from the system. However, the social system determines the effectiveness and efficiency of the utilization of the technology. (p. 108)

Systems management is a synthesis of previous schools of management thought with the addition of more sophisticated scientific decision-making methodologies. Deriving from the organismic views of von Bertalanffy (1968) and other biologists, Barnard introduced the use of a systems approach to the field of organization and management in the late 1930s. However, it did not become the accepted model for organization and management thought until the 1960s when, with increasing frequency, its use was being reported and advocated in the literature (Kast & Rosenzweig, 1979).

Drawing from von Bertalanffy's (1968) work, systems management is concerned with the notion that an organization consists of sets of interrelated parts and functions like a living organism in the sense that it is goal-seeking and interacts with the environment for survival. Materials, energy, and information are imported and transformed into valued outputs, such as profit or service. Perceived as a living open system, an organization is dynamic and in constant interaction with its environment. Within this framework, information and its selection, structuring, processing, and transmission become critical factors. Consequently, a cybernetic system (Bailey & Claus, 1975) rather than conventional authority is seen as the major determinant of organizational behavior.

In the systems approach to management, attention is focused on developing an optimal organization by considering both the tasks to be done and the resources available. Care and effort are expended to ensure that specialists are properly used as facilitators or consultants. Extensive use is made of models which simulate the

environment, quantify factors relevant to outcomes, and through the use of computer technology enable managers to interact in a meaningful and efficient way with their environments. The concept of sociotechnical systems as organizational subsystems is used to describe and predict behavior. In this regard, the sociotechnical system is meant to operate within the broad paradigm of systems theory but at a less abstract level and consistent with contingency-design organizational theories.

Viewing organizations as open sociotechnical systems suggests a substantially different and more difficult role for management from the one played in either classical or neoclassical theory. In this approach, management must concern itself with situations that are dynamic, inherently uncertain, and frequently ambiguous. Consequently, management must ascribe to contingency views of organizations which "are ultimately directed toward suggesting organizational designs and managerial actions most appropriate for specific situations" (Kast & Rosenzweig, 1979, p. 115). In this view, the primary managerial role is to maximize congruence between the organization and its environment and among the various internal subsystems. Thus, management must play an active role in determining environmental relationships and in designing internal subsystems that meet the objectives of effectiveness, efficiency, and participant satisfaction (Kast & Rosenzweig, 1979).

While the aerospace industry, with its problems of rapid obsolescence, was the first to adopt a systems managment framework, it has become increasingly accepted by other industries. The widespread use of computers, coupled with the trend toward automation, involves application of systems and contingency concepts at the operations

level in numerous other types of agencies and activities. The development of program evaluation and review technique (PERT) and planning-programming-budgeting systems (PPBS) are also relevant and comprehensive examples of the application of systems and contingency approaches to the management of complex organizations. The pervasiveness of systems thinking and contingency views of management practice portends a very promising and challenging future for the development of modern organization theory as well as for its practical application in improving managerial effectiveness (Kast & Rosenzweig, 1979).

Summary of systems theory. The wider view of organization and management theory is based on systems concepts and contingency views. Systems concepts provide a macro paradigm for understanding all organizations. Contingency views are less abstract and tend to emphasize unique characteristics and patterns of relationships within and among internal subsystems of a specific organization. An underlying assumption of the contingency view is that there should be an appropriate fit between the organization and its environment and among the various subsystems. Consequently, contingency views suggest that the primary function of management is to develop and maximize this congruence. Thus, the essence of the contingency view is that there is no "one best way" to organize and manage; rather; effective management is contingent upon the situation. Therefore, what constitutes effective management requires a pragmatic approach with heavy emphasis on comparative and situational analysis. Lastly, contingency approaches to management can be found with regard to a variety of processes; for

example, leadership, decision-making, design, and managing change (Kast & Rosenzweig, 1979).

Contingency Theory

In recent years, the contingency perspective has emerged as an important theoretical framework for the study of organizational characteristics and adaptation to the environment. According to this view, how organizations are structured and managed largely depends on the nature of the task, technologies, and environmental variables such as the degree of competition and state and federal regulatory systems which organizations face (Shortell & Kaluvny, 1983). An important aspect of the contingency approach is that it has served to incorporate the systems perspective and to apply this approach to organization and management, particularly with regard to developing and defining specific relationships between environmental, management and performance variables. Kast and Rosenzweig (1979) described the contingency view of organizations as follows:

> The contingency view of organizations and their managements suggests that an organization is a system composed of subsystems and delineated by identifiable boundaries from its environmental suprasystem. The contingency view seeks to understand the interrelationships within and among subsystems as well as between the organization and its environment and to define patterns of relationships or configurations of variables. It emphasizes the multivariate nature of organizations and attempts to understand how organizations operate under varying conditions and in specific circumstances. Contingency views are ultimately directed toward suggesting organizational designs and managerial actions most appropriate for specific situations. (p. 115)

The contingency perspective suggests that organizations are contrived social systems or subsystems interacting in relevant environments which

provide opportunites as well as constraints. The challenge for administrators is to choose among these constraints and opportunities under conditions of uncertainty and risk, and under a variety of needs and priorities (Kast & Rosenzweig, 1979; Thompson, 1967).

The general orienting hypothesis of the contingency perspective is that organizations whose internal structural and functional characteristics best fit or are congruent with the demands of their environment will achieve greater effectiveness, efficiency, and participant satisfaction (Kast & Rosenzweig, 1979). Studies which examined this hypothesis have resulted in the formulation of several underlying assumptions: (a) there is no one best way to organize, (b) different ways of organizing are not necessarily equally effective, and (c) the most effective way to organize depends upon the nature of the environment to which the organization must relate (Kast & Rosenzweig, 1979; Galbraith & Nathanson, 1977; Pfeffer, 1983; Scott; 1981). Thus, contingency views explicitly reject the single best way approach to administration, arguing that the most appropriate structure depends on what type of work is being performed and on what environmental demands or conditions confront the organization at a given time.

Contingency theory as a major perspective in the present study. The demand that organization theory and research have relevance to practice characterizes the adoption of the contingency perspective as the dominant paradigm in the field of organizational behavior and as the major perspective in the present study. As Cheng (1983) recently pointed out, organizational research will be applied only to the extent

that it can generate findings that are of potential value and relevance to practitioners. The contingency perspective, with its focus on the development and testing of situation-specific theoretical models, has been effective in linking theory with practice. Current organization and management literature appears to attest to this linkage system (Kanter, 1983; Mintzberg, 1979; Nadler & Lawler, 1983; Ouchi, 1982; Peters & Teng, 1983; Peters & Waterman, 1982; Pfeffer, 1981; Pfeffer & Salancik, 1978).

The literature also underscores the relevance of the contingency perspective for the study and understanding of contemporary hospital systems. In a significant way, studies and articles which have been reviewed synthesize and extend the conceptualization of organizations as consisting of complex sets of variables, changing over time as a result of patterns of interdependence between different elements within the organization and between the organization and environment. The results of these studies provide support for the view of Kast and Rosenzweig (1979) that "each organization is unique and that each situation must be analyzed separately" (p. 115).

On a more concrete and practical level, contingency views suggest that organizations consist of people practicing their technologies, organized by their tasks, and structured into relationships kept dynamic by the many and varied ways in which they are measured and influenced. For the most part, people are self-selected, and to some degree, they share common values and purposes. An organization which is operating effectively must have a high degree of fit not only with the environment, but also with the dimensions of technology, structure,

motivations of organizational members, and the authority or control system. Although such fit or congruence is rarely perfect, organizations tend toward some idealized way of working that is cherished and relatively stable. When the market and availability of resources shifts and threatens an organization's sense of stability, numerous dimensions are affected and respond through the process of organizational change called adaptation (Sheldon, 1980). The process of strategic management is central to an organization's tendency toward adaptation and stability, and typifies the case of many of today's hospitals. Since hospitals need facts and information to survive, they function primarily as open systems.

Basic to the contingency perspective is the presumption that undertanding the internal functioning and performance of complex organizations requires a framework that cuts across and integrates the macro (overall organization) and micro (work group and individual job) levels of analyses (Van De Ven, 1977; Kast and Rosenzweig, 1979; Pfeffer, 1982; Shortell and Kaluvny, 1983). For example, Van De Ven and Morgan (1980) asserted that such an understanding "is not obtained by focusing on just a small set of variables or issues at one particular level of organizational analysis, particularly given our limited current state of knowledge about organizational design and performance" (p. 219).

Summary of contingency theory. The contingency perspective recognizes organizations as open systems which are dependent upon the external environment for survival. This perspective further suggests that organizations must adapt to environmental demands if they are to remain viable. Thompson (1967) postulated that an essential feature of

this adaptation process involved coping with environmental uncertainty and turbulence. The presumption is that successful coping strategies enable organizations, and their employees, to perform more effectively and efficiently than would otherwise be possible.

The preceding discussion of hospitals and the forces that are currently influencing their development suggests that these organizations are indeed facing a tremendously uncertain and turbulent environment. Accordingly, organizational adaptation could be expected to be a critically important activity in organizations of this type. Thus, the contingency perspective would appear to be well-suited to serve as a conceptual foundation for an empirical investigation of complex hospital systems endeavoring to survive in the present decade.

Summary of Theoretical Perspectives: Historical Review

Prior to 1960, the majority of theoretical and empirical work on how organizations operate was from a closed-system perspective, which was shaped by assumptions inherent in the Weberian, scientific management, and human relations views of organizations (Katz & Kahn, 1978). The main thrust of these assumptions centered on the normative structure of organizations, and was primarily concerned with maximizing task performance to achieve predetermined goals (Scott, 1981).

During the 1960s, the open systems perspectives began to emerge with the notion that complex organizations could not be viewed in isolation from their environments (Johnson, Katz and Kahn, 1966; Kast, & Rosenzweig, 1963; Schein, 1965). Organizational input,

transformation, and output processes as they impacted and were influenced by the environment became major research considerations (Katz & Kahn, 1966; Pugh, 1966; Thompson, 1967). Correspondingly, environmental uncertainty and the need, if possible, to control the environment began to be recognized as critical factors relative to the organizations ability to adapt and survive (Emery & Trist, 1965; Lawrence & Lorch, 1967; Thompson, 1967).

Empirical work on the relationship between organizations and their environments originated with Burns and Stalker (1961), who proposed that the stability of an organization's environment is an important factor in determining an organization's structure. They distinguished between two types of organizations--organic and mechanistic. Based on a sample of 20 manufacturing firms in Scotland and England, Burns and Stalker found that high-performing organizations in relatively certain or stable environments tended to be bureaucratic (mechanistic) in form, while those in uncertain or more dynamic environments relied more heavily on nonbureaucratic (organic) coordinating mechanisms, such as decentralization, lateral communication, group problem solving, and less clearly defined roles in the hierarchy. As Katz and Kahn (1978) aptly pointed out: "Their conclusion was not that the mechanistic model was inferior to the organic model under all conditions but that each model was appropriate to a different environment; in a stable environment the mechanistic system had its merits" (p. 134).

Lawrence and Lorch (1967) also provided empirical support for the congruence hypothesis in their investigation of ten U.S. firms in three different industries (plastics, consumer foods, and standardized

containers). They found that the most effective firms were those that differentiated their functional subunits to the extent required to adapt to the uncertainty in the task environment of these subunits, while simultaneously creating mechanisms to integrate these subunits. These integrating mechanisms provided the means to monitor and deal with the competitive nature of the overall corporate environment. In more turbulent, diverse, and complex external environments, subunits were more differentiated, in terms of clarity of goals, time perspective, interpersonal orientation, and locus of decision-making, than those in relatively stable and homogeneous environments. In other words, successful performance was contingent upon a balance of differentiation with environmental (task) uncertainty, and of integration with differentiation (Katz & Kahn, 1978; Lawrence & Lorch, 1967; Ullrich & Wieland, 1980). In the work of Lawrence and Lorch (1967), differentiation referred both to differences in formal structure and to differences in cognitive and emotional orientations of subunit members.

Thompson (1967) presented a somewhat more comprehensive theoretical explanation of how organizations both shape and are shaped by their environments in his classic analytic work Organizations in Action. Thompson (1967) "conceive(d) of complex organizations as open systems, hence indeterminate and faced with uncertainty, but at the same time subject to criteria of rationality and hence needing determinism and certainty" (p. 10). To paraphrase Thompson, organizations operate under norms of rationality and seek to create structures and formulate strategies which insulate their core technologies from environmental exigencies. Accordingly, Thompson argued that power processes such as

competition, contracting, co-opting, and coalescing combined with boundary spanning units are critical to organizational survival. The current trend among hospitals toward the formation of shared service arrangements, multihospital systems, mergers, and contractual agreements can be viewed as manifestations of Thompson's basic resource dependence model.

These studies contributed to extant administrative theory and practice in several significant ways. First, they represented a transition from earlier universalistic approaches to the design and development of organizations. Second, they called attention to the more complex strategies and relationships which organizations develop and execute to influence and control their environments, as well as the reciprocal relations existing between individuals and the organizations they function in. Third, they established the rationale for contingency theory and thereby provided the impetus for its emergence as the dominant paradigm guiding extant administrative science and practice. Thompson's work (1967), in particular, continues to be the cornerstone of current administrative theory and practice.

Consistent with Kuhn's (1970) usage of the term, a paradigm connotes an accepted pattern or way of perceiving, thinking, and doing within the context of a particular vision of reality. Paradigms provide researchers and practitioners alike with relevant conceptual models from which to view phenomena and diagnose or predict behavior. Given the proliferation of contingency models within the last decade, there can be little question that contingency theory has become the dominant paradigm of administrative science and practice (Shortell & Kaluvny, 1983). As

Kuhn (1970) cogently stated: "Acquisition of a paradigm and the more esoteric types of research it permits is a sign of maturity in the development of any given scientific field" (p. 11).

Major Components of Organizational Design Underlying the Study

The five components of organziational design selected by the investigator to guide the research include the following: (a) external environment, (b) organizational context, (c) organizational structure, (d) organizational processes, and (e) organizational climate. Each of these dimensions will be described as a backdrop for the study and are presented in Figure 1.

External Environment

Within the contingency perspective, emphasis is given to the external environment "as a set of influences shaping the structure, functioning, and fate of organizations" (Scott, 1981, p. 115). Two rather distinctive and relevant approaches used to conceptualize environmental characteristics are the natural selection model and the resource dependence model. Both of these approaches view organizational outcomes as the dependent variable and give priority to studying environmental characteristics in their own right as the independent variable.

The natural selection or population ecology approach. As its name suggests, this approach deals with the populations of organizations

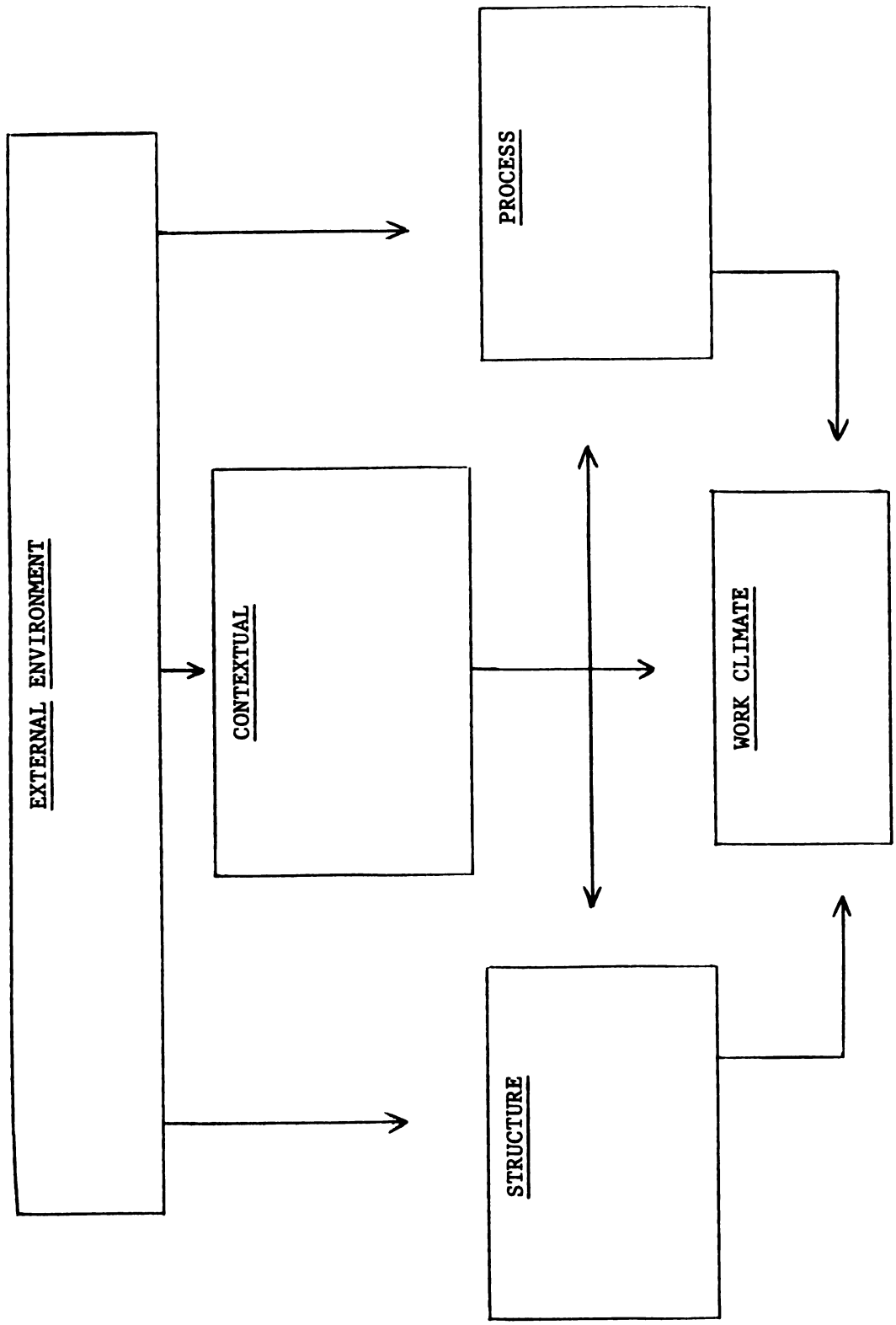

Figure 1. A Provisional Model of Organizational Components of a Hospital.

rather than with single organizational systems. Hannan and Freeman (1974, 1977), originators of this approach, draw extensively from biological ecology and argue that selection processes operating in the external environment are the critical determinants of both the form and survival of organizations. Thus, the natural selection approach suggests that it is not necessary to presume rationality in order to explain organizational growth and survival. As Freeman (1977) noted: "Natural selection approaches to the study of organizations, which focus on populations of organizations, seem to leave no role for individual choice" (p. 23). In other words, the totality of environmental conditions at any point in time not only specify the needs for particular goods and services but also determine many of the structural and functional characteristics of the organizations created to provide them (Aldrich, 1979; Hannan & Freeman, 1977).

With a focus on external control of organizational behavior, conceptualization of the environment is a critical issue. An important device in the natural selection approach is the utilization of the powerful metaphor "niche" borrowed from biological ecology. Hannan and Freeman (1977) defined niche as "that area in constraint space (the space where dimensions are levels of resources, etc.) in which the population outcompetes all other local populations. The niche, then, consists of all those combinations of resource levels at which the population can survive and reproduce itself" (p. 947). In a similar manner, Aldrich (1979) defined environmental niches as "distinct combinations of resources and other constraints that are sufficient to support an organizational form" (p. 28).

External environmental characteristics in natural selection approaches are dimensionalized according to three criteria: (a) the uncertainty of environmental conditions, (b) the compatibility of the different resource states, and (c) the frequency of changes in environmental states over time (Hannan & Freeman, 1981; Pfeffer, 1982). As the survival principal advanced by Hannan and Freeman (1977) clearly stated: "it is the environment which optomizes" (p. 939). For example, the natural selection approach assumes a population logical and argues that environments select for survival those organizational structures most suited to exploiting the resources in their changing environments. Selection occurs primarily through the competition among populations of organizational structures. Organizations which cannot adapt to changes in their environmental niches will find survival difficult if not impossible. While empirical support is limited, Starkweather (1981) has stated that this approach explains hospital mergers in large communities and metropolitan areas. Clearly, its potential for understanding and explaining hospital survival rates in an increasingly competitive health care market is substantial.

The resouce dependence approach. This approach emphasizes the effects of environmental constraints on organizational behavior, and argues that organizations are active agents of change and, therefore, capable of both adapting and altering their environments (Pfeffer and Salancik, 1978). The resource dependence approach is more concerned with the actions and adaptations of single organizations. It also identifies the role of individual choice and intraorganizational political processes as central to organizational survival. As Pfeffer

and Salancik (1978) note: "Organizations are only loosely coupled with their environments, and . . . power is one important variable intervening between environments and organizations" (p. 230). The resource dependence approach assumes that organizations cannot generate all of the resources required to sustain themselves over time; therefore, they must engage in constant and important transactions with elements in their environments that can supply those resources necessary and critical to their continued survival. Furthermore, these transactions are either pursued or avoided because of power and control issues inherent in dependency relationships (Pfeffer & Salancik, 1978). This approach advocates a political conception of organizations and argues that organizational outcomes must be viewed as the result of environmental effects on the distribution of power and influence within organizations (Pfeffer & Salancik, 1978; Thompson, 1967). In turn, the distribution of power and influence affects the selection and retention of organizational leaders and the subsequent actions taken by organizations to manage or control problems of environmental dependency. Empirical support of the relationship between environmental effects on distribution of power and the resultant selection or removal of executives has been established by Pfeffer and Salancik (1978) in their study of hospital administrators, and additional evidence can be found in the more recent work of Peters and Waterman (1982) and Kantor (1983).

Within the resource dependence perspective, environments are conceptualized as networks of complex interorganizational relations. This conceptual view is based on the premise that organizations are open systems, dependent on their environments for resource exchange, yet

requiring independence to operate rationally (Pfeffer & Salancik, 1978; Thompson, 1967). Pfeffer and Salancik (1978), major contributors to this approach, embrace exchange theory (Emerson, 1962). In their views on power and dependence, Pfeffer and Salancik (1978) argue that interorganizational relations are best seen as strategic responses used by organizations to secure access to critical resources, to reduce uncertainty and dependence, and to stabilize relationships with other organizations or elements in the environment. Interorganizational relations, then, reflect the strategic linkages that organizations negotiate to enhance and preserve their autonomy and acquire some measure of control over their interdependencies (Pfeffer & Salancik, 1978; Thompson, 1967).

In the resource dependence approaches, external environmental characteristics are dimensionalized according to three explicit factors which ultimately determine one organizations dependence on another: (a) the degree of concentration of resources, (b) the scarcity or munificence of resources, and (c) the degree of interconnectedness of the network of organizations (Pfeffer & Salancik, 1978). As the exchange principles explicated by Emerson (1962) and adopted by Pfeffer and Salancik (1978) unequivocally asserted, power is the obverse of dependence; therefore, organization A has power over organization B to the extent that A controls resources critical to B and/or to the extent that A completely monopolizes those resources.

To summarize, the resource dependence approach assumes a political bargaining logic and argues "that organizations seek to manage or strategically adapt to their environments" (Pfeffer & Salancik, 1978,

p. 79). Since environmental dependency places constraints on the ability of organizations to function autonomously and with some degree of certainty, they are motivated to utilize a variety of political strategies that will improve their power dependence relations and, thereby, increase the likelihood of survival as a relatively independent entity (Pfeffer and Salancik, 1978; Thompson, 1967). The formation and maintenance of interorganizational relations are, therefore, a consequence of the various political strategies that organizations enact to achieve these objectives. These strategies in turn reflect either symetrical or asymetrical interorganizational linkages, the former resulting from complementary exchanges and the latter from more competitive or imbalanced exchanges (Pfeffer, 1981; Pfeffer & Salancik, 1978). Pfeffer, 1981). The types of strategic linkages that organizations typically pursue to alter or manage the dual problems of interdependence and uncertainty include mergers, joint ventures, interlocking directories, and diversification. Empirical support of the ability of this approach to explain or predict patterns of interorganizational linkage activities is growing, with evidence of consistent findings established in the current hospital as well as organization and management literature (Brown and McCool, 1980; Kantor, 1983; Longest, 1981; Peters & Teng, 1983; Peters & Waterman, 1982; Pfeffer, 1981; Pfeffer & Salancik, 1978; Zuckerman & Wheeler, 1982).

The major argument advanced by both the natural selection and resource dependence approaches is that all organizations are open and vulnerable to environmental influence as a condition of their survival. Although both approaches are addressed to different levels of analysis,

time frames, and types of organizational processes, they offer complementary conceptual schemes for defining and comprehending the environments of extant hospital organizations. As Scott (1981) aptly points out: "they aid us in asking and answering different, but equally important, questions about organization-environment connections" (p. 178).

A combination of the natural selection and resource dependence approaches follow systems theory (von Bertalannfy, 1968), and characterize environments as both a source of resources that organizations must mobilize to survive and as a source of contraints to which they must adapt when operationalizing performance objectives (Scott, 1981). In this regard, the concept external environment denotes forces in the environment such as economic, political-legal, technological, demographic, and cultural which impact on organizations and which must be assumed as givens or as independent variables in a contingency framework (Kast & Rosenzweig, 1979). This characterization, in turn, suggests that no single organization can significantly alter or directly control these general environmental characteristics. Consequently, it follows that the notion of boundary setting is fundamental to the ability of organizations to deal with specific environmental forces and to the delineation of the concept environment as well.

Boundary setting also reflects the actions taken by organizations to manage their external dependencies, both to ensure survival of the organization and to acquire more autonomy and freedom from external influences (Kast and Rosenzweig, 1979; Scott, 1981). Whether implicitly

or explicitly, boundary setting is a consequence of rational choice and can be seen as an expression of the discretionary power of an organization with respect to its environment. Pfeffer and Salancik (1978) have summarized boundary setting relative to organizations as follows:

> The organization is the total set of interstructured activities in which it is engaged at any one time and over which it has discretion to initiate, maintain, or end behaviors . . . . The organization ends where its discretion ends and another's begins. (p. 32)

Definition of External Environment

In this study, the external environment is defined as the general societal forces that are not subject to the direct control of organizations or their managements. A synthesis of classification taxonomies developed by Duncan (1972), Hall (1972), Katz and Kahn (1978), and Kast and Rosenzweig (1979) suggests the following representative general or macro level environmental variables: economic, social, cultural, technological, political, legal, educational, and demographic. The impact of these external influences on organzations can be viewed as having two problematic consequences, the nature of which can be examined empirically by focusing on interorganizational linkage activities. First, organizations face uncertainty arising from the unpredictable actions of other organizations that comprise the environment. This uncertainty, according to Pfeffer and Salancik (1978) is a result of the inability to predict the behavior of competitors. Second, organizations are interdependent with other organizations with which they exchange essential resources and, therefore, vulnerable to influence by them. This interdependence stems from transactions with noncompetitors such as

government agencies, suppliers, customers, and creditors (Pfeffer & Salancik, 1978). As noted by Thompson (1967), Pfeffer and Salancik (1978) Shortell and Kaluvny (1983), and others, mergers, joint ventures, cooptation, interlocking directorates, selective recruitment, diversification, and other political activity are valid empirical indicators of the actions taken by organizations to reduce uncertainty and manage interdependence.

Organizational Context

Since organizations have been characterized in the preceeding discussion as systems interacting with larger systems, further discussion of the relationship between the environment and organizations seems appropriate. The pioneering efforts of Dill (1958) in defining the task environment provided direction for most of the subsequent work on operationalizing the concept of environment with respect to organizations. Typically, the task environment is defined as that portion of the more immediate organizational setting which is relevant for goal setting and goal attainment (Dill, 1958; Kast & Rosenzweig, 1979). Operationally, the task environment is usually limited to the following five major constituencies with which most organizations must relate: client or customers, suppliers, competitors, regulators, and other sociopolitical or special interest groups (Dill, 1958; Thompson, 1967). A number of studies have indicated that as this segment of the environment becomes more dynamic, organizations must become not only more receptive to change, but alter their internal structures and functions to maintain and/or optimize a high survival potential

(Burns & Stalker, 1961; Duncan, 1972; Emery & Trist, 1965; Kanter, 1983; Lawrence & Lorch, 1967; Osborn and Hunt, 1974; Peters & Teng, 1983; Peters & Waterman, 1982; Pfeffer and Salancik, 1978).

Thompson (1967), building on the work of Levine and White (1961), argued that organizations stake out domains; that is, they make claims on the part of the task environment in which certain services or products to certain clients or customers will be provided. This concept reduces the amorphous environment from "everything out there" to a specific set of organizations or constituencies which are relevant to decision-making and strategy formation processes of individual organizations (Thompson, 1967). Similarly, Evan (1966) employed the term organization-set to describe the specific set of environmental actors with which individual organizations must transact to achieve their primary goals and purposes. Pfeffer and Salancik (1978) suggest that "the underlying premise of the external perspective on organizations is that organizational activities and outcomes are accounted for by the context in which the organization is embedded" (p. 39).

Specifications of the task environment, domain, and organization-set were important initial contributions in translating abstract systems thinking into more pragmatically useful organization terms. However, the question remains as to how external environments actually become known to organizational policy makers. Indeed, dependency and uncertainty with which researchers deal are often far removed from the ways in which practicing administrators view environments. These views frequently are based on trends or events that

have significance to their organization. This difference predisposed to a debate on whether administrators respond to the real external environment or to a set of perceptions about that environment (Scott, 1981). Exploration of this question by researchers led them to conclude that the factual characteristics of that environment are mediated through the filter of administrative perceptions (Childs, 1972; Scott, 1981). Kast and Rosenzweig (1979) reached a similar conclusion and completed the argument:

> Managers in two different organizations in the same industry may have differing views of that environment. These perceptual differences help to explain the variations in organization design and managerial practices within the same industry or field. (p. 134)

Organizational context has emerged as an increasingly important concept in the literature considering the effects of environmental dimensions on organizational characteristics. Although technology has been the primary variable employed in the environment-organization research, more recent literature suggests that organizational behavior is influenced by many forces in addition to those generated by technology (Kanter, 1983; Nadler & Tushman, 1982; Peters & Waterman, 1982; Pfeffer, 1982; Scott, 1981; Ullrich & Weiland, 1980). Furthermore, Scott (1981) has noted that most of the technology-structure studies suffer from definitional and measurement problems and, as a consequence, indicate mixed and often contradictory results. In contrast with early studies (e.g., Dill, 1958; Lawrence and Lorch, 1967; Duncan, 1972) which proceeded from the assumption that structure follows technology, the organizational context research suggests that the reverse is usually the case in complex organizations.

Structure, both formal and informal, as well as human and other contextual variables can determine technology (Pfeffer, 1982; Pfeffer, 1982; Ullrich & Weilland, 1980). Therefore, as Scott (1981) pointed out: "Organizations are not simply regarded as technical systems but as social and political systems; and the concern is not primarily how to achieve technical efficiency but how to ensure organizational survival" (p. 188).

Pugh, Hickson, Hinnings, McDonald, Turner, and Lupton (1963) were among the first to challenge the technological imperative hypothesis and to argue that much of the variation in organizational structures may be explained by contextual factors other than technology. Concerned with the confusion and confounding of research in the previously cited technology-structure literature, Pugh and his colleagues (1963) at Aston University in England, the so-called Aston group, used a multivariate approach to define and measure the relative importance of a large number of contextual factors presumed to influence organizational structure. The concept of organizational context developed out of this research effort and has been used to connote the following empirically confirmed contextual variables: origin and history, ownership and control, size, charter or mission, technology, and interdependence (Pugh et al., 1963). In a later study involving a sample of 46 organizations in the English Midlands, the Aston group (1969) used these eight contextual elements as independent variables in a multivariate regression analysis to predict three underlying dimensions of organizational structure previously established: structuring of activities, concentration of authority, and line control of work flow. The findings of this study indicated that

these aspects of context can be regarded as being of primary importance in determining the structure and functioning of complex organizations (Pugh et al., 1969).

In addition to the variables identified by Pugh et al. (1963), another contextual contingency affecting organizational structure and performance is the organization's strategy. Chandler (1962) was the first to elaborate on the strategy-structure connection, stressing the notion of "fit" between organizational arrangements and environmental requirements. Adams (1976) and Aldrich and Herker (1977) extended the idea of internal fit among organizational systems implied by Thompson (1967) and Lawrence and Lorch (1967), noting the importance of peripheral systems supporting and buffering the technological core from environmental perturbations. Miles and Snow (1978) and Jelinek (1979) further developed Child's (1972) argument that administrative perceptions and choices strongly influence the strategic actions organizations undertake to achieve a better fit with their environments. More recently, Nadler and Tushman (1982) have described strategy as "the whole set of decisions that are made about how the organization will configure its resources against demands, constraints, and opportunities of the environment within the context of its history" (p. 39). This description of strategy accords with the current emphasis on strategy analysis as an important aspect of organizational analysis (Kanter, 1983; Peters & Teng, 1983; Peters & Waterman, 1982; Pfeffer, 1982; Shortell & Kaluvny, 1983).

Strategy can be defined either retrospectively as the pattern of an organization's past decisions (Mintzberg, 1978), or, as is more common,

in terms of prospective intentions (Chandler, 1962). Regardless of the approach taken, strategy refers to the issue of matching organizational capabilities to environmental demands, or making the fundamental decision about: "What business are we in?" (Drucker, 1978; Nadler and Tushman, 1982). An organization's strategy, then, defines the ways in which its goals and purposes will be fulfilled. In this respect, the current attention being paid to strategy formation and strategic management has reinforced the importance of organizational purpose. While attention to purpose has also generated a wide variety of definitions of strategy, Bourgeois (1980) has noted that "one can find among the many definitions that strategy has the two primary purposes of defining the segment of the environment in which the organization will operate and providing guidance for subsequent goal-directed activity within that niche" (p. 27). In a similar vein, Bracker (1980) noted that "business strategy has the following characteristics: an environmental or situational analysis is used to determine a firm's posture in its field, and then the firm's resources are utilized in an appropriate manner to attain its major goals" (p. 221).

It should be noted that much of the early theoretical and empirical work on organization-environment relations reflects considerable confusion and overlap concerning the use of different conceptualizations of technology and structure, levels of analysis, and types of measures. With few exceptions, investigators tended to either ignore the environment completely or hold it constant while concentrating on the search for universalistic organization and management principles. Several recent reviews of the organization-environment literature have

discussed the limitations and their potential for creating confusion and confounding in this area of research and theory development (Katz & Kahn, 1978; Miles, Snow, & Pfeffer, 1977; Pfeffer, 1982; Scott, 1981; Shortell & Kaluvny, 1983). As a consequence, Jelinek and Burstein (1982) offer the following suggestion: "Current descriptions often rely heavily on technically oriented and strategically deficient perspectives--more representative of their author's specialties than the requirements of managers" (p. 242).

Within the past decade, contingency theoriests and researchers have utilized open systems analysis to demonstrate the apparent interactions between a growing number of environmental, contextual, structural, and human variables. Their contributions to extant administrative theory and practice can be placed into three general categories: (a) the conceptualization of organizations in the context of their environments; (b) the conceptualization of administrative behavior in the context of their organizations; and (c) the development of methods to improve the alignment of organizational strategy, structure, and process with environmental demands (Kanter, 1983; Kast & Rosenzweig, 1979; Jemison, 1981; Miles, Snow, & Pfeffer, 1974; Mintzberg, 1973; Nadler & Tushman, 1982; Peters & Teng, 1983; Peters & Waterman, 1982; Pfeffer, 1974; Pfeffer & Salancik, 1978; Scott, 1981; Shortell & Kaluvny, 1983). Overall, the major contributions of these researchers combined with the research of the Aston group (1963, 1969) have served to reject the technological imperative and called for greater attention to the processes in organizations that produce presumed results and to the effects of historical contexts on organizational outcomes (Kanter,

1983; Nadler & Tushman, 1982; Peters & Waterman, 1982; Pfeffer, 1982). Additionally, they have provided more precise articulation and definition of the concepts and related variables surrounding the complex relationships among dimensions of organizational environments, between organization context and structure, between strategy and structure, and inherent in strategy formulation and implementation. Finally, these contributions have indicated that a reciprocal or interactive relationship exists between strategy and structure (Miles, Snow, & Pfeffer, 1974; Pfeffer, 1982). Scott (1981) concluded: "It is from this level that the interests, the resources, the dependencies of a given organization are best examined and its survival strategies probed" (p. 173).

Definition of Organizational Context

Current perspectives on organization linkages suggest that organizational decision-makers intervene between organizational context and structure. That is, the relationship between context and structure is not directly determined by contextual factors, but depends on how key decision-makers view the value of contextual factors and how they choose to deal with them (Bobbitt & Ford, 1980; Childs, 1972; Ford & Schellenberg, 1982). As previously noted, contextual factors refer to those variables which may influence administrative choices other than personal or individual administrator attributes. These include but are not restricted to such variables as administrative philosophy (Osborn, Hunt, & Jauch, 1980), mission, size, technology, history, external environment, current structure, and people (Bobbitt & Ford, 1980;

Nadler & Tushman, 1982; Pugh et al., 1963). Thus, the choice of structure is largely a function of administrators' cognitive and motivational orientations, their strategic thinking competences, and their ability to implement the chosen structure (Ford & Schellenberg, 1982; Jemison, 1981; Quinn, 1980). Accordingly, the structure of organizations is strongly influenced by the strategic chocies made by organizational administrators. Therefore, as noted by Ford and Schellenberg (1982), the conceptual and operational definition of organizational context must recognize the critical variable of strategy to improve context-structure alignment.

Organizational context, than, is defined as the focal setting within which structure is developed and refers to the more specific forces that give direction to, or act as constraints on, the decision-making and strategy formation processes of an individual organization. Implicit in this definition is the presumption that strategic decisions must take the organization as a whole as the unit of analysis. And, as noted by Mintzberg (1978), "when a sequence of decisions in some area exhibits a consistency over time, a stategy will be considered to have formed" (p. 935). Operationally, strategy becomes a pattern of choices made by top level decision-makers to establish the appropriate alignment and linkages among characteristics of the organization (e.g., context and structure) and performance. Therefore, as suggested by Childs (1972), Mintzberg (1978), and Bourgeois (1980) among others, organizational decision-makers, by their patterns of attention or inattention to strategic issues, intervene between context

and structure. Thus, as Kanter (1983) cogently pointed out: "Strategy may not so much drive structure as exist in an interdependent relationhship with it" (p. 290).

Following Mintzberg (1978), this research views strategy as the cumulative outcome of a series or pattern of strategic decisions made by organizational policy-makers to improve the alignment and linkages between context and structure. A strategic decision is defined as a specific commitment to actions which are significant in terms of either the resources allocated or the precedents established. In this respect, strategic decisions are made outside of the functional areas of the organization and, therefore, seek to relate the total organization more effectively to the combination of general environmental and specific contextual conditions. For example, top level decisions about the ways in which hospitals will attempt to gain an edge over competitors or seek to control and/or change the quality of inputs of patients and personnel are strategic in nature. As noted by Chandler (1962), strategic decisions are externally-oriented and involve the allocation of resources; nonstrategic decisions are operationally-oriented and involve the efficient utilization of resources. The essence of the strategic alignment process is succinctly captured by Quinn (1980), who used the term "logical incrementation" to describe how strategy emerges in major corporations:

> The most effective strategies of major enterprises tend to emerge step-by-step from an iterative process in which the organization probes the future, experiments, and learns from a series of partial (incremental) commitments rather than through global formulations of total strategies. Good managers are aware of this process, and they consciously intervene in it. They use it to improve the information available for decisions and to build the psychological

> identification essential to successful strategies....Such logical incrementation is not "muddling", as most people understand the word....(It) honors and utilizes the global analyses inherent in formal strategy formulation models (and) embraces the central tenets of the political or power-behavioral approaches to such decision-making. (p. 58)

Quinn's (1980) arguments have been strongly supported by other researchers (e.g., Kanter, 1983; Peters & Teng, 1983; Peters & Waterman, 1982) as the way in which successful executives establish the appropriate alignment and linkages among input, transformation, and output processes. More specifically, the overall conclusions from these researchers was that successful organizations were those in which the top level decision-makers were able to make incremental adjustments to changing contextual conditions or in which the internal structures and processes were appropriate. Additionally, boundary spanning activities were shown to be of critical importance to executives in their effective management of the strategic decision-making process. In this respect, boundary spanning activities served a dual function in information processing, acting as both filters and facilitators. These studies also confirmed that boundary spanning activities permit boundary role incumbents to gain considerable power for themselves and/or their organizations. Administrative or executive behaviors in boundary spanning activities, however, tended to vary from context to context and in relation to the value sought (Kanter, 1983; Peters and Teng, 1982; Peters & Waterman, 1982; Quinn, 1980).

Contextual Variables

As the previous discussion suggests, only a limited number of individuals at the total organizational level have a substantive

influence on the goal priorities of contemporary corporations and hospitals (Mintzberg, 1979; Peters & Teng, 1983; Quinn, 1980). The predispositions of these individuals toward specific organizational goals and strategies are accompanied by perceptual filtering of the elements constituting context. In this respect, the values of contextual elements serve as an important source of information to top level decision-makers' choice of structure and the strategic initiatives essential to achieving desired outcomes. Accordingly, the contextual elements selected for assessment in this study are: history, ownership and control, mission/strategy/goals, service area demographics, size, competitive advantage and unionization. These seven variables are representative of the value inputs that give direction to, or act as constraints on, the decision-making and strategy formation processes of discrete hospital systems. Although at a lower level of abstraction, forces from the general environment are continually penetrating into the contextual setting of each specific hospital (Kast & Rosenzweig, 1979).

History. There is growing evidence that the ways in which extant organizatons operate are profoundly influenced by past events (Pugh et al., 1969; Kanter, 1983; Mintzberg, 1979; Nadler and Tushman, 1982; Peters and Teng, 1983; Peter & Waterman, 1982). Every organization has a history, a known or documented past, that helps explain its contemporary priorities and characteristics. An examination of the historical documents of a particular hospital,for example, generates valid data about the set of societal forces and actors that influenced the founding, growth, and development of the institution. They describe

the periods of growth, stability, turbulence, and possible entropy as the institution sought to adjust to the forces impinging upon it. They also indicate that the hospital had watershed years or phases in which important decisions influenced its growth and development and established the precedents and traditions to which the institution currently adheres. Empirical indicators of history, then, are the patterns of past events, decisions, and activities of the hospital that have an impact on its current functioning (Nadler & Tushman, 1982).

Ownership and control. Research indicates that value inputs from the owning and governing units of an organization have a significant impact on its decision-making and strategy formation processes (Brown & McCool, 1980; Gilmore and Wheeler, 1972; Heydebrand, 1973; Peters and Teng, 1983; Pfeffer, 1973; Pugh et al., Rushing, 1974; Shortell & Brown, 1976). The ownership of nonprofit general hospitals can be usefully classified into three categories: private, public, and federal (AHA, 1978). This classification further stratifies nonprofit general hospitals with regard to their governing boards. Correspondingly, the formal or overall control and responsibility for hospital operations and services are vested in their legally recognized boards of directors or trustees (AHA, 1982). The focus of this study is on the first two ownership categories, namely, private and public hospitals since they comprise the study population relative to the hospital setting.

Private or voluntary short-term general hospitals are owned and controlled by nongovernmental associations or corporations, as well as religious groups. In hosptials affiliated with churches and fraternal associations, governing board members are primarily selected by the

sponsoring organization. By contrast, hospital board members of nonchurch voluntary associations or corporations appear to be representative of community leadership (Heydebrand, 1973; Schulz & Johnson, 1983).

Public or state and local governmental hospitals are controlled by specific departments, boards, or administrative systems of their respective governments. State hospitals are either under the jurisdiction of state departments of health and human services or controlled by special boards or commissions appointed by the governor. Local governmental hospitals include county hospitals, city, city-county, and district hospitals. The county and city hospital groupings are usually controlled by governing boards or commissions comprised of members who are appointed by local governmental officials. Governing board members of district hospitals, however, are generally elected by the residents of the respective district (Heydebrand, 1973: Schulz & Johnson, 1983).

The governing boards of nonprofit general hospitals have traditionally been dominated by business executives, members of the legal and accounting professions, physicians, and administrative and lay spokespersons for these institutions (Schulz & Johnson, 1983). This pattern of representation has generated considerable criticism that hospital boards represent community leaders and vested interests rather than the consumers whom hospitals serve (Goldsmith, 1981; Schulz & Johnson, 1983). Hence, the profile of hospital governing boards which emerges is one primarily representative of the upper to upper middle class segement of the population. As noted by Goldsmith (1981), "The

justification of this skewed representation is that such a group is likely to bring greater financial and intellectual resources to a board" (p. 88). The extent that this skewed representation reflects the composition of governing boards in the nonprofit sector is of particular importance, since the legal charge of a board is to represent and be accountable to the collective interests of all constituents in addition to the overall welfare of the institution (Schulz & Johnson, 1983). Thus, the composition of governing boards is an important indicator of value systems of board members relative to hospital decision-making and strategy formation processes.

Mission/strategy/goal. Frequently referred to as a statement of philosophy or goals and objectives, the mission statement delineates the ideals that undergrid an organization's basic raison d'etre. Mission statements typically include: (a) a statement of the philosophy of the organization, (b) an expression of the values or ideologies to which the organization adheres, (c) a statement that specifies the role and purposes of the organization, and (d) a statement that articulates the goals and objectives that operationalize the institutional strategy (Charns & Schaefer, 1983; Veninga, 1982). Mission statements, although broad and necessarily vague in some instances, provide the necessary unifying themes for the formulation of organizational programs and services. They also provide a sufficient degree of specificity that allows for the differentiation of one organization from all others. Thus, it is suggested that hospital mission statement are relevant indicators of value inputs to decision-making and strategy formation processes in their own right.

Service area demographics. The National Health Planning and Resources Development Act of 1974, Public Law 93-461, established the concept of health service areas (HSAs) to reflect the geographic boundaries within which hospitals define the specific services they will provide and the targeted constituencies they will serve. In the State of California, these geographic regions are designated by the Governor and the Secretary of Health and Human Services, and are based on population estimates, availability of resources, and other related factors necessary to provide acceptable health services for residents (California Hospital Association, 1983). HSAs are administered by consumer-dominated governing boards whose mandate is comprehensive regional planning within the framework of clearly enumerated federal guidelines. To this end, each HSA's governing body must develop a master plan which reflects concern for the quality, distribution, and cost of health care services as articulated in the nation's health policy documents (Cushman & Perry, 1983).

Basic to the development of the master plan is the gathering and analyses of data on the HSA concerning both the health status of area residents and the health care delivery system and its use. Correspondingly, all health care institutions are required to submit long-range planning documents to HSA regulatory agencies for periodic review in support of their continued existence and congruence with the areawide master plan. The data, which is published each year (e.g., California Health Facilities Commission Disclosure Report, 1983), provides descriptive information on the demographic characteristics of

HSAs and statistics on various other relevant aspects of the health system which impact on the hospitals used in the present study. Clearly, HSA vital statistics are important value inputs to institutional planning and decision-making processes as well.

Size. Beginning with Weber (1947), experts in the field of organizational theories have suggested organizational size (the number of salaried employees) as a major determinant of variations among organizations (Blau, 1970; Child, 1973). The effect of size generally is reflected in the degree of centralization and formalization of structure, and the amount of horizontal differentiation, or the extent of specialization and vertical elaboration (Pfeffer, 1982). Berry (1967) as well as Neuhauser and Anderson (1976) found that size was one of the principal factors causing structural and performance variations among short-term general hospitals. Thus, it is suggested that size is an increasingly important value input affecting both strategic decisions as to the type of services hospitals will endeavor to offer and the design of their internal structures. Because of their close relationship to the overall objectives of the study, the total number of salaried personnel and the number of beds were chosen as the measures of size to be used in this investigation.

Competitive advantage. The means by which an organization strives to differentiate itself from other organizations in the same industry is termed competitive advantage (Shirley, 1982). From a hospital's frame of reference, the means for differentiation requires a change from facility or master planning to strategic planning. As noted earlier, strategic palnning is focused directly on the interface between the

focal hospital and its competitive situation. A shift in orientation from manufacturing to a consumer marketing approach is also implied when strategic planning is adopted (Thieme, Wilson, & Long, 1981). Hence, market research techniques are becoming a crucial element in competitive assessment activities and in the development of viable strategic choices available to hospital decision-makers. For example, the recognition of changed attitudes and preferences in maternity care enabled many hospitals to gain a competitive advantage by offering birthing rooms and other amenities related to consumer needs and wants.

Thieme, Wilson, and Long (1981) referred to competitive assessment as involving an analysis of the strengths, weaknesses, and future plans of key competitors followed by identification of the opportunities and threats to be acted upon by hospital decision-makers. The market positions, utilization characteristics, reimbursement and case mix trends, major changes in services and programs, medical staff patterns, administrative management capabilities, strategic plans, financial positions and resources, building needs and conditions, and other factors specific to key competitors should be known and assessed for their impact (Thieme, Wilson, & Long, 1981). This kind of analysis reflects what Thieme et al. (1981) call a marketing orientation.

In recent years, hospitals have been strongly encouraged to adopt a market orientation and identify potential constituencies with whom they can develop mutually beneficial exchange relationships (Goldsmith, 1981; MacStravic, 1977; Milch, 1980; Ready & Ranelli, 1982; Thieme, Wilson, & Long, 1981). Such a market orientation is more concerned with differentiating population groups on the basis of needs and wants,

rather than by geographic service area characteristics. That is, the market approach also views physicians, unions, government, and other institutions as important constituents with whom hospitals may have exchange relationships (Thieme et al., 1981). When combined with a comprehensive internal assessment, the market approach could lead to strategic initiatives which would significantly strengthen the competitive posturing of nonprofit general hospitals (Thieme et al., 1981).

The current literature suggests that strategic planning, marketing and the use of sophisticated analytic techniques are essential to the survival of hospitals in today's restrictive and competitive health care environment. Paradoxically, research findings indicate that these concepts and techniques have not been widely adopted (Bartlett, Schewe, & Allen, 1984; Kropf & Goldsmith, 1983; Milch, 1980). For example, Kropf and Goldsmith (1983) found that with few exceptions, hospital plans are not significantly different in terms of technical sophistication from what hospitals would have produced following World War II. However, it is reasoned here that the recent conversion to the new Medicare Prospective Payment System (PPS) would require extensive innovation in hospital planning activities. Thus, hospital planning activities would be expected to reflect greater concern about the needs and desire of consumers, increased use of marketing methods and techniques, and a heightened awareness of the opportunities and consequences of competition.

Competitive advantage in the present study was determined by the nature and extent of vertical and horizontal integration, the use of

marketing methods and techniques, and the type of planning activities that can influence how hospitals choose to compete in light of industry conditions and their positions in the marketplace. Strategies such as satellite clinics, health maintenance organizations and group distribution and purchasing arrangements are examples of vertical integration. Horizontal integration or expansion strategies include attempts to control patient movement throughout the inpatient system. Incorporating nursing homes, home health, and hospice services into one parent organization provides an example of horizontal integration.

Facility or master planning and program planning have been routine practicees for most hospitals. However, these planning activities tend to be circumscribed and short range, with an emphasis on individual programs, inpatient services, equipment, and physical plant. In contrast, strategic planning is future-oriented and "broad in scope and long in consequences" (Peters, 1979, p. 13). It focuses attention on resource allocation decisions and strategic considerations that are based on the status of the external environment. Implicit in most definitions of strategic planning is the assumption that hospitals can and do compete to serve consumer needs, and that hospitals will choose markets that offer them greater stability and growth. Much of the specific information about the external environment and competitive situation essential for strategic planning is also necessary for marketing activities. Thus, strategic planning activities go hand-in-hand with marketing endeavors (Bartlett, Schewe, & Allen, 1984; Kropf and Goldsmith, 1983; Thieme, Wilson, & Long, 1981).

While commitment to the application and development of these concepts relative to strategic planning and marketing endeavors vary from hospital to hospital, it would be expected that the altered incentive structure under prospective payment has led nonprofit hospitals to develop strategic planning processes with a market orientation. The use of multivariate forecasting techniques, market surveys to obtain inputs from consumer groups, market segmentation as a means for building or maintaining institutional image or market share, and upgrading of information systems are representative of the indicators used to assess the marketing and planning activities of the hospitals in this study.

Unionization. The rapid and substantial growth of employee unionism in the hospital industry is clearly one of the most interesting and controversial labor relations phenomenon of recent years. Indeed, union membership figures for hospital employees now approximate those of other major private sector industries (Clarke, 1981). It is further estimated that one-third of the nation's total hospital work force is currently employed in hospitals that have collective bargaining agreements (Numerof & Abrams, 1984). Although some 40 organizations represent hospital employees in collective bargaining, three unions dominate the industry: the National Union of Hospital and Health Care Employees (Local 1199), the Service Employees' International Union (SEIU), and the constituents of the American Nurses' Association. Collectively, they account for more than 65 percent of all negotiated contracts (Clarke, 1981). In a growing number of urban centers across

the country, nonunion hospitals are fast becoming the exception rather than the rule (Maxey, 1981; Numerof & Abrams, 1984).

Much of the attention and controversy surrounding the growth and development of the hospital union movement derives from the organizing activities of professional employees, particularly in the public and nonprofit sectors of the industry. In an early study of professional unionism, Garbarino (1977 reported that approximately 25 percent of all professional employees were union members. More recent literature further indicates that health care professionals increasingly are turning toward collective bargaining as a means of preserving or regaining autonomous control over their practice in addition to other professional prerequisites in bureaucratic hospital settings (Beletz, 1980; Bentivegna, 1979; Numerof & Abrams, 1984; Rothman, 1983).

The expansion of professional unionism into the nonprofit general hospital sector is partially the result of more permissive legislation, but it is also often attributed in part to the increasing bureaucratization of these institutions and the subsequent erosion of professional prerogatives (Beletz, 1980). Collective bargaining is sought as a means of developing a countervailing power to prevent a further diminution of the roles and rights of the professional employee (Beletz, 1980). This is particularly true for the growing number of baccalaureate-prepared nurses who are more highly skilled and unwilling to accept the traditional nurses' role of handmaiden to the physician. Several recent studies have indicated that baccalaureate nurses favor unionization as a means to gain greater equity in the work setting and more participation in hospital decision-making with respect to programs

and policies that affect their practice and the quality of patient care (Feldman, 1981; Zacur, 1982). Thus, it may be anticipated that the trend toward greater professionalization will place increasing pressure on hospitals to redefine the role of professional nurses in the organizational and management structure of these institutions or face high levels of turnover and the threat of unionization (Numerof & Abrams, 1984).

Since the passage of the 1974 NLRA amendaments, an increasing number of nurses prepared in diploma and associate degree programs have also turned toward unionization to achieve their goals. As noted in the previous chapter, approximately 270,000 or about 22 percent of the 1.24 million employed registered nurses are now represented by bargaining agents in their place of employment (Aiken, 1984; Levenstein, 1980). It is further estimated that 69 percent of all full-time employed nurses are currently working in hospitals (Aiken, 1984). The dissatisfaction of nurses with their roles, working conditions, and career options in hospital settings is well documented (Aiken, 1981; National Commission on Nursing, 1981; Numerof & Abrams, 1984). The substantial success of unionization among hospital staff nurses clearly reflects this dissatisfaction.

While it is evident from the literature that nurses are increasingly turning to collective bargaining as a vehicle for expressing their dissatisfaction with hospital employment, the impact of this trend on contemporary hospital systems is not clear. Part of this confusion stems from the paucity of research concerning the impact of nurses' collective actions on hospital management practices and

policy-making processes, and may also be attributed in part to the anti-union views that have permeated the hospital management literature for the past several decades.

Several studies have indicated that unionization can have a positive influence on hospital management by: (a) increasing management's attention to institutional structures and processes, (b) fostering more formal and consistent personnel policies, and (c) improving communications between management and employees (Maxey, 1981; Osterhaus, 1967; Rothman, 1983). Becker (1978) and Maxey (1981) also found that unionization stabilizes employment by reducing turnover. More recently, Rothman (1983) reported that the presence of unions and collective bargaining agreements also "provides a cohesiveness and a feeling of belonging to employees which in turn increases morale and productivity" (p. 53). Thus, it would appear that unionization offers hospital's a degree of certainty in personnel management not previously enjoyed.

Hospital and nursing administrators are generally opposed to unionization because they believe that the presence of a labor union increases the likelihood of losing control over their employees and that contract specification of work rules reduces flexibility in the management of nursing personnel (Maxey, 1981; Metzger, 1979; Rothman, 1983; Samara, 1978). They further believe that a union contract predisposes to mediocre performance and handicaps their ability to recognize and promote outstanding nursing staff members (Samara, 1978). Maxey (1981) also reported that hospital administrators representing hospitals with mature union relationships perceived that employees'

loyalty and performance appears to deteriorate after unionization. Apparently, however, unionization has a neutral effect on the quality of patient care (Maxey, 1981; Miller & Shortell, 1969).

Several other disadvantages associated with unionization are those attributable to the costs of strikes and revenue losses resulting from work stoppage activities. Although unionization has increased employee wage levels, a number of studies have indicted that the impact on overall hospital costs has been insignificant (Fottler, 1977; Taylor, 1979; Weinstein, Tanner & Ahmuty, 1980). In fact, one study found that "unionized hospitals will have two to four percent lower average costs due to savings from lower turnover" (Miller, Becker, & Krinsky, 1979).

There can be little doubt that unionization and collective bargaining have the potential to alter not only the arbitrary power of hospital executives in decisions affecting the allocation and development of nursing resources but the overall work climate of hospital settings as well. These changes have important implications for the organizational characteristics of hospitals, the quality of relationships between administration and nursing personnel, the quality and quantity of services provided to clients, and, clearly, for the effectiveness and efficiency of hospital operations.

In this investigation, the perceptions of hospital and nursing administrators, examination of collective bargaining agreements, and pertinent information obtained from institutional records were used to assess the impact of nurses' collective bargaining activities on hospital management practices and policy-making processes. All but one

hospital in the study sample had collective bargaining agreements covering nursing staff members. Both the presence of these agreements and perceptions of hospital executives may be viewed as relevant value inputs affecting hospital decision-making and planning processes as well as the quality of employment relationships that evolved.

Organizational Structure

Weber (1947) provided one of the earliest conceptualizations of structure, proposing an ideal-type bureaucratic organizational form designed around the following basic characteristics: a clearly defined hierarchy of authority, division of labor based on functional specialization, specified rules and norms, a system of work procedures, impersonality of interpersonal relationships, and rewards based on merit or technical competence. Weber's classic investigation demonstrated that military, religious, political, governmental, and industrial organizations have common attributes. Specifically, Weber concluded that they all require a control system based on legal-rational rules; rules which are designed to regulate the whole organizational structure and processes on the basis of technical knowledge, and with the aim of maximum efficiency (Mouzelis, 1968, p. 39).

Writing from a sociological perspective, Weber (1947) saw a direct relationship between the rise of an industrial market economy and the emergence of the bureaucratic type of administrative organization, which was viewed as the most effective means for mobilizing resources and power in such a social system (Kast & Rosenzweig, 1979). To paraphrase Weber (1947), the decisive reason for the advance of the bureaucratic

form has always been that, over time, it has proved technically superior to any other form of organization known. As he cogently pointed out:

> Its development is, to take the most striking case, the most crucial phenomenon of the modern Western state . . . . The whole pattern of everyday life is cut to fit this framework. For bureaucratic administration is, other things being equal, always, from a formal, technical point of view, the most rational type. For the needs of mass administration today, it is completely indispensible. The choice is only that between bureaucracy and dilettantism in the field of administration. (p. 337)

Merton (1940), Selznick (1949), and Gouldner (1954), however, have argued that the formal, rational elements of the bureaucratic form can create various conditions that tend to diminish or inhibit its expected efficiency. Briefly, their studies suggest that the exclusive reliance on hierarchical authority and explicit rules and regulations produce certain unanticipated dysfunctional consequences that actually hinder rather than enhance the attainment of organizational goals. These dysfunctional consequences are largely the result of worker alienation and client dissatisfaction brought about by the increasing concentration of power in the hands of top bureaucrats and the suppression of voluntary participation of members in the affairs of the organization (Gouldner, 1954; Merton, 1940; Selznick, 1949).

In summary, the findings of these and other studies conducted during the 1940's and 1950's suggest that the bureaucratic model not only failed to anticipate the consequences of human behavior in organization, but also failed to adequately account for the demands of rapidly changing technologies and environments (Kast & Rosenzweig, 1979; Ullrick & Weiland, 1980). Many of these studies and their conclusions have since been challenged by Perrow (1979) who argued that the

extensive preoccupation with attempts to humanize and decentralize bureaucracies--that is, to apply social engineering and human relations techniques--have served to obscure the true nature and contributions of these organizations to modern society. For Perrow (1979), the limitations generally associated with bureaucracy are either not limitations at all or are the consequences of the failure to bureaucratize sufficiently. The underlying logic of Perrow's (1979) defense of bureaucracy is that: "Bureaucracies are set up to deal with stable, routine tasks; that is the basis of organizational efficiency. Without stable tasks there cannot be a stable division of labor, a prescribed acquisition of skills and experience, formal planning and coordination, and so on" (p. 5).

Finally, modern day contingency theorists have reaffirmed that the essential logic of Weber's (1947) conception of bureaucracy remains inviolate, and the empirical study of contemporary organizations appears to have confirmed it (Burns and Stalker, 1966; Kast & Rosenzweig, 1979; Lawrence and Lorch, 1967; Sarri and Hasenfeld, 1978; Shortell & Kaluvny, 1983; Ullrich & Wieland, 1980). As Shortell and Kaluvny (1983) have noted, "it is now clear that no one bureaucratic form is universally best, but rather that a myriad of appropriate forms exist, each composed of different combinations of bureacratic characteristics" (p. 182). It is further recognized that most all large, complex organizations in this country are best classified as bureaucracies, though the degree and form of bureaucratization vary (Perrow, 1979; Shortell & Kaluvny, 1983; Ullrich & Wieland, 1980).

Definition of Organizational Structure

The term organizational structure evolved from Weber (1947) to refer to the network of authority-accountability relationships that exist among various hierarchical levels and individuals who perform different work acitivites in organizations (Levey & Loomba, 1984). In the most general sense, structure is concerned with the formal allocation of work roles and the administrative mechanisms established to control and integrate the work activities and relationships of organizational members (Charns & Schaefer, 1983; Childs, 1972). Correspondingly, this internal structuring of organizational activities and relationships--as reflected in the division of labor, the administrative component, the distribution of power and authority, and the departmentalization of the various work unit elements--represents a series of deliberate choices by key executives to effectively implement the organizational mandate (Childs, 1972; Hasenfeld, 1983; Ullrich and Wieland, 1980). These choices depend, however, on various environmental and contextual factors.

Organizational structures are often reflected in printed charts and supplemented by position descriptions, procedure manuals, and other formalized documents. However, organizational charts are static representations: they rarely convey the dynamic realities of organizational behavior. Moreover, the structures of organizations cannot be perceived as completely separate from their functions and processes (Kast & Rosenzweig, 1979). In spite of their being two separate phenomena, Kast and Rosenzweig (1979) further noted that:

> Taken together, the concepts of structure and processes can be viewed as the static and dynamic features of the organization.

> In some systems the static aspects (the structure) are the most important for investigation; in others the dynamic aspects (the processes) are important. (p. 198)

In the present study, organizational structure is defined as the formal pattern of relationships that exist between positions and work unit elements, integrating the functions and processes of the organization. It is this aspect of structure that is referred to as the formal organization: "It sets a general framework and delineates certain prescribed functions and responsibilities and the relationships among them" (Kast & Rosenzweig, 1979, p. 199). Although formal and informal structures exist together, the formal structure generally is the aspect of the organization that administration seeks to change in order to improve its functioning. The evolution of participative management, the matrix organization, and the type Z organization are illustrative of such changes.

Structural Variables

The organization design literature indicates that there is considerable agreement among organization theorists and researchers that complexity, formalization, and centralization are the major elements of organizational structure (Hage & Aiken, 1970; Hall, 1972; Kast and Rosenzweig, 1979; Scott, 1981; Shortell and Kaluvny, 1983; Van De Ven, 1976; Wieland, 1981). Professionalization has also been identified as an important element of structure (Charns and Schaefer, 1983; Hall, 1968; Heydebrand, 1973; Hrebiniak, 1974; Perrow, 1970; Shortell & Kaluvny, 1983). Complexity, formalization, centralization, and professionalization have been selected as the primary elements of

structure to be assessed in this investigation. These four variables represent the means by which most complex organizations achieve their desired ends (Shortell & Kaluvny, 1983).

Complexity. This term may be defined as the extent of differentiation within an organization, where differentiation may be vertical, horizontal, or technical in nature. Thus, complexity may be measured in terms of the number of hierarchical levels (vertical), the number of departments or work units, and the degree of task variability (technical) (Ford & Slocum, 1977; Perrow, 1979; Shortell & Kaluvny, 1983; Wieland, 1981).

Formalization. The concept of formalization refers to the extent to which rules, policies, and procedures within an organization are explicit and enforced. Formalization can be measured by counting either the number of rules and regulations that apply to specific jobs or those that operate in the organization as a whole. Additionally, the amount of discretionary behavior permitted individuals in job performance can be determined by perceptual or objective measures (Ford & Slocum, 1977; Shortell & Kaluvny, 1983; Wieland, 1981).

Centralization. The term centralization may be defined as the degree to which power and authority are concentrated or distributed within the organization. Thus defined, centalization may be measured by the extent to which the occupants of various positions participate in important decisions concerning the allocation of resources and the formulation of organizational policies (Hage & Aiken, 1970). Low frequency of participation in organization decisions by staff nurses, for example, typifies health care organizations that are highly

centralized (Shortell & Kaluvny, 1983). Similarly, the extent to which authority is delegated downward to lower levels in an organization may be viewed as a measure of centralization or decentralization (Wieland, 1981). According to Ullrich and Wieland (1981), centralization implies that behavior in an organization is controlled via formalization, the use of job descriptions, rules and regulations, and procedure manuals along with other forms of control. Centalization also implies differences in rewards and low mobility of the work force in the organization.

Professionalization. The term professionalization has been defined by Freidson (1973) as:

> a process by which an organized occupation, usually but not always by virtue of making a claim to specific esoteric competence and to concern for the quality of its work and its benefits to society, obtains the exclusive right to perform a particular kind of work, control training for and access to it, and control the right of determining and evaluating the way work is performed. (p. 22)

In turn, professional power is manifested through the ability of the members of organized professions to determine and control the conditions of their work and to attain autonomy from organizational evaluation and administrative authority (Hasenfeld, 1983). From this perspective, health care occupations are seen to vary in their degree of professionalization. They range from physicians, who enjoy the highest degree of professional power; to nurses, who are frequently classified as semiprofessionals; to vocational nurses and hospital attendants, who are classified as paraprofessionals (Hasenfled, 1983). Correspondingly, semiprofessionals tend to be defined as belonging to an occupational

group that lacks exclusive control over their services and body of knowledge, even though the state acknowledges their unique domain of activities (Hasenfeld, 1983).

It appears that professional expertise is not automatically acknowledged by others but, rather must be demonstrated in relation to the state, those of the same profession, and those of other professions. That is, professionals must demonstrate that they possess certain knowledge and skills for defining problems, determining means for their solutions, and judging the success of actions undertaken in their area of expertise. To the extent that professionals are able to substantiate such claims in relation to the state and other professionals, autonomy and power are acquired (Ullrich & Wieland, 1980).

Organizations and components of organizations may vary greatly in professionalization, depending on the extent to which the educational preparation and credentials of their professional staffs are perceived as important factors in recruitment, placement, retention, and performance. Indicators of professionalization, then, are reflected in the number of board-certified physicians on staff and in the degree of educational preparation of nursing staff members. The extent of professionalization within organizations may also be assessed by measuring the degree of autonomy perceived by incumbents of a variety of occupational roles (Hall, 1968; Engels, 1969).

Organizational Process

Organizational process finds its most global definition in the transformation of inputs into outputs (Katz & Kahn, 1978). This

definition assumes that organizations are open social action systems and that transformation processes are carried on at all levels of organization: individual, group, organizational, and societal (England, Negandhi, & Wilpert, 1979). Katz and Kahn (1978) have noted that there are two fundamental and interdependent sets of processes in organizations, one involving matter and/or energy, the other, information. Kotter (1978) has indicated that these organizational processes can be defined as the major information-gathering, communication, decision-making, matter/energy transporting, and matter/energy converting actions of the organization's work force and machines. Complex organizations are comprised of many such processes, but they are more commonly identified according to their function in administration and maintenance of the organization. For example, leadership, communication, coordination, planning, marketing, purchasing, staffing, evaluation, and budgeting are all important processes associated with the functioning of organizations. Katz and Kahn (1978) and Hall (1972) have also included the use of power and the role of conflict in their discussions of organizational process. Collectively, these processes are the events and behaviors that shape the character of an organization. They determine why an organization is the way it is (Hall, 1972).

Organizational theorists and researchers who have adopted information processing views of organizations argue that work and information flows are the two most important processes in organizations (Galbraith, 1977; Galbraith & Nathanson, 1978; Tushman and Nadler, 1978; Van De Ven, 1976). From this perspective, organizational process has

been defined as the direction and frequency of work and information flows that link together the differentiated roles within and between departments or units of complex organizations (Galbraith & Nathanson, 1978). The term work flow refers to the materials, objects, or clients that are sent or transported between personnel within and between organizatonal units. Information flows refer to messages or communications about the objects or units of work that are transmitted between personnel and work units through a variety of media. While work flows involve task instrumental functions, information flows involve pattern maintenance functions. Correspondingly, the direction and frequency of work and information flows are viewed as relevant processual indicators of activity and influence patterns which affect or effect micro and macro organizational structures (Galbraith & Nathanson, 1978; Van De Ven, 1976).

Of all the processes involved in organizational dynamics, communication is possibly the most important. Both the centrality and importance of the communication process as an all-encompassing explanation of organizational behavior has been addressed in the writings of a number of prominent theorists. For example, Barnard (1938), one of the early contributors to organization theory, stated that "In an exhaustive theory of organization, communication would occupy a central place, because the structure, extensiveness, and scope of organization are almost entirely determined by communication technique" (p. 91). Davis and Scott (1969) reaffirmed this position by asserting that "without communication, there can be no

organization . . . . Communication is the bridge over which all technical knowledge and human relationships must travel" (p. 255). For Katz and Kahn (1978), "communication--the exchange of information and the transmission of meaning--is the very essence of a social system or an organization. It is possible to subsume under it such social interaction as the exertion of influence, cooperation, social contagion or imitation, and leadership" (p. 428).

With the continued emphasis on viewing organizations as open social action systems, communication processes and networks are clearly as vital to organizational functioning as power and the decision-making process. As Katz and Kahn (1978) have noted: "The closer one gets to the organizational center of control and decision-making, the more pronounced is the emphasis on information exchange" (p. 428). Similarly, Kast and Rosenzweig (1979) have found it useful to view decision-makers as information-processing systems. Hage (1983) has indicated that administrators of modern hospital systems "will find that communication and coordination are two of the most critical tasks they perform" (p. 224). In this sense, communication is a major coordinating device in addition to being an important mechanism of control and of affect (Hage, 1983).

In spite of ample research on interpersonal and group communication, the topics of communication linkages and interorganizational coordination have been largely ignored (Hage; 1983; Katz & Kahn, 1978). Studies by Georgopoulos and Mann (1962) and Hage (1974) on communication and coordination mechanisms in hospitals are two notable exceptions. In general, the existing evidence suggests that as

the task complexity of an organization becomes increasingly more difficult or nonroutine, and the technology more sophisticated, employees are more highly educated and skilled, and the organization becomes more structurally differentiated or organic, the need for unscheduled instrumental communication increases. Such organizations rely less on formal and programmed or verical communication to achieve coordination and more on a pattern of informal and reciprocal or horizontal information flows (Hage, 1983). This pattern is characteristic of many acute care general hospitals.

In summary, communication and information are the lifeline of an organization. Neither planning, nor decision-making, nor any other governing or managerial process is possible without them. Communication may be viewed as the process through which information is exchanged; it provides the means of interaction between organizational members and organizational decision centers (Levey & Loomba, 1984). This definition presumes that communication occurs only to the extent that the receivers understand the information as the senders intended it to be understood. Feedback is perhaps the most important aspect of the communication process, since it makes the process transactional. Additionally, the communication process functions most effectively when the frame of reference or field experience of the senders and the receivers overlap. Such overlap serves to reduce some of the perceptual and attitudinal or personality factors that influence and interfere with the transmitting of information. As Gray and Starke (1984) have noted: "There is an inverse relationship between the degree of commonality in the field of experience and effort required for effective communication" (p. 310).

Within most organizations there are four directions in which communications flow: downward, upward, lateral, and diagonal. The downward flow of communication generally follows the authority pattern of the formal organization. The primary purposes of this flow are to transmit information and instruct employees in the performance of their jobs. Upward communication or the "bottom-up" flow is commonly used to provide feedback to individuals about how well they are performing in their jobs. This flow is also frequently used to involve employees in formal organizational decisions and to handle employee grievances against formal organization decisions. Lateral communication takes place between peers on the same level of the hierarchy. The major purpose of this flow is to facilitate coordination and promote teamwork. Diagonal communication occurs between individuals who are from different work areas as well as from different levels of the hierarchy. This "crisscross" flow is generally used to cut across organizational boundaries in an effort to save time or as a last resort toward resolution of a problem (Gray & Starke, 1984; Katz & Kahn, 1978). From their review of the research on communication flows within organizations, Katz and Kahn (1978) concluded that hospital administrations have generally given priority to the downward flow of communication. Yet communication theory suggests that there is an inverse relationship between communication clarity and the number of levels in the hierarchy of an organization (Gray & Starke, 1984). In other words, the more levels in the organization, the more difficult it is to insure that the employees at the lower levels have a clear understanding of either their jobs or the corporate objectives (Gray & Starke, 1984).

Finally, every organization has informal communication networks that arise spontaneously out of the interactions and activities of friends, associates, or other personnel who are in close proximity, have similar interests and values, and complementary personalities and social characteristics (Delbecq, 1968). Commonly referred to as the grapevine, these channels serve both as sources of information and as a means for dissemination. Although hospital administrators have often viewed informal communication with suspicion and disdain, these networks are as vital to hospital operations as the formal networks (Charns & Schaefer, 1983; Hage, 1983). While the two networks are complementary and frequently overlap, there are differences between them. Briefly, the informal network tends to operate verbally, it cuts across formal boundaries, and it involves interchanges of work-related and nonwork-related information. As such, it facilitates the rapid dissemination of information throughout the organization, it promotes task coordination, and it provides emotional and social support to individuals (Hage, 1983; Katz & Kahn, 1978).

Definition of Organizational Process

The concept of organizational process has evolved to refer to the patterns of activities characterizing the members of organizations and include tasks, interactions, and influence activities (Aiken, Bacharach, & French, 1980). According to Aiken, Bacharach, and French (1980), organizational processes may also be placed on an organic-mechanistic continuum with nonroutine tasks, high rates of interaction, and dispersed influence taken as indicative of organic work processes and

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their opposites connoting mechanistic ones. Organizational processes are thus distinguished from structures in that the former typically vary among work force members differentially situated in the organizational structure (Aiken, Bacharach, & French, 1980).

Organizational processes are commonly reflected in the informal arrangements that tend to emerge over time, and include patterns of communications and coordination, power and influence, and norms and values. These informal arrangements characterize how most organizations actually function (Gray & Starke, 1984; Hage, 1983; Hall, 1972; Katz & Kahn, 1978; Peters & Waterman, 1982). Research findings are clear and consistent about the importance of these unprogrammed and interpersonal processes in determining worker productivity (Roethlisberger & Dickson, 1947), in determining leader effectiveness (Peters & Waterman, 1982), and in determining the power structure of an organization (Pfeffer, 1981).

In this investigation, organizational process is defined as the means by which the different departments and levels of an organization are linked together by different flows of work elements, of information, of influence, and of decision processes. This definition assumes that two influence systems operate in every organization: the formal system, based upon the prescribed authority structure, and the power structure, based on upon actual influence relationships. It is further suggested that the exercise of power involves exerting influence over other individuals without the formal right of authority. Correspondingly, power and authority underlie all influence systems and, therefore, affect the appropriateness and/or effectiveness of various management or

leadership styles (Claus & Bailey, 1977; Gray & Starke, 1984; Mintzberg, 1979).

Process Variables

There are many indicators of organizational process, and they deal with essentially different, though interrelated, forces that introduce action into the otherwise static structure of an organization (Gray & Starke, 1984). Processual variables selected for analysis in this study fall into six general categories concerned with how activities within an organization are actually carried out: 1) communication, 2) coordination, 3) functional influence, 4) administration, 5) work flows, and 6) staff relations. These interactional patterns vary in the same manner as the structural attributes that have been discussed and they often vary dramatically because they are contingent on a wide array of situational and personal characteristics of the individual organizational members (Shortell & Kaluvny, 1983).

Communication. The term communication may be broadly defined as the nature and direction of information flows within an organization. The nature of information flows refer to the modes or systems that are used to facilitate the transmission of information within and between the different levels of an organization. For analytic purposes, they may be divided into three basic categories: 1) formal, 2) informal, and 3) computer-based systems. Indicators of communication are thus reflected in the form and the direction--downward, upward, lateral, and diagonal--of information movement within an organization.

Coordination. This concept is defined as the process of achieving integrated patterns of individual and group efforts in the accomplishment of the organizaton's mission (McFarland, 1979). Coordination of work efforts can be achieved through a variety of means, and a number of typologies have been advanced to this end (Georgopoulos & Mann, 1962; Hage, 1974; March & Simon, 1958; Thompson, 1967; Van De Ven, 1976. The study of coordination in hospitals has categorized coordinative methods into programmed and nonprogrammed mechanisms. The categorization was developed by March and Simon (1958) and developed further by Georgopoulos and Mann (1962) and Hage (1974). The basic distinction between these two types of coordination centers around the extent to which work methods and activities can be specified in advance. Hence, programmed coordination of work efforts are dictated by plans and relationships specified in advance by the formal organization. Coordination by program is achieved through codified work rules, scheduled meetings, predominantly downward information flows, and formal authority arrangements. In contrast, nonprogrammed coordination is based upon unscheduled communications that give notice of deviations from planned or predictable work activitie, such as feedback for mutual adjustment among the members involved. Coordination by feedback is achieved through the mutually recognized interdependence and autonomy of organizational members, unscheduled meetings, lateral and/or diagonal information flows, and the informal power structure (Claus & Bailey, 1977; Georgopoulos & Mann, 1962; Hage, 1974; March & Simon, 1958).

Functional influence. The term functional influence may be defined as the amount of power organizational members perceive they have

over decision outcomes which affect them. Within this context, power connotes the ability and willingness to influence the decision outcomes of other organizational members or stakeholders, and seems consistent with the definitions posited by Claus and Bailey (1977). Functional influence is thus perceived as a result of the intentional and appropriate use of power sources which effect decision outcomes that would not have otherwise occurred. In their respective conceptualizations of power, Claus and Bailey (1977) and Pfeffer (1981) further elaborated on the distinction between power and authority, and emphasized the critical role of legitimacy in the exercise of both in the decision process. These authors also contend that power and authority which are not used would be lost.

Functional influence and power are basic characteristics of the many and varied relationships within organizations, which arise from the ability and capacity to either directly or indirectly alter the behavior or decision premises of another person. However, it is important to note that power may or may not be activated within any given situation because the exercise of power typically has costs. As Pfeffer (1981) has noted:

> Enforcing one's way over others requires the expenditure of resources, the making of commitments, and a level of effort which can be undertaken only when the issues at hand are relatively important. On the other hand, the exercise of authority, power which has become legitimated, is expected and desired in the social context. (p. 4)

The perspective on functional influence presented here is consistent with the power dependence paradigm, which argues that organizations are best viewed as political arenas in which individuals

and groups with different values, norms, objectives, and preferences struggle for power and influence (Pfeffer & Salancik, 1978). Indeed, as Schein (1977) noted: "power struggles . . . may be as endemic to organizational life as planning, organizing, directing, and controlling" (p. 64). It also avoids the oversimplification of speaking of power as emanating solely from one or more bases of power which a power wielder obviously possesses. For example, the exercise of expert power requires both an individual possessing relevant expert information and a person or group who needs this information. The focus here is on how functional influence is utilized to affect organizational decisions, as well as on some of the significant factors that affect the distribution of power across groups within hospital systems.

Functional influence patterns in hospital systems can be assessed through the use of reputational and representational indicators of the distribution of power in organizations developed by Pfeffer and Salancik (1974) and employed in their study of power in academic institutions. The methods applied by Peters and Waterman (1982) and Kantor (1983) in their studies of power and influence patterns in corporations are conceptually similar. Reputational indicators of power assess the distribution of influence within organizations by asking influentials and informants as well as by observational appraisals of its physical manifestations in the form of symbols. Representational indicators of power typically assess individual, departmental, and occupational membership on critical committees, such as budgeting committees, strategic planning and policy committees, multidisciplinary committees, executive committees, and governing boards. Additionally, both

reputational and representational indicators can involve the use of quantitative as well as qualitative techniques, which may be particularly fruitful in determining influence patterns within organizations from an historical perspective (Pfeffer, 1981).

Administration. The term administration is often used interchangeably with the term management to identify and describe a particular group of people whose work it is to direct the efforts and activities of others toward common goals (McFarland, 1979; Kast and Rosenzweig, 1979; Charns and Schaefer, 1983). The term administration is emphasized here since it commonly refers to higher, policy-making levels of an organization and because it is perceived to be a more extensive term, varying from management either by context or scope of function (Stevens, 1975; McFarland, 1979). The distinction between the two terms has been aptly stated by Stevens (1975):

> The term administration indicates a comprehensive executive role including functions of setting divisional goals, policy formulations, and management. Management is defined as getting the work done through others, or facilitating attainment of institutional goals by use of human and material resources. Thus all administrators manage, but not all managers have administrative power. Some managers simply are responsible for implementing administrative goals and policies that have been determined by others at a higher level. (p. 29)

In general then the term administration tends to denote those functions or aspects dealing more with the formulation of purpose and policy, the value-laden and ethical issues, and the behavioral or performance component of the entire organization. Management, on the other hand, tends to denote aspects which are more routine, definitive, programmatic, and quantifiable. Thus, it appears that administration

tends to be results-oriented while management is means-oriented (McFarland, 1979; Stevens, 1973).

For the purposes of this study, the concept of executive and leader needs clarification. An executive is a person who is formally authorized to perform the functions of administration. Traditionally these functions have been described as planning, organizing, directing, staffing, and controlling (Mintzberg, 1973). A leader, on the other hand, is any person in the organization who is able to influence others to pursue certain goals or objectives (Claus and Bailey, 1977). Whether an executive is also a leader is largely dependent upon the individual's ability to exercise influence over others in the pursuit of organization goals and objectives. From a contingency perspective, it is further assumed that different situations require different leader behaviors. For example, leader effectiveness is contingent upon situational and individual factors as well as the interaction between the two as they impact on the influence process (Fiedler, 1974).

Implicit in this view of leadership is the notion that successful executives are those who shaped the situations in which they find themselves to more effectively match their personalities or preferred leader styles. Preferred leader styles derive from two distinct motivational systems, task-motivated or relationship-motivated (Fiedler, 1974), a view which suggests that the leader style called for depends on the favorableness of the situation. The favorableness of the situation is, in turn, determined by leader-member relations, task structure, and position power (Fiedler, 1974). The argument behind the situational approach is that, although leader style is relatively unchangeable,

executives can be trained to diagnose situational factors and possibly alter them to better fit their preferred leader style (Fiedler, 1974).

Numerous investigations of leadership conducted by researchers at the University of Michigan and Ohio State University have provided empirical evidence that there are two major interdependent components of leader effectiveness (Stogdill, 1974). These may be called task-motivated and relationship-motivated, or initiation of structure and consideration, or employee-centered and production-centered (Stogdill, 1974). However, there seems to be little agreement on which leader behaviors are most important or how leader situations should be viewed. In particular, there is a debate among researchers and theorists as to which is more valid, a contingency approach or a normative approach to the study of leader effectiveness (Burke, 1982; Sayles, 1979; Stogdill, 1974). Further, there is also the question of which comes first, supportive leadership or desirable subordinate behaviors (Filey, House, & Kerr, 1976; p. 219-222). Despite being one of the few organizational processes to be investigated through a systematic and cumulative program of research, leadership still remains a poorly defined and misunderstood aspect of organizational functioning (Gray and Starke, 1984; Katz & Kahn, 1978; Levey & loomba, 1984; Sayles, 1979). Mintzberg (1975) suggested abandoning the concept in favor of research into what executives actually do to move their organizations to optimal performance.

Although there have been other researchers who have studied the actual work of administration, Mintzberg (1973), Katz (1974), and Peters and Waterman (1982) have integrated their own and existing data on

executives at work, synthesized the data into a contingency perspective using such variables as size and nature of industry and administrative style, and recast the accumulated material into substantive sets of algorithms or skills characteristic of effective administrative practice. As such, their work is not based on what "ideal" administrators are (their innate traits and attributes) or limited to the characteristics (context and nature) of administrative work, but rather on the content of what they actually do (the kinds of skills they exhibit and the different roles they fill in carrying out their jobs effectively). Collectively, their work provides useful empirical statements of what administrators or executives actually do, and fills numerous gaps in knowledge about both the process and content of administrative work.

The cumulative findings of these studies suggest that the reality of organizational life at executive levels is a work process that seems at odds with the "one best way" approach that persists in much of the present-day management science literature (Mintzberg, 1979). The work of Mintzberg (1973) and Peters and Waterman (1982) , in particular, clearly demonstrated that administration does not consist of static formulas or fixed patterns which management scientists seek and describe. Rather, administration is perceived to be dynamic, a highly interactive role that requires the ability to shift from one style and set of actions to another in a short period of time. Most importantly, administration is a contingency activity; executives respond when the organization's stability, legitimacy, and performance is threatened.

These threats require executives to act more like leaders, to invoke various symbols, values, and behaviors that legitimate the organization's relationship to its environment as well as to its members (Shortell & Kaluvny, 1983). The work of Peters and Waterman (1982) also supports the notion that symbolic activities and strategic decisions of executives may have a greater impact on administrative style than substantive activities and tactical decisions. By focusing on fundamental strategy rather than tactical actions, this style of administration creates integration of purpose rather than conformity of behavior. In doing so, it also creates the necessary sense of direction and purpose that is essential for the organization to become more productive and innovative (Peters & Waterman, 1982; Shortell & Kaluvny, 1983).

In the present study, administration is broadly defined as the process by which top-level executives achieve purposeful results through the integrated efforts of members of a group or organization. Administration as a process is reflected in the pattern of overlapping strategic and symbolic activities that characterize the behavior of executives as they pursue organizational goals and objectives. This definition recognizes that administration is the primary force in organizations for integrating the efforts of work group members of diverse interests and potentials, and relating their efforts to environmental opportunities and constraints. The work of executives is thus not only complex but broad in scope; it has a role dimension which implies that executives need a sensitivity to the skills appropriate to their tasks and desired outcomes. Further, this role dimension changes

with the level of organization. The higher the executive is in the organization hierarchy, operational, or managment activities become less important and conceptual and administrative processes become more important (McFarland, 1979). Conceptual work involves symbols, values, philosophies, and highly developed analytic and interpersonal skills. These are the skills that are associated with strategy formulation and strategy implementation. They are easily observable in the administrative style that characterizes executives' distinctive pattern or manner of performance, as well as the observable results or consequences of their work activities (Mintzberg, 1973; Peters & Waterman, 1982).

Work flow. This concept may be defined as the process of mobilizing and utilizing organizational resources to effect change in the state of a person, an object, or a set of information (Charns & Schaefer, 1983). Thus defined, work flow may be assessed either in terms of the extent to which computerized information systems are used to relate resources to outputs or the extent to which different types of nursing care delivery systems are utilized within hospital settings to achieve specified purposes or predictable and tangible results. As Charns and Schaefer (1983, p. 83) have indicated, "The work of caring for and curing people who are ill exists independently of who does it--a physician, a nurse, a social worker, or a psychologist. Work is always to some degree analyzable". These two empirical indicators comprise the operational definition of work flow employed in this study.

Staff relations. The term staff relations is defined as the state of trust and collaboration that exists between supervisors and

subordinates and among occupational groups within the work settings of the study sample of hospitals. Both the nature and quality of staff relations may be determined by the use of perceptual and objective measures such as those employed in this investigation. For example, representatives of the various organizational levels and occupational groups were observed during interpersonal exchanges during the course of meetings and in their work settings. Additionally, the perceptions of the quality of staff relations by key executives were obtained through recorded responses to open-ended questions.

Organizational Climate

The concept of organizational climate has recently come to occupy a place of prominence in administrative thought and practice. Although its origins can be traced to the seminal work of Barnard (1938) and to other behavioral scientists in the 1950s when the human relations and sociotechnical movements got under way, the concept of work climate per se did not emerge as an important theoretical or analytic characteristic of organizational behavior until the early 1970s (Lawler, Nadler, & Cammann, 1980). The social scientists of the Tavistock Institute in London, England, however, provided the conceptual basis for much of the subsequent development of the concept, including the substantial contributions generated by the Quality of Work Life Program behavioral scientists of the University of Michigan (Lawler et al., 1980).

One of the central concepts in the Tavistock school of thought was that of the sociotechnical system--a view of an organization as not

merely a technical system or primarily a psychosocial system, but a totally integrated system in which the various aspects interact. In their studies of the British coal mining industry, the Tavistock scientists found that alterations in work arrangements based only on engineering considerations disrupted the social system to the extent that the introduction of new technology designed to improve productivity could not be effectively accommodated. The findings from these studies also led the Tavistock investigators to develop the position that the design and functioning of work systems should be one of joint involvement and shared responsibility in order to ensure that the technical system complements the social system (Davis and Trist, 1974; Emery and Trist, 1960; Trist & Bamforth, 1951). Hackman and Suttle (1977) have captured the essence of the Tavistock position and its relevance to the present discussion by noting the following:

> Changes that are undertaken from a sociotechnical systems perspective attempt simultaneously to modify both the technical and the social aspects of the organizaton to create work systems that lead both to greater task productivity and to greater personal fulfillment for organizational members. (p. 112)

The concept and practice of autonomous work groups is illustrative of this orientation (Emery, 1983).

The Tavistock initiatives stimulated work redesign activities throughout the world in the 1960s. Many of the more notable applications of this approach in reshaping work for more satisfying jobs and better results took place in groups of companies in Western Europe. In Scandinavia and Germany, for instances, the Tavistock ideas of action research and action learning or "working through" played a significant

role in improving the quality of work climate as well as productivity. These developments toward industrial democracy were of pathfinding significance in that they provided sound organizational alternatives in bureaucracy-scientific management, alternatives that were far better suited to the realities of the environments of Western society in the 1960s as well as the remaining years of the twentieth century. By the late 1960s, it became increasingly clear that successful operation of an organization had become dependent on the commitment of its members to act automatically when required. By recognizing, mobilizing, and developing the commitment and expertise of the members of an organization, active participative planning became an ongoing learning process and the basic strategy for effectively relating to turbulent environments in a proactive and adaptive manner (Davis, 1983; Emery, 1983; Emery & Trist, 1965).

The success of the European innovations with autonomous work groups and other forms of industrial democracy captured the interests of the international community of scholars and provided the impetus for two landmark developments in the history of the quality of work climate and the broader construct--quality of working life. The first occurred in 1972, when a small group of social and behavioral scientists attended the First International Conference on Quality of Work Life which took place at Arden House, New York. It was at this conference that the term "quality of work life" was born and the International Council for the Quality of Working Life was established. Since then, many developments in the practice and theory of the democratization of work have taken

place, including the involvement of representatives from labor, management, government, and academia in the activities and program of the International Council (Kolodny & van Beinum, 1983). The second derived from a series of Department of Health, Education, and Welfare sponsored investigations of the quality of employment in American industries that was jointly managed by the University of Michigan Quality of Work Program and the newly formed National Quality of Work Center (Nadler & Lawler, 1983). This research effort involved both a series of national attitude surveys and labor-management experiments that resulted in two widely published books on the subject, Work in America, (Davis & Cherns, 1973) and, The Quality of Working Life, (Davis and Cherns, 1975). Additionally, a number of the experimental projects such as those involving the Bell System, Procter and Gamble, and the Aluminum Corporation of America have matured and acquired reputations for being some of the most innovative and successful corporations in America (Kolodny & van Beinum, 1983; Peters & Waterman, 1982).

Researchers at the University of Michigan have recently developed organizational assessment methodologies which are oriented toward diagnosing and evaluating organizational behavior and the determinants and consequences of that behavior (Lawler et al., 1980, p. 2). A major objective of the organizational assessment perspective is the systematic measurement of organizational functioning and the quality of employment of organizational members to ascertain precisely the capacity to enhance organizational effectiveness (Lawler et al., 1980). The methodology of scientific research is thus an inherent feature of the organizational assessment perspective (Lawler et al., 1980). This approach to

organizational assessment, then, tends to have a behavioral emphasis and attempts to create work systems that enhance worker productivity without incurring the human costs that have been shown to be associated with the traditional bureaucracy-scientific management approaches. Most organizational assessment activities, therefore, are guided by a blend of four theoretical approaches which include expectancy theory, motivation-hygiene theory, job design theory, and sociotechnical systems theory (Hackman, 1980; Lawler et al., 1980).

Despite the current popularity of quality of work life as a research topic and rationale for enhancing organizational effectiveness, Cherns (1983) has argued that the dominant form of Quality of Work Life intervention is a mixture of dilute sociotechnical analysis and principles with Oranizational Development practice. In an address on the-state-of-the-art in Quality of Work Life activities, Cherns (1983) stated the following:

> It is far more important to understand people's belief systems than to measure their "job satisfaction". That is why we should be looking at their cognitive maps, their sense of person competence, and their modes of conceptualizing the organization and their relationship to it. It is perhaps no exaggeration to say that our system of measurement, both of organizational outcomes and of personal outcomes, have been unhelpful, if not positively antagonistic, to QWL. (pp. 95-96)

As one of the pioneers of the Quality of Work Life movement in the United States, Chern, (1973; 1975; 1983) appears to be committed to the view that improving the quality of employment is a vital social necessity. Organizational assessment packages replete with consultants and standard solutions in the form of semi-autonomous work groups or other work design models, however, are a source of major concern to

Cherns and others in the field. If "packages" must be offered, Cherns (1983) has argued that it is less harmful to package the process rather than the product or outcome. Emery (1983) has taken the argument a step further by asserting that traditional sociotechnical systems thinking can only deal in a limited way with the fundamental aspects of ongoing processes of organizational change and adaptation.

In summary, the concept of organizational climate has emerged as an important factor that contributes to productivity and the quality of employee work experiences. The subject of organizational climate in general and quality of work life in particular has received increasing attention in recent years for a variety of reasons ranging from concerns about productivity and industrial relations to changes in the work force and in the meaning of work to society (Cherns, 1983). As a result of this attention, considerably more is known about the attributes of organizational climate.

Definition of Organizational Climate

Taguiri (1968, p. 27) has defined organizational climate as "a relatively enduring quality of the internal environment of an organization that 1) is experienced by its members, 2) influences their behavior, and 3) can be described in terms of the values of a particular set of characteristics (or attributes) of the organization". Thus defined, the work climate within an organization is both a consequence and a determinant of employee motivation, effort, and performance (Lancaster, 1984; Lawler et al., 1980; Taguiri & Litwin, 1968). Review of the literature on the effects of work climate on employee motivation

further suggests that it is best to view climate as a set of attributes that can either facilitate or inhibit the strength of the predisposition of individual employees to engage in goal-directed action or activity on the job (Lawler et al., 1980; McClelland, 1961; Nadler & Lawler, 1983). In behavioral terms, motivation is not a feeling of relative satisfaction with various job outcomes, but a reflection of an individual's inherent readiness or willingness to work at accomplishing a particular task or goal (Lancaster, 1985; Lawler et al, 1980; McClelland, 1961; Taguiri & Litwin, 1968).

It is further recognized that if the concept of motivation is to be useful in understanding human behavior in organizations, it must be combined with individual ability, since performance is ultimately a function of motivation and ability (Ullrich & Wieland, 1980; Lawler et al., 1980). Equally important is the recognition by administrators and managers that work performance and work satisfaction are the results of quite different things: "performance is determined by people's efforts to obtain goals and outcomes they desire, and satisfaction is determined by the outcomes people actually obtain" (Lawler, 1973, p. 67). Thus, contrary to the popular view that "happy workers are productive workers" or that high job satisfaction leads to high performance, the literature clearly suggests that it is performance which leads to satisfaction (Lawler, 1973; Locke, 1976). In this sense, administrators can expect to find that, not only motivation affects performance, but that both motivation and performance are affected in turn by organizational characteristics that aid or impede the application of individual

abilities in their organizations (Lawler, 1973; Lawler et al., 1980; McClelland, 1961; Nadler & Lawler, 1983; Taquiri & Litwin, 1968).

In the present investigation, organizational climate is defined as the quality of the relationship between the individual and the organization which can be measured through the perceptions of organizational members, or through observational and other objective methods. Climate is a broad expression of the prevailing ethos within which administrators and managers make known their philosophy of human resources management. This philosophy is typically reflected in the attention paid to personnel as a critical resource rather than a purchased service. Climate analysis, therefore, attempts to ascertain from various sources, through quantitative and qualitative techniques, the effectiveness of the organization's policies and practices concerning the management and development of its human resources. Because climate analysis can be segmented by specific work units, it can be used to identify and describe strengths and weaknesses throughout the organization and at various levels of management (Nash, 1983).

A review of the literature on work satisfaction, quality of work life, and organizational climate suggests that an effective climate is one that emphasizes achievement, personal goal setting, autonomy, stability, and a commitment to the development of human resources (Lawler, 1973; Lawler & Nadler, 1983; Lawler et al., 1980; Shortell & Kaluvny, 1983). While many of the studies relative to organizational climate were conducted in industrial and commercial enterprises, the factors cited above are similar to those found to be associated with effective climates in health care organizations (Hall, Von Endt, &

Parker, 1981; McClure, Poulin, Sovie, & Wandelt, 1983; National Commission on Nursing, 1981; Wandelt, Pierce, & Widdowson, 1981). Studies of health care organizations indicate that organizational climate is important because of its impact on such critical factors as motivation, productivity, and work satisfaction. They also provide sufficient evidence to suggest that reward systems, career mobility, stability, and turnover are four attributes or variables that appear to differentiate positive organizational climates from negative ones.

Reward systems. The programs, policies, procedures, and behaviors of others that either reward or punish the behavior of an individual comprise the reward systems. These reward systems can be formal systems such as remuneration and incentive programs, or informal systems such as the interpersonal rewards and sanctions that occur between supervisors and subordinates or among peers. Other types of reward systems include: performance appraisal, recognition, and greater freedom and opportunities for creativity in job performance (Gray & Starke, 1984; Lancaster, 1985).

Career mobility. The concept of career mobility refers to the movement between different authority and accountability levels in the organization as reflected in the advancement and promotion of nursing service personnel. According to Gillies (1982), "The purposes of implementing a career mobility program are 1) to improve worker morale and motivation by eliminating dead-end jobs and 2) to decrease costly labor turnover" (p. 272). Clinical ladders reflecting a hierarchy of nursing expertise and clinical performance are an important measure of career mobility in contemporary hospital systems.

Stability. This term refers to the maintenance of organizational structures, processes, and resources through time and, most importantly, through periods of uncertainty and stress (Hall, 1983; Robbins, 1983). According to Hall (1983), "Stability is the certain, secure, and healthy condition of individuals and groups" (p. 19). The underlying assumption of Hall's (1983) definition is "that there are patterned regularities in human behavior that are maintained through socialization and commitment. Commitment keeps individuals stable by the acquisition of a support system that maintains a stable set of values" (p. 19). Robbins (1983) concurs with this conclusion and extends the central idea further by noting the following:

> . . . pressures for stability are extremely great in organizations. Those who argue for the highly dynamic nature of organizations, and hence the need for continual change, make assumptions about goals and effectiveness measures that are not consistent with reality. So change, planned or otherwise, is not nearly as prevelant as theorists would predict. (p. 284)

Consistent with the power-dependence perspective, those in power will select technologies, processes, and environments that will facilitate their maintenance of control (Pfeffer, 1983). A growing body of research findings indicate that in order for those in power to enhance control, they need to implement structures that are essentially low in complexity and high in both formalization and centralization (Bonoma & Zaltman, 1981; Gray & Starke, 1984; Hage, 1983; Hage & Aiken, 1970; Kanter, 1984; Katz & Kahn, 1978; Pfeffer, 1981).

Since organizations seek routinization and mangement of uncertainty, structural changes are typically incremental. Incrementalism maintains stability by keeping structural changes small,

simple, and at a minimum (Robbins, 1983). This conservative nature of organizations is consistent with the comments made earlier in this chapter about incrementalism and the value of participation in decision-making. Increased participation extends the opportunities for members of the organization to provide input and enhances commitment (Peters & Waterman, 1982; Quinn, 1980; Robbins, 1983).

Stability can be operationally defined as the extent of turnover in the administrative component of hospital organizations as well as that which has occurred at either the mangerial or staff nurse levels. It can be measured through archival records, interview data, or both records and interviews.

Turnover. The term turnover may be defined as the percentage of registered nurses who voluntarily terminate their services to an employing organization during a year's time (Gillies, 1983). While the most recent analysis of the nurse work force suggests that supply and demand are reasonably in balance (Aiken, 1984), current estimates of nurse turnover in California hospitals is over 35 percent annually (California Hospital Association, 1983). Moreover, 36 percent of California's short-term general hospitals continue to report difficulty in recruiting the number of registered nurses they require for optimal functioning (California Hospital Association, 1983).

Porter and Steers (1973) describe turnover as "a relatively clear cut behavior that has potentially critical consequences for both the individual and the organization" (p. 15). Among the consequences for the organization are the expenses involved in recruitment and

orientation programs. In addition to these costs, high turnover rates may require the hiring of more people to perform the various functions filled by departing personnel. Moreover, new employees usually require more direct supervision which, in turn, may result in increased requirements for first line supervisory personnel. In the case of registry or supplemental nursing agency personnel, payroll and associated direct and indirect costs may be excessively high (Dalton & Todor, 1982; Gillies, 1983; Prescott, 1982).

There has been a plethora of literature in recent years attesting to the ramifications of employee turnover to health care organizatons (Aiken, 1981, 1984; Bluedorn, 1976; Friss, 1982; Hicks & White, 1981; Porter & Steers, 1973; Price, 1977; Price & Mueller, 1981; Wiseman, 1982). Several comprehensive models of voluntary turnover have been proposed which have attempted to integrate research findings and reports in the literature (Mobley, Griffeth, Hand, & Meglino, 1979; Steers & Mowday, 1981; Wiseman, 1982). All the models suggest that employee intentions are precursors of actual turnover. Employee intentions are proposed to be influenced by: (a) attraction and expected utility of the present job, (b) attraction and expected utility of alternative jobs and environments, (c) work satisfaction, and (d) extra work factors such as kinship responsibilities or market forces. It appears from the research on nursing turnover that the quality of the work climate in hospitals may have strong moderating effects on the relationships between work satisfaction, intentions to resign, and actual turnover of staff nurses (Aiken, 1982, 1984; National Commission of Nursing, 1981; Poulin et al., 1983; Wiseman, 1982). It also appears that additional

studies on the effects of work climate on the quality of the relationship between the indiviudal and the organization are needed.

Summary

The purpose of this chapter was to develop and describe the conceptual framework in order to guide the investigator's understanding of the evolution, adaptation, and survival of contemporary acute care hospital orgranizations. The framework was also used to synthesize the extensive literature relevant to hospital characteristics and their relationship to the the quality of nurses' work climate, and to develop the theoretical rationale for the concepts and variables selected for the study. In turn, the key concepts of organizational design and related variables that impact on contemporary hospital systems were defined and approaches to their measurement were discussed.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The primary purposes of the study were to: (a) examine the characteristics of six types of contemporary, nonprofit general hospitals; (b) analyze the extent to which environmental conditions and contextual factors determine structural-functional characters of the selected hospitals; (c) explore the relationships between selected hospital characteristics and the quality of nurses' work climate; and (d) develop a descriptive data base for future theoretical and empirical work. This chapter describes the research design, the setting, the sample, protection of subjects procedures, and instrumentation.

Research Design

Although the overall design of the study was descriptive and cross-sectional in nature, it also has elements of comparative design since the study compared six types of acute care, nonprofit hospitals. An embedded, multiple case study design was also used based on the need to: (a) deal with multiple sources of data; (b) minimize biases of the investigator; (c) increase objectivity; and (d) focus on more than one unit of analysis. In addition to qualitative data from case studies, interviews, observations, reports, and records, quantitative data on a selected group of staff nurses was also obtained through the use of a

standardized instrument to measure the nurses' perceptions of the work environment in the hospital sites in which they were employed.

The case study has sometimes been criticized as a weak form of quasi-experimental design; however, Cook and Campbell (1979) noted that "certainly the case study as normally practiced should not be demeaned by identification with the one-group post-test-only design." Yin (1984) also contended that the case study is a distinctive form of empirical inquiry that has its own design or methodological framework for bringing evidence to bear on research questions, and further asserted that case studies are the preferred research approach when: (a) "how" and "why" questions are being posed; (b) the investigator has little or no control over a set of events; and (c) the focus is on complex contemporary phenomenon within some real-life context.

A second misperception about case studies is that they fail to provide a sufficient basis for scientific generalization. This misperception was also addressed by Yin (1984) as follows:

> The short answer is that case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study does not represent a 'sample', and the investigator's goal is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization). (p. 21)

Yin, (1984) also contended that the essence of analytic generalization consists of the development of a rich, theoretical framework; and a commitment to follow a replication as opposed to a sampling logic. In analytic generalization, the theoretical framework becomes the vehicle for generalizing findings beyond the unit(s) investigated. For multiple case study designs, the notion of

replication logic is analogous to that used in multiple experiments and allows scientists to generalize from one experiment to another. As described by Yin (1984): "Each individual case study consists of a 'whole' study, in which convergent evidence is sought regarding facts and conclusions for the case; each case's conclusions are then considered to be the information needing replication by other individual cases" (p. 52). It would appear that each individual case is considered to be a single experiment, and data analysis should follow cross-experiment rather than within-experiment design and logic.

In summary, multiple case study designs allow the investigator to generalize findings into a broader theory, analogous to the way a scientist generalizes from experimental results to theory. Accordingly, this type of research design requires a well-developed theoretical framework in order to effectively meet the tests of both construct and external validity. The use of multiple sources of evidence also increases construct validity, making the multiple case study design one of the more rigorous methods of scientific inquiry. When an embedded design includes the collection and analysis of quantitative data at a subunit level of assessment, the evidence from the study is often considered more compelling or reliable, and the overall research design is therefore viewed as being more robust (Yin, 1984).

The Setting

Six types of acute care, non-profit hospitals were selected to participate in a research project, "Comparative Study of Stress and

Coping of Hospital Nurses," conducted by Bailey and Chiriboga (1984) as primary investigators. The present study on the characteristics of these hospitals is a part of the larger Bailey and Chiriboga research study. Five of the hospitals in the study were located in Northern California and one was located in Southern California. The types of hospitals as reported earlier included the following: community, county, district, private, sectarian, and university. An assumption was made that most acute care hospitals would fall into these six types with the exception of federally funded hospitals and health maintenance organizations (HMOs).

A number of criteria were developed in the selection process of the hospital sites and these criteria included: (a) hospitals should represent one of the six types (i.e., community, county, district, private, sectarian, or university); (b) hospital size should be between 300-700 licensed beds; (c) hospitals should be accredited by the Joint Commission on the Accreditation of Hospitals; (d) hospitals should be located in the State of California; and (e) hospitals should hold a current contract with the sponsoring academic institution.

The Sample

The study population was comprised of six hospital administrators, six directors of nursing service, six assistant or associate directors of nursing, and a total of 544 critical care and medical-surgical staff nurses employed at the six hospital sites. The hospital and nursing

administrators were interviewed to obtain data for the case studies which will be presented in Chapter IV, and also for the results and findings described in Chapter V. It should be noted that the sample was a convenient sample and that the staff nurses employed on the critical care units and medical-surgical units in each of the study sites were invited to participate in the study through completing a questionnaire if they wished to do so.

Protection of Subjects

The proposal for the present study was submitted for review and approved by the Human and Environmental Protection Committee of the sponsoring academic institution. Approval of the present study (number 937707-01) was received on March 16, 1984.

Informed consent was obtained from subjects who were willing to participate in the study. The procedures and protocol of the Human and Environmental Protection Committee were followed and copies of the consent forms are presented in Appendix A.

The confidentiality of subjects was protected by the coding of typewritten transcripts of interviews, and questionnaires with the names of the respondents were known only to the investigator of the present study and the principal investigator of the larger research project. The identity and privacy of each hospital and respondent were protected by the omission of names and the use of pseudonyms in interpreting and reporting the results of the study. Nurses who participated in the study and other interested nurses will be invited to attend a meeting

with the principal investigator with respect to the study and the present investigation. In addition, a report will be filed with the nurse executive of each participating hospital and made available to those in the hospital setting who are interested.

Procedure and Instrumentation

After the criteria for the selection of six types of hospitals were established and the hospitals selected, the principal investigator of the larger research project (Bailey & Chiriboga, 1984), of which this study was a part, held two meetings with nurse executives of each hospital to describe the purposes of the study, obtain their suggestions, and solicit their cooperation. Letters of agreement to participate in the study were mailed to the principal investigator after the nurse executives had communicated with the hospital administrators and members of their staff and received their support. It should be noted that the investigator of the present study attended these meetings and was introduced as a doctoral student who would be involved in the study, serve as a Research Assistant, and conduct a part of the larger study as her doctoral dissertation should they agree to participate. This appeared to be well received by the nurse executives attending the meeting.

After permission had been obtained from the hospital and nursing administrators to participate in the study, a pilot study was conducted to pretest the Interview Protocol for the top executive group. The

questionnaire to be administered to the critical care and medical-surgical staff nurses was also pretested.

The Interview Protocol was developed by the present investigator to link the data to the theoretical issues addressed in this study and to organize relevant elements and variables of the study as presented in the model. The Interview Protocol was critiqued by four experts on instrument design and then pretested. Three experienced nursing service administrators and one hospital administrator, not affiliated with the six study hospitals, participated in the pilot study. With a few minor suggestions, the Interview Protocol was finalized and is presented in Appendix B.

The instrument packet developed by Bailey and Chiriboga (1984) was printed in booklet form for administering to critical care and medical-surgical staff nurses employed in the six study hospitals. After receiving approval from each hospital and its nursing administration to participate in the study, the principal investigator in the larger study and five research assistants, including the present investigator, met with the nursing director, assistant nursing directors, and head nurses in most of the hospital study sites to acquaint the nurse executive group with the purposes of the study, to solicit their cooperation and assistance in data collection, and to introduce the research team. The data collection occurred between May and August, 1984. Prior to the data collection, an announcement of the study was posted on each of the study units.

Staff nurses on critical care and medical-surgical units were contacted on their unit by a member of the research team who explained

the purposes of the study, solicited their willingness to participate, and handed them the instrument packet with instructions to return it to the nurse researcher or to deposit it in a locked box provided for that purpose.

Included in the instrument packet was the instrument "Your Work Environment" (see Appendix C) which was adapted from the Moos Work Environment Scale (Moos, 1981). This questionnaire was an integral part of the present study and was used to explore the nurses' perceptions of their work environment. "Your Work Environment" is a self-reporting attitudinal scale of 68 items, which is subdivided into 10 subscales that are designed to measure three sets of dimensions: work relationships, personal development, and system maintenance and system change (Moos, 1981). The 10 subscales of the modified questionnaire include the following:

(a) Involvement, or the extent to which employees are concerned about or committed to their jobs.

(b) Peer cohesion, or the extent to which employees are friendly and supportive of each other.

(c) Supervisor support, or the extent to which supervisory staff members are supportive of employees and encourage employees to be supportive of one another.

(d) Autonomy, or the extent to which employees are encouraged to be self-sufficient and to make their own decisions.

(e) Task orientation, or the degree of emphasis placed on good planning, efficiency, and getting the job done.

(f) Work pressure, or the degree to which the pressures of work dominate the job milieu.

(g) Clarity, or the extent to which employees know what to expect in their daily work routines and how explicit rules and policies of the work place are communicated.

(h) Control, or the extent to which management uses rules and pressure to keep employees under control.

(i) Innovation, or the degree of emphasis placed on variety, change, and new approaches to solving problems.

(j) Security, or how assured employees feel about their future in the work place and how pleasant employees perceive the overall work environment to be (Moos, 1981).

The Moos Work Environment Scale (WES), Form R, from which the questionnaire used in the present study was adapted, represents the third refinement of the original 200 item Form A WES (Moos, 1981). Normative data for the 90 item Form R were obtained from employees ($\underline{N}$=1442) in a wide variety of general commercial and industrial work settings and an equally representative sample of health care employees ($\underline{N}$=1607) (Moos, 1981). The health care employee sample included administrative, supervisory, and staff nurse personnel from four intensive care and general medical hospital units (Moos, 1981). A sample of 1,045 employees representative of both general and health care work groups was used to determine internal consistency measures for the 10 subscales, which ranged from 0.69 for peer cohesion to 0.86 for innovation (Moos, 1981). Stability of the subscales over a one-month interval of time generated test-retest correlations ranging from a low of 0.69 for clarity to a high of 0.83 for involvement ($\underline{n}$=75). Test-retest correlations over a 12 month time interval remained within

an acceptable range, varying from a low of 0.51 for supervisory support to a high of 0.63 for work pressure (n=245) (Moos, 1981).

Data Analysis

Several procedures were used to organize, analyze, and interpret the data collected in the study. First, descriptive statistics were used to describe and summarize the observations and qualitative data relative to the six hospitals which were the primary unit of analysis. Descriptive techniques and statistical analysis were also used for the purpose of making across-hospital comparisons with respect to the key organizational components and related variables which were derived from the conceptual framework. Second, a pattern-matching analytic technique was used to relate the data to theoretical propositions that underlie the study. Yin (1984, p. 103) recently contended that:

> For case-study analysis, one of the most desirable strategies is the use of a pattern-matching logic. Such a logic compares an empirically based pattern with a predicted one (or with several alternative predictions). If the patterns coincide, the results can help a case study to strengthen its internal validity.
> If the case study is an explanatory one, the patterns may be related to the dependent or independent variables of the study (or both). If the case study is a descriptive one, pattern-matching is still relevant, as long as the predicted pattern of specific variables is defined prior to data collection.

Additional statistical procedures such as one-way analysis of variance and the Student-Neuman-Keuls Procedure were used to determine if there were any differences among the six hospitals relative to the staff nurses' perceptions of the work environment.

To summarize, analysis of the data was guided by a provisional model of organizational components showing work climate as one of the major components (see Figure 1). This model links the components of the external environment to the other components of organizational context, structure, and processes as well as to the work climate.

Definitions of Organizational Components and Related Variables

External environment comprises the societal forces such as socio/economic, political/legal, and cultural/philosophical that are not subject to the direct control of organizations or their management. Among the actions taken by organizations to reduce uncertainty and manage interdependence are mergers, joint ventures, cooptation, interlocking directorates, selective recruitment, diversification, and related activities.

Organizational context refers to the setting within which structure is developed and refers to the more specific forces that give direction to, or act as constraints upon, the decision-making and strategy formation processes of an organization.

History comprises the patterns of past events, decisions, and activities of the organization that have an impact on its current functioning.

Ownership and control is defined as the extent of public accountability as expressed by the type and composition of the governing board.

Mission/strategy/goals refers to the statement of philosophy which delineates the role and purpose(s) of the organization.

Service area demographics means the geographic boundaries within which organizations define the specific services they will provide and the target constituencies they will serve.

Size is comprised of the total number of salaried personnel and the number of operating or staffed beds.

Competitive advantage is defined as the type of planning and marketing activities that influence how organizations choose to compete in light of industry conditions and their positions in the marketplace.

Unionization means the impact of nurses' collective bargaining activities on organizational management practices and policy-making processes.

Organizational structure comprises the formal pattern of relationships that exist between positions and work unit elements, integrating the functions and processes of the organization.

Complexity is defined as the number of hierarical levels (vertical), the number of departments or work units (horizontal, and the degree of task variability (technical).

Formalization is the extent or amount of discretionary behavior permitted individuals in job performance.

Centralization is the degree to which power and authority are centralized or distributed within the organization.

Professionalization refers to the proportion of board-certified physicians on staff and the degree of educational preparation of nursing staff members.

Organizational process refers to the means by which the different departments and levels of the organization are linked together by different flows of work elements, of information, of influence, and of decision processes.

Communication is the form and direction of information movement within the organizaton.

Coordination is defined as the types of mechanisms utilized to achieve integrated patterns of individual and group efforts in the accomplishment of organizational goals and objectives.

Functional influence means the extent to which nursing personnel are represented on all major organizational committees.

Administration is comprised of the pattern of overlapping strategic and symbolic activities that characterize the behavior of executives as they pursue organizational goals and objectives.

Work flow means the extent to which computerized information systems are utilized to relate nursing resources to patient care needs.

Staff relations refers to the nature and quality of interpersonal exchanges that exist between supervisors and subordinates and among colleagues.

Organizational climate is defined as the quality of the relationship which exists between the organization and its membership as perceived by the administrative staff.

Reward sytems means the equitable distribution of positive sanctions by the organization for conformity to work-related performance standards and the symbolic or monetary recognition of outstanding personnel performance.

Career mobility means the movement between different authority and accountability levels in the organization as reflected in the advancement and promotion of nursing service personnel.

Stability refers to tenure of directors of nursing in their present hospital settings.

Turnover is the percentage of registered nurses who voluntarily terminate their services to the employing organization during a year's time.

Summary

This chapter presented the overall purposes of the study as an introduction. It also described the research design, setting, sample, protection of subjects, and instruments. In addition to the qualitative analysis of the data, statistical procedures were described to analyze the quantitative data.

CHAPTER IV

CASE STUDIES OF SIX TYPES OF ACUTE CARE HOSPITALS

This chapter presents a descriptive case study of each of the six hospital organizations involved in the present investigation. These case studies are primarily based on data derived from hospital records and related written documents, including employee newsletters and any other informational or archival materials made available to the investigator. Each of the case studies has been reviewed and validated by the hospital and nursing administrators who were interviewed, thus enhancing the reliability of these findings.

As a research approach, the case studies cover a number of different topics, which complement the conceptual model used in the present analysis of contemporary hospital systems, and includes the following components: external environment, organizational context, organizational structure, organizational processes, and organizational climate. Although the case studies do not provide a complete picture of the hospitals studied, they capture salient features of each hospital as an organization, having its own unique character and operating within its own real-life context. In addition to providing insights into the characteristics of six types of acute care hospitals, the case studies offer a comparative perspective from which to view a number of problems and issues across hospital settings. The case studies also provide the background against which the findings in Chapter V may be viewed.

Community Hospital

Community Hospital is a private, nonprofit, acute care general teaching hospital which was organized by a small group of civic-minded women in the late 1880s. The Hospital had its meager beginning as a 25-bed facility which was housed in a small redwood building located in a resort city with a population of 5,000 residents. During the first 40 years of operation, the Hospital experiences incremental and steady growth consistent with the needs of the community and the institution's guiding philosophy: "to provide the very best and most modern health care possible to individuals of the community and beyond, regardless of their ability to pay." By the early 1930s, the Hospital's bed capacity had grown to 210 beds, which was made possible by donations for constructing additional facilities. In 1934, the Hospital provided inpatient care services to over 3,000 adult and pediatric patients. More than 6,000 persons were also cared for in the outpatient department. Despite the opening of a county-operated facility in 1925, the Hospital continued to provide free or partial-pay care to more than 175 inpatients on an annual basis.

The population of the community increased steadily during and following the war years, and the demand for hospital services continued to grow. In the early 1950s, it was evident that, again, there was a dire shortage of hospital beds in the area and that many of the service areas of the Hospital were either deteriorating or becoming obsolete. Accordingly, the Board of Directors decided that "the time had come to replace instead of repair, to supplant rather than supplement--to build

a new . . . . Hospital on the rubble of the old." In 1962, ground was broken for the first phase of an estimated $15 million construction and expansion program which, when completed in 1966, would extend the Hospital's capacity to over 300 beds. Included in this phase was a new research building and a five-story structure which contained the new location of emergency, surgery, post-anesthesia recovery, intensive care, coronary care, maternity, nursery, radiology, orthopedic, and medical services. With the completion of two six-story buildings in 1968 and 1972, the Hospital's capacity was expanded to nearly 475 beds. These two structures provided for the addition of a number of new specialized services, including pediatric and psychiatric units, and expansion of the clinical laboratory and intensive care and coronary care units. The building completed in 1972 also housed the renal treatment center, the cardio-pulmonary laboratory, and the heart catheterization facilities. The following year, a wing containing new kitchen and dining facilities, conference rooms, and physical therapy facilities were completed. Also completed in 1973 was a two-story wing containing a distinctive professional reference and research library. This addition provided for expansion of administrative offices and facilities for the community's cancer foundation as well.

Over the course of this ten-year period of extensive physical growth, the Hospital's medical staff increased from 235 to 350 and its work force nearly doubled to 1100 full-time and part-time personnel. While construction was in progress, more than 130,000 patients were admitted for care, more than 170,000 persons were treated in the emergency facilities, and more than 13,000 babies were birthed in the

Hospital's new delivery suite. In 1968, however, the Board of Directors announced the loss of a major service with the closing of the affiliated school of nursing which had accorded the Hospital a stable and reliable nursing staff for more than 75 years.

Paralleling the substantial physical and internal development of the new Hospital, an equally impressive financial base was developed during the decade of expansion. In 1961, members of the Board of Directors and the administration were joined by some 137 physicians each of whom pledged $1,000 toward the building fund. This gesture provided the impetus for a flow of contributions from individuals, foundations, and corporations which throughout 1973 had expanded the fund to nearly $10,000,000 million. As a result of the planning and effort on the part of the governing body, the administration, the medical staff, key employees, volunteers, and other friends of the Hospital, the community had been provided with a modern health care facility having an estimated replacement value exceeding $30,000,000 million. Through continued planning, concerted efforts, and philanthropic endeavors which had made physical and financial growth possible, the Hospital was enabled to broaden its capabilities and expertise in several major health care areas. These areas included: open heart and kidney transplant surgery, renal dialysis, clinical radiation therapy, coronary care and rehabilitation.

Community Hospital currently maintains an operating capacity of more than 400 beds, and a staff of over 1600 full-time and part-time personnel. In cooperation with two smaller community facilities, the Hospital serves as a principal source of acute care for a population of

approximately 300,000 persons. It provides general and specialty care services in the following areas: medical, surgical, pediatrics, obstetrics, psychiatry, and gerontology.

Community Hospital, as a partially endowed, private, nonprofit institution, is operated by a 17-member Board of Directors. Prior to 1914, the corporate by-laws indicated that the affairs of the Hospital were to be controlled by a Board of nine women Directors. In addition to permitting the election of male members, the revised by-laws provided for the Board to be self-perpetuating. It also provided for the membership to serve without time limitations. Through its articles of incorporation, the Board is structured to permit leaders from all sectors of the community to contribute their expertise toward a common purpose and to provide a sound mechanism for public accountability. The present Board of Directors consists of five female and 12 male members whose professional backgrounds reflect expertise in finance, law, marketing, public relations, nursing, medicine, corporate management, education, engineering, and organizational governance. Although the membership of the Board has changed over the years, the essential ethos of its public mandate has remained intact.

Members of the Board of Directors exercise control over the affairs of the Hospital through 11 standing committees composed of Board, administration, and medical staff representatives: Executive, Finance, Long-Range Planning, Personnel, Joint Conference, Quality Review, Community Relations, Development, By-Laws, and Community Hospital Auxiliary Committees. In addition to serving on various Board committees, the Directors participate regularly on hospital and medical

staff committees. Likewise, representatives of hospital administration and the medical staff serve on many of the Board's standing committees as ex officio members. Although influence and community status have traditionally been criteria for membership on the Board, current membership reflects knowledge, skills, and expertise in health care planning, marketing and strategic management. For example, two of the more recently recruited members bring to the Board strong backgrounds in regional, state, and public planning as well as in hospital governance.

The current Board of Directors is perceived as a strong, business-oriented governing body which devotes considerable time to governance and policy formulation. Board members are also perceived to be highly informed on the issues and trends currently impacting the hospital. As a new Board member and acting college president recently stated: "I see the role of the Board member as one who questions everything." Similarly, another Board member, and past President of the Board, has been described as a person who "demanded exhaustive examination of statistics and trends and a harder look at the future of health care." The following statement of a third Board member also captures the overall orientation of the current membership, especially in terms of the new era of prospective pricing and more aggressive hospital marketing:

> Expansion of services may not be the answer for this hospital, particularly if someone else can provide the service at lower cost. What's most important is that the services (Community Hospital) does offer are indeed the best, the most medically necessary, and the most cost-effective for the health of the hospital and the consumer.

The Board's orientation and strong leadership have been a critical factor in Community Hospital's ability to improve its position for

continued growth and development in today's increasingly complex and competitive health care environment. In 1977, the Board engaged the services of professional consultants to provide an objective view of the Hospital's strengths and weaknesses and to reassess its direction vis-a-vis the existing and future demands of the institution's operating environment. Concurrently, strategic planning was initiated and several important decisions were made concerning steps which needed to be taken to improve the Hospital's alignment with environmental pressures. First, a planning process involving the Board, administration, and the medical staff was implemented. Second, a Planning Department was created and a Director of Planning was hired. Third, the administrative structure was changed to reflect the addition of two Associate Hospital Administrators. Fourth, a Department of Development/Community Relations was established. This set of decisions enabled the Hospital to inaugurate a major redevelopment and modernization program deemed necessary to meet the health care needs of the community through the 1980s and into the next century.

In light of the 1982 enactment of state and federal legislative initiatives that were designed to reduce the rate of increase in health care and hospital costs, the Board moved to reconsider and modify its long-range building and services plans which were in the final stage of development at the time. Based on the results of an extensive internal and external assessment of its current position and potential for future development, revised plans with an estimated cost of $41 million opposed to $70 million were approved and the initial phase of this six-year project was started in 1984. The revised plans reflect the Hospital's

decision to provide space for expanding and consolidating existing patient treatment areas without increasing the number of licensed inpatient beds. This decision was partly influenced by the modest decline in the Hospital's occupancy rates from 66.7 percent in 1982 to 62.2 percent in 1983. It may also have been influenced by the uncertainty concerning the actual impact that Medicare's Prospective Payment System would have on the Hospital after its implementation in January 1984.

While the Hospital was in the process of developing the revised strategic plan, the strategic issues that were raised in the process also had important implications for the Hospital's organizational structure and the type of systems used to manage it. Correspondingly, in 1981 a system of Management by Objectives was implemented to provide a mechanism by which to establish departmental objectives that would reflect congruence with the Hospital's strategic plan. An additional Associate Hospital Administrator with a background in finance was hired. The Nursing Department was reorganized into three areas of responsibility and Associate Directors of Nursing were appointed to manage them. The nursing process for planning, providing, documenting, and evaluating patient care was implemented across all nursing units. A patient classification system was developed by nursing staff members to serve as a guide for planning and allocating nursing resources. In 1983, nursing unit head nurses were also given the responsibility for preparing and managing the budgets of their units. The Hospital's computerized information system was programmed to generate weekly

productivity reports to assist the management staff to monitor and control the activities of their units and/or departments.

High on the list of strategic issues that were raised during the 1983 planning activities were the legislative changes in state and federal health care reimbursements systems which had been enacted in late 1982. Of immediate concern to the Hospital was the State's legislation which essentially called for selective contracting of hospitals at fixed rates for the care of Medi-Cal patients and Medically Indigent Adults (MIAs). MIAs included patients who were not eligible for Medi-Cal but whose care had been transferred from the state to the local county level on January 1, 1983. This legislation further authorized contracting between insurance companies and preferred provider or exclusive provider organizations. As previously noted, these legislative initiatives resulted in a decision to reduce the size and scope of the Hospital's Centennial Plan, so named because its projected completion date could coincide with the Hospital's 100th anniversary. They also resulted in decisions that led to the Hospital's signing contracts to provide care for Medi-Cal patients and the local county's MIA-eligible patients. In addition, Blue Cross designated the Hospital as its contract hospital or preferred provider organization under the company's Prudent Buyer Plan. Since the closing of the county hospital facility in 1978, Community Hospital has endeavored to gain a greater market-share of the Medicare and Medi-Cal programs' beneficiaries. In 1983, approximately 47 percent of the Hospital's reimbursements were derived from these two programs. From 1978 to 1983,

the Hospital experienced a three percent increase in reimbursements deriving from the Medicare program and a five percent decrease in patient revenues from the Medi-Cal program.

In early 1983, it became apparent that changing treatment and utilization patterns, changes in the local competitive market, and changing service area demographics were beginning to create problems that had not previously been experienced by the hospital staff. The Board of Directors again engaged the services of professional consultants and charged them with updating the Hospital's Long-Range Role and Services Plan. As a part of this study, emphasis was given to the development of an extensive data base of subjective and objective information that would enable the Hospital's decision-makers to adopt a more proactive approach to external environmental pressures. The findings and recommendations of this study provided the impetus for the development of alternative health care delivery settings in such areas as ambulatory care, home health care, and expanded diagnostic and screening services. Based on the relevant information concerning its client population, the decision was made to broaden the Hospital's service base through the purchase of a 136-bed accredited long-term care facility. In this regard, it was noted that the city in which the Hospital was located now exceeded 75,000 residents and that it contained a large concentration of persons 65 years and older. In 1980, this elderly population group represented approximately 18 percent of the residents of the community and is expected to increase substantially through the present and subsequent decades. The ethnic distribution for the city as well as the primary service area has remained stable over

the past several decades and reflect the following proportions: White (76 percent), Hispanic ((18 percent), and Black (2 percent).

Community Hospital has a highly professionalized administrative staff composed of ten members: (a) the Chief Executive Officer; (b) Associate Administrators for Nursing, Finance, and Operations; (c) Assistant Administrators for Support Services and Professional Services; (d) Directors for the Departments of Personnel, Planning, and Development and Community Relations; and (e) a Controller. The Chief Executive Officer is directly accountable to the President of the Board of Directors for the Administration of the Hospital in all its activities and operations including the administration of the medical and surgical education programs. The Chief Executive Officer has served the Hospital in this capacity for nearly thirty years. During this period, the Hospital has made the transition from a medium-sized general hospital to a large medical center with high-technology tertiary care services in most major health care areas. Throughout this period of transition, the Hospital's formal organizational structure has changed to reflect a less hierarchical and more decentralized pattern of authority arrangements. Accordingly, the management staff is composed of 30 members who hold positions as directors, assistant directors, or managers of key departments and services. The acquisition of the long-term care facility has necessitated additional restructuring which is now in progress.

The medical staff of Community Hospital is composed of more than 500 representative physicians, surgeons, academic, and researchers, most of whom are members of the local county medical society, appointed by

the governing board on the nomination of the medical staff membership itself. Over 74 percent of the hospital and non-hospital based medical staff members are categorized as either Board Eligible or Board Certified in more than 40 areas of general and specialty professional practice. The clinical expertise and service contributions of the medical staff are integrated into 16 medical departments and represented through participation on over 30 multidisciplinary committees. The medical staff, through its Executive Committee, formulates medical policy for approval by the Board of Directors, and maintains clinical standards through self-governance procedures. As of 1983, the physician/population ratio for the community exceeded both the U.S. Bureau of Health Manpower and Graduate Medical Education National Advisory Committee standards and ranked sixth among California counties (California Medical Association, 1983).

Medical education and research have been major components of Community Hospital's mission and commitment to health care practices, and reflect state-of-the-art technology and patient care management techniques. The Hospital's research programs have achieved national and international recognition in the diagnosis and treatment of cancer and metabolic disorders, and in the development of basic and applied research in the fields of radiology and cardio-pulmonary diseases of children and adults. Research activities have traditionally been supported through funds derived from governmental or private sources.

Community Hospital's medical education programs are fully accredited. At the present time, the Hospital is affiliated with a major university medical school and offers residency and internship

training programs in medicine, surgery, and radiology. In addition, the Hospital operates a School of Medical Technology. There are a variety of nursing and allied health education programs within the Hospital, notably continuing education and specialty training programs for staff nurses. The Hospital also participates in educational programs for student nurses, physical therapists, radiologic and laboratory technologists, administrative residents, and diatetic interns.

The Nursing Department of Community Hospital is composed of approximately 570 professional and 160 nonprofessional personnel (425 full-time equivalent employees). Nonsupervisory professional staff nurses number approximately 515 or about 91 percent of the department's full-time equivalent registered nurses. Approximately 30 percent of the professional nursing staff work less than 30 hours per week and, therefore, are considered part-time personnel. The proportion of registered nurses holding baccalaureate degrees in either nursing or allied disciplines was estimated to be about 16 percent in June 1984. Approximately two percent of the registered nurses on staff hold graduate degrees in nursing. Turnover among registered nurses decreased from approximately 40 percent in 1978 to 12 percent in 1984. The Nursing Department maintains its own extended pool of registered nurses to augment staffing requirements on a shift by shift basis. Registered nurses are not unionized at this facility.

The organizational structure of the Department of Nursing is decentralized in design, with a high degree of decision-making authority exercised at the unit level. The Hospital's senior nurse executive holds the position of Associate Administrator for Patient Care Services

and is directly accountable to the Administrator. Accountable to the Associate Administrator for Patient Care Services are the following administrators: Assistant Administrator, Specialty Care; Associate Director, Staffing and Operations; Associate Director, Clinical Services; Director, Nursing Education; and Assistant Director, Surgery and Post-Anesthesia Recovery. The Assistant Administrator for Speciality Care is responsible for outpatient surgery and emergency services, intensive care and coronary care units, and maternal and child health services. The Associate Director of Staffing and Operations is responsible for nurse recruitment, monitoring the allocation and distribution of nursing resources, and the supervision of ten nursing shift supervisors. The Associate Director for Clinical Services is responsible for medical and surgical patient care units. The Director of Psychiatric Nursing Services is organizationally responsible to the divisional Director for Psychiatric Services, but is professionally accountable to the Associate Administrator for Patient Care Services. The Nursing Department presently operates 20 clinical units, each of which is managed by a head nurse with the assistance of clerical personnel. Included in this number are four critical care units, 2 orthopedic units, a pediatric unit, 5 medical-surgical units, and a telemetry unit. As of June 1984, nursing service personnel comprised approximately 46 percent of the Hospital's total work force of 1600 personnel.

In 1979, the nursing department came under the new leadership of the present senior nurse executive following the resignation of the former Director of Nursing. During the ensuing months, a series of

actions were initiated to facilitate and provide the decentalization necessary for the process of developing and implementing new programs and roles consistent with the emergent professional models of nursing practice. While these innovations represented a marked departure from the long-standing traditional roles and authority patterns that had evolved over time, they were perceived as essential to the development of the Hospital's nursing resources during the critical years of the nursing shortage. Concurrent with the realignment of the department's formal structure, a Clinical Series was implemented to provide career mobility and advancement opportunities to larger numbers of nursing staff members. Subsequent revision in 1982 resulted in policies which reflected an integrated, four-dimensional promotion plan for career enhancement and advancement in either clinical or managerial positions. The promotion plan included the following levels: (a) Staff Nurse I (training/orientation); (b) Staff Nurse II (working more than 30 hours per week); (c) Staff Nurse III (clinical expertise); and (d) Staff Nurse IV (management and leadership). Promotion to Staff Nurse III and IV requires above average ratings on performance evaluations, a baccalaureate degree, and more than three years of nursing experience. It was noted that over 90 nurses have been promoted to Staff Nurse III, and approximately 30 nurses have been promoted to Staff Nurse IV. In 1980, the newly created Nursing Education Department provided staff development opportunities in operating room nursing and a 19 week management development course for supervisory personnel was offered. Critical care nursing courses were developed and made available the following year. A blend of primary nursing and total patient care has

become the delivery modality of nursing care. Participatory management has also been incorporated into the nursing department's philosophy which states that: "Nursing will remain a democratic environment that is conducive to staff development and learning, focused on improved patient care."

During a five-year period (1979-1984), the committee structure of the nursing department has also changed to accommodate the department's nursing philosophy and goals to provide high-quality patient care, promote professional practice, and to create an environment conducive to participative management. The following committees were formed to reinforce the department's current emphasis on the nursing process and on quality assurance at the nursing unit level: Nursing Practice, Policy and Procedure, Quality Review and Audit, Staff Development, Nursing Education and Research, and Clinical Levels. In addition, staff nurses participate on most of the Hospital's 27 standing and special committees. Presently, the institution's Quality Assurance Program is administered by a nurse. The participative committee structure appears to have strengthened nursing's image. The Nursing Department is perceived as resourceful and well managed, which makes a valuable contribution to quality patient care and which is mindful of cost-control.

From July through December 1983, Community Hospital committed itself to prepare for the implementation of the new federal prospective payment system. Increased efforts were made to develop information on what the Prospective Payment System would mean to the Hospital's

utilization, revenues, expenses, and resources. The service area and market analysis undertaken by the Hospital's consulting firm was used to "fine-tune" the quality of care criteria and standards relative to such factors as case mix, diagnostic justification, admission, length of stay, and related management parameters. The committees and task forces involved in this activity were composed of the Board of Directors, administrative staff, nursing staff, and medical staff. At the same time, a public relations campaign was launched to ensure that the community was informed of legislative changes and what these changes might mean to the Hospital and to the general public. In one of the Hospital's published communications to the public, the Hospital reaffirmed that despite the uncertainties and challenges which the legislative charges had imposed, the Hospital intended to keep its pledge to the community: "a pledge that has weathered almost 100 years of change--to provide quality health care within its financial resources to all who need it."

Hospital utilization reports for the period from 1982 to 1984 indicated that the number of available beds stayed the same, the occupancy rate declined by 4.3 percent, the number of admissions increased slightly (1 percent), while the average length of stay decreased by .5 percent and the number of patient days by approximately 1 percent. During this same period, the number of deliveries at the Hospital increased significantly (20 percent); outpatient surgery increased slightly (1.8 percent); while the total volume of outpatient services decreased by more than 12 percent. In 1983, the Hospital's needy patient fund made nearly $600,000 available to persons needing

financial assistance to pay their hospital bills. The total deductions from patient revenues, including all of the Hospital's uncompensated fees, were in excess of $18 million for the 1983 year.

Community Hospital currently perceives its major goal as that of providing tertiary health care services to the people in an underserved geographic region. Its objectives are to define and gain a larger share of a market in several adjacent counties while pursing its goal of meeting community needs and expanding its role in outpatient services, rehabilitative services, high-risk perinatal care, geriatric services, and post-acute or home care services.

County Hospital

County Hospital is a public, acute care, teaching hospital that was founded in 1926 for the overall purpose of providing health care services to the medically indigent. When the hospital opened, the facilities included an administration building, a service building, five patient care wings with a bed capacity of 350, a laboratory building, a graduate nurses' residence, and a building that housed classrooms and a dormitory for 160 student nurses. At this time, the County was comprised of approximately 440,200 people within the County radius of 800 square miles.

In 1970, County Hospital moved to a newly constructed nine-story facility that was designed to accommodate approximately 430 patients, since the population had more than doubled during the 44 year span. It was interesting to note that, by the time the hospital was in operation, because of changes brought about by Medicare and Medicaid programs, many of the medically indigent were being admitted to other acute care hospitals. As a consequence, the operating bed capacity of County Hospital has not exceeded 275 since 1971.

As of June 1984, County Hospital consisted of approximately 170 acute care medical and surgical beds, a 64 bed psychiatric inpatient service, a 24 bed obstetrical unit, a newborn nursery for well babies, major medical and psychiatric emergency facilities, a large ambulatory care service, a staff complement of 1219 full-time equivalent employees, and an operating budget in excess of 54 million dollars.

In contrast to the actions taken by the governing boards of many California counties, medical care services at County Hospital continue

to be available only to the medically indigent. Although the hospital will make exceptions for the care of emergency cases, the governing board has consistently voted against any formal action to change the status of the hospital from a legally designated county facility to a community hospital which would permit the offering of services to all patients, whether indigent or otherwise.

County Hospital is owned and operated by the county government which, under a charter granted by the State of California, has certain ordaining powers in addition to fiscal and regulatory functions ordinarily exercised by a county. Both the executive and legislative functions of county government are exercised by the Board of Supervisors.

The governing body of County Hospital is comprised of five members who are elected on a non-partisan basis by the constituencies of supervisorial districts. Supervisorial districts are redrawn periodically in order to balance the population of each of the districts to ensure that the governing body represents the one million residents of the county. The current board of supervisors consists of five male members, all of whom have served more than one four year term of office. The membership of the board tends to reflect the ethnic and cultural diversity of the population it serves. Demographic data indicates that the population which County Hospital serves is comprised of sixteen percent Blacks, thirteen percent Hispanic, four percent Oriental, and .1 percent Native American (United States Bureau of the Census, 1980). There is also a wide range of income levels, including a significant low income population and at times high unemployment in specific groups.

The population which is eligible for Medi-Cal is estimated to be approximately 11 percent of the total county population.

Within the broad limits established by the constitution, state statutes, and the county charter, the Board of Supervisors not only adopts ordinances and sets policy for operation of the county, but it is also responsible for implementing the laws and policies. It has, therefore, established the position of County Administrative Officer (CAO) to assist in the detailed administration of the county. Umbrella agencies have also been established for the purpose of administering many of the county's major program (e.g., Health Care Services Agency, Social Services Agency). A number of operating service departments have been created which County Hospital must depend on for specific support. These operating services include the following: Human Resources Management Department, Information Systems Department, General Services Agency, Public Works Department, County Counsel, and County Risk Manager in the County Administrator's Office. In addition, the County Sheriff's Department is responsible for providing security to the hospital.

In 1970, the Board of Supervisors adopted the administrative concept of a Health Care Services Agency to enable it to deal more effectively with the increasingly complex administrative and fiscal problems associated with the operation of the county's health care delivery system. The Agency represents a consolidation of all county health care services, with full managerial authority and responsibilities vested in the board-appointed Agency Director. It is currently comprised of several major components including Public Health Services, Mental Health Services, Medical Care Services, Alcohol and

Drug Abuse Services, and Administrative Services. The Administrator for County Hospital reports organizationally to the Deputy Agency Director of Medical Care. Additionally, the Health Care Service Agency and County Hospital have medical care responsibilities for County Jail and Juvenile Detention Facility populations. Hospital services include a staffed criminal justice medical inpatient unit and a criminal justice psychiatric inpatient service.

By the late 1970s, the Board of Directors became aware of the need for changes in the role of the Health Care Services Agency as well as the need for a major program of improvement in the governance and management of County Hospital. In early 1970, a study was commissioned to develop a program for the improvement of hospital and related county health care services. The study, which included a standard management and organizational survey conducted by the California Hospital Association, concluded that the existing organization of County Hospital's governance--Board of Supervisors, Health Care Services Agency, and Health Care Services Agency Commission--was dysfunctional to the organizational viability of the institution. It was further noted that "This organization has not produced ongoing planning, a program of goals and objectives, a philosophy of operation, a clear set of operational policies, or a formal periodic evaluation of the hospital's administrator--all important elements of effective governance" (County Hospital Project Report, Vol., p. 3-4, 1978).

The study also suggested that County Hospital's management system had considerable room for improvement. Specifically, the study led to the following conclusions:

> There is limited management leadership from the Agency; it has not established any formal accountability or reporting mechanisms for the hospital administrator. The administrator's job is complicated by having line relationships with two Deputy Agency Directors (Medical and Administration), and by having to respond to a multiplicity of 'functional superiors' in the Agency (e.g., Budgets-Contracts, Financial Services) and elsewhere in the County (e.g., Personnel). Therefore, he lacks control over key operating resources--e.g., personnel, financial, purchasing, maintenance, data processing. Accurate and timely management information is not available. Perhaps as a consequence of all the foregoing, the administrator has adopted a management-by-crisis or reactive approach to operations management. There are no management plans or mechanisms to establish accountability within the administrative or departmental staff, and little delegation of operational responsibilities.

On January 24, 1978, the Board of Supervisors approved the study's proposals regarding a program of improvement in the governance and management of County Hospital as well as a second health care institution under its control. In this regard, the Board agreed that it should: (a) perform the key governance tasks directly, (b) hold regular monthly meetings that would be devoted exclusively to hospital business, and (c) obtain assistance in the performance of key governance tasks from the Health Care Services Agency and from Joint Conference Committees and strengthened Community Advisory Committees at each hospital. In May 1978, the Health Care Services Commission was dissolved and the Board moved to engage contracted management services, including direct administration, for County Hospital. The contract with a firm specializing in hospital management became effective on July 1, 1978. This action was preceded by careful review of proposals submitted by four of the hospital industry's most prominent and respected hospital management organizations, and it reflected the

Board's acceptance of one of the study's recommended options for improving the operational performance of County Hospital.

The promulgated County Hospital Management Agreement established that the contracted firm was to provide operating administration and specialized services of a consulting nature, and that all policy authority would remain with the Board of Supervisors and the Health Care Services Agency. It further called for the contracted firm to meet four general conditions: 1) provision of an operating administration for the full term of the contract, 2) establishment of the enterprise approach to administration, 3) development of a "stand-alone capability" for the hospital at the end of two years, and 4) achievement of improvements in financial performance that would make funds available to cover the costs of the Board's proposed program of administrative improvement, including the contract for management services and result in an additional reduction of 1.7 million dollars in County costs over the term of the contract. In addition, the agreement called for the contracted firm to provide the following: 1) a highly qualified and experienced four-member administrative staff, 2) specialized staff to complete project assignments, 3) a formal results-oriented management system, 4) a financial management program, 5) a phased plan for development of data processing systems, 6) major operational improvements in selected departments and functions, 7) a work program and progress reports, and 8) training of successor top level administrators so that the hospital would be capable of operating at a high level of effectiveness without continued outside managerial services.

In August 1980, the Board of Supervisors returned County Hospital to full county management after two years of contracted management services which resulted in an estimated loss of revenues in excess of nine million dollars, including a two million dollar fee for services. Concurrently, a temporary management staff was immediately appointed to facilitate the transition and revitalize hospital administrative and patient care services. A proposal for a new organizational structure was approved for County Hospital and a recruitment program was launched to fill key administrative positions, including a Hospital Administrator, Director and Associate Director of Nursing Services, Director of Finance, and Budget Officer. Subsequent restructuring in 1983 established the formal authority relationships that characterize the present management and governance of County Hospital. The incumbent Hospital Administrator, as Chief Executive Officer, is now directly accountable to the Health Care Service Agency Director for the day to day operation and administration of the hospital within the approved policies, program, and budget allocations of the Board of Supervisors. Directly accountable to the Hospital Administrator are the Executive Officer for Administrative Services; the Director of Hospital Operations; and the Directors of Finance, Nursing, Medical, Ambulatory Care and Ancillary Services. The executive staff of County Hospital has been under new leadership since February 1984.

The medical staff of County Hospital consists of approximately 375 attending physicians and dentists, 40 salaried and contract physicians, and 80 residents and interns involved in the facility's medical

education program. Contractual arrangements also provide for the services of five certified midwives. An estimated 85 percent of the medical staff have passed specialty certification examinations in more than 25 specialty areas of medical, surgical, and dental practice. The attending medical staff is self-governing, with governance facilitated through member participation on the various standing and special committees of the County Medical Society. The President of the medical staff continues to represent the attending staff on the executive Joint Conference Committee of the Health Care Services Agency. The salaried staff of physicians, residents, and interns are under the professional management of the Director of Clinical Services and Medical Education who, in turn, is accountable to the governing body through the hospital administrator.

County Hospital's nuclear medicine specialists gained national recognition in the early 1950s for their pioneering research in the use of P-32 in blood volume studies, radioactive iron-58 for studying the blood forming organs, and iodine-131 for the diagnosis and treatment of thyroid disease. Starting in the late 1970s, the Hospital's multidisciplinary mental health services have operated an adult day health program which currently serves up to 50 elderly residents of the community on a daily basis. As of 1980, the Hospital has offered residency training in emergency medicine. This program has contributed significantly to the Hospital's emergent role as a regional trauma center and continued recognition as one of the region's designated Advanced Life Support base stations. More recently, the hospital opened an ambulatory surgery service which handles in excess of 1200 outpatient surgical procedures annually.

County Hospital also offers residency and internship programs in general surgery, primary care, internal medicine, and selected sub-specialty areas. Its medical education programs are fully accredited and affiliation agreements with several university medical schools have been in existence since the Hospital's opening in 1926. Although the hospital's school of nursing closed in 1971, a number of schools of nursing continue to utilize County Hospital as a clinical site for their students.

The nursing department of County Hospital is comprised of approximately 250 professional and 200 nonprofessional personnel (265 full-time equivalent employees). Nonsupervisory professional staff nurses number approximately 200 or 80 percent of the department's full-time equivalent nurses. An estimated 97 percent of all nonsupervisory nurses are involved in direct patient care, with the remaining three percent performing such functions as inservice education instructors, nurse recruitment, nurse staffing and scheduling coordinators, and infection control nurses. Approximately 10 percent of the registered nurse staff hold baccalaureate degrees, 2 percent hold masters degrees, and the remaining 88 percent hold either associate degrees or nursing diplomas. In addition, one member of the nursing staff has completed a doctoral program of study. From 1974 to the present, nonsupervisory registered nurses have been represented by the Service Employees' International Union for the purpose of collective bargaining.

The organizational structure of the Department of Nursing Services can be described as functionally-oriented and centralized in design,

following the traditional hierarchical pattern of authority arrangements. The Hospital's senior nurse executive holds the position of Director of Nursing Services and is directly accountable to the Chief Executive Officer. Accountable to the Director of Nursing Service are the Director of Nursing Education, the Associate Director of Inpatient Nursing, the Assistant Director of Outpatient Nursing, five Assistant Directors of Evening and Night Nursing, the Nurse Recruiting Officer, the Nurse Business Manager, the Supervisor of Surgical Suites, and the Supervisor of Emergency Services. Reporting to the Associate Director of Inpatient Nursing are the Supervisor of Nurse Staffing, the Supervisor of Maternal and Child Health, the Supervisor of Intensive Care/Definitive Observation Units, and the Supervisor of Medical/Surgical Patient Care Units. Senior nursing managers are afforded the opportunity to perform the functions of Associate Director of Inpatient Nursing on a rotating basis as a part of their professional development should they choose to do so. Although nursing staff members for the mental health units are allocated from the nursing departments budgeted positions, the Associate Director of Psychiatric Nursing Services is organizationally accountable to the Director of Nursing Services through the Chairman, Department of Psychiatry. At present, the Department of Nursing Services is comprised of 10 clinical inpatient units: a Surgical Intensive Care Unit, a Medical Intensive Care Unit, a Definitive Observation Unit, an Orthopedic Unit, an Obstetrical Unit, two Medical Units, two Surgical Units, and three Psychiatric Inpatient Units.

Nurse recruitment and nurse retention have been a major problem at County Hospital, particularly in the last ten year period. Various staffing studies and organizational assessments together with the 49-day strike by nursing personnel in the mid-1970s have highlighted the magnititude of this problem. Reports compiled by consultants and nursing service personnel during this period have identified a number of contributing factors. The lack of a defined recruitment program, increased demands on nursing personnel, inadequate complement of head nurses, low morale in the nursing department, the lack of a hospital-based personnel department, inflexible and obsolete personnel policies, and the lack of a fully implemented staff planning and scheduling process are among the factors frequently mentioned. While the strike-action reportedly resulted in substantial improvements in nursing personnel wages and benefits, recommendations regarding the need for more flexible employment arrangements, updated positions allocation and control mechanisms, and a viable staffing and scheduling methodology have continued to be identified as priority goals of the nursing department. For example, the departmental study completed in late 1981 indicated that, despite a highly competitive wage and benefits package, approximately 50 percent of the budgeted registered nurse positions for inpatient nursing services were unfilled. In addition, there were 77 unfilled budgeted full-time equivalent licensed vocational nurse positions for Inpatient Nursing Services at this time. The use of registry nursing personnel during the 2-year period 1980 to 1982 was estimated to cost County Hospital more than three million dollars annually.

The nursing department came under new leadership in October 1980, following the resignation of the former Director of Nursing Service. Since then, several innovations have been implemented as a means to enhance the recruitment and retention of licensed nursing personnel. In 1981, the department supported the use of the California Worksite and Educational Act by 15 of its licensed vocational nurse staff members desiring to upgrade themselves to registered nurses. As noted by the incumbent Director of Nursing, "How else could I, in one fell swoop, have 15 new RNs in my nursing department!" Officially known as SB-132, this Act provides state funds for the underserved to upgrade themselves through participation in a 12-month intensive program of study which includes an educational component and a work component. By 1983, it was apparent that continued support of the program was no longer feasible since less than 40 percent of the more than 30 County Hospital-sponsored enrollees either did not choose to or were unsuccessful in their attempts to pass the state licensure examination for registered nurses.

A second innovation involved the incumbent Director's persistence in bring about necessary changes in the promotional structure and position classification system for nursing personnel, within the framework of the County Civil Service Commission policies and procedures. The resultant changes in position classifications have permitted the employment of part-time nursing personnel and created additional opportunities for the career advancement of nurses in management positions. Concurrently, innovations intended to enhance the work experiences across all levels of nursing personnel have been provided through an expanded inservice education program, the

establishment of a nursing leadership development program, and the implementation of a preceptor program to facilitate the orientation and retention of newly hired nursing personnel. In addition, an Hispanic nurse recruitment program was implemented through contacts with schools of Nursing in Mexico and related networking activities. The concept of contracted nursing registry services has also been adopted as an alternative staffing and recruitment strategy. In this regard, contracted services with out-of-state registries (e.g., Traveling Nurses) are preferred over local registry resources because of the qualifications of the nurses provided and the recruitment potential such arrangements are perceived to offer.

The nursing department's management mode has, at this time because of necessity, been crisis-oriented. Excessively high turnover, extensive use of registry personnel, and the lack of a viable patient classification system and resource allocation methodology have contributed to this management approach. From 1982 to the present, the use of registry nursing personnel has fluctuated between 30 and 40 percent, and an estimated 30 percent of the full-time employed registered nurse staff terminate employment on an annual basis. Constant changes in the work force and additional workloads on existing staff have generated substantial concerns about the quality of patient care as well as the quality of work climate for nursing personnel. While a team nursing modality has been implemented, task-oriented patient care tends to prevail due to an inadequate complement of professional registered nurses. A request for 50 full-time equivalent staff nurse positions has been under consideration since early 1984.

Over the past year, County Hospital experienced significant increases in the number of admissions (12.5 percent), patient days (7.2 percent), occupancy rate (6.4 percent), and average daily census, which increased from 160 in 1983 to 192.6 in 1984. During this same year period, the average length of stay for medical-surgical patients was 5 days. It has also been estimated that approximately 70 percent of all patients admitted to County Hospital have multiple and complex diagnoses, compared with the medical-surgical patients admitted to private hospitals. One of the region's busiest outpatient services is also located at County Hospital, with approximately 134,000 visits per year. Of this number, over 40 percent, or approximately 56,200 patients, are seen in the emergency services department.

In early 1984, County Hospital launched a concerted effort in preparation for full implementation of the new Medicare reimbursement system on July 1, 1984. Since more than 80 percent of the Hospital's patient revenues derive from the Medicare and Medi-Cal programs, these changes, combined with the local competitive health care environment, may have a substantial impact on the institution's continued growth and development. At this time, the incumbent Chief Executive Officer initiated a series of actions to facilitate the planning process. First, a highly qualified coordinator was appointed to assume responsibility for the planning and implementation of the program. Second, a task force composed of representatives from all departments was established and charged with reevaluating the efforts of their respective departments in terms of prospective payments. Third, the concept of participatory management was implemented to facilitate the Hospital's

ability to effectively respond to rapid and significant changes in public health care policies within the framework of improved patient care services. At the same time, the newly appointed Chief Executive Officer shared with the public and the staff the following perspective on the mission of County Hospital in the new era of prospective payments:

> Our whole society is addressing the issue of adequacy of medical care. We're all asking, 'At what point in time do we say that we should not provide a particular kind of care?' Here at (County Hospital), that general concern translates into how we're going to specifically and concretely provide the best level of service with the available resources to the widest range of patients in the community.

The priority goals of the present Hospital Administrator include the following: (a) to establish open and responsive communication channels among all of the various constituencies, support arms, and interest groups involved with the Hospital, (b) to streamline the eligibility process so that the responsible person or organization pays for medical care, (c) to create a strong team spirit between the medical and nonmedical staff, and (d) to create a mission-oriented work environment. During a recent interview, the incumbent Administrator summarized the need to define functions and goals as follows:

> I want us to define the function of the hospital right down to the lowest common denominator. Once that common denominator is defined, we'll be able to assign to all staff specific responsibilities and appropriate levels of authority. From my initial conversations, I know (County Hospital) employees want to do the best possible job they can. By defining their responsibilities in terms of the hospital's overall goals, doing their best will become that much easier.

The issue of the local competitive health care environment was addressed in the 1977 research project that was commissioned by the Board of Supervisors. The findings as reported by the County Hospital

Project Team to the Board in January was noteworthy in light of the Hospital's subsequent utilization levels and in view of the new challenges posed by changing reimbursement policies. First, there are approximately 10 private, nonprofit acute care hospitals located within a 9-mile radius of County Hospital. Most of these facilities maintain an operating capacity in excess of 250, and only 1 has operated with a Medi-Cal contract during the previous 2-year period. Given this perspective, the study concluded that:

> We doubt that private hospitals will attract a significant share of the County's patients during the next four to five years. They have other priorities, and the pressure for high utilization is not yet very great. Beyond this period, however, there could be a very substantial impact.

A second issue addressed in both the 1970s and 1980s by consultant groups concerns the Hospital's medical education program. Findings revealed that "Inspite of the stated commitment to patient care as the first priority, there is substantial evidence that the post graduate medical education has had the primary attention of both full-time salaried and volunteer attending medical staff" (Board Commissioned Study, 1970). Recent reports indicated the need to clearly define the roles and responsibilities of the medical staff vis-a-vis the Hospital's mission, each of which have reaffirmed that patient care is the primary goal of this health care institution. The integration of the medical staff into the mainstream of hospital operations has been identified as a high priority goal of the incumbent Chief Executive Officer of County Hospital.

District Hospital

District Hospital is a public voluntary acute care general hospital, which began operation in 1954 as a 154-bed non-profit institution committed to serving the health care needs of approximately 100,000 district residents. The Hospital, through its designation as a district hospital, obtained funds for construction in 1947 through bond issues as well as some financial support from annual district tax revenues. Since 1947, the electorate of the district has approved several bond issues totalling some $11.8 million for the construction and subsequent expansion of District Hospital. From 1954 until the electorate of the State of California voted for Proposition 13, the Hospital derived a certain percentage amount of annual tax-based financial support as well. Although Proposition 13 eliminated the hospital district taxes, the county in which District Hospital is located annually allocates approximately $850,00 of county revenues to the institution on behalf of the public services it provides.

During its first four years of operation, the Hospital's bed capacity increased from 154 to 230 beds. Population growth in the district together with a critical shortage of hospital beds in the surrounding area resulted in additional expansions. In 1969, the institution reached its present capacity of 400 beds, nine floors, and 26 specialized departments. Additionally, a pilot mental health program undertaken in 1964 grew into a full-service Community Mental Health Center with the purchase of an adjacent building in 1970, which provides accommodations for about 45 adolescent and adult patients who participate in short-term treatment and rehabilitation programs.

At the present time, District Hospital represents one of the most visually attractive and ultra-modern health care facilities in the area. It is located on a 24-acre site in the center of the hospital district. The district is composed of 5 cities and adjacent unincorporated areas. Within a large and densely populated county, affluent suburban cities and unincorporated areas comprise the highest proportion of admissions and outpatient visits to the Hospital. Additional patient volume derives from the surrounding primary health service area which consists of neighboring communities with a total population of 495,200 persons, and almost exclusively include upper middle-class residential areas characteristic of the overall market that District Hospital serves. In 1960, the primary service area included approximately 120,000 persons. During the next 10 years, the population of the district increased to about 195,000 and the primary service area to a total of 556,000 persons. In the late 1970s, District Hospital acquired state-of-the-art technology for the diagnosis and treatment of cancer, cardiovascular diseases, and life-threatening emergencies. Several years later, with the addition of a helipad, the Hospital opened its doors to even more distant and complicated emergency services. At present, the Hospital provides a wide range of services including: Intensive Care and Cardiac Intensive Care Units, Diagnostic and Therapeutic Nuclear Medicine facilities, Telemetry, Physical Therapy, Respiratory Care Services, Occupational Health, Obstetric and Pediatric Units, and an evolving Geriatric Program.

District Hospital operates under the supervision and direction of an elected Board of Directors composed of one female and four male

members. The Board elects its own officers and the members participate in the activities of the Hospital through five organized committees composed of board, administration, and medical staff representatives: Management, Audit, Finance, Buildings, Joint Conference, and District Hospital Auxiliary. In recent years, a 15-member Advisory Board was created to strengthen the Hospital's ties with business and other community resources. Six of the Advisory Board's members work directly on behalf of the Hospital and they comprise the Advisory Board's governing body. As positioned directors, they serve indefinitely and carry a major responsibility for selecting the other nine members of the Advisory Board who are appointed to serve only three years. While the Hospital's Board of Directors tend to reflect the political character of the district, the Advisory Board more closely reflects corporate and civic interests of the district. The memberships of both boards provide District Hospital with an exceptional complement of professional expertise and leadership.

Since 1980, when a professional management consulting firm became involved with District Hospital, major changes in formal organizational arrangements and management practices have occurred. For example, traditional position titles and vertical authority patterns have been replaced by corporate executive titles and horizontal authority patterns. Hospital executives have been assigned management of health care service programs serving a targeted group of patients in addition to line management responsibilities. Several additional administrative positions have been created and subsequently filled by specialists in

program development, planning and marketing. These changes reflect the Hospital's current emphasis on program-centered planning, which in turn is a reflection of changing organizational needs for a proactive strategic planning process. Thus, over the past several years, the Hospital's formal structure has been altered to achieve an organization which would be program-oriented rather than department-oriented.

District Hospital's Executive Vice-President, as Chief Executive Officer, is responsible for the administration of all activities of the Hospital and for directing the development and delivery of program-centered health care services in a manner consistent with the institution's mission and goals. Individual program responsibilities are delegated to an executive staff composed of an Executive Vice-President, four Vice-Presidents, and two Assistant Vice-Presidents. The Hospital's management staff is composed of 45 department managers and approximately 55 additional management personnel. As of 1984, hospital management has been organized around the following patient care programs: Medical-Surgical, Pediatrics, OB/GYN, Coronary Care, Oncology, Neuro/Musculo/Skeletal, Mental Health, Alcohol and Drug Rehabilitation, Occupational Health, and Geriatrics.

The medical staff of District Hospital consists of approximately 475 members of the medical profession practicing within the primary service area. This number includes 125 surgeons, 118 medical internists, 75 psychiatrists and psychologists, 45 general practitioners, 28 pediatricians, 25 obstetricians, 37 orthopedic specialists, and 19 radiologists/pathologists. In addition to these active staff members, three medical directors are employed on a

full-time basis, and contractual arrangements have been made for such services as radiology, pathology, and anesthesiology. Over 80 percent of the medical staff have passed specialty certification examinations in more than 15 areas of medical and surgical practice. The medical staff, through a 14-member Executive Committee, formulates medical policy for the approval of the Board of Directors and maintains its clinical standards through self-governance procedures. As of 1984, one of the Hospital's seven vice-presidents was also a physician, while one of the five governing board members was a registered nurse.

District Hospital's multidisciplinary mental health team has been a pioneer in the development of a comprehensive hospital-based community mental health center which offers a broad spectrum of diagnostic and treatment programs for children, adolescents, adults, and senior citizens of the region. More recently, multidisciplinary teams of medical and allied health specialists have developed a number of specialized programs designed to meet the needs of key target groups of individuals through broadening pre-acute care and post acute care services. Among these are cardiovascular and substance abuse rehabilitation programs, a cancer risk analysis program, physical fitness and related occupational health programs, and numerous health education programs. In addition, an ambulatory surgery program was opened, and a lifeline program for elderly persons who are at risk or live alone was established.

The nursing department of District Hospital is composed of approximately 200 professional and 100 nonprofessional personnel (256 full-time equivalent employees). Prior to a 50 percent reduction in the

Hospital's operating bed capacity which occurred four years ago, the number of personnel employed under this department was close to double the 1984 staffing statistics. Currently, nonsupervisory professional staff nurses number approximately 150 or 75 percent of the department's full-time equivalent nurses. Nearly 90 percent of all nonsupervisory nurses are classified as staff nurses, with the remaining 10 percent distributed among clinical nurse specialists, quality assurance, and nurse instructors. Approximately 31 percent of the registered nurse staff hold baccalaureate degrees, one percent hold masters degrees, 19 percent hold associate degrees in nursing, and 49 percent hold nursing diplomas. Since 1966, nonsupervisory registered nurses have been represented by the California Nurses' Association for the purpose of collective bargaining.

The organizational structure of the department of nursing is described as basically pyramid-shaped and centralized, following the traditional Director-Associate-Assistant-Supervisor-Head Nurse or Nursing Unit Director pattern of authority arrangements. The nursing management team consists of 17 full-time personnel and includes one Associate and two Assistant Directors of Nursing, four Nursing Shift Supervisors, two Nurse Staffing Managers, and seven Nursing Unit Directors. The department's senior nurse executive holds the position of Assistant Vice-President of Patient Care Services, with additional responsibility for the operation of several ancillary support services. At present, the department of nursing is comprised of eight clinical units and includes: Intensive Care, Coronary Care, Telemetry, Pediatric, Obstetrical, and three Medical-Surgical Units.

During the last three years, with the assistance of professional consultants, the nursing department implemented an automated patient classification system, launched a comprehensive management training program for supervisory personnel, and initiated a number of projects and committee changes to improve communication between the nursing management team and unit personnel. Throughout this period, emphasis was on the application of Organizational Development concepts and techniques to improve work methods and resource allocations within the nursing service department. Concurrently, staff development through expanded in-service and continuing education programs and the implementation of a Clinical Nurse series contributed to the department's success in reducing staff turnover from 25 percent to 15 percent during this period of reorganization and change.

Beginning in the late 1970s, District Hospital was confronted with the problem of declining patient volumes and the associated loss of more than $100,000 per month in patient revenues. Specifically, the Hospital experienced a 13 percent decrease in average daily patient census for a 12-month period ending in October 1977. In response to this dramatic change in utilization and revenue generating patterns, the hospital administration established several ad hoc committees to act as a "think tank" for a period of 90 days. Members of these committees were assigned the task of gathering relevant data and making recommendations to the administration regarding the Hospital's future potential for growth and development. The ability to bridge the gap between the kinds of patients cared for and the availability of hospital resources to meet

changing community health care needs was a critical problem confronting the Hospital at this time.

Since 1970, the district population has decreased to about 180,000 while the total population of the primary service area has experienced a modest increase to 587,000 persons. The lack of available land for development and affordable housing for younger and less affluent families contributed to the slow growth in the hospital district and surrounding primary health service area. Consequently, a majority of the residents now served by District Hospital are affluent elderly persons over 65 years of age. This population group accounted for approximately 26 percent of the residents in the primary service area and more than 40 percent of the Hospital's patient days in 1980. The next largest population group, which is comprised of residents between the ages of 45 and 65 years, accounted for approximately 23 percent of the total primary service area population in 1980. Hospital utilization data suggests that this large group of predominantly affluent residents tend to utilize more convenient and alternative forms of health care delivery such as health maintenance or preventive care services and ambulatory care centers.

District Hospital competes with six other major short-term, acute care hospitals for the majority of their patient volumes. Utilization data indicated that District Hospital's market share of patient days had decreased from approximately 22 percent in 1973 to 20 percent in 1980. Three of the six other hospitals accounted for slightly over 60 percent of the total market share of patient days during the same period 1973

through 1980. This health service area also has a ratio of more than 255 physicians per 100,000 population, many of which have staff privileges at all seven of these hospitals. According to physician supply data, this ratio is larger than state (228 per 100,000) and national (188 per 100,000) averages (California Hospital Association, 1984).

Historically, these seven hospitals have been competing for the same market of potential health care consumers for quite some time. Those hospitals are located within a 10 mile radius of one another, and many of the inpatient and outpatient services which are offered are comparable in scope as well as in quality. With the 1980s, competition has also increased for health care consumers through health care delivery services such as free-standing outpatient services (including private physician offices). In addition, there has been an increased growth in health maintenance organizations, and a decreased overall market base. It was also noted that District Hospital's client population of elderly persons had increased and that these patients require a more costly secondary level of care with increasingly limited reimbursement capabilities. While the hospital has not sought a Medi-Cal contract during the past five years, approximately 42 percent of the reimbursements for patient days has come from the Medi-Care retrospective payment system. What impact the new prospective payment system will have on the Hospital's revenue or expense outcomes has yet to be determined.

Although industrial growth in the Hospital's environment has been limited by the lack of land available for such use, there are several

large service and distribution industries along with numerous small business firms that provide employment to approximately 210,000 persons. However, health care services provided by the seven hospitals are among the largest employers in the area. It seems doubtful that industrial or population growth will increase in the area during the next few decades. Thus, it is expected that competition among hospitals for health care consumers will increase relative to outpatient services, and will continue for inpatient services.

District Hospital has adopted several innovative approaches to meet the problems of increased competition and decreased patient volumes. First, the Hospital has embarked on a joint venture for constructing a 300-unit senior citizen housing and multipurpose geriatric care complex which includes plans for both skilled and intermediate nursing care beds. Second, acquisition of an established home care agency has enabled the Hospital to gain access to the growing home health care market within the primary service area. Third, the recent negotiation of several contracts with preferred providers organizations as well as the county medical society's newly formed Independent Physician Association (IPA) should improve the Hospital's potential for increasing patient volumes in the coming months and beyond. Lastly, the Hospital developed an occupational health program which was successfully marketed to several of the district's larger industrial firms. Collectively, these endeavors reflect the Hospital's commitment to meeting the existing and evolving health care needs of district residents in a manner which seems to be consistent with its operating philosophy of program centered planning.

Private Hospital

Private Hospital is a nonsectarian, nonprofit, acute care general teaching hospital, which was founded by two women physicians in the late 1800s. As a private facility, it was initially organized to provide medical and surgical care for women and children, and to facilitate the advancement of women physicians in the medical profession. The institution began as a small dispensary located in a frontier city with over 30,000 persons. By 1900, with the support of a group of philanthropic women, it was incorporated as an acute care specialty hospital and training school for nurses. The Hospital consisted of a 4-building complex with accommodations for approximately 140 women and children. Subsequent construction increased the size of the Hospital to nearly 200 beds in 1928, and to 300 beds in 1954. In 1955, the Hospital began admitting adult male patients, and in 1957, the Hospital's training school graduated its last class of nursing students.

The decade of the 1950s brought increased population to the area, and the demand for hospital services continued to grow. In 1966, a new wing was added to the main structure, increasing the hospital's bed capacity to its present complement of nearly 400 licensed inpatient beds. In 1967, a 9-story building was completed to house outpatient services and research activities. Since the late 1960s, hospital facilities have been expanded to include two medical office buildings and garages located across the street from the main complex. By the late 1970s, it became obvious that a major portion of the inpatient care facilities of the Hospital were both inadequate and obsolete. A successful fund-raising campaign permitted the construction of a new

six-story wing for replacement beds as well as extensive renovation and modernization of the Hospital's existing facilities. This project, which started in 1981, has a final completion date of December, 1985.

Over the past three decades, Private Hospital has made the transition from a limited-service specialty hospital to a major metropolitan acute care medical center. Changes that reflect the Hospital's expanded role in the community include the sponsorship of medical education and research programs, the expansion of emergency and primary care services, the addition of critical care programs, and the implementation and/or expansion of essential inpatient and outpatient diagnostic and therapeutic services for medical, surgical, pediatric, and obstetric patients. The Hospital also continues to provide a wide range of tertiary specialty services for expectant women and children. Among the more salient specialty services offered are a designated perinatal center, several day treatment centers for emotionally handicapped children, and a neuromuscular disease center.

In response to increasing public demands for cost containment of hospital care, Private Hospital modified its operating philosophy and initiated actions in 1981 to reduce its available bed capacity by more than 25 percent. Since 1981, the Hospital has maintained an operating complement of 290 inpatient beds, an occupancy rate of over 72 percent, and a work force in excess of 1,700 full-time and part-time personnel.

Private Hospital, as a nonprofit public benefit corporation, is governed by a 19-member female Board of Directors, all of whom are elected for 3-year terms by the voting membership. In addition, the Board of Directors is advised and counseled by a 15-member male Board of

Trustees. While the Articles of Incorporation indicate that the affairs of the corporation are to be controlled by a board of not more than 30 women directors, the Board of Trustees may not exceed 15 members. The power of the Board of Trustees is limited to only making recommendations. Members of the Board of Directors exercise control over the affairs of the Hospital through 12 standing committees: Executive, Finance, Long Range Planning, Accreditation, Building, Community Service, Development, Public Relations, House and Grounds, Joint Conference, By-Laws, and Nominating Committees. The standing committees generally meet monthly and submit their recommendations to the Executive Committee of the Board, which is the only committee empowered to make decisions. The 9-member Executive Committee is comprised of the President, two Vice-Presidents, Treasurer, Chairperson of the Joint Conference Committee, and five other directors of the corporate board. In addition to the reports from standing and special committees, the Executive Committee receives monthly activity reports from the Administrator, Medical Director, and President of the medical staff. While the Administrator and certain officers of the medical staff serve on several of the standing committees as ex officio members without vote, the Joint Conference Committee serves as the official liaison committee between the Board of Directors, the medical staff Executive Committee, and the Hospital Administrator.

Historically, the governing board of Private Hospital has assumed an active role in Hospital decision-making and in the execution of policy. The current Board consists of members of the legal profession, corporate and banking executives, prominent civic leaders, and

philanthropists. Members of the Board are perceived as extremely knowledgeable of the issues and trends impacting the Hospital. The former Hospital Administrator stated: "They think critically, plan innovatively and act with conviction. And, fortunately for me, they always are willing to listen to, and be challenged by, new thoughts and ideas. The future belongs to an organization that leads and makes thing happen."

Within the last two decades, the Board's strong leadership and governance has been a critical factor in making things happen for Private Hospital. In the late 1960s, the Board reaffirmed support of the concept that medical education in a hospital setting improves the quality of patient care, and made the decision to become a major affiliate of a leading university medical school. In 1975, the Board recognized the need for an alternative form of health care delivery in the community and established one of the areas first hospital-based health maintenance organizations to be associated with a private, nonprofit health care institution. The Board also moved to engage in joint planning with three other major nonprofit teaching hospitals as part of a voluntary effort "to discourage duplication of services, develop overall health care policies, and explore specific areas where joint action could enhance the interest of the patient, the community and the institutions." This bold planning initiative resulted in a reduction of more than 300 excess hospital beds in the city in 1979 and further enhanced the Hospital's flexibility in effectively responding to the regulatory and economic challenges of the 1980s. In light of these

substantial challenges, the Board of Directors made the decision to pursue a formal alliance with one of the medical centers involved in the voluntary effort. This alliance became a reality with the signing of the preliminary affiliation agreements in 1981. The emergent multi-hospital system, with an initial capacity in excess of 800 beds, a unique combination of unduplicated but complementary health care services, and a work force of nearly 3,000 personnel, has the potential to achieve a position of leadership in the health care industry regardless of the choices that may be presented to the consumer of health care in present and future decades.

The Memorandum of Understanding drawn up and agreed upon by the two institutions, provided for the incremental transfer of power currently reserved for their respective governing boards. In 1986, following the 5-year period of transition, it is anticipated that a complement of directors of each of the two respective corporations will become the Board of Directors of the new parent corporation. It is further expected that the Hospital's Board of Trustees will continue to exist in an advisory capacity to the parent corporation. Through the years, the membership of both Boards has provided Private Hospital with an exceptional complement of professional expertise and leadership in corporate, governmental, and civic affairs.

The Executive Vice-President of Private Hospital, as Chief Executive Officer, has full responsibility for the administration of the Hospital in all its activities and departments including the administration of the medical staff operations. The organizational structure of the hospital has many of the elements of a modified

matrix-type structure with authority decentralized and delegated to an executive management staff consisting of seven Vice-Presidents, ten Assistant Vice-Presidents, and one Assistant to the Executive Vice-President. There are currently seven major departmental components, each of which are headed by one of the Vice-Presidents: Hospital Administration, Alternate Care Systems, Medical Services and Education, Research, Corporate Finance, Corporate Services, and Profit Ventures. Directly accountable to the Vice-President for Hospital Administration are the Assistant Vice-Presidents of Institutional Services (plant operations), Financial Services, Diagnostic and Therapeutic Services, and Patient Care Services.

In 1982, a Hospital/Neighborhood Steering Committee was established for the purpose of opening channels of communication between the Hospital and the adjacent communities. This Committee is currently composed of eight members representing the nearby communities and a proportionate number of administrative and medical staff members who are appointed to represent the Hospital in an informational or liaison role. Both the Governing Board and Hospital Administration view this Committee as an essential link to the respective communities since they are the origins of the Hospital's major client groups.

The medical staff of Private Hospital consists of approximately 889 physicians, 37 dentists and 18 podiatrists. Of the total membership, 343 are categorized as active, 54 as associate, 413 as courtesy, 61 as consulting, and 73 as honorary staff. The total house staff of residents and interns averages about 100 annually. Over 80 percent of the 343 physicians in the active category have passed specialty

certification examinations in more than 20 areas of professional practice. Included in this number are 30 surgeons, 71 medical internists, 60 obstetricians/gynecologists, 73 pediatricians, 19 psychiatrists, 13 orthopedic specialists, 10 opthalmologists, 15 otolaryngologists, 14 anesthesiologists, 8 neurologists, and 12 radiologists/pathologists. A significant proportion of the active and associate staff hold faculty appointments at the affiliated university medical school and other academic medical centers located in the region. The medical staff, through its Executive Committee, formulates medical policy for the approval of the Board of Directors and maintains its clinical standards through self-governance procedures. Approximately 150 members of the medical staff maintain offices in the hospital-owned medical office buildings.

Medical education and research have been major components of Private Hospital's mission and commitment to the delivery of the highest quality of medical and surgical care for adults and children. As a major teaching hospital, it offers residency and internship training programs in medicine; pediatrics; surgery; obstetrics and gynecology; orthopedics; anesthesiology; and ear, nose, and throat. In addition to medical education programs, Private Hospital participates in educational programs for pediatric nurse practitioners, occupational and physical therapists, radiologic, laboratory and medical records technologists, psychologists, social workers, administrative residents, and pharmacy and dietetic interns. Its educational programs are fully accredited and many of the programs are affiliated with a major university medical school.

Private Hospital's research programs have achieved national recognition in the treatment of neuromuscular diseases and in the care of severly emotionally impaired children and adults. Its multidisciplinary teams of physicians and allied health care specialists are currently engaged in fundamental and applied research in the fields of melanoma and immunology, neonatology, breast cancer, and neurologic disorders of children and adults. These research programs are supported totally from funds derived from governmental or private sources.

The nursing department of Private Hospital is comprised of approximately 580 professional and 200 nonprofessional personnel. Full-time equivalent employees number 467. There are 490 staff nurses who comprise 85 percent of the department's full-time equivalent registered nurses. An estimated 96 percent of all nonsupervisory nurses are classified as Staff Nurse, with the remaining 4 percent classified as either Clinical Specialists or Staff Nurse IIIs. Approximately 50 percent of the registered nurse staff hold baccalaureate degrees, 7 percent hold masters degrees, and the remaining 43 percent hold either associate degrees or nursing diplomas. Additionally, one member of the nursing staff has completed a doctoral program of study. From 1957 to the present, nonsupervisory registered nurses have been represented by the California Nurses Association for the purpose of collective bargaining.

The organizational structure of the Department of Nursing contains many of the elements of a matrix-type structure, including a decentralized pattern of authority arrangements. The Hospital's senior

nurse executive holds the position of Assistant Vice-President for Patient Care Services and is directly accountable to the Vice-President, Hospital Administration. Directly accountable to this nurse executive are the Director of Nursing, Director of Social Services, Director of Surgical Services, Director of Educational Services, Special Projects Coordinator for Nursing, and Infection Control Nurse. Reporting to the Director of Nursing are two Assistant Directors of Clinical Services and one Assistant Director of Administrative Services. The Assistant Directors of Clinical Services are each responsible for five to seven medical-surgical or obstetrical-pediatric patient care units. The Assistant Director of Administrative Services is responsible for the overall monitoring and analysis of the department's budget, productivity, staffing requirements, and for the development and management of information processing systems in support of nursing service operations. The nursing department presently operates 13 clinical units, each of which is managed by a head nurse with the assistance of clerical personnel. As of June 1984, nursing service personnel comprised approximately 44 percent of the Hospital's total work force of 1800 personnel.

In 1981, the nursing department came under new leadership when the former Assistant Administrator for Nursing Services resigned. With the change in nursing administration, participatory management became an integral part of the philosophy of the nursing department, and a new model of nursing self-governance has been established. Unit coordinators/head nurses and staff nurses have been brought into the mainstream of departmental decision-making through membership on the

seven standing committees of the department of nursing services. Authority, responsibility, and accountability for patient care services and nursing resources management became vested in the unit coordinator/head nurse role. Greater responsibilities and accountability for clinical nursing practice was also vested in the professional staff nurses engaged in direct patient care activities. In addition, subcommittees and task forces comprised of members from all job categories within nursing services have been formed to gather information relative to selected critical decision areas (e.g., nursing service productivity) as well as more concrete types of decisions (e.g., nursing care plan/documentation system). Examples of the achievements that reflect the department's emergent model of nursing self-governance include the following: successful implementation of an effective patient classification and nursing resources management system, system-wide adoption of total patient care as the delivery modality, movement toward an all registered nurse staff, the implementation of the Staff Nurse III clinical ladder concept, establishment of a nursing research/patient care study committee, decentralization of fiscal responsibilities for staffing requirements to the unit level, and the expansion of the role of clinical nurse specialists both within and external to the department of nursing services.

Modern approaches to nursing resources development are also being used to develop and strengthen the management skills of unit coordinators/head nurses and the clinical expertise and competence of staff nurses. The Nursing Education Department, with its complement of clinical instructors and access to management consultants, routinely

provides a wide range of clinically oriented educational programs for staff nurses and management training programs tailored to meet the needs of supervisory nursing and hospital personnel. The incumbent Senior Nurse Executive and Vice-President for Patient Care Services has also recently established a Nursing Administrative Rounds Task Force and introduced the concept of management mentorships to further develop and enhance the management capabilities of supervisory nursing personnel.

During the past four years, the goals and objectives of the nursing department have reflected a dual concern for providing improved patient care while maintaining emphasis on cost efficiency and staff satisfaction. As of June 1984, the use of registry nurses declined to 1 percent and turnover among registered nurse staff members dropped to an all-time low of 11 percent. Three measurement systems are currently utilized to evaluate the department's effectiveness in providing quality patient care services: concurrent patient care audit system, retrospective patient chart reviews, and patient questionnaires. These quality assurance mechanisms are facilitated by the nursing department's philosophy of participatory decision-making and a trend toward decentralization.

With the implementation of Medicare's new prospective reimbursement system in October 1983, Private Hospital increased its efforts to provide quality care in a financially responsible manner. The nursing department initiated a patient classification and productivity study to pilot test their new nursing management system. This system, which utilizes elements of existing methodologies, permits nursing service to more accurately reflect the complexity of patient care requirements

within diagnosis-related grouping as well as to generate data essential for predicting daily shift staffing requirements and for monitoring nursing productivity. To date, the system has proved to be an invaluable tool for managing nursing resources and monitoring the impact of Medicare's prospective reimbursement scheme on the delivery of inpatient care services. Since approximately 50 percent of Private Hospital's reimbursement for patient care services derive from the Medicare and Medi-Cal programs, it is anticipated that the patient classification system will be incorporated into the Hospital Financial system following completion of the pilot study in the late 1985 fiscal year.

A review of Private Hospital's annual report for the 1983 year clearly demonstrated the Hospital's capacity to achieve its operating goals despite increasingly restrictive state and federal reimbursement policies. Overall, the Hospital has been able to: generate sufficient revenues internally to meet the operating costs of existing programs, fund the development of a number of new programs, continue to provide charity care in excess of several million dollars, continue investing in state-of-the-art technologies, and fund additional equity investments in the Hospital's multi-phase modernization project, which commenced in 1981.

During the same fiscal period, the Hospital experienced a slight decrease in admissions (less than 1 percent), a 5 percent decrease in the number of inpatient days, a 5 percent decrease in average daily census, a 3.6 percent drop in occupancy rate to 72.1 percent, a slight decline in average length of stay to 5.9 percent, while the number of

operating beds remained constant at 290 and the number of outpatient visits decreased by about 5 percent or to slightly more than 95,000 visits for the year. It is important to note that throughout much of 1983 and 1984 hospital services were somewhat disrupted by the inconveniences created by the major construction and modernization project that was in progress at the time. However, it would appear that this decline in patient utilization levels was largely the result of tightened admission eligibility requirements imposed by the Medi-Cal program in 1983 and the legislation that changed Medicare from cost-based retrospective reimbursement to a prospective payment system based on diagnostic case mix. In addition, newly emerging social, demographic, and marketplace influences have substantially made an impact on the utilization levels of virtually all nonprofit general acute care hospitals in the region.

The primary service area from which Private Hospital attracts approximately 64 percent of its inpatient volume includes a population base of about 680,000 residents. The population of the secondary service area, which includes close to 52,000 persons, accounted for approximately 17 percent of the Hospital's patient volume in 1983. The population of the primary and secondary service area is projected to decrease by approximately .1 percent from 1980 to 1985. The median age of the two service area populations is projected to increase to 36.03 years by 1985. In addition, there are four general acute care hospitals located in the primary service area which the Hospital considers to be its principal competition. However, it is apparent that the new emergent corporation will substantially alter the competitive

environment for these acute care hospitals and other health care provider organizations in the region. According to one of the Hospital's senior executives, "This provider coalition has the inherent potential to form one of the largest regional health care networks in the State of California."

Sectarian Hospital

Sectarian Hospital was founded in the late 1850s by a small religious community of sisters who had been recruited from abroad to bring their educational and health care ministry to California since they were prepared for both teaching and nursing roles. Under the leadership of a resourceful young Mother Superior, the Hospital had its beginnings as a 500-bed semi-charitable institution for the destitute located in a frontier city of approximately 35,000 persons. Since the California State Legislature had withdrawn from any responsibility for the indigent poor and sick, the purchase of this crude and poorly maintained institution by a religious order met minimal resistance.

In 1861, a new brick structure consisting of four stories and a finished basement was completed on an eight-acre site located in a more fashionable and accessible part of the city. By the end of the decade, the Hospital had accommodations for more than 250 patients and infirmed elderly. The Hospital's superior medical and surgical facilities had become the hallmark for much of the early medical progress of California. During the next three decades, the Hospital expanded in size as well as stature as additional buildings were erected on the premises. The aims of the Hospital were to support and offer health services for the homeless and unwanted indigent elderly; to provide educational courses and training programs in order to improve the lives and employment potential of young women; and, to properly house the growing congregation of sisters and future student nurses who would be accepted into the Hospital's charter class of nursing students. This

training program for nurses lasted fifty-five years, graduating its last class in 1954.

After nearly 50 years of commendable service as one of the State's first nonprofit, voluntary, acute care, general teaching hospitals, Sectarian Hospital and its adjacent buildings were destroyed by a fire. In the five years that it took to build a new physical plant, Sectarian Hospital was located in an abandoned mental hospital where it continued to provide general medical and surgical care to the city's indigent sick of all age groupings and religious backgrounds. In 1911, a new six-story structure with a capacity of 150 beds was ready for occupancy. A matching six-story wing was completed in 1926, which more than doubled the number of beds, and which totaled 371 beds and 60 bassinets. Over the next three decades, surgery, obstetrics, radiology, pathology, and general medical services were expanded and upgraded to meet the latest and highest professional standards; outpatient departments were organized to extend medical and dental services to the poor; a six-story building to accommodate the Hospital's growing population of student nurses was completed; and a neuropsychiatric unit was opened to provide a wide range of psychiatric care and mental health services to both adults and children.

In 1966, a five-story diagnostic and treatment center was completed opposite the Hospital to provide more adequate facilities for the growth in outpatient services. In 1967, the outpatient facility handled approximately 28,000 free or part-pay visits for approximately 4,800 patients. This represented an increase of 18 percent over the 1961 utilization figures. Similarly, hospital records indicated that 14,171

patient admissions accounted for 125,496 patient days of care in 1966. Of these figures, 7,207 were free or part-pay days given by the Hospital to 1,189 indigent persons. At this time, it was again recognized that a major modernization and building program needed to be undertaken if Sectarian Hospital was to remain true to its mission to serve those in need. Accordingly, a fund-raising campaign was launched which, with the assistance of federal grant support, permitted the construction of an 11-story nursing tower. This $37 million construction project was completed in 1974, bringing the Hospital's capacity to its present size of over 550 licensed beds, and representing the latest in modern hospital design and technology. The construction project also brought Sectarian Hospital full-circle from its pioneer distinction as the first voluntary hospital committed to the care of the indigent, poor, and elderly to its expanded role as a major teaching hospital and medical center serving a primary service area for a population of more than 700,000 persons.

Sectarian Hospital is currently owned and operated by a religious congregation of approximately 350 sisters who now operate over 20 health care and educational institutions in the Western United States. The corporation members are all religious sisters, and the present Board of Directors of Sectarian Hospital consists of four sisters, three physicians, four male business executives, and the Hospital's Chief Executive Officer.

For the first 70 years of its existence, Sectarian Hospital was both the mother-house and focal point of the sisters' apostolate. From the late 1950s to 1916, successors to the Hospital's foundress continued

the dual responsibility of Mother Superior and Superintendent of Sectarian Hospital. Starting in 1916, there was a separation of the two offices, and a succession of ten dedicated and experienced members of the congregation carried the responsibility for the administration of Sectarian Hospital for the next 65 years. In 1981, the corporation broke tradition and appointed the first lay person to administer the Hospital and function in the role of its Chief Executive Officer.

In 1981, the newly appointed Chief Executive Officer reorganized the administrative structure of the Hospital. The fact that the Chief Executive Officer was a former member of the institution's administrative staff for over 10 years may have eased the stress and strain associated with the restructuring process that ensued. The result of the restructuring process was the establishment of a more decentralized pattern of authority arrangements. It primarily involved the consolidation of departments under key members of the administrative staff which included the Associate Administrator and six Assistant Administrators. At this time, the Director of Nursing was also given the title and additional responsibilities of an Assistant Administrator.

In 1984, the corporation again broke tradition by appointing the lay Chief Executive Officer to the position of President/Chief Executive Officer of Sectarian Hospital. The person holding this position is also a voting member of the governing board. Concurrently, the Hospital's first Chief Operating Officer was appointed to take over the responsibilities normally associated with the title of Hospital Administrator. At this time, the first lay Associate Hospital Administrator was also appointed. The person selected for this position

was the Hospital's incumbent Director of Nursing. These changes reflect the current trend toward multihospital systems. In this case, each of the health care facilities owned and operated by the congregation of religious sisters continues to have its own governing Board of Directors, but the latter in turn is now responsible to a systemwide board appointed by the General Council of the congregation. The present organizational structure of Sectarian Hospital consists of all lay administrators and includes: the President/Chief Executive Officer, the Chief Operating Officer, the Associate Hospital Administrator, six Assistant Administrators, and two Administrative Assistants.

The medical staff of Sectarian Hospital is organized departmentally, consistent with the academic departments of its Medical Education Program. The senior attending staff members represent virtually every clinical area of professional practice, and consist of approximately 180 active staff, 65 associate staff, and 230 courtesy staff members. The total house staff complement of interns and residents averages about 90 each year. Of the members of the senior staff active in the various teaching programs, approximately 50 are in Internal Medicine, 50 in surgery, 25 in Psychiatry, 10 in Pediatrics, Nine in Obstetrics/Gynecology, six in Diagnostic Radiology, and two in Radiation Oncology. A significant proportion of the active and associate staff physicians have served as house staff at Sectarian Hospital and many of them hold clinical faculty appointments at academic medical centers located in the region. Over 70 percent of the medical staff have passed specialty certification examinations in more than 30 areas of medical and surgical practice. The medical staff, through its

executive committee, formulates medical and nursing practice policy for the approval of the Board of Directors and maintains its clinical standards through self-governance procedures. Self-governance is further facilitated through member participation on several key standing committees and a number of specialty committees.

Medical education and research have always been considered essential to Sectarian Hospital's ability to fulfill its commitment to holistic health care. During the decade of the 1950s, it was a pioneer in establishing departments of Medical Physics and Nuclear Medicine, Physical Medicine, and a Psychiatric Outpatient Clinic. In the ensuing years, it also became an internationally recognized center for open heart surgery, total hip replacement, cancer therapy, and eye therapy. In 1968, the Hospital opened one of the region's first Speech and Learning Centers, which were later augmented by a Hearing Center. As a major teaching hospital in the Western United States, Sectarian Hospital maintains fully accredited programs for interns, residents, medical and radiology technologists,and health care administrators. To safeguard and enhance the primacy of its corporate philosophy for health ministries, Sectarian Hospital established in 1970, one of the country's first Pastoral Care Departments for the spiritual well-being of the patient.

The nursing department of Sectarian Hospital is composed of approximately 500 professional and 200 nonprofessional full-time and part-time personnel. Nonsupervisory professional staff nurses number approximately 450 or 64 percent of the department's total complement of

nursing service personnel. An estimated 97 percent of all nonsupervisory nurses are classified as staff nurses, with the remaining three percent classified as either clinical nurse specialists or nursing instructors. Approximately 25 percent of the registered nurse staff hold baccalaureate degrees, 3 percent hold masters degrees, and the remaining 72 percent hold either associate degrees or nursing diplomas. Turnover among registered nurse staff members currently exceeds 10 percent annually, and registry nurses are routinely used to augment staffing shortages. Since the late 1950s, nonsupervisory registered nurses have been represented by the California Nurses Association for the purpose of collective bargaining.

The organizational structure of the nursing department was altered several years ago to reflect the Hospital's decision to move toward a more decentralized management system. Accordingly, nursing service functions were realigned and consolidated under seven key nursing managers: director of staffing and budgets, director of educational services, director of specialty care areas, director of medical-surgical units, director of psychiatry, director of operating and recovery rooms, and director of emergency and cast rooms. The directors of medical-surgical, psychiatric and specialty nursing areas are responsible for five to eight clinical units in their respective areas. Each of the patient care units is managed by a head nurse, with the administrative assistance of unit clerks. As of June 1984, nursing personnel comprised approximately 40 percent of the Hospital's total work force of 1900 full-time and part-time personnel.

Since 1981, the nursing department has been under new leadership following the retirement of the previous director of nursing who had served the institution for over 30 years. In 1984, the department's senior nurse executive became the first lay person to be appointed to the position of Associate Administrator, with additional responsibility for the operation of several ancillary support services. Decentralization of the nursing department, together with the development of the institution's nursing resources, have been high-priority goals of the new associate administrator during the last three years. To facilitate decentralization of the nursing department, a Nursing Leadership Group was established to function as the department's key decision-making body. This group consists of approximately 43 full-time resource management and supervisory personnel and includes the nursing directors, assistant nursing directors, nursing shift supervisors, head nurses, patient care and staffing coordinators, and infection control and quality assurance nurses. As one of the nursing department's six standing committees, the Nursing Leadership Group meets on a scheduled basis and serves as primary clearing house for all departmental business. During the past year, leadership, assertiveness, and clinical development programs have been offered to enhance the role performance of staff nurses and head nurses. In addition, staff nurses have been encouraged to share their knowledge and skills through participation in nursing grand rounds.

Primary nursing has been implemented on two nursing units. The management of nursing resources however, has proven to be particularly

challenging in the absence of an established patient classification or acuity system.

As a religious-sponsored hospital which is committed to providing health care services to the poor, Sectarian Hospital seeks to ensure that the values and obligations embodied in its mission statement remain an integral part of its present and future operational performance. In the late 1970s, the Hospital recognized that external pressures of government regulations, cost-containment, and innumerable audits threatened to stifle the spirit of the Hospital's reason for existence. It also realized that there was a need to expand present sources of revenue and capital in order to maintain its services, provide for future modernization of facilities, and provide new services consistent with the Hospital's mission: "to respond to need in whatever manner that need is displayed." During the past years, the sponsoring corporation initiated a strategic planning process which eventually led to the inclusion of Sectarian Hospital into a new organization, a multihospital system formed on July 1, 1984. The new system, comprised of five other health care facilities, was created as an expression of the sponsoring sisters' commitment "to prepare their health ministry for the demands of the future and to maximize the use of their resources." Its central purposes are to: (a) strengthen the sisters' influence (mission and philosophy) through sponsored facilities; (b) provide clear lines of accountability of facilities to the governing board of the religious congregation; (c) increase the opportunity for sharing resources, (d) assure health care expertise on a consistent basis at the corporate level; and (e) provide a mechanism for the corporate board to delegate selected authority.

Hospital documents indicated that the new multihospital system represents a corporate strategy designed to enhance the survival and growth potential of the six member health care facilities by providing them with increased opportunities for capital formation as well as to minimize costs through central purchasing arrangements, pooled cash management programs, and more effective utilization of management personnel and information processing systems. Accompanying these resource-sharing opportunities, however, has been an added responsibility to search out ways of enhancing the economic viability of each member hospital, and to continue to serve in accord with the corporate mission and philosophy. For Sectarian Hospital, this search actually began in 1980 when research was initiated to determine the Hospital's future role in the region, and to update its master plan in anticipation of program needs during the next decade. In August 1981, highlights of the revised plan were communicated to employees and the general public. Looking toward the 1990s, top priority was given to building a medical office facility adjacent to the Hospital with office space for 100 physicians. The plan also included new construction to provide space for additional patient rooms, ambulatory care and outpatient services, and garage facilities to accommodate 160 automobiles. The long-range or master plan was based on several projected patient activity levels: an occupancy rate of 87 percent accompanied by an increase of 49,000 inpatient days over the decade, an increase in outpatient volume from 129,000 to 153,000, and and expectation that 100 physician tenants would account for approximately 300,000 office visits per year and lead to increased

utilization of hospital services through new referral patterns. Another result of this planning effort was the decision to move toward the coordination of related outpatient services into comprehensive, specialty-oriented care center. The 10 specialties selected for future marketing purposes were cardiology, opthalmology, rehabilitation, cancer therapy, sports medicine, industrial medicine, geriatrics, maternal and child health, alcohol abuse, and psychiatry. While the Hospital indicated that it would continue its long-established program of acute care services, the revised plan established new directions for more preventive, educational, and rehabilitative services to complement existing acute care services.

Prior to and during the Hospital's long-range planning process, there was the desire to improve its inpatient share of the primary service area market, and to develop alternative delivery systems to attract outpatient volume, while keeping its doors open to the poor. The primary service area population at this time was defined to include approximately 679,000 residents of a major city and county located in a declining growth area in California. Bureau of Census data indicated that the primary service area population had decreased approximately 5.2 percent between 1970 and 1980, with an additional decrease of 1.6 percent projected for the five-year period 1980 to 1985. The median age of the primary service area population in 1980 was 35.30, with a rise to 36 years of age projected for 1985. The secondary service area is comprised of an essentially suburban population of approximately 50,000 residents who are slightly older and typically more affluent. Sectarian Hospital has historically derived approximately 75 percent of its

inpatient and outpatient volumes from the primary service area. As of 1984, approximately 50 percent of the Hospital's reimbursement for patient care services derived from the federally-sponsored Medicare program, with an additional 13 percent coming from the state-sponsored Medi-Cal program.

Within the primary service area of Sectarian Hospital, are approximately 16 other acute care hospitals, six of which may be considered its major competitors since they each offer health care services that are comparable in scope as well as quality. In this highly competitive environment, the Hospital's ability to experience stable and predictable utilization levels has become more difficult as well as more essential in light of its commitment to the underserved, indigent, and elderly. Historical, hospital statistical data, as well as data from state health service agencies, indicated that the utilization levels for inpatient services have declined significantly during the last eight years, while the volume of outpatient visits increased marginally. Between 1977 and 1984, the number of admissions decreased approximately 9.5 percent , the occupancy rate decreased 9 percent, the number of patient days decreased 12 percent, while the average length of stay declined from approximately 10.7 days to 9.2 days, and the total volume of outpatient/emergency visits increased approximately 2 percent. In early 1984, the number of available and staffed hospital beds was reduced by 64, following the closure of two patient care units. A program to reduce the number of nonprofessional employees was also initiated at this time, providing the impetus for union and employee protests in the form of public demonstrations and picketing. For the

most part, these protest activities were confined to the small number of employees affected, or slightly less than one percent of the Hospital's total complement of approximately 1900 personnel.

During the last two years, Sectarian Hospital has developed and implemented a number of innovative programs to address the problems of increased competition and decreased patient volumes. First, the Hospital has expanded its home health care services for the disabled and frail elderly through the establishment of a lifeline program and an adult day health center. Second, the Hospital became a co-sponsor of a satellite ambulatory care center offering general medical and urgent care services on a walk-in basis, with provisions for specialty health care services by appointment. Third, the Hospital, together with its newly incorporated Sectarian Hospital Physician Association negotiated agreements to provide health care services to several major employee groups located within the primary service area. Fourth, the Hospital negotiated a contract to provide cardiology and open heart surgery services for the membership of a large health maintenance organization. Fifth, the Hospital established a new, expanded physician referral service for the membership of its medical staff. This service, which was designed to stimulate referrals for both established physicians and new physicians who are starting to build practices, provided new opportunities for the Hospital to market services and generate additional revenues through physician referrals. Lastly, the Hospital aggressively sought and acquired a contract to provide services to persons eligible for Medi-Cal sponsorship.

Currently, cost-containment efforts have been intensified and multidisciplinary committees have been appointed to begin preparing for the implementation of the new federal Medicare reimbursement system on July 1, 1984. The thrust of this preparation was the testing of a computerized concurrent review system designed to assist hospitals and physicians to determine the most accurate reimbursable compensation under Medicare's Prospective Payment Program. This system provides a working diagnosis-related group (DRG) along with computer-selected alternate DRGs for physicians and system coordinators to review and approve or correct as necessary. When fully operational, the system should facilitate the Hospital's ability to obtain the maximum allowable reimbursements under the capitated reimbursement program.

As of June 1984, Sectarian Hospital had identified, as its main objectives for the next fiscal year, the enhancement of revenue by (a) planning and implementing health maintenance programs for industry; (b) offering additional incentives to physicians to encourage new referral patterns and greater utilization of hospital services; and (c) expanding ambulatory care services to meet new and/or changing needs of the diverse population within its primary services area. A resource management master plan for controlling operating costs was also implemented with new procedures established to maintain, revise or delete existing systems in order to improve management of hospital supplies and equipment. These planning actions reflect the Hospital's current determination to improve productivity and contain operating costs.

University Hospital

University Hospital is a state support institution which was established in 1907 under a state charter to provide general medical services to an underserved and expanding population of "sick-poor" for a young and growing city. A training school for nurses was opened at the same time to secure adequate staffing for the small 30-bed facility. Increased demands for hospital beds led to the building and opening of a new 103-bed general acute-care hospital in 1917. Sixteen years later, a hospital outpatient clinic was completed and opened to the general public. After World War II, construction of a new 470-bed hospital building, which had been designed in 1939, was undertaken and completed in 1955. As early as 1965, it became evident that the existing facilities were both inadequate and obsolete. Accordingly, a third building fund campaign was launched which, with the assistance of state and federal grant support, made possible the construction of a new 15-story addition as well as extensive modernization of the older hospital building.

University Hospital is a large metropolitan referral, teaching, and research hospital serving a population of over 3 million people. As of 1984, the facility consisted of nearly 600 acute-care beds, an ambulatory care center, a 70-bed neuropsychiatric unit, and a hospital staff of over 2500 people. The hospital has operating revenues of $146 million, and assets of $151 million. It provides general and specialty acute-care in the following five areas: medical, surgical, obstetrical, pediatrics, and psychiatry.

University Hospital operates under the supervision and direction of an appointed governing body composed of two female and thirty male members. As a part of a university system, the Hospital is affiliated with several health related professional schools. Integration of these distinctive administrative entities is achieved through a formal meeting and reporting structure to assure that information is shared and appropriately disseminated. Interlocking mechanisms currently in place to facilitate this communication and coordination within the medical center complex includes joint academic, clinical, and administrative committees; systematic transmittal of activities reports; and monthly meetings of the Executive Director of the Medical Center, President of the Medical Staff, Dean of the Medical School, and Administrator of University Hospital. In essence, a 28-member Executive Medical Board, which is composed of 26 chairpersons of the representative academic departments of the School of Medicine and the Administrator and Director of Nursing of the Hospital, is the principal policy-making body for integrating the educational and research programs of the parent university with the clinical patient care programs of the hospital. This medical-administrative group meets monthly to discuss and initiate actions relative to the clinical programs and affairs of University Hospital.

The Administrator of University Hospital, as Chief Executive Officer, is responsible for the administration of all activities of the hospital and for providing quality patient care services in a manner consistent with the parent university's teaching, research, and public service mission. To accomplish this, the Chief Executive Officer works

with and through an administrative staff composed of a total of 28 Associate, Deputy Associate, Director and Assistant Directors of the Hospital's divisions of Nursing, Ambulatory Care, Operating and Recovery Room Nursing, Patient Services, Finance, Personnel, Planning, Operations, Information Systems, and Medical Staff and Administrative Affairs. The Hospital's management staff is composed of 31 department managers with responsibility for the functioning of their respective allied health and support service operations.

The medical staff of University Hospital is organized departmentally, consistent with the academic departments of the School of Medicine. The medical staff consists of attending, courtesy, associate, emeritus, and visiting staff members, as well as house staff. The associate staff is composed of nonphysician health care professionals such as nurse-midwives and persons with doctoral preparation in areas such as health physics and ethics. As of 1984, the attending medical staff consisted of more than 900 full-time and 2,500 volunteer clinical faculty, 1,000 house staff physicians, and nearly 200 associate and courtesy staff members. Over 90 percent of the medical staff have passed specialty certification examinations in more than 50 areas of medical and surgical practice. The medical staff is self-governing, with governance facilitated through member participation on 11 standing committees and 11 special committees.

University Hospital's interdisciplinary teams of physicians and scientists have been pioneers in the development and application of new biological, technological, and clinical knowledge in the diagnosis and treatment of cancer, respiratory distress syndrome in newborns,

infertility, metabolic and neurologic disorders of children and at-risk populations of adults. In the process of such intense clinical investigation, University Hospital has been transformed into an internationally recognized center for biomedical research and a preeminent tertiary care center in the Western United States. As of 1984, about 63 percent of hospital admissions came from the community and 37 percent came from other areas in the State of California, other states, or from abroad. Outpatient services, through the Hospital's Ambulatory Care Center, consist of more than 75 clinics encompassing nearly all the specialty areas of medicine. In addition, the Center provides a broad range of services through nurse practitioners, social workers, dietitians, and clinical specialists who are available for health maintenance to meet patient education needs, and for individual consultations with patients upon recommendations of a physician.

The nursing staff of University Hospital is composed of over 1,100 registered nurses who are organized into four discrete departments: 1) Inpatient Nursing Service, 2) Ambulatory Care and Emergency Room, 3) Operating and Recovery Room, and 4) Neuropsychiatry. Each department is operated by a Director of Nursing who is administratively accountable to the Chief Executive Officer of University Hospital. Approximately 82 percent of the Hospital's registered nurse staff perform functions within the Department of Inpatient Nursing Service. The Director of this Department also holds the title of Associate Hospital Administrator. The structure of the Department of Inpatient Nursing Service is a modified matrix type organization, and consists of one Associate and 7 Assistant Directors of Nursing and 13 Clinical Nurse

Specialists, who report directly to the Director of Inpatient Nursing Service. The assistant directors of medical, surgical, critical care, and maternal and child nursing are responsible for 6 to 8 clinical units in their respective specialty areas. Each of the patient care units within the four clinical areas is managed by a head nurse. administrative assistance of a unit manager. The nursing quality assurance program, administrative services, and education and research departments provide collaborative support to the clinical practice areas and are headed by an Assistant Director of Nursing. For each of the four clinical areas, there are two or more clinical nurse specialists who work with the nursing and medical staff to plan ways to improve patient care or to assist in solving patient problems. Directly responsible to the Associate Director of Nursing are two nurse analysts, a nursing systems coordinator, and a senior employment representative, who is responsible for recruitment and retention of nurses.

In 1984, the combined nursing service departments employed more than 1,400 professional and nonprofessional nursing personnel which comprise approximately 52 percent of the hospitals employed work force. A survey of the inpatient nursing service staff, which was conducted in 1984, showed that 55 percent of the registered nurse staff were prepared in baccalaureate nursing programs, an additional 6 percent were masters-prepared, and one nurse staff member had completed a doctoral program of study. This highly professionalized nursing staff, together with their colleagues in the other three nursing departments of the hospital, recently elected the California Nurses' Association to represent them for the purpose of collective bargaining.

Pursuant to the 1982 legislative changes to the state Medi-Cal and medically indigent adult programs, University Hospital had experienced nearly 80 years of steady growth and profitable operation. These changes, however, precipitated a series of events which, in 1983, severly threatened the economic viability of the Hospital and its potential to effectively support the parent university's teaching and research missions. A dramatic reduction in Medi-Cal patient volume together with the loss of essentially all of its medically indigent adult patient population resulted in a significant decrease in inpatient volume and in revenue generating potential for the Hospital during much of 1983. Compared to the previous year, the number of admissions declined by 7.1 percent, the number of patient days decreased by 10.4 percent, and the overall occupancy rate fell by 8.1 percent.

The Hospital's decision-makers decided to respond to the threat to its economic viability in serveral ways. First, departments were requested to curtain their use of overtime, on-call, and temporary workers. By June 1983, more than 125 budgeted positions had been eliminated throughout the Hospital. This budget variance was largely due to the nursing department's ability to staff flexibly with patient volume through the use of in-house per diem nurses. Second, aggressive administrative actions were undertaken to increase the Hospital's market share of Medi-Cal eligible patients and to establish adequate procedures to permit the Hospital to provide certain services for the medically indigent adult population of the community and surrounding areas. As a result of this effort, the Hospital increased

its Medi-Cal patient volume to within 57 percent of the 1982 utilization rate. Third, professional consultants were hired to assist the Hospital in initiating a strategic planning process and in the selection and implementation of new computerized information and financial management systems. This action resulted in substantial improvements in the Hospital's information processing and financial services as well as the successful negotiation of contractual arrangements with area hospital systems, prepaid health plans, and preferred provider organizations. Collectively, these actions enabled University Hospital to realize a gain of $1.9 million in 1983.

Between 1982 and 1983, the number of admissions decreased 9.2 percent, the occupancy rate decreased 8.2 percent, the number of patient days decreased 10.3 percent, the average daily census decreased 10.6 percent, while the number of available beds remained constant. During this same period, the number of deliveries at the Hospital decreased 14.7 percent, the total volume of outpatient/emergency visits decreased 3.1 percent, while the number of surgical operations increased 6.2 percent. In December, 1983, the transfer of patients from the old to the new Hospital addition was completed.

The total number of Hospital employees during this same period decreased by 2.2 percent, reflecting a modest increase in the number of full-time equivalent employees per occupied bed from 6.1 to about 6.6. The total number of full-time and part-time registered nurses employed by the Hospital decreased from approximately 1,093 in 1982 to 936 in 1984. Turnover among registered nurses decreased from 33 percent in 1978 to 24 percent in 1984. During this same 6-year period, the total

number of nursing services employees increased from 1,018 to 1,483. Employee benefits and salaries amounted to 62 percent of the Hospital's operating expenses in 1983, accounting for approximately $78 million of the institution's $155 million annual budget.

At present, approximately 30 percent of the Hospital's revenues derive from the federal government's Medicare Program, 13 percent come from the state's Medi-Cal Program, 38 percent from private insurance, and 7 percent from contractual agreements with several prepaid health plans and preferred provider organizations. An additional 9 percent derives from nonsponsored sources, 2 percent from county government, and the remaining 1 percent comes from nonpatient revenue sources. Given that the Hospital did not implement the new federal Prospective Payment System until July 1, 1984, the actual impact of this reimbursement system on the Hospital's Medicare-related revenue sources has yet to be determined.

CHAPTER V

RESULTS AND DISCUSSION

Chapter IV provided descriptive data about the six hospitals being studied, including information about the internal and external environments within which the hospitals are striving to change, compete, and survive. Each of the case studies covered a range of topics essential to describing the hospitals themselves as the unit of analysis and, therefore, sought answers to the research questions posed in Chapter I.

This chapter will present the major findings of the study. In addition, the findings will be discussed. It should be noted that the findings which follow are a synthesis of the case studies from Chapter IV and the interview data in this chapter. The chapter is organized around the five major components and twenty-one related variables as indicated in Figure 2.

External Environment

The case studies which were presented in Chapter IV clearly indicated that the external environment in which contemporary nonprofit, acute care general hospitals currently operate is no longer one in which high levels of utilization, a growing market share, and increases in revenue can be taken for granted. In addition, the case studies suggest that hospitals are in a state of turbulence and change and that they

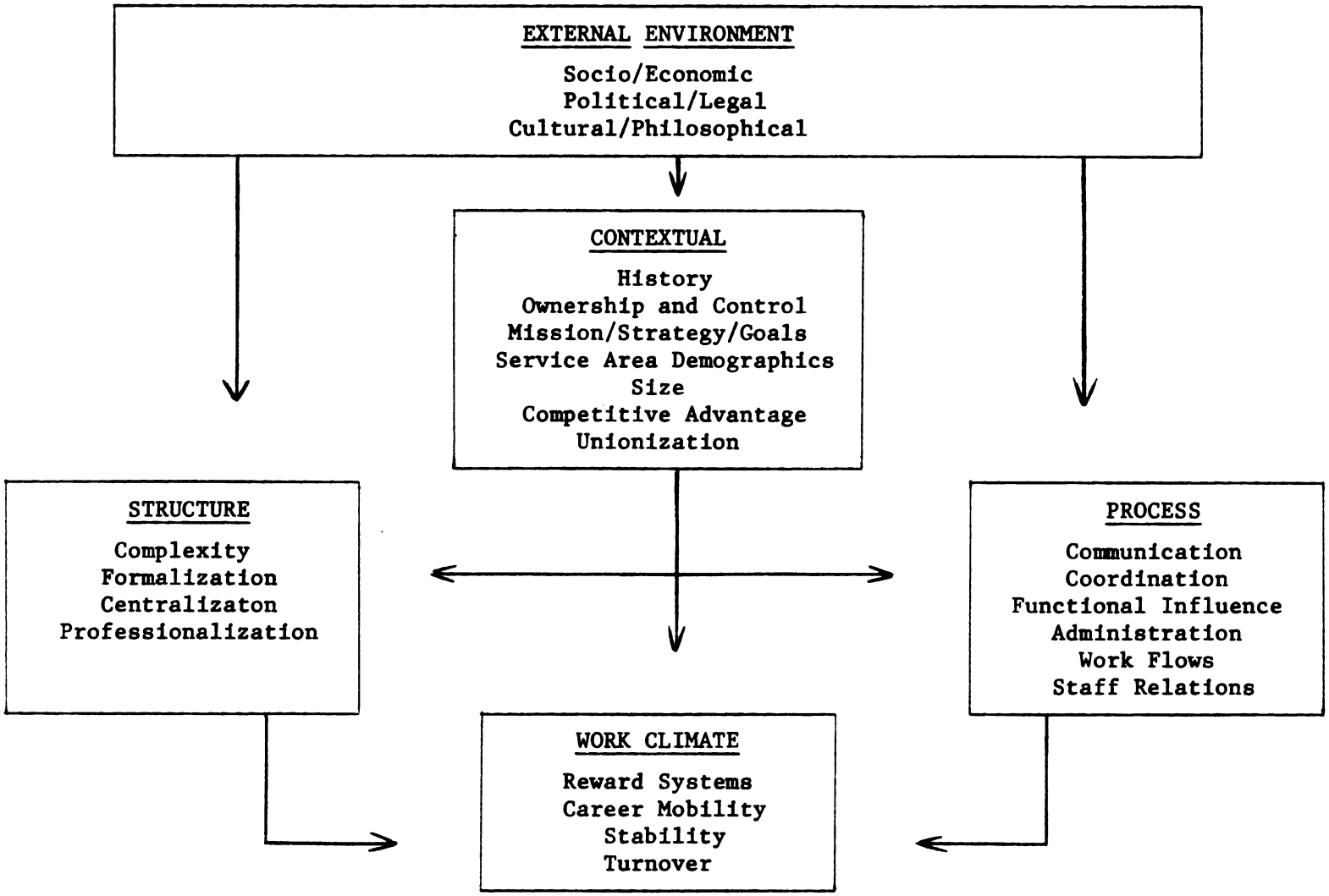

Figure 2. A Provisional Model of Organizational Components of a Hospital.

cannot continue to assume that their existing structures, planning practices, work processes, reimbursement patterns, and mix of services are appropriate. The interview data also reaffirmed that the external environment may be characterized as increasingly complex and unpredictable.

The interviewees in the present study, which included hospital administrators and nurse executives from six types of acute care hospitals, indicated that recent changes in the State's Medi-Cal Program and the implementation of the new Prospective Payment System for Medicare beneficiaries have created the present environment of change and uncertainty which hospitals and their administrations need to address. As one nurse executive stated: "Medi-Cal has had the most significant impact on this hospital because it's impacted on the physicians, it's impacted on the hospital's financial base, and it's impacted on the kinds of patients we have here." The dominant theme conveyed by all interviewees was that "we have gone from a cost-plus environment to a competitive market-driven environment." A hospital administrator in the present study summarized the current situation confronting hospitals as follows:

> We came out of the philosophy of a process where all we had to do was grow. We had to grow to accommodate the new needs and demands imposed on our hospitals by the post World War II population growth and the initial introduction of Medicare/Medicaid legislation in this country in 1966. Now, something else has happened. Legislation again has been responsible for that--that is an acute awareness of the cost of health care. Now the gearing down process because the government who pays for more than half of the care in hospitals as of now has said we can't afford anymore. You find a way to render the same kind of care for less money. So

> now we are impacted at the other end. Now we are going to gear down our organizations to render, I hope, safe and effective care using less resources. I think that is a real issue and following that are the private insurance companies, provider organizations, health maintenance organizations, all the alphabets that apply in the health industry now. So these are political economic factors and I think looking at external factors, those would be the greatest.

The findings from the case studies as well as the interview data indicted that the implementation of the new regulatory and competitive approaches to health care cost-containment provided the impetus for the hospitals to change their planning focus from facility-oriented master planning to market-oriented strategic planning. As previously noted, strategic planning requires hospitals to reconceptualize their role in a changing environment. In this regard, several of the study hospitals engaged the services of consultants to assist them in developing a viable planning process which involved assessing the hospital's present situation and future options for renewal and growth. Two of the six hospitals in the present study indicated that the strategic planning process culminated in the decision to enter into formal multi-institutional arrangements as a response to external pressures in the changing health care environment. Several of the study hospitals determined that vertical integration, which involved the marketing of a series of program of services to target populations was the most effective means for achieving a higher level of organizational stability. Vertical integration included moving into such markets as industrial health, sports medicine, health maintenance organizations, satellite clinic facilities, home health care, and packaged obstetrical services. In essence, moving into these underserved markets reflected

strategic responses which have substantially redefined the businesses of these institutions, and provided them access to capital formation within the framework of a highly regulated environment. In addition, one of the study hospitals adopted the strategy of horizontal integration as a means to protect institutional interests and to ensure access to critical resources. In this case, the hospital accomplished horizontal integration through the acquisition of a fully accredited skilled nursing and non-acute inpatient facility. An expansion strategy of this nature carries with it the potential to control patient movement throughout the inpatient system. It may also carry a greater risk factor where third party reimbursement schemes are not clearly defined or standardized. However, the financial benefits of such integration can be substantial in terms of increased access to capital markets or competitive posturing.

Shared service arrangements represented the most frequently employed strategy adopted by the study hospitals as a means to: (a) achieve economies of scale, (b) improve productivity, (c) lower costs, (d) increase access to capital markets; and (e) develop more efficient management of human and material resources. These arrangements included sharing such services as laundry facilities, information processing, diagnostic and treatment services, and more specialized staff expertise. While these cooperative arrangement appear to be more conservative and less risky than others, they were perceived by the interviewees as one of the strategies which they used to deal with external constraints and contingencies, to secure access to a

steady flow of required resources, and to stabilize relationships with other organizations in the environment.

Joint ventures between hospitals and physicians were perceived to be one of the most important strategies adopted by several of the hospitals in the study as a means to increase their market share for existing or new services. Some of the benefits derived from these arrangements include: diversification, improved physician referral patterns, decreased duplication of costly technology, tax-sheltered investments, and improved capital formation. Although joint ventures appear to offer substantial advantages to hospital organizations and physician investors, they may also have been avoided because of the power and control issues inherent in dependency arrangements. As one hospital administrator noted:

> There is a competitive spirit functioning in the community and it doesn't take long for doctors to learn how to play one institution off against another. Instead of working with their chosen institution, make it their favorite and work with it . . . it is one of mutual trust. This is a very trying time for doctors and so their suspicions run high. Somehow they have got to realize that they can compete only to a degree and then they have destroyed the thing they need most. They really can do without that extra revenue, they really can if they have to, but they can't do without a skilled hospital to carry on all of this sophistication in services. It is popular buzz word now but I mean it, this joint venture, where we find ways that we identify our economic interest together too . . . we are going to have to transcend all of the nice things we have talked about loyalty and all of the buzz words--now I think we have to start to say that fiscally we need each other too. If we can work together to make those things fiscally a success we won't be working against each other, we will be working with each other. But that has some interesting implications in the matter of control. Some of the traditions of control that pass out of a hospital pass out of the governing board, voluntary governing boards are disquieting. We still make decisions based on community need but will we make decisions based on economic needs? There is

> a difference. They should be compatible, we hope they will be compatible, but those are the kinds of challenges that lie in front of us.

Although the six hospital in the present study have endeavored to seek more equitable and balanced exchange relationships with the membership of their medical staffs, a number of the hospital administrators who were interviewed indicated that joint ventures require more mature working relationships between hospitals and physicians then are presently in evidence. Since there are a variety of complex legal, regulatory, financial and political factors that need to be considered in structuring joint ventures, perhaps they cannot be readily undertaken in the absence of a high level of mutual trust or without the inclusion of methods to resolve hospital-physician conflicts concerning the issues of power and control.

In summary, there was consensus among hospital administrators and nurse executives who were interviewed in the six types of hospitals that the present external environment in which hospitals must operate presents a series of opportunities as well as threats to the growth and survival of acute care hospitals. A major concern for the study hospitals has been the recent proliferation of new alternative health care delivery systems, which frequently compete with hospitals for health care business. These health care systems may offer more convenience to the consumer, and less cost through cost-shifting and/or subsidization of their members' health care costs by others. For example, one interviewee stated: "The full impact of cost-shifting and reduced government programs is only dimly seen at this time, but it is a

very divisive and dangerous threat to this and every other hospital in (the region)."

Threats and competition from the emerging alternative health care delivery systems have resulted in an increased interest by the study hospitals in strategic planning. In general, the interviewees indicated that such planning has become an essential administrative function. Several interviewees further noted that they were in the process of redefining their institutions mission and goals as a result of the on-going strategic planning. As noted in the case studies discussed previously, several of hospitals in the present study have diversified. In addition, to acute inpatient care, they have moved into a broader mix of pre-acute and post acute care as well as non-acute care services. The current emphasis on marketing and competition appears to have increased the interest of hospitals in market research in an effort to determine how best to meet the health care needs of those whom they wish to serve.

Organizational Context

The growing interest and importance of strategic planning for hospitals as discussed earlier recognizes the need for hospitals to establish formal linkages between external elements of the institution (the external environment) and the internal decision-making or resources allocation functions. Since strategic planning is concerned with defining the structure as well as the desired future state of the institution, it seems that some attention needs to be given to the

setting or context within which the hospital operates. The seven contextual variables which were identified earlier are presented in Figure 3. These contextual variables are of primary importance in influencing the development of an institution's structure and the strategy that is necessary to achieve a "goodness of fit" between the institution and its operational or immediate environmental situation.

Table 2 presents a summary of the findings relevant to the contextual variables examined in the present study.

History

A recurring and universal theme from the interviewees indicated that historic patterns and traditions have substantially influenced the philosophy, goals, objectives, strategies, and structural characteristics of the hospitals in the present study. To a large extent, historic patterns and traditions were perceived as constituting a cultural mosaic that distinguished each of the hospitals from other hospitals in either their peer groups or their communities. As one interviewee asserted:

> I think because of its history, there's a certain image in the community and I think there's a certain pride with which people are members of the family at (hospital). And I think that's <u>because</u> of its history, not because of its sponsorship. The people who work here reflect on that. They reflect on the philosophy that has been a part of (hospital) for so many years. And that's a part of their orientation, so nobody comes to work at (Sectarian) without knowing something about its history, without knowing something about its philosophy. And, hopefully, that carries through, and that's a whole new thing that we're into--that we want to maximize for all of our personnel. But they do reflect on that. They feel a part of the institution, they feel a part of the history, the philosophy, and they follow through in all of their behavior patterns in the way that is consistent with the mission and the philosophy.

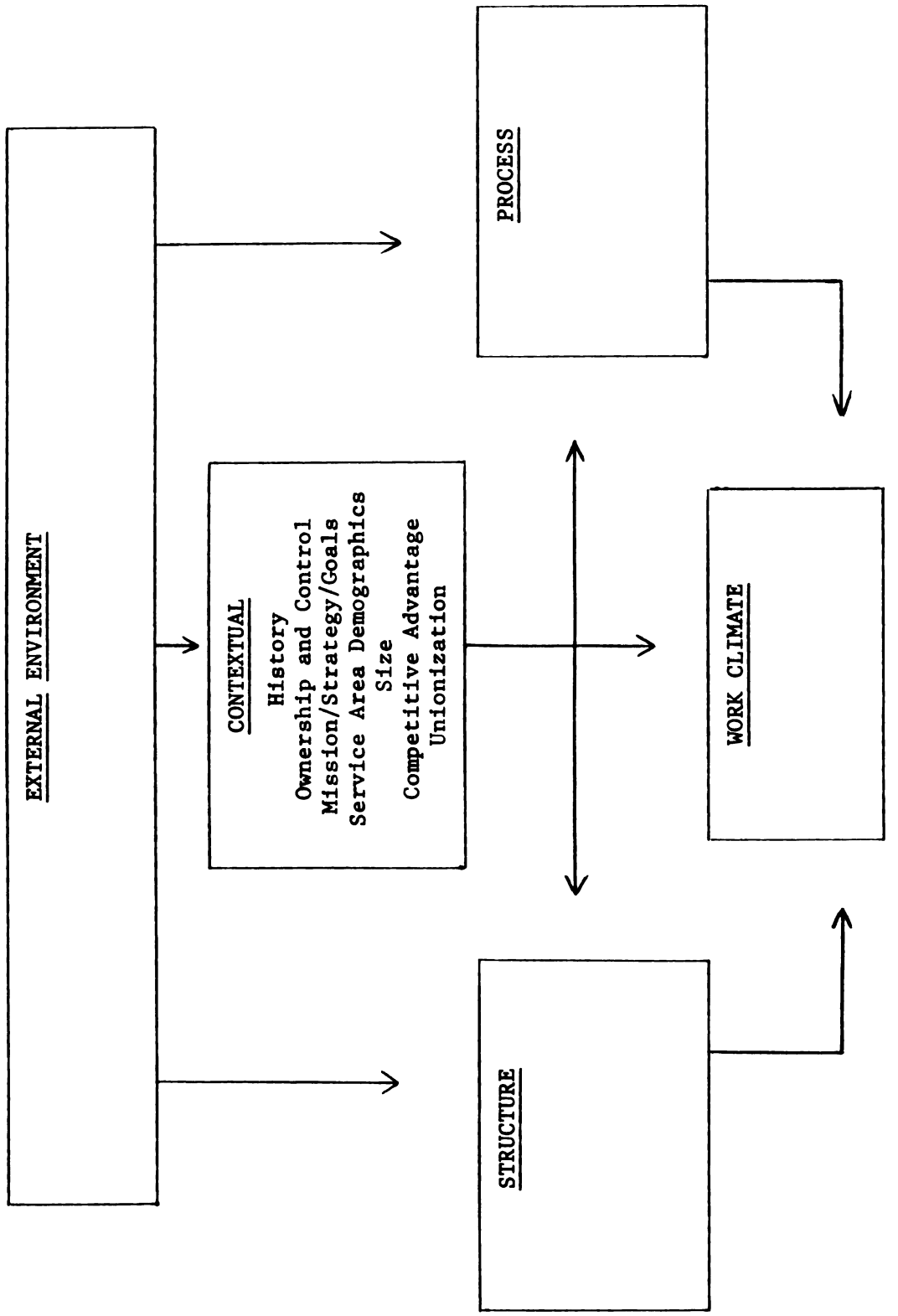

Figure 3. A Provisional Model of Variables in the Contextual Compontent of the Study.

Table 2

Contextual Variables Influencing the Development of Structure and Strategy Across the Six Study Hospitals (Comm. = Community, Co. = County, Dist. = District, Pvt. = Private, Sect. = Sectarian, Univ. = University) (Sources: California Health Facility Commission, Hospital Records, and Archival Documents)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
History						
Age: 110-130 Years				x	x	
75-100 Years	x					x
50-75 Years		x				
25-45 Years			x			
Founders:						
Women	x			x	x	
Men		x	x			x
Ownership/Control						
Ownership:						
Local Government		x	x			
State Government						x
Religious Corporation					x	
Private Public Corporation				x		
Community	x					
Control:						
Elected Governing Board		x	x			
Appointed Governing Board	x			x	x	x
Board Composition:						
All Women				x		
All Men		x				
Women and Men	x		x		x	x
Mission/Strategy/Goals						
Mission:						
Service			x			
Service and Medical Education		x				
Service, Medical Education and Research	x			x	x	x
Strategy/Goals:						
Health Promotion	x		x	x	x	
Health Maintenance				x		x
Mental Health and Rehabilitation	x	x	x	x	x	x
Geriatric Inpatient Care	x	x			x	

Table 2 (continued)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Home Health Care	x		x		x	x
Regional Trauma Center		x				
High-Risk Perinatal Care	x			x		x
Service Area Demographics						
Size of Population Served:						
500,000 - 900,000 Persons	x		x	x	x	
1,000,000 - 1,500,000 Persons		x				
2,000,000 - 5,000,000 Persons (Plus)						x
Characteristics of Population Served:						
High Proportion of Elderly Persons Over Age 65	x		x		x	
High Proportion of Ethnic Minority Groups		x				
High Proportion of Affluent Client Groups	x		x			
High Proportion of High-Risk Client Groups		x		x		x
High Proportion of Young Professional Client Groups			x	x		x
Source of Patient Revenues by Percent						
Medi-Cal	43	70	41	25	37	30
Medicare	4	11	3	17	13	13
Size						
Total Number of Full and Part-Time Personnel	1600	1400	1250	1800	1900	2500
Total Number of available, staffed beds (Includes In-Patient Psychiatric Beds)	400	275	300	290	480	630
Competitive Advantage						
Adult Day Care Program		x	x			
Cardiac Rehabilitation Program			x		x	
Exclusive Provider Organization	x		x			x
Emergency Services/Trauma Center	x	x				
Geriatric Inpatient Care	x				x	
Health Maintenance Organization				x		
Health Promotion/Industrial Medicine Program			x	x		
Home Health Care Program			x			
Maternal and Child Health Services	x			x		x

Table 2 (continued)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Mental Health Programs	x	x	x	x	x	x
Satellite Clinics				x	x	x
Substance Abuse Rehabilitation Program	x		x			
Unionization						
Over 50% of Total Full-Time Equivalent Employees		x			x	x
Between 25-40% of Total Full-Time Equivalent Employees			x	x		
Nonunionized Work Force	x					
Nurses' Collective Bargaining Agent:						
California Nurses Association			x	x	x	x
State Employees International Union		x				

Historic patterns and traditions also seemed to reflect the cumulative endowments of wealth, power, knowledge, and attitudes acquired by several of the hospitals. In this respect, learning about the institution's history may provide valuable insights into the cultural, social, political, and economic traditions that support its growth and development. This historical perspective was highlighted by one interviewee as follows:

> The history both of the community and the hospital in its early days, people of tremendous means and goals and visions favored this hospital so that we were able to create a facility where they could receive care and the community could receive care. The school of nursing was founded in the early 1900's. I think these philanthropically minded people with a desire and an ability to make these things come to pass, I think started this hospital in a direction and a motion that though it has gone through bad or difficult times, I think we have been able to parlay that into an ability. Part of the fact that it started with a group of women in itself is a most interesting phenomenon. At at time when that would have been most unusual. They did have a male advisory group but the board was women. That in itself is of great interest and I

> think our recent good fortunes from the standpoint of philanthropic support and some endowments that we have been able to create through the interest of people of great means, they weren't accidental. This community has many people who have settled here who have come from environments where quality is expected. I think it has been maintained over the years in this hospital and those traditions and standards exist. It is a community of high standards.

Of the six study hospitals, three have been in existence for more than 96 years. All of the interviewees in these three hospitals indicated that both the age of their hospital and the fact that they were founded by women have substantially influenced the growth and development of the three hospitals. There appeared to be an overall perception that longevity enhanced the hospital's competitive positions by according them such advantages as increased prestige and credibility, greater economic stability, better employee relationships, and stronger support and linkage to the community. There was also a view that the founding groups of women had experienced considerable farsightedness in establishing their institutions three-fold missions of service, teaching, and research. The three-fold mission appeared to distinguish them from the more common single-mission approach to the delivery of health care services. Actions that were undertaken to attract the medical expertise needed to develop some of the State's early teaching and research programs were frequently cited as exemplary of the farsightedness demonstrated by their women founders. One interviewee shared the following: "I don't know what the board did--I don't know how, but we have attracted fine physicians and we have maintained them, and we keep replenishing them, which I think is definitely an advantage of this hospital." When the interviewees affiliated with these three

institutions were asked to reflect on what they perceived the "ideal hospital" should be like, they were in agreement that their institutions came close to representing "the kind of facility that can best approach, if not the ideal, the best that our society can offer."

Ownership and Control

In general, ownership and control were perceived by the interviewee as being of major importance in terms of influencing the structures and functioning of the study hospitals. There was the perception among interviewees affiliated with four of the six hospitals that ownership and governance mechanisms often impeded their ability to implement a more decentralized or less bureaucratic organizational structure and to develop a more proactive as opposed to reactive stance in the existing health care market place. As one interviewee indicated:

> In terms of the ability to manage the whole governance aspect of the hospital, it is rocky. It is an obsolete structure. The staff structure is obsolete. The management and governance structure is obsolete and it all gets back to governance because when the board of supervisors meets as the board of directors of the hospital, and it does every Tuesday morning and at special meetings, and so forth, it meets often, more often than private hospitals, they don't realize what they are meeting about. They are not at fault, they can't be because when they meet as the board of directors for 10 minutes or 15 minutes, they take off one hat and they put on another and meet as the board of directors of the welfare department and they take off a hat and put on another and they are the board of directors of public works, or the library, or on and on and on. In that context we do not have a dedicated board, a knowledgeable board in terms of health issues which are extremely complex and they just don't understand because they treat everything the same, as if it is the library or a road department, whatever. And they are just not the same. . . . Because of the lack of knowledge at the front lines, if I may put it, it reflects on administration. . . . In the personnel structure we have the whole civil service structure and we have the union structure. The two are not compatible. . . . So, the other thing I guess in terms of the ideal is

> that the hospital has to be depoliticized. It has become the focus of jobs for some people, it has become the focus of constituency and votes for certain politicians.

Present administrative structures and practices in the other three institutions were also perceived by the interviewees as being more bureaucratic and traditional in terms of the extent of organizational autonomy as well as internal authority arrangements. There was a general perception that planning and decisions concerning the future direction of the institutions did not include more than perfunctory nursing involvement and only peripheral administrative staff involvement. As one interviewee noted:

> It's a fairly standard bureaucratic structure. Basically the (campus director) serves in lieu of an onsite board of trustees. . . . I think in practice, the way it works is that there's a lot of input. It depends on what kinds of decisions you talk about . . . in terms of the interaction between top administration and the unit level or department manager administration, I would characterize it as getting a fair amount of input from managers of the units. But with, clearly, their input and not decision-making about overall organization direction. I'm a part of that level of managers. So, it's an interesting mix that really varies from department to department as to how much advice and consent and how much is decentralized decision-making and how much final authority is left centralized. . . . It's not a nontraditional structure.

It should be noted that in this situation, the directives which control many of the decisions about the hospital's facilities, funds, and services come from a governing body which is far removed from the everyday functioning of the hospital. However, one interviewee indicated that "they have a subcommittee, which, over the last three years, has become much more involved in its oversight role as it relates to assuring the quality of care, monitoring the financial circumstances

of the institution, and in the course of doing that, they've become much more sensitive to the external forces with which we have to deal."

Although the interface between the administrative staff and the governing boards was frequently perceived as being discontinuous or limited to selective involvement on the basis of hierarchy, there seemed to be a general perception that the governing boards responsible for each of these three institutions were beginning to assume a more aggressive role in helping them to address the pressing issues with which they were being confronted. However, the extent and nature of board involvement and their functions were difficult to assess in several of these institutions. As one Director of Nursing indicated:

> Our board is kind of one of those unknown entities. you're never given very much information about them. I'm not really too sure what all they do. I had the opportunity, we shall say, to present something to them on one occasion. Outside of that, we have nothing to do with the board. Now I know who they are because I had to go there. And they were interested in my topic and so, now, they have a little bit of conversation in the hall, but . . . it's a mixed board. I have never seen them exert any kind of visible power until yesterday. We had a procedure for suture removal by nurses go up through the chain of our approval ladder, and it came to them. . . . They would not approve the policy yesterday. And that was because of the physician influence on the board. . . . I don't know much about other hospital's boards, but my assumption, or my impression, is that our board is traditional. Our hospital is traditional.

There was a universal perception among the interviewees affiliated with four of the study hospitals that their institutions have increasingly endeavored to attract individuals who are influential, affluent, well-educated, and highly involved in the local community to serve on their boards of directors, thus developing what has been described by Pfeffer (1973) as a "power board". The board of the state

owned institution was characterized as being "reflective of the diverse community and society that is California". At the same time, it was noted that "we see a stronger social sensitivity and influence in the appointments to the board".

Based on the discussion of the role and functions of governing boards that was presented in Chapter II, boards function at the interface between an organization and its environment or at what has referred to as the "institutional level" (Pfeffer, 1973). It was also suggested by Pfeffer (1973) that the role of a board may be more limited because of board composition. Hence, boards may have been perceived as functioning from essentially two different but interrelated perspectives: The internal control function with emphasis on administrative activities and the external function of buffering or co-opting critical elements of the institution's environment. These two functions have important implications for the hospital's medical and nursing staffs, support services, ancillary services, and the adaptability and effectiveness vis-a-vis the operating environment. When hospital administrators and nursing service directors in the present study were asked to share their perceptions of the boards of directors' governance role and focus, responses varied from: (a) not known; (b) internally focused; (c) reactive; (d) externally focused; (e) proactive; (f) entrepreneurial; and (g) a working board with emphasis on both internal and external functions.

These perceptions offered additional rationale for understanding why the study hospitals appeared to reflect different approaches relative to their decision-making and strategy formation processes. Of

the six institutions, only three were perceived to have developed and implemented an ongoing strategic planning process which clearly reflected that the environmental linkage or co-optation function of the governing board was integral to the planning endeavor. As the case studies suggested and the interviewed data confirmed, the composition of governing boards has become a strategic issue. As one interviewee aptly stated:

> They are all moneyed (Californians), most of whom's husbands are in business or in major aspects of the city. They have been a board that takes a very active interest in this hospital. And they are a working board. They're not like a board of trustees that comes in and pats you on the head and gives you advice, and that sort of thing. They are a working board. They are on key committees. They are also involved in fundraising, as well operational components. Sometimes I've felt that they were too involved in operational components, but they're beginning to pull back now and serve in, like, as a board member of key committees. THey have a nice balance of professional women and have worked to strengthen the board through recruiting, again people who are in a moneyed level, but recruiting people who are attorneys, executives in banking firms, and I think that, in addition to the other board members who may be married to executives, has really strengthened the board a great deal.

There was agreement among the interviewees in the present study that the composition of the governing board tended to reflect the demands of the hospital's operating environments. In this regard, several of the institution's have endeavored to achieve a "goodness of fit" between their board's orientation and environmental requirements or pressures. Correspondingly, two of the hospitals have recruited a number of new members within the last few years. Interviewees affiliated with these two institutions indicated that emphasis was given to the recruitment of members with marketing and planning skills in order to develop proactive approaches in managing these pressures. In

effect, these institutions seem to have recognized that they must change in order to successfully cope with rapidly changing and uncertain environments.

Mission/Strategy/Goals

Health care organizations usually have mission statements which outline the institution's philosophy, purpose, values, and goals. A well-developed statement may also contain information about the institution's strategy in terms of the decisions that have been made concerning the use of resources and the general direction in which the institution is proceeding. The mission and goals statement of one of the six hospitals in the study is presented to indicate the institution's ethic of social responsibility and commitment to its clients and employees.

Mission and goals statement of a study hospital. The mission of Community Hospital is to provide the highest standard of general and specialty health care services to the community and to function on a regional basis as a referral center, while maintaining our role in education, research and the promotion of health.

Goal statement of a study hospital. Community Hospital will:

1) . . . continue to provide the highest quality health care services (city) at the lowest possible cost to our patients;

2) . . . maintain our role as a recognized leader in specialty health care delivery in the (service region of California;

3) . . . promote cooperation in the planning and delivery of health care services in the (city) area;

4) . . . endeavor to develop multi-institutional agreements with other health care providers for the sharing of services;

5) . . . continue to emphasize responsiveness to the community in defining our scope of services; taking into consideration financial and other factors;

6) . . . foster an environment which encourages compassion, loyalty and strong commitment to patient services;

7) . . . provide needed medical and health educational programs;

8) . . . operate in compliance with fair employment regulations and provide equitable treatment and advancement opportunities to all employees;

9) . . . continue to allocate a portion of our services on a charitable basis to those patients unable to pay;

10). . . promote an active development program to encourage philanthropic giving to the hospital to assist in the achievement of these goals.

The mission statement, like those of several of the other study hospitals, relates the philosophy and values of the institution to the strategy and goals of the institution and its broader role in society. Because it is more detailed than some of the other statements, it provides the reader with important information concerning the priorities of this particular hospital, who its clientele are, what its scope of services is, how it operationalizes its ethic of social responsibility, how it views and develops its human resources, how it allocates and generates its financial resources, and how the institution is striving to incorporate current concepts and values as they relate to the

delivery of health care services. For example, the statement defines health care as more than the treatment of disease and it integrates research, education, and health policy issues within the operational and cultural framework of the institution. The statement delineates an explicit set of guiding principles for decision-making at all levels of the institution.

Irrespective of the institutional settings within which the interviewees were functioning, there was a universal perception that harsh economic and political realities together with the growing influence from corporate and commercial or entrepreneurial ideologies serve as a stimulus for reconceptualizing their institutions' roles in local, regional, and state health care delivery systems. There was a consistent view offered by the interviewees affiliated with three of the study hospitals that the primary objective of their institutions was to actively engage all elements of the institution--governance, administration, and clinical--in planning for the future of the institution as opposed to defending or maintaining the status quo. Hence, the mission of one of the study hospitals was described as follows:

> Gray, right now. And I'm not meaning to be unreal--I'm saying the first thing that comes to my head . . . I think we have been a hospital that has served the primary echelons of the community and has been a multiservice hospital. I think now we're redefining who our community is, and do we, is it going to be more diversive than it is now? I think the emphasis will remain in some way on our specialty services, because we realize that's an identity in the community. I think that we will be moving to better define our services and we will probably remain multi-service, but not quite so many. That's why I say gray, because I think we're in the process of redefining the mission, but I'd be disappointed if we weren't, given the changes in health care and given the changes in this community.

The mission statement of another hospital in the study delinated the role and purpose of the hospital as one "to enhance the quality of life by preventing illness, restoring health, alleviating suffering and caring for the dying in a Christian environment which fosters dignity and respect for each person." Interviewees affiliated with this institution further indicated that the mission is directly related to the values inherent in the corporate philosophy, and as such remains "committed to the service of the poor, sick, and aged." However, one of the interviewees expressed concern that "the mission isn't changing, but the financial objective is, and sometimes that makes you feel like the objective and the mission are contradictory." Part of this discrepancy was perceived to be related to a lack of fit between the institution's strategy and mission:

> Well, sometimes I think we do things because we assume that the community needs something without our really finding out, and so my answer is going to be one of those assumptions. We aren't doing what I think we need to do in terms of community education. We're going to be; they're starting now to develop a community education program, so that there are classes and things being offered here for particularly the neighborhood. There's a lot of elderly in this neighborhood. But, thus far we haven't done that. And most hospitals are way ahead of us with that . . . . And I think (hospital) has been probably one of the last hospitals to do any advertising--and I don't mean for jobs, I mean advertising of services, and really going out there to hustle, to get additional clients. And I have a feeling that it's somewhat related to the whole philosophy.

Inconsistencies between institutional strategy and mission were perceived to exist in several other study hospitals as well. One interviewee indicated that the written mission was "a good mission, but I don't think we have reached the mission statement in terms of a good balance of service and education and the medical staff." Although the

mission statement of this hospital clearly identified patient care as the superordinate goal, the institution has not had the direct and full support of its governing board to achieve the desired balance or to pursue the service goal at the expense of the educational goal. A similar imbalance in resource allocations and support of goals in a multi-purpose institution with a three-fold mission was described by a nursing administrator as follows:

> I think, at the moment, there is some ambiguity about our overall mission. And I think that ambiguity is what is at the base of our problems or our shortcomings in hospitality. I think that what is unclear is the balance between the research/teaching function and the patient service function. I think, certainly, there are points at which there's no tension and the two complement each other naturally. But there are points at which one would do something slightly different if one were given priority to the patient service function as compared to the research/teaching side. And so, the issue is how to sort of mitigate the negative effect of the research/teaching function in order to maximize what is possible in the patient service function. So I think there's a tension, and there isn't a clear single voice statement as to what . . ., you know, when you finally come down to the crunch, and you have to make a choice, which one should be given priority. No one would deny that we must serve our research/teaching function, and we want to do that, but it's just, where is the absolute final . . .

Given the present realities of fiscal constraints and scarce resources, it might be expected that institutions that endeavor to accomplish two or more goals may find it difficult to reach both of these goals in an equitable and balanced manner. The problem may be further complicated by the fact that teaching hospitals are generally more labor-intensive than their non-teaching counterparts. For example, teaching hospitals are usually more costly which intensifies financial problems. As the case studies suggest, another problem that makes teaching hospitals more expensive has to do with their public mission.

Community expectations of these institutions have increased significantly in recent years. They are expected to provide a broad spectrum of community-oriented primary care services in addition to highly specialized tertiary care services. These community-based societal needs have made the mission of teaching hospitals more complex and more ambiguous in terms of their traditional way of doing business.

There appeared to be agreement among the interviewees in the six study hospitals that the medical faculty and professional staff need to be brought into the mainstream of the operational functioning of hospitals, and that their power base should be decreased. There was also consensus among the interviewees that with the increased demands for public accountability, hospitals should no longer serve their teaching and/or research missions at the expense of their service mission.

Service Area Demographics

As the information presented in Table 2 suggests, the geographic service areas in which the study hospitals operate have implications for decisions relative to their missions, the scope of services they provide, and the type of patients they serve. Many of the long-range decisions that these hospitals have made (especially those concerning missions, strategies, and goals) are based on the characteristics of the service area population. The characteristics typically taken into consideration usually include: age, ethnicity, income or source of payment, occupation, and size of the population. In addition, three of

the study hospitals have also used a market approach to determine other constituents. For example, these three hospitals have identified physicians, unions, industrial groups, and other provider organizations as important constitutes with which they can have mutually beneficial relationships. Each of the six study hospitals appeared to view physicians as the major determinant of the patient population that they serve and the services which they provide. As one interviewee noted: "The community that's most influential on what we do here is the professional medical community." This perception was shared by the majority of the hospital and nursing administrators interviewed.

Size. One of the most prominent attributes of the study hospitals relates to the size of their salaried work force and their bed capacity. Findings from the case studies and interviews indicate that only one institution continues to maintain the same number of beds as that for which they were licensed. Two of the institutions have reduced their number of operating or staffed beds by approximately 14 percent in the last three years. The remaining two institutions found it necessary to reduce their operating bed capacities by more than 25 percent during this same three year period. The interviewees affiliated with these five institutions identified declining inpatient volumes as the reason for the decreases in operating capacities. It was particularly interesting to note that only one of the study hospitals reduced its work force by more than 10 percent for the period from 1980 to 1984.

There was agreement among the majority of interviewees that the supply of licensed hospitals beds in their respective areas have exceeded the demand for inpatient capabilities for nearly two decades.

A similar relationship was evident when both licensed and available beds were considered. For example, average occupancy based on the licensed bed capacity for the six study hospitals was 56 percent versus 65 percent on available bed capacity for fiscal year 1983 (California Health Facilities Commission, 1984).

Several of the interviewees expressed the view that greater inpatient service intensity together with lower average lengths of stay have increased the need for higher staffing levels in their respective hospital settings. It was further noted in two of the study hospitals that a higher ratio of personnel per patient resulted from personnel practices which permitted a reduction in hours worked as an alternative to personnel cutbacks and involuntary separations. According to recent data, California hospitals have consistently experienced lower average lengths of stay, lower admissions and patient days per 1000 population, and higher staffing levels than hospitals across the nation (California Hospital Association, 1983). These staffing levels also include hospital personnel rendering outpatient care services. Thus, it was argued by some that since California hospitals tend to place greater emphasis on outpatient services, more personnel for inpatient services would be expected (California Hospital Association, 1983).

Competitive Advantage

The findings presented in Table 2 reflect the strategies the study hospitals have adopted as a means to survive and advance in a competitive health care environment. These tend to highlight the

adaptive function of strategic decisions in that they reflect the study hospitals' distinctive efforts to capitalize on opportunities while surmounting threats to the viability of their respective hospitals. The integrative and coordinative functions of strategic decisions are also apparent in these choices in that administrative and operational interdependencies must be effectively managed within the overall strategic design (Shirley, 1982). Lastly, the choices and strategies reflect various marketing strategies that the study hospitals have chosen to pursue in light of industry conditions and competitive situations. As one interviewee indicated, "as long as our occupancy rate was up, we didn't worry too much about marketing."

Strategic planning and marketing have emerged as areas of increasing interest for hospital administrations within the last ten years. Strategic planning in the hospital context has been defined by Domanico (1981) as follows: "the process whereby hospitals assess the total health care market to determine future direction while at the same time address community needs and satisfy regulatory requirements" (p. 25). The concept of marketing has been defined by Bartlett et al. (1984) as: "a management understanding that the key task of the hospital is to identify the wants and needs of key constituents (notably, patients and physicians), and then shape the organization's offering in such a manner as to bring about the desired exchanges between the constituents and the hospital" (p. 77). The relevance of strategic planning and marketing for the problems and challenges confronting the study hospitals was perhaps best captured in the

following excerpts of a recent board meeting address by one of the institution's chief executive officers who stated:

> As we look ahead, the overriding concern of (hospital) leaders must be an accurate, objective assessment of how well the institution is positioned on all fronts to face the future. Are we, for instance, fully attuned to a changing marketplace? Unless the answer is an unqualified "yes," greater attention will have to be focused on the design and implementation of strategies that keep intact, in whole or part, institutional values that have served us well in the past while simultaneously preparing the institution, through changing concepts, for the challenge being thrust at us by the consumer, government and our competition . . . . Other, more market-oriented industries have long understood the cause and effect phenomena in a competitive, non-regulated society. Now it is the hospital's and physician's turn to pay attention to public attitudes and changing policy pronouncements . . . . The business climate we are entering imposes new operational requirements. We will need to consider new lines of business that are in the best interest of the people who desire services. Naturally, these ventures will have to be economically justified. The developmental and marketing strategies, including the sensitive topic of advertising, will take on added importance in our deliberations . . . We can ill afford to understate the importance of designing new approaches to planning, organization and management aspects associated with the delivery of effective and efficient health care. Nationwide pressures mandate a new industry response.

Strategic planning, competition, and marketing are increasingly being called essential to the growth and survival of hospitals, irrespective of their ownership status (Connors & Domanico, 1981; Kropf & Goldsmith, 1983; Peters, 1979; Peters & Teng, 1983; Spaulding, 1982; Thieme et al., 1981). Thus, it was of interest to this investigator to learn the extent to which the study hospitals had incorporated these concepts into their current administrative philosophies and practices.

Since strategic planning activities are necessarily the responsibility of hospital executives, the perceptions of top level hospital and nursing administrators from the interviews form the basis

for part of the analysis. In addition, an examination of planning documents related materials, and observations also served as a data base.

Of the six study hospitals, only three were determined to have shifted their perspective from short-range capital expenditure planning to more comprehensive, market-oriented strategic planning. Each of these institutions has created positions for directors of planning or departments of planning as a part of the institution's administrative structure. It was also noted that all three of the hospitals had a history of hiring consultants to assist them in charting their institution's future. The roles of planning directors and consultants were described by the interviewees as engendering responsibility for collecting and computerizing relevant marketing information, assessing the institution's strengths and weaknesses, identifying issues, assessing mission involvement, developing strategic options, conducting feasibility studies, and monitoring the progress and/or outcomes of organizational actions taken toward achieving the future preferred state. These three hospitals had written strategic plans in addition to the institutional plans required by federal regulatory or national accrediting agencies. Two of the strategic plans that were made available were completed in early 1984. The other three study hospitals appeared to be focused on short-range facility planning with emphasis on existing programs, technical capabilities, and physical plant improvements. These institutions tended to be more concerned about internal economic pressures and the unstable demand for their existing

inpatient acute care services, rather than with the needs and preferences of specific market segments of the populations that they serve. For example, one hospital administrator shared the following:

> Well, our program scope is influenced on the one hand by our determination of patient need, that is, to the extent that we identify a particular community need that is not being met, we will now program. Those programs that we develop are also a reflection of our educational effort, so that on occasion, we will develop a program that we feel complements our broad clinical and educational efforts and they will serve to attract, rather than responding to an identified need . . . . So we draw the line, even once having determined the need, as to whether or not it complements our total programs.

The discussion presented in the first two chapters suggested that hospital administrators who are faced with the growing scarcity of resources need to be actively engaged in creating new futures for their institutions in order to survive. This creative process will probably not be supported by internally-oriented, traditional budget planning and control systems. Several of the case studies presented earlier have indicated that strategic planning can provide institutions with the knowledge and creativity to capitalize on their strengths and minimize their weaknesses.

Hospital and nursing administrators both expressed the view that competition and marketing have provided hospitals and physicians with the impetus to enter into new relationships with their peers and the public. There appeared to be consensus among the interviewees that financial and political considerations will become increasingly important to hospital and nursing administrators in the years ahead. One hospital executive remarked: "Clearly, competition and collaboration will become more visible. We will be compelled to continually assess

programs in light of changing consumer needs and alternative means of health care delivery." A majority of the interviewees indicated that innovative and imaginative approaches specifically designed to meet local community and consumer/patient needs should be identified and adopted. Strategic planning, with emphasis on marketing information and competitive advantage, was perceived as having a high priority in some of the study hospitals.

Unionization. The date which is presented in Table 2 indicate that staff nurses employed by five of the six study hospitals were unionized. Other relevant findings from the case studies discussed in Chapter IV noted that staff nurses from four of the study hospitals had been covered by collective bargaining agreements for at least 10 years, with a range of continuous coverage from 10 to 27 years. These findings also suggested that representation elections conducted at four of the hospitals were won by unions prior to passage of the 1974 Amendments to the National Labor Relations Act. Three of the representation elections were won by the California Nurses Association, which successfully negotiated contracts with two of the hospitals in 1957 and an additional contract negotiated in 1966. Only one of the study hospitals has remained "union free" throughout its years of existence.

An analysis of the union contracts with the five study hospitals revealed that the content of contracts negotiated by the California Nurses' Association differed considerably from the contract negotiated by the Service Employees International Union. For example, all three of the contracts negotiated by the California Nurses' Association contained language dealing with complex substantive issues of professional

practice and included provisions which further served to guarantee ongoing participation by professional nurses in hospital decision- and policy-making. In these cases the contract contained language concerning the creation of interdisciplinary committee structures to deal with professional practice issues in an ongoing fashion. By contrast, the contract negotiated by the Service Employees International Union contained language dealing with the more traditional issues of individual and job security, salaries and benefits, hours of work, and promotional opportunities for members. It was particularly interesting to find that this contract covered both staff nurses and secretarial employees.

Contract provisions concerning salaries, benefits, and related conditions of employment with respect to staff nurses were found to be essentially comparable across the hospital agreements. When the hospital contracts with the unions were compared with the same general categories of employment practice enumerated in the Personnel Manual of the nonunionized hospital, the findings indicated that there were similarities as well as differences. For example, relative to differences, it was noted that benefits offered by the nonunionized hospital provided a wider range of coverage to employees, such as an annual bonus payment to reward those employees who did not exhaust their sick leave benefit, a retirement plan that was paid by the employer, bereavement leave with pay, and relocation reimbursement to assist employees in eligible job classifications when they relocated at the employer's request. In terms of salary scales, work schedules,

promotions, and vacations, there were strong similarities between the unionized and nonunionized personnel policies and procedures.

The interview data indicted that nearly all of the hospital and nursing administrators interviewed perceived nurses' collective bargaining as having a more negative than positive impact on their hospitals' management practices and personnel policies. With respect to management practices, there was a dominant theme that the presence of a collective bargaining agreement somewhat limited the ability of their hospitals to operate at higher levels of efficiency and effectiveness. This view was perhaps best articulated by one hospital administrator who asserted that:

> From a management point of view, I think it's greatly complicated our policies, it's greatly increased costs and has decreased efficiency. I think that if we were to have a study done by an industrial engineering type firm, that they would probably tell us that due to all of the rules and regulations that we have under the contract, that we have to carry additional people to perform tasks. This kind of a study hasn't been done here for nursing. It has been done in some other areas that are unionized, and it seems that invariably our costs go up as we become unionized. That isn't to say that I'm anti-union, because I think that unions come in to fill a vacuum. I think that vacuum definitely has existed and continues to exist in the profession. But from a management point of view, I would like to deal with a more manageable environment. Collective bargaining complicates it.

With respect to personnel policies, a majority of the nursing and hospital administrators expressed their belief that when registered nurse employees were covered by a bargaining agreement, the hospital's flexibility in offering more attractive compensation and rewards to nurses for their performances was curtailed. Part of the rationale for this view was derived from the apparent ambivalence of several interviewees toward the practice of collective bargaining in the

hospital setting. One nursing administrator candidly acknowledged this in the following statement:

> I don't think there's anything that collective bargaining agents can get from this hospital for nurses that they don't already have . . . . I know that (the hospital) has a lot of unions, but I am very opposed to unions for professional people. I think that autonomy that the professional has is not served by that. And I don't talk against the collective actions among nurses, but I do have problems with that.

Since the presence of a union seems to inhibit the freedom of hospital and nurse executives to unilaterally establish and implement policies concerning the management of nursing resources, the challenge for directors of nursing then becomes how to utilize the collective bargaining process and bargained agreements to enhance the goals and philosophies of nursing in the work setting. However, the interview data suggest that directors of nursing affiliated with several of the unionized hospitals have not been seated at the bargaining tables as members of the negotiating team. The ironly of this situation may well be that subsequent problems concerning the management of nursing resources become the rationale for maintaining directors of nursing in positions of limited autonomy. The absence of directors of nursing at the bargaining table may also have far-reaching implications for the amount of trust that exists between nursing staff and the nursing administrator. One nursing director provided the following description of the impact of nurses' collective actions on internal processes and relationships over a period spanning nearly three decades:

> We've had a contract for so long that we've all learned to live with it, I think, fairly well. And personally, the only impact that I see from it is around the time when the contract expires and we begin negotiations, then there's always the fear that there will be a work stoppage or a strike. And that occurs about every two years. In between that time, we just

> learn to live with the constraints of the contract. I don't like it. I would much rather be able to relate to the nursing staff one to one, instead of having that third party there, but it's a fact of life and we've learned to live with it. And we will never be rid of it. Well, we tried that a few years ago. We tried to have the nurses vote to decertify the union, and it was a joke how many votes 'no union' got. So I think we'll always have it in (city) unless something drastically changes, and I just try not to let it bother me. We do what we have to with it, but go on about our business . . . I'd like to believe that if the (hospital) nurses were voting independently they would have voted no union. I doubt that it's true. I don't think we've had enough years of trust and long-standing relationship for nurses. They're not going to vote out of the union here at (hospital). Even if I had the best relationship in the world with my nurses, they don't know that I'm going to be here tomorrow. It's just iffy. They're too savvy in terms of what goes on in leadership roles that they will continue to want the security of a union. I don't think that the union provides them that, but they perceive that they get some sort of security from the union.

Analysis of the interview data also indicated that, in general, hospital administrators seemed to be less ambivalent in their attitudes toward unions and bargaining by registered nurses than directors of nursing. Although most of the hospital administrators interviewed felt that collective bargaining tended to complicate personnel administration, they did not perceive it as "the death knell of the ability of an institution to perform". They further expressed the view that the success or failure of the implementation of bargained agreements was solely "dependent on the way in which unions behave and the way in which management behaves". Several hospital administrators also expressed the view that the quality of supervision in the organization carries with it the potential to either avoid or precipitate the unionization of the work force. An administrator affiliated with the nonunionized hospital made the following statement:

> If the quality of supervision is poor, then there are all kinds of opportunities for someone to represent the interests

> of the employees. So this has to be our first consideration. To make sure that the quality of supervision here is consistently high and fair and does recognize the dignity of each individual that works for us. Take none of them for granted. I certainly think that we have to maintain an equitable basis of salary and fringe benefit structure here at the hospital. If those lag behind, particularly in the absence of good supervision, then you have got a problem. So, I think that we have been successful in avoiding unionization by our commitment to be a fair employer in the aspects of how people are treated and how they are remunerated.

Such factors as the quality of supervision, fair employment practices, and equitable compensation programs were perceived as being equally important in creating and maintaining good labor-management relationships in the unionized hospital settings. Since none of the unionized hospitals had experienced either work stoppages or strikes by nurses in the past decade, one might conjecture that effective union-management relationships exist in these hospital settings, which is somewhat supported by the interviews with hospital and nursing administrators. For example, one associate director of nursing described the relationship between the nurses' bargaining agent and the hospital as follows:

> We had a negotiation in the last year that was probably the smoothest I have ever heard of anywhere because of the relationship being quite good. We keep each other quite well informed of what we are doing and have a respect. Both sides respect one another.

This view was corroborated by the hospital's administrator who added that both teams of negotiators joined the administrative staff for dinner at the close of the bargaining. However, the interview data indicated that only one of the administrative officials interviewed perceived the presence of unions and collective bargaining as having a

more positive than negative impact on the management practices and personnel policies of contemporary hospitals. Thus, one hospital administrator offered this divergent view by stating that:

> I don't believe that collective bargaining is an obstacle. I see it as a challenge, an opportunity; it's a reality. You deal with it. Not in an attitude saying, 'my god, if only we didn't!' That is not going to do it. It just makes it worse. So, from my perspective, in my prior 20 some odd years of administrative experience, I have always dealt with it, and I have always seen it as something positive. I welcome an opportunity to sit down and talk. I think that to the degree that administration is open, whether or not you have a union or organized employees means little.

These statement contradict the traditional argument that unionization and collective bargaining usurp administrative authority in the hospital setting. It is, however, consistent with the views espoused by several scholars and experts on labor relations in the health care industry. For example, Rothman (1983, p. 55) recently asserted that: "The only way management will lose control over the operation of the facility is if it lets the union gain control. A good union knows it does not manage and has no desire to acquire managerial headaches." Metzger (1979) has also argued that unions do not usurp the authority of administration, but rather, poor administration is the variable that allows unions to gain control and run the institution. The exclusion of employees from decision-making processes and general lack of communication between employees and employers are frequently cited attributes of poor administration.

In summary, the findings from the interview data indicate that unionization and collective bargaining by nurses affected the study hospitals in several ways. First, organizational structures and

processes have been altered to ensure ongoing participation by nurses in institutional decision- and policy-making. Second, administrative authority has been altered but not necessarily eroded by the presence of collective bargaining agreements and unions in the hospital setting. Third, the role expectations of administrators and supervisors have been expanded to include a working knowledge of labor relations. In unionized hospital settings, contract administration has become an increasingly important function of nurse managers.

The findings further suggest that five of the study hospitals either ignored or were unsuccessful in dealing with economic or noneconomic employment conditions of importance to registered nurses. Consequently, some 2000 staff nurses employed by these institutions sought union representation and accepted the concept of collective bargaining as a viable means for bringing about improvement in their wages and working conditions. The findings also reveal that improved wages, increased benefits, and better working conditions gained by unionized nurses are typically passed on to nonunionized nurses. Thus, collective bargaining among nurses seemed to affect all hospitals in a given geographical area.

Although there was a dominant perception among hospital and nursing administrators, who were interviewed, that the effects of unions on their institutions were negative, the evidence suggests a far more mixed and complex relationship with both negative and positive outcomes for unionized hospitals (Maxey, 1981; Miller et al., 1979; Rothman, 1983). Additionally, there was agreement among this group of hospital executives that nurses' interest in unionization was triggered by high

levels of dissatisfaction with conditions in the workplace, and strong beliefs that the most effective way to improve these conditions was through collective action.

Organizational Structure

The findings of the present study relative to organizational structure which are presented in Table 3 suggest that there is no one best way to organize hospitals. Moreover, effective organizations develop adaptive structures that are congruent with the environments in which they operate. These findings appear to give support to contingency theory which was discussed in Chapter II. For example, several of the study hospitals have modified their structural configurations through mergers and joint ventures in order to strengthen and stabilize their positions in rapidly changing environmental forces, whereas other study hospitals have modified their organizational structures by identifying issues and encouraging governing boards, hospital and nursing administrators, and physicians to solve problems jointly. As a consequence, board members are now serving on medical staff committees, and more physicians and nurses are serving on governing board committees.

The various elements of internal structuring presented in Figure 4, and which appear to be affected by changing environmental demands and constraints are those emerging from the Weberian (1947) conception of structure. These elements, which are displayed in Figure 2, include the degree of formalization and centralization of the structure, the degree

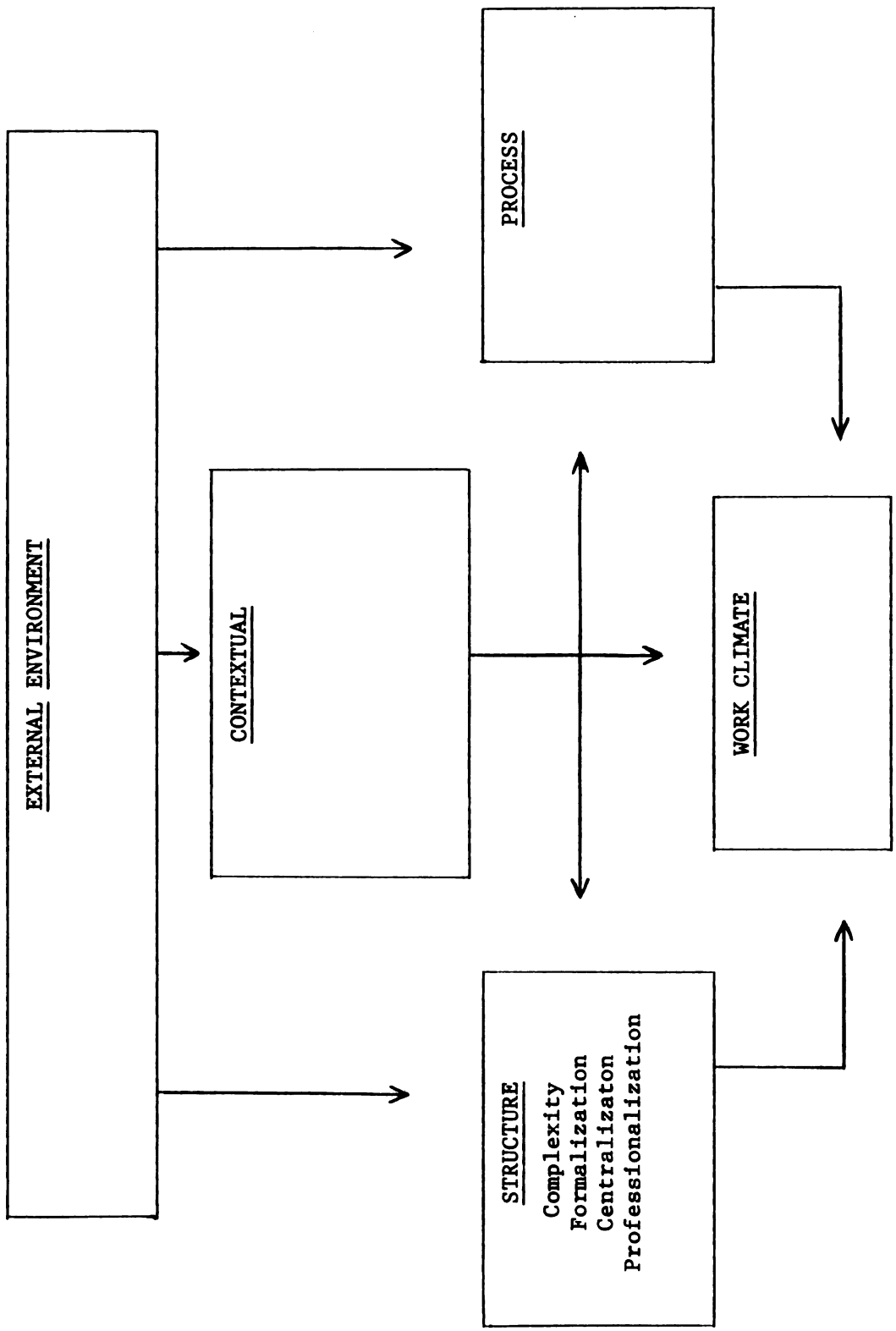

Figure 4. A Provisional Model of Variables in the Structure Component of the Study.

of complexity, the amount of technical specialization, and the extent of vertical and horizontal differentiation. These elements have been used at various times in the identification of organic or mechanistic organizational structures. Mechanistic structures, which are characterized by a high degree of centralization and formalization, have been found to be effective forms for organizations operating in stable markets with unskilled workers. Organic structures, typified by ambiguous roles, decentralization, and lateral communication, have been found to be effective forms for organizations operating in rapidly changing and dynamic environments with highly skilled workers (Burns & Stalker, 1961; Durbin & Springall, 1969; Perrow, 1970; Thompson, 1967).

While none of the study hospitals were perceived as being either totally mechanistic or organic in terms of their overall organizational designs, the distinguishing features of both forms were reflected within these institutions. The nature and extent of these structural variations within and across the six study hospitals, the source of which was hospital records, are displayed in Table 3.

The findings in Table 3 suggest that rapidly changing and complex environments necessitate greater internal flexibility and variety in the number and kinds of structural arrangements within contemporary hospital systems. For example, all of the study hospitals have expanded their scope of services and have noted that with expansion has come the need for greater horizontal differentiation and more elaborate administrative hierarchies. Findings from four of the study hospitals suggest that these hospitals are moving more toward organic organizational forms,

Table 3

Comparison of Structural Variables Within and Across the Six Study Hospitals (Comm. = Community, Co. = County, Dist. = District, Pvt. = Private, Sect. = Sectarian, Univ. = University)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Complexity						
Vertical differentiation (number of levels in the administrative hierarchy)	4	3	6	4	5	7
Horizontal differentiation (number of departments)	27	22	26	22	30	47
Technical specialization (number of general and specialty services)	41	24	31	34	37	45
Total complexity rating (high, moderate, or low)	Hi	Low	Mod.	Low	Mod.	Hi
Formalization						
High		x			x	
Intermediate			x			x
Low	x			x		
Centralization						
High		x			x	
Intermediate			x			
Low	x			x		x
Administrative density (number of assistant directors and above)						
5-10	x	x				
11-15			x		x	
16-20				x		x
Professionalization (nursing staff)						
High				x		x
Intermediate			x		x	
Low	x	x				
Professionalization (medical staff)						
High						x
Intermediate		x	x	x		
Low	x				x	

which are characterized by a high degree of differentiation and specialization of activities, a low degree of formalization, and a more dispersed or decentralized authority network (Kast & Rosenzweig, 1979).

The literature on organizational structure supports the generalization that the higher the complexity, which includes both horizontal and vertical differentiation of positions and functions, and the more professionalization of the organization, the lower the centralization (Hage & Aiken, 1970; Hall, 1972; Heydebrand, 1973). Thus, in health care organizations with greater amounts of specialized expertise and greater numbers of differentiated positions, the decision-making is likely to be dispersed throughout the organization. Low formalization of rules and procedures relative to roles and functions of the professional employee also appears to facilitate the decentralization process. As the findings in Table 3 suggest, this generalization was only partially supported by the present study. However, the findings tend to provide strong support for the contingency view in that the study hospitals with lower levels of technical specialization may function best when the organizational structure is formalized, centralized, and exhibits a low level of vertical and horizontal differentiation; whereas those hospitals with greater technical specialization may be more effective with low formalization and centralization and higher degrees of differentiation. In either case, the presence of other than an inverse relationship between professionalization and centralization would be an incongruent structural arrangement according to the contingency perspective. Such a

hierarchical approach would also be inconsistent with the notion of professional bureaucracy (Hasenfeld, 1983; Kast & Rosenzweig, 1983; Mintzberg, 1979).

Although the relationship between centralization and professionalization was discussed in Chapter II, it should again be noted that evidence strongly supports an inverse relationship between these two variables (Hage & Aiken, 1970; Hall, 1972; Hasenfeld, 1983; Heydebrand, 1973; Shortell & Kaluvny, 1983). In highly complex professional bureaucracies, decentralization is associated with high professionalization. For example, an increase in technical specialization implies an increase in the knowledge, expertise, and ability to make decisions. For example, when employees have undertaken professional preparation and training, they expect to participate in decisions that affect their work. Conversely, the literature also suggests that the greater the centralization of work-related decisions, the less professional preparation and training is likely to be reflected in employee characteristics. Since professional employees expect to have some autonomy over their work and some degree of decision-making power within the organization as a whole, one would expect to find high complexity of tasks associated with high professionalization and decentralization when examining the structure of contemporary hospital systems; however, Table 3 indicates that this relationship was apparent in only one of the study hospitals.

The notion of a centralization-professionalization relationship appears to be ambiguous in hospital settings since the indicators used for professionalization are often based primarily on the educational

preparation of physicians and nurses, rather than on the actual amount of authority inherent in their respective professional roles. Thus, in the case of nurses, it may be argued that the measure of professionalization should include more than educational preparation of staff nurses. For example, the proportion of registered nurses employed within the nursing service departments of contemporary hospitals would perhaps more appropriately reflect the degree of professionalization exhibited by this employee group and, thereby, lead to more consistent results concerning the relationship between centralization and professionalization. Figure 5 presents the findings generated from operationalizing professionalization in this manner.

As the findings in Figure 5 suggest, five of the study hospitals have nursing staffs that are comprised of more than 70 percent professional and less than 30 percent nonprofessional nursing service personnel. While the proportion of professional employees ranged from 71 to 79 percent, the range for nonprofessional employees was from 22 to 29 percent. When the percentage of registered nurses and the percentage of board-certified/eligible physicians on staff are averaged, the total professionalization scores for four of the study hospitals ranged from 76 to 84 percent. The range for the remaining two hospitals was from 68 to 71 percent. Using these two indicators of professionalization leads to an inverse relationship between centralization and professionalization in three of the study hospitals. These findings are summarized in Table 4.

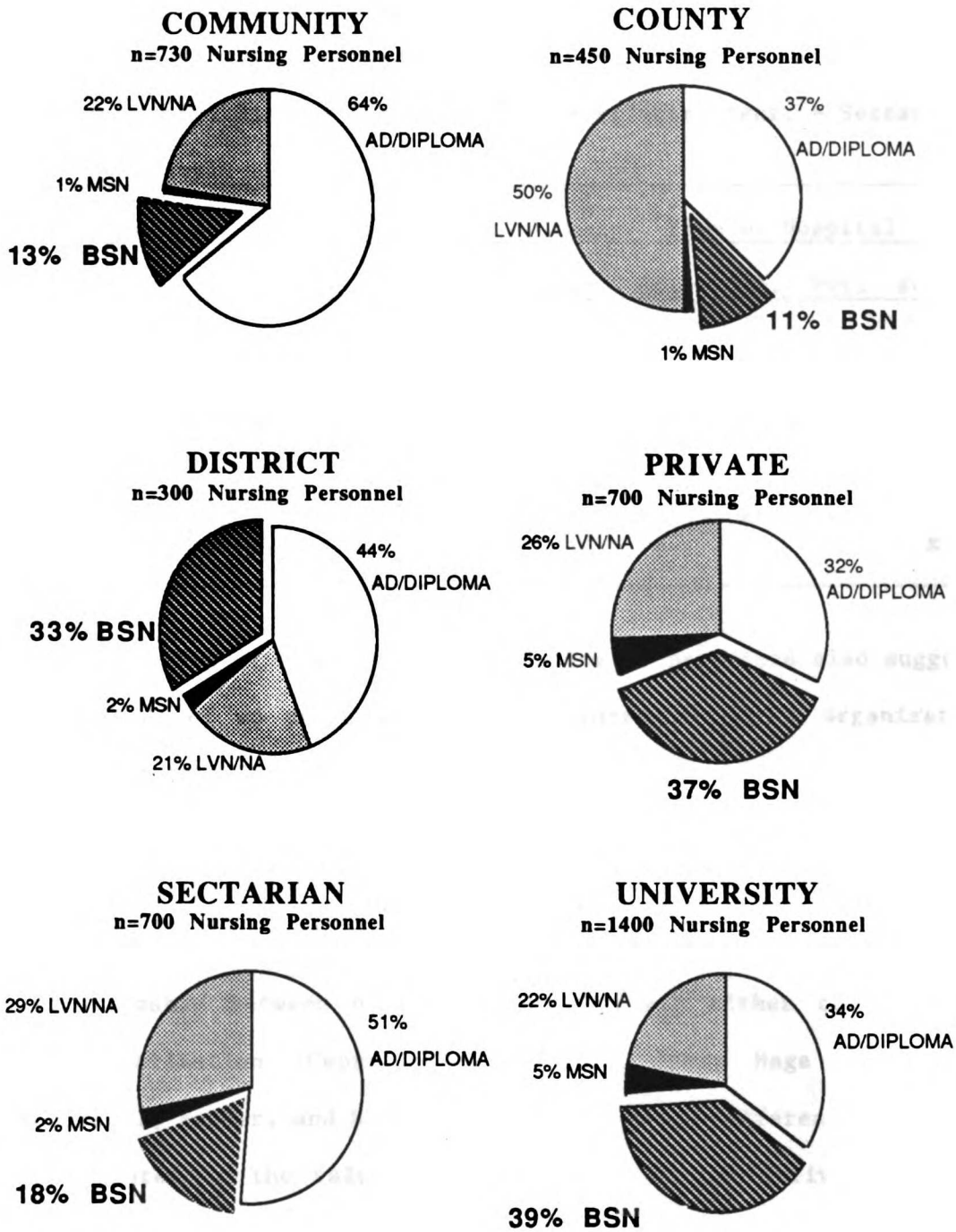

Figure 5. Comparison of Nursing Personnel Within and Across the Six Study Hospitals

Table 4

Comparison of the Relationship Between Centralization and Professionalization Across the Six Study Hospitals (Comm. = Community, Co. = County, Dist. = District, Pvt. = Private, Sect. = Sectarian, Univ. = University)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Centralization						
High		x			x	
Moderate			x			
Low	x			x		x
Professionalization						
High (rating of 75% and above)	x		x	x		x
Low (rating of 74% and below)		x			x	

A review of the literature relative to structure also suggests that as the level so professionalization increases in an organization, the level of formalization decreases (Hage & Aiken, 1970). As the findings in Table 3 indicate, an inverse relationship between formalization and professionalization was evident in several of the study hospitals. There is also evidence in the literature on hospitals that supports the relationship between high formalization and either centralization or decentralization (Georgopoulos & Mann, 1962; Hage & Aiken, 1970; Shortell, Becker, and Neuhauser, 1976). These differences were found to be related to the value orientations of administrative and management personnel. For example, when the assumptions proposed by McGregor (1965) tend to dominate, high formalization is associated with high centralization of authority within organizations. It would appear that

assessment of both formalization and centralization needs to be based on individual perceptions in addition to formal documents and written reports.

The degree of centralization and formalization in the study hospitals was assessed by investigating a number of factors that indicate the overall level of formality inherent in these complex organizational structures. Assessment of organizational charts revealed that the basic organizational design of these institutions approximates the traditional pyramidal form of bureaucracy since at successively higher levels there are fewer positions and administrators have broader responsibilities. Three of the study hospitals reflected a more decentralized structure as evidenced by greater horizontal differentiation and the existence of fewer administrative layers between management and the employees of the organization. The organizational structure chart of one of the study hospitals reflected an emergent matrix design with emphasis on the existence of both hierarchical (vertical) coordination and control through departmentalization and the formal chain of command and simultaneously lateral (horizontal) coordination and control across departments. As the administrator of this institution stated:

> Right now, realizing of course that we changed October, 1983 from one model to another, and we're getting ready to change again by this October, we have, I guess you could define it as a functional organization chart in that we have tried to pull like and similar functions together. We have a fairly classic organization chart on paper showing the typical pyramid shape. In reality, though, the real organization chart is not nearly as pyramid-shaped as it would appear. And in fact, we have superimposed a matrix type organization over our hierarchical chart, and so while on paper there are clearly defined lines

> of authority and accountability and responsibility, in reality there are lots of dotted lines. I would describe us as evolving toward a matrix organization.

This administrator also offered the following perspective on the relationship of the nursing department to the institution's governance and management systems:

> I think it's extremely important from two perspectives. One, we have as an assistant vice-president on the same level as our chief financial officer for the hospital, who is an assistant VP, and others, a person at that level who is responsible for nursing as well as some other patient care-related activities. Also, under the less formally defined matrix organization, the person filling that role is to be probably the most active member of the top management team in the assigned projects outside of nursing. So, I think we have an extremely, really extremely strong person in that role, and that, I think, because of that person, to a large extent, nursing is viewed as somewhat pivotal in decisions of the institution.

Of the two study hospital which reflected the characteristics of high formalization and centralization, a nursing executive described the structure of one of them as follows:

> It is really changing quite dramatically in the last five years. There used to be a very, what I thought was fairly loose organizational structure. A lot of information flowing in both directions. I still personally have no difficulty going to whomever I need to talk to whether it be (the CEO) or whomever. Although I am finding more pressure to have to go through the chains of command. I think we are becoming rigid and maybe that is because of the environment out there. I don't know all the reasons. But I see that happening . . . especially since we have had this impetus for five years now to go to this . . . toward program management and so forth. And I think the result is that we have not succeeded in it. I think we have done, this is the middle managers viewpoint on this, is that the middle management and staff have done a nice job of developing participatory management styles with the administrative staff but still they are stuck . . . I still get told by the box theory. How much more authoritarian than that can you get? I am the boss and you will do, there is no discussion. That still happens and it happens more frequently than it did in the past . . . . After we get to the departmental level, I think we (nursing) have a great deal of

> influence and flexibility. We are involved in all of our engineering projects. All of the construction, I am unfortunately involved in every one of them that is going on, if not myself then one of the other nurse managers and sometimes staff nurses. We work very closely with finance and they respect our knowledge . . . so I think across department manager lines, there is a good deal of working relationship and I think we have a lot of influence.

It should be noted that the ratings in Table 3 were derived from an assessment of hospital and nursing policy and procedure manuals, nursing service personnel job descriptions, collective bargaining agreements, personnel policies, and most importantly, the perceptions of the top level executives of these institutions. The findings reported in Table 4 represent the investigator's assessments of the written documents of the study hospitals and the perceptions of at least two of the three hospital and nursing administrators interviewed at each of the six institutions, and reflect the organizational flavor within these six contemporary hospital systems. The findings also reflect the relationship between contextual and structural variables and structural and process variables.

Organizational Process

An integral and related component of organizational structure is process--the means by which the different departments and levels of the organization are linked together by different flows of work elements, information, influence, and decision processes. In theory, organizations are built on the basis of mission, strategy, goals, and concepts of desired future states. As open systems, modern health care

organizations draw inputs from their environment such as people, materials, technology, money and information, and transform them through strategy into some form of health care services which they output to the environment. As suggested in the literature and indicated by the case studies, structure follows strategy. The interview data provided additional support for the strategy imperative--as strategy changes restructuring follows. This restructuring is necessary, since each structure facilitates a certain set of processes that must also fit the health service-market strategy being pursued (Galbraith and Nathanson, 1979).

As discussed in Chapter II, structure is generally the aspect of the organization that administrators change in the pursuit of desired outcomes. Since process and outcome are both more difficult to deal with, there is the tendency to believe that changes in structure will inevitably lead to the desired changes in process and outcome as well (Goldsmith, 1981). While this assumption lacks empirical support, it does call attention to the critical problems of integration that are associated with the move toward more differentiated and complex organizational structures in contemporary hospital systems.

Integration of work roles and activities is one of the major and most difficult problems modern hospitals are faced with and must solve in order to be effective (Georgopoulos & Mann, 1962; Longest, 1974; Shortell & Kaluvny, 1983). Integration involves bringing and fitting together the efforts and work activities of organizational members into a unified whole, and the need for it arises from the functionally interdependent nature of the activities that organizational members

perform (Georgopoulos & Mann, 1962). Modern Hospitals have adopted or created a number of information sharing and decision-making processes to integrate or relate the functionally interdependent work efforts and activities of their members to one another so as to attain institutional goals and objectives in the most effective manner. These processes range from informal spontaneous meetings such as patient care conferences to more formal communication and coordination mechanisms such as standing committees or project teams and task forces. One of the findings in the literature is that organic or adaptive organizations have achieved appropriate levels of differentiation and integration through systematically matching strategy, structure, people, and processes (Galbraith & Nathanson, 1979; Peters & Teng, 1983; Shortell & Kaluvny, 1983).

An objective of the present study was to assess the extent of integration and identify mechanisms that are perceived to enhance integration in the total hospital system, particularly the nursing service department. Additionally, the assessment of these integrating processes might lead to certain conclusions about the impact of environmental influences upon internal power bases and decision processes; how these processes vary according to variations in strategy; and how they relate to the overall quality of nurses' work climate.

The concept of organizational process was assessed across six variables: communication, coordination, functional influence, administration, work flows, and staff relations. These variables, which are reflected in Figure 6, correspond to the transformation portion of the input-transformation-output cycle advanced by modern organization

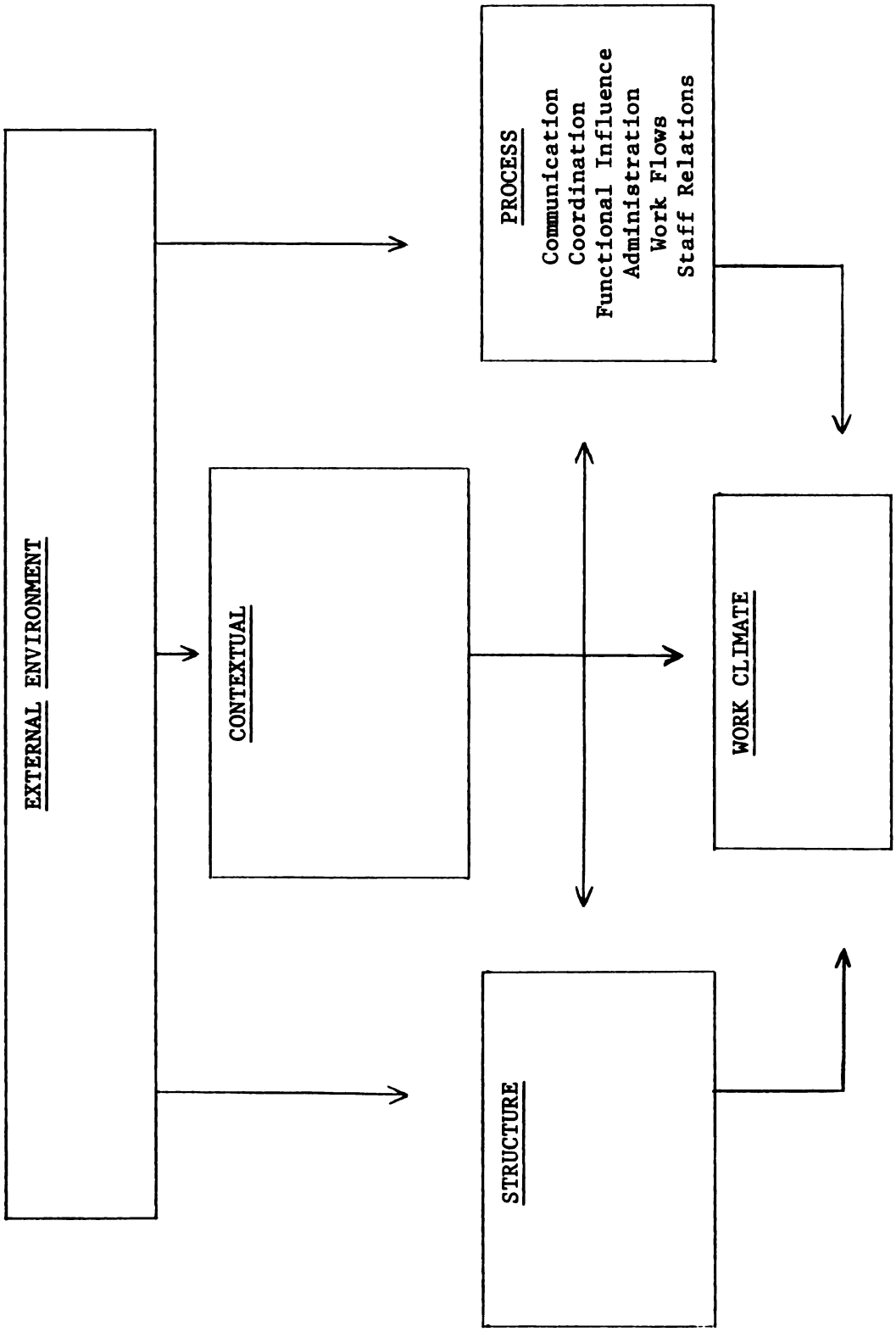

Figure 6. A Provisional Model of Variables in the Process Component of the Study.

theory ((Katz & Kahn, 1978). They describe specific integrating activities that are crucial to the effective functioning of contemporary hospital systems. The assessment of this set of variables was based on the data generated from the interviews with hospital and nursing administrators employed by the study hospitals. Each of the interviewees were requested to respond to the same series of questions about organizational processes, several of which required numerical ratings or descriptive response alternatives. The findings from this assessment of the process component are presented in Table 5.

Table 5

Comparison of Process Variables Within and Across the Six Study Hospitals (Comm. = Community, Co. = County, Dist. = District, Pvt. = Private, Sect. = Sectarian, Univ. = University)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Communication (form and direction)						
Formal (high)	x		x	x		x
Informal (high)	x		x	x		x
Computer-Based (unit level)			x	x		
Vertical	x	x	x	x	x	x
Horizontal	x		x	x		x
Diagonal				x		x
Interviewee ratings						
Excellent						
Good	x		x	x		x
Fair					x	
Poor	x					
Coordination						
Joint Conference Committee (governing board, administration and medicine)	x		x	x	x	x
Executive Committee (administration, nursing and medicine)	x	x	x	x	x	x
Interdisciplinary Committees	x	x	x	x	x	x
Quality Assurance Committee	x	x	x	x	x	x

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Joint Practice Committee (nursing and medicine)	x	x	x	x	x	x
Labor Council	x					
Project Teams/Task Forces	x		x	x		x
Clinical Nurse Specialists			x	x		x
Functional Influence (nursing representation on executive level committees) (high)						
Directors of Nursing	x		x	x		x
Head Nurse	x		x	x		x
Staff Nurses	x			x		
Administration (modus operandi)						
Defender/Reactor (inward focus with emphasis on administrative activities)		x			x	x
Prospector/Analyzer (outward focus with emphasis on entrepreneurial and engineering activities)	x		x	x		
Work Flows (extent to which computerized information systems are used to relate nursing resources to patient care needs)						
High Extent				x		x
Fair Extent	x		x			
Limited Extent		x			x	
Staff Relations (as perceived by interviewees)						
Nurse-Physician Relationships						
Excellent						
Good	x	x	x	x	x	x
Fair						
Poor						
Nurse-Physician Collaboration						
Great Extent						
Good Extent	x	x		x		x
Fair Extent			x		x	
Limited Extent						

As Table 5 indicates, there appears to be agreement among the interviewees affiliated with four of the study hospitals that both the volume and quality of communication in their respective institutions was essentially good in relation to the achievement of institutional goals and objectives. There was further agreement among these four groups of interviewees that the formal and informal communication networks in their institutions served as major coordinating devices for achieving appropriate and/or optimal levels of integration among organizational parts and activities. Furthermore, while these administrators assessed their communications systems as "good", they also indicated that improving existing communication patterns was among their administrative priorities, particularly those patterns that cut across professional and departmental channels of communication and authority.

When queried about the extent to which their institutions had been able to achieve a unity of purpose in the pursuit of desired outcomes, their responses were quite similar to that of one nursing executive who stated:

> I think for the most part we have unity of purpose. Maybe we have been overly ambitious as far as seeing the results but I do think we run a good show and I think that tells that there must be a good deal of cooperation and communication somewhere. I think for a place of this size and the diverse group of physicians we have and the kind of board we have, it runs a fairly good ship, tight ship.

In the two institutions where both the volume and quality of communications were perceived to be less than good, there was further agreement among the interviewees affiliated with these institutions that the existing formal and informal communications networks were less open

and that information flows tended to follow vertical or hierarchical pathways. Correspondingly, communication was less effective as an integrating mechanism and the ability of these institutions to achieve unity of purpose was perceived by the interviewees as being substantially limited or constrained. As a nursing executive from one of these institutions indicated:

> We have five divisions . . . . Each one feels--and there are some crossovers--much into their own little thing. Unfortunately, there are times when decisions are made that impact other departments, unilaterally, that should not be made . . . . But that's one of the problems, you know, that we still do not function as a team; we still function in isolation more or less, but nursing can't function that way, and we catch it for everything.

It should be noted that the interview data was combined with the case study findings to develop the measures for the two forms of communication, functional influence, and work flows. The eight coordination mechanisms that are reflected in Table 5 were identified by the majority of the interviewees as being equally important aspects of their hospital's communication systems. These eight mechanisms together with the existence of a regularly published nursing newsletter and closed circuit television programs for patient education represent the range of formal communication activities that were used to measure formal forms of communication. A cutoff point of six or more activities was established for the rating of high formal communication levels. Communication activities that were used to measure informal forms include the following: patient care conferences, nursing grand rounds, general staff nurse meetings, and bag lunch meetings. A cutoff point of three or more activities was established for the rating of high informal

communication levels. While all six of the study hospitals have computerized information systems, only two of the institutions have extended the capability of their systems to the management or processing of information at the nursing unit level.

The findings in Table 5 have several additional implications for the relationship between communication and coordination. First, higher volumes of formal and informal communications tend to be positively related to lateral communication channels, more complex coordinating mechanisms, and high functional influence of nurse executives and nurse managers. Second, the clinical nurse specialists role appears to be positively related to both greater openness in communication channels and more complex forms of coordination. Third, good communication, more complex coordination mechanisms, and a high functional influence appear to be associated with the structural attributes of high complexity, high professionalization and decentralization. Fourth, size and complexity were not found to be strongly associated with any of the process variables reflected in Table 5. In this regard, only two of the interviewees perceived that the size of their institutions was associated with problems of communication and coordination.

A majority of the interviewees identified committees as one of the most important communication mechanisms to facilitate that departments and units work closely together. Committee integration was also viewed by several interviewees as leading to improved staff relations, particularly nurse-physician collaboration. As one nurse executive noted:

> I think informally, what's happened more and more has been involvement of nurse in patient care conferences and going on

> grand rounds, and in a sense it's like, 'Oh, well, we can't do that without including nurses'. It's like people don't have to think anymore to include nursing. There's just a tripartite, and in terms of medicine, nursing and administration. And . . . these are some of the mechanisms that have been built into this environment that build a sense of community, and the tripartite community, because we're here in such close proximity to each other, and there's the committee structure.

However, as the findings in Table 5 indicate, only one of the other study hospitals reflects a high level of staff nurse representation on hospital-wide policy making committees. In light of the current emphasis on interdependent decision-making, shared accountability, and joint-practice models, it was surprising to find that staff nurses have not assumed a more central or visable role in interdependent decision-making processes in contemporary hospital systems. Several nurse executives considered staff nurse participation on committees at all levels of the organization crucial to improving the quality of patient care. For example, one nurse executive stated the following:

> I would like to see even more of them on committees. We are now moving to get staff nurses on committees. First, it was just the head nurse group and that was mainly to get a little continuity so that you have good representation of the staff nurse if she can't always get away. There wouldn't be a nurse represented, that kind of thing. Now that it is a given, physicians have accepted it. I think we would like to move down to the staff nurse level. Still improve communication, always, at the committee level, one on one meetings. I would like to see a real team approach if there is ever such a thing.

Table 5 suggests that the overall patterns of hospital and nursing executive behaviors fell into two strategic and symbolic types: defender/reactor and prospector/analyzer. This measure of executive behavior patterns was derived from the work of Mintzberg (1973) and Mile

and Snow (1978). Mintzberg (1973) noted that high level executives typically carry out numerous roles which may be grouped into three types of roles: 1) interpersonal roles, 2) informational roles, and 3) decisional roles. In the interpersonal role, the executive acts as a figurehead, leader, and liaison, who performs ceremonial and symbolic functions; designs organizational climate; and maintains horizontal and diagonal relationships with a network of constituencies outside the organization. The executive monitors and disseminates information within the organization and acts as the spokesperson in transmitting information outside the organization in the informational role. In the decisional roles, the executive initiates and designs organizational change; takes care of system disturbances; monitors and controls the flow of resources; and negotiates with various persons and groups of persons on behalf of the organization (Mintzberg, 1973; 1975).

Based on work with business firms, Miles and Snow (1978) noted that organizations could be classified into one of four strategic types: defenders, prospectors, analyzers, and reactors. Each type of organization, tends to reflect certain patterns of activities that characterize the modus operandi or behavior of executives as they pursue institutional goals in relation to environmental demands. For example, the defender administrations tend to emphasize those activities that are designed to enhance stability and efficiency by protecting their organizations from external pressures and maintaining the status quo. Defender administrations are thus characterized by intensive planning oriented toward internal cost and efficiency issues, with executive spending a relatively greater proportion of their time on interpersonal

roles. Prospector administrations tend to emphasize entrepreneurial activities which are designed to improve and adapt their organizations to changing environmental demands. These administrations are typically characterized by developing and maintaining the capacity to identify and exploit new market opportunities, with executives more involved with informational roles. Analyzer administrations emphasize those activities that are designed to enhance both flexibility and stability by simultaneously capitalizing on new service and market opportunities and maintaining operating efficiency in their stable or traditional service and market areas. Analyzer administration might be characterized by intensive planning oriented toward complex strategic issues, with executives more involved in decisional roles. Reactor administrations tend to emphasize activities that are designed to facilitate survival by maintaining the status quo. Reactor administrations are characterized by inconsistent and often inappropriate patterns of behavior that arise from a lack of fit between the entire rage of strategy-structure-process relationships (Miles & Snow, 1978; Robbins, 1983).

As the discussion suggests, defender/reactor administrations tend to focus their efforts on stabilizing ongoing transformation activities in order to retain the status quo. There would be little or no investment in personnel or technology for the sole purpose of assessing the environment to find new areas of opportunity, but there would be extensive emphasis on preventing competitors from entering their "turf" or penetrating their market segments (Robbins, 1983). Correspondingly, executive behaviors can be expected to reflect

greater involvement in administrative rather than entrepreneurial activities. Prospector/analyzer administrations would tend to concentrate their efforts on innovation and entrepreneurial activities in order to improve their institutions competitive position in the marketplace. There would be extensive investment in strategic planning and marketing expertise, and sophisticated information gathering and processing techniques will be used to improve institutional decision-making processes. Thus, executive behaviors can be expected to reflect greater involvement in boundary spanning and entrepreneurial activities (Miles & Snow, 1978; Robbins, 1983).

The study hospitals with prospector/analyzer administrations have planning departments with the capability to gather and analyze trend data on an ongoing basis. These administrations also have marketing specialists, a strategic planning committee, and a high awareness of the need for change. The senior hospital and nurse executives affiliated with these institutions currently use subordinate administrative staff to manage daily hospital and nursing service operations. Interview data indicated that this group of executives tended to spend more time on entrepreneurial and interpersonal role activities and to work more closely together. Executives routinely attended regularly scheduled board meetings, participated with board members on committees, and perceived their influence on policy and resource allocation decisions to be fairly substantial. These measurement indicators were used to differentiate the two types of administrations.

As analytic devices, the three role categories and two administrative types proved to be useful tools since the concept

of administration is difficult to operationalize, and they also provided a means for assessing administration from both a macro and a micro perspective within the contingency framework and the limitations of this study. The differences between the two administrations and the different executive behavior patterns, therefore, may be associated with certain contextual factors such as ownership and control or be related to certain personal attributes such as administrative philosophy. The interview data also suggest that ownership and control together with the orientation of the governing body can be viewed as special contingent conditions under which hospital systems and their administrative employees function, requiring certain patterns of behavior and inhibiting others. As the cited responses of several executives have indicated, administrative behavior patterns often differ depending on the governance context within which they occur.

Overall, the interview data suggest that hospital and nurse executives' behavior patterns reflect involvement in each of the three categories of role activities identified by Mintzberg (1973). In this sense, the findings indicated that the three role categories are not mutually exclusive and that leader behaviors are more likely to be contingent on situational factors. As one nurse executive stated: "I prefer participative management; it depends on the situation and what lends itself to that. I am strong in process, but also strong in action. And it (administrative style) is really situation." The majority of these executives described their administrative style as being participative, with emphasis on team building or a team management

approach. This point was perhaps best expressed by one hospital administrator who stated:

> For the most part, I think people would characterize the management organization as reflecting the management style. I'm a very strong believer in delegating. I'm a strong believer in consensus building. I don't make very many unilateral decisions in this place. That's really for two reasons. Number one, I don't have the capability by myself to assess the problems and come up with a solution that's predictably going to be successful all by my lonesome. Number two, having made a decision, I don't have to implement it. So, I believe in trying to get folks that have to implement it involved in the decision-making process. And I hasten to add, we don't vote; when we vote I got one more vote than all the rest of the people in the room, because I've got to deliver the end product. But I think it is, in fact, a delegated organization that allows and encourages delegation, tries to put into place very capable people in each management level, and then allows them to do their thing, in the vernacular, with as best they can, with an understanding of where the institution is moving in its broadest sense, so that they know the extent to which their thing is contributing to that.

The findings further suggest that hospital administrators tended to spend more time on informational and decisional roles, whereas nurse executives tended to be more involved with interpersonal roles. This is understandable when it is recognized that interpersonal role activities provide access to information which is often important in making decisions and implementing innovations designed to maintain and improve nursing service productivity. For example, in institutions where a concerted effort is made to encourage knowledge workers (e.g., staff nurses) to be more productive or to ensure that workers are not alienated, a major role requirement of nurse executives is to absorb or reduce uncertainty and to use their influence to create a positive practice climate (Shaeffer, 1977). One assistant nursing director described the importance of the senior nurse executive's interpersonal role activities as follows:

> Since (nurse executive) has been with us, even since her term, she is doing more things on the administrative level. One thing that we fought for years by the way was to have a nurse at the administrative level . . . . Anyway, with (nurse executive), I think she had the knack of, number one, finding out about the organization, listening, learning and finding out what approach she had to use with number one, the men of the organization. How to get our point across. She did it strategically and, therefore, was most of the time successful. Now I believe that she is truly listened to as a peer. Having her at the administration level was a biggie; psychologically important to us to have that . . . I kind of felt from the beginning that (nurse executive) was what we needed.

Studies have provided empirical support for the argument that nurses' morale or sense of worker alienation is strongly influenced by the style and quality of leader behavior exhibited by nursing service executives (Aiken, 1984; McClure et al., 1983). These studies also indicated that when nursing service executives are perceived as having power and influence at the organizational level and viewed as strong nurse advocates, nursing staff morale is high and nursing leadership is recognized as a key variable in attracting and retaining a well qualified and productive nursing staff. They further suggest that creating a positive practice climate requires operationalizing the concept of professional accountability and sharing administrative responsibility through decentralized decision-making arrangements.

Interview data in the present study indicated that decentralized decision-making at the head nurse level had been implemented in four of the six study hospitals. In these institutions, the head nurse prepared, defended, and managed the nursing budget at the unit level. However, the use of computer technology to enhance nursing practice and cost effectiveness in the form of validated patient classification

systems was evident in only two of the study hospitals. As a nurse executive from one of the other four institutions indicated:

> We don't have a real acuity system here at (hospital) yet, and I think we really need to move into that and get that right away so that we can assess the amount of nursing resources that are going into each DRG. But we're a ways away from that.

Similar views concerning the relationship of work flows to outcomes were expressed by nursing executives affiliated with three of the study hospitals. Two of these institutions had engaged the services of consultants to assist them in the development and implementation of a patient classification system suited to their particular needs. The second finding concerning work flows suggests that the type of nursing care delivery system utilized in the study hospitals was associated with such factors as decentralization, professionalization, lateral and diagonal communications, functional influence, and stability of nurse staffing patterns. Primary nursing was the least utilized modality, with team and total patient nursing the most utilized modalities. Irrespective of the hospital setting, two and sometimes three different nursing care delivery systems were being utilized simultaneously.

In light of increased resource scarcity and cost-containment pressures, it was surprising to find that, during the Summer of 1984, only one of the study hospitals had begun to systematically measure and relate nursing resource use to patients' diagnosis groupings (DRGs). The congruence between the orientation of hospital and nursing administration regarding the role of nursing in implementing the new prospective payment system was strongly in evidence in this particular

institution. This hospital administrator's response to the question--Do you perceive a particular role for nursing in dealing with DRGs?--was as follows:

> Yes. You know, there's a lot of talk, writing about, nursing as a profit center. And that's new. It implies a whole new way of looking at nursing. I'm not sure in my own mind if nursing can or should be, depending on what the definition is, a profit center. However, nursing, I think, will have a profound impact on a particular hospital's success or lack of success with DRGs. I suspect that we aren't quite sure what that means yet. I think that nursing will find that they will participate in a lot more proactive role in efficiency improvement, cost containment, and that there will be a role in nursing defined in a business sense, which we haven't seen before . . . I think, potentially, it could do some good things for nursing. It could, potentially, again force nursing and medicine, nurses and doctors, closer together. It could force communications that haven't existed before, or at least this particular rationale hasn't existed for talking . . . I think, if I were in the profession of nursing, I would look on this whole thing, this whole PPS, and the whole changing health care environment as a grand opportunity to finally begin to define the role of nursing and to reestablish some of what I suspect are kind of lost values, and to kind of carve out a more secure place in the health care market.

Most of the hospital and nursing executives interviewed indicated that the advent of prospective payment systems has substantial implications for nursing practice, particularly the process components of nursing care delivery. However, one hospital administrator expressed a somewhat different view, suggesting that the successful implementation of DRGs rests primarily with the medical staff and their compliance with the new procedural requirements that have been established. As this administrator stated:

> I guess it's clear here that the most difficult group here to get cooperation with our new procedures is the medical staff. It seems that they have a greater role in it than anyone else does, too. They have to do more things. They have to function a little bit differently. Their documentation has to change. From the nurse's standpoint, very little changes.

> But they've got to be knowledgeable about DRGs because to a great extent we might be able to use them to help the physicians get in line. But our biggest problem, really, is with the physicians, is with the physicians' compliance with our procedures.

The lack of congruence between hospital and nursing administration concerning such factors as administrative philosophies, committee membership, information sharing, nursing practice models, and reward systems was reflected in the responses of the three interviewees affiliated with this study hospital. The study data further indicated that an aggressive thrust or more proactive role for nursing in bringing about change in the process of patient care delivery at this institution would not be readily accepted or rewarded.

In summary, the data suggest that the processes or methods used to transform inputs into outputs in the study hospitals tended to be influenced primarily by the type of ownership and control, type of administration, decentralization, and professionalization of nursing staff. The data further indicated that the-state-of-the-art information gathering and analytic techniques for planning, managing, and evaluating nursing productivity in relation to process and outcome have only recently been recognized as being important to the overall effectiveness of the study hospitals. As contingency theorists have argued, organizations characterized by high complexity and operating in dynamic, competitive environments tend to perform more effectively when they are functionally differentiated and decentralized, with integration and coordination taking place at the lowest level feasible (Lawrence & Lorch, 1967).

Organizational Climate

As previously noted, organizational climate refers to a set or cluster of attributes which are perceived and deduced from the way an organization deals with its members and its environment (Hellriegel and Slocum, 1974; Taguiri & Litwin, 1968). This definition calls attention to several important features of the concept of organizational climate. First, organizational climate is an abstract concept dependent upon the perceptions of people. Second, organizational climate is largely the result of the interaction between organizational and individual characteristics. Third, organizational climate is principally a situationally determined process in which climate variables function as either precipitating or moderating influences on individual behavior and job attitudes. Fourth, organizational climate encompasses certain core characteristics or attributes which function to differentiate one organization or work setting from another. Fifth, organizational climate is more appropriately assessed by perceptual measures that reflect collective group perceptions rather than individual perceptions of the organization. Therefore, perceptual measures of climate should be descriptive as opposed to evaluative (Campbell, 1970; Gilmer & Deci, 1977; Hellriegel & Slocum, 1974; James & Jones, 1974; Lawler et al., 1980; Taguiri & Litwin, 1968).

The model presented in Figure 7 provides a schematic representation of how work climate relates to and interacts with other organizational characteristics, and which ultimately affect the behaviors of

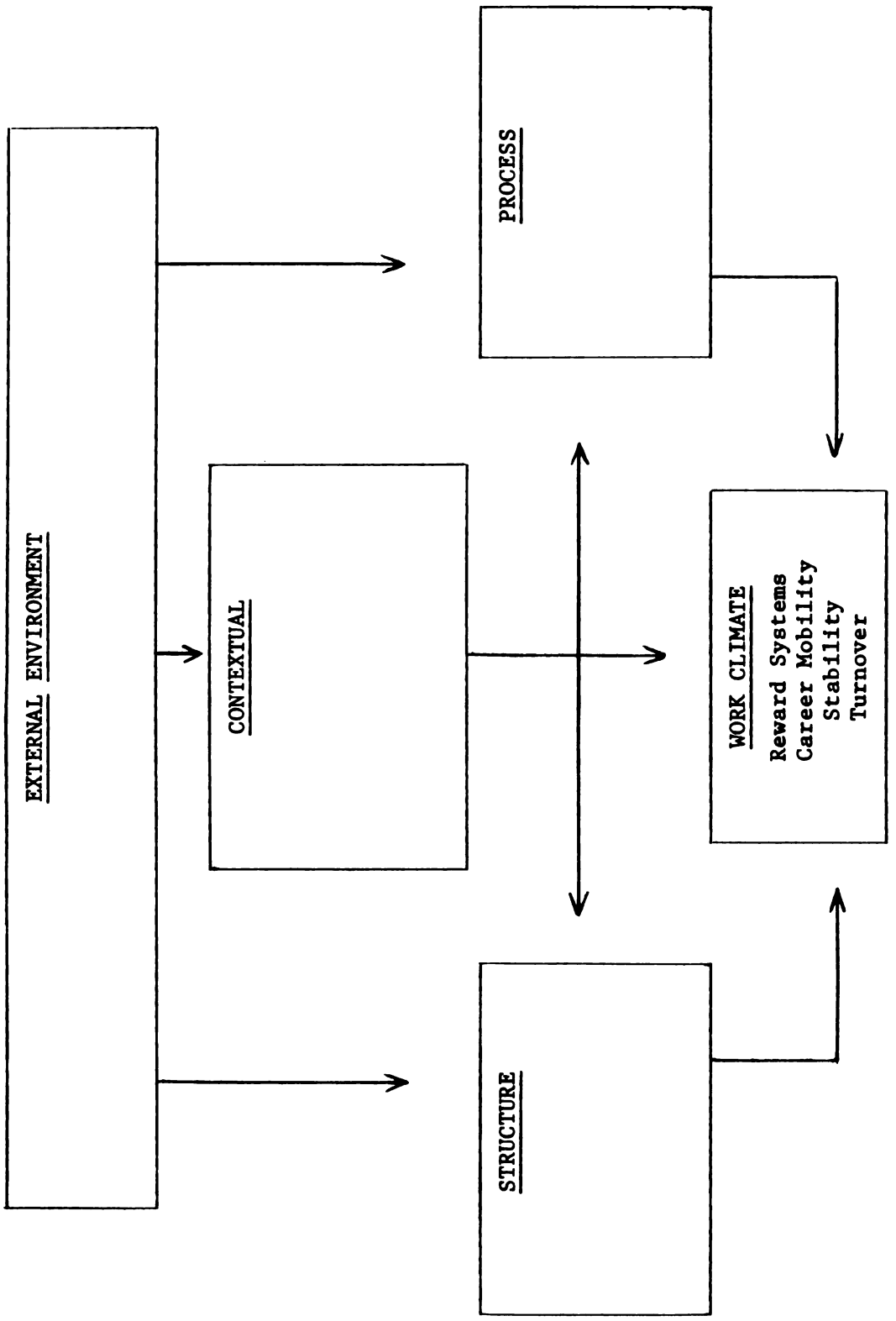

Figure 7. A Provisional Model of the Variables in the Work Climate Component of the Study.

organizational members. The model is based on the assumption that the particular needs, abilities, expectations, and values of organizational members represent a significant input into the determination of organizational climate. This assumption also supports the notion that it is possible for most organizations to have more than one climate. When perceptions are measures, different groups of employees at various levels of the hierarchy may have different perceptions of organizational climate (Gilmer & Deci, 1977).

Figure 7 suggests that four major sets of variables can either directly or indirectly influence the climate of a particular organization or work unit. For example, changes or the anticipation of changes in the external environment can have a substantial impact on internal organizational climates. Economic, legislative, and cultural changes in particular can directly affect climate by threatening the survival of the organization as well as by modifying the attitude and expectations of organizational members. Discussion of the study findings presented earlier have also indicated that various contextual, structural, and process variables may have an important bearing on the nature and quality of the climate within a particular hospital organization. In general, these findings support the notion that the external environment may ultimately affect behaviors or outcomes, such as job attitudes and turnover; since to some extent they contribute to an appropriate or attractive work climate. Climate can thus be seen as an independent variable where important characteristics of the organization can be changed to promote certain desired results such as higher morale, lower turnover, or more commitment (Gilmer & Deci, 1977; Lawler et al., 1980).

It seems important to note that within any overall organizational climate, further differentiations can usually be made. For example, Taguiri and Litwin (1968) have described the executive climate and how it differs from the more pervasive managerial climate. The term executive climate refers to "those aspects of the organizational climate that influence particularly the behavior of executives" (Taguiri & Litwin, 1968, p. 225). Although executive climate is of primary concern to the executive group, it indirectly influences the entire organization. Basically, the term is designed to include those aspects of the overall work situation which makes a difference in how executives work and how they feel about their work. From a factor analysis, Taguiri and Litwin (1968) concluded that the executive's perceived work climate encompassed five primary dimensions: 1) direction and guidance, 2) professional atmosphere, 3) qualities of the superior, 4) quality of the work group, and 5) results such as autonomy and satisfaction. These five dimensions have their various indicators that relate to external environmental, contextual, structural, process, and individual attributes or variables. The preceding discussion of the study findings on the organizational characteristics of the six hospitals would appear to fit the descriptive framework of executive climate as outlined by Taguiri and Litwin (1968). In this respect, work climate may also be viewed as either a dependent or intervening variable. For example, personal characteristics such as individual needs, values, and abilities in their interaction with certain organizational characteristics jointly affect outcomes such as productivity, quality of work life, and growth

and development (Hellriegel & Slocum, 1974; James & Jones, 1974; Lawler et al., 1980; Taguiri & Litwin, 1968).

The five climate dimensions identified by Taguiri and Litwin (1968) have also been identified by other investigators in their conceptualizations of organizational climate (Campbell, 1970; Halpin & Croft, 1962; Hellriegel & Slocum, 1974; Lawler, Hall, & Oldham, 1974; Payne & Pugh, 1976). Although some variations exist among these conceptualizations, the dimensions proposed by Taguiri and Litwin (1968) are characteristic of the core dimension included in most of the the climate or work environment instruments. These dimensions are also reflected in the work environment instrument ("Your Work Environment") employed in the present study. The overall purpose of the instrument, "Your Work Environment," is to elicit responses which describe work environments in contrast to satisfaction instruments which serve to evaluate work environments (Hellriegel & Slocum, 1974). While there appears to be considerable overlap and redundancy between satisfaction and climate scales, the organizational climate scales are designed to evoke perceptual rather than attitudinal or other types of responses (Hellriegel & Slocum, 1974).

Before reporting the findings of the nurses' perceptions of the work climate, it seems important to note that organizational climate is also not exclusively a perceptual phenomenon. Organizational climate encompasses objective phenomena such as employee turnover, absenteeism, tardiness, grievances, and reward systems (Payne & Pugh, 1976). Thus, it would seem reasonable to conclude that organizational climate is an attribute of both the individual and the organization.

In order to avoid some of the limitations of relying solely on either subjective or objective measurements of organizational climate, both types of assessment methods were utilized in the present investigation. Table 6 indicates the results of the analysis of the work climate derived from the assessment of organizational records, reports, and related personnel documents. Table 7 presents findings relative to the work climate generated from the interview

Table 6

Comparison of Work Climate Variables Within and Across the Six Study Hospitals (Comm. = Community, Co. = County, Dist. = District, Pvt. = Private, Sect. = Sectarian, Univ. = University)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Reward system						
Pay and benefits						
Above market standards	x	x				
Market standards			x	x	x	x
Below market standards						
Career mobility (opportunity for lateral clinical advancement)						
High	x					x
Moderate			x	x		
Low		x			x	
Stability (tenure of incumbent director of Nursing)						
1-2 years			x			
3-4 years				x	x	
5-6 years	x	x				
Turnover (registered nurse staff)						
10-15%	x		x	x		
16-21%					x	
22-27%						x
28-33%		x				

Table 7

Administrative Perceptions of Work Climate Within and Across the Six Study Hospitals (Comm. = Community, Co. = County, Dist. = District, Pvt. = Private, Sect. = Sectarian, Univ. = University)

Variable	Type of Hospital					
	Comm.	Co.	Dist.	Pvt.	Sect.	Univ.
Quality of work climate						
High	x					
Above average			x	x	x	x
Average		x				
Below average						
Overall hospital rating (as rated by interviewees)						
Ideal (9-10)	x					x
Above average (6-8)			x	x	x	
Average (3-5)		x				
Below average (0-2)						
Nurses' stress in the work place						
High level		x		x		
Moderate level	x		x		x	x
Low level						

data and reflects the convergence of administrative perceptions about certain aspects or attibutes of their particular hospital settings. Figure 8 represents the analysis relative to nine work environment dimensions measured by the instrument, "Your Work Environment," adapted by Bailey and Chiriboga (1984) from the Moss Work Environment Scale (1981). This instrument was administered to medical-surgical and critical care nurses in the six study hospitals.

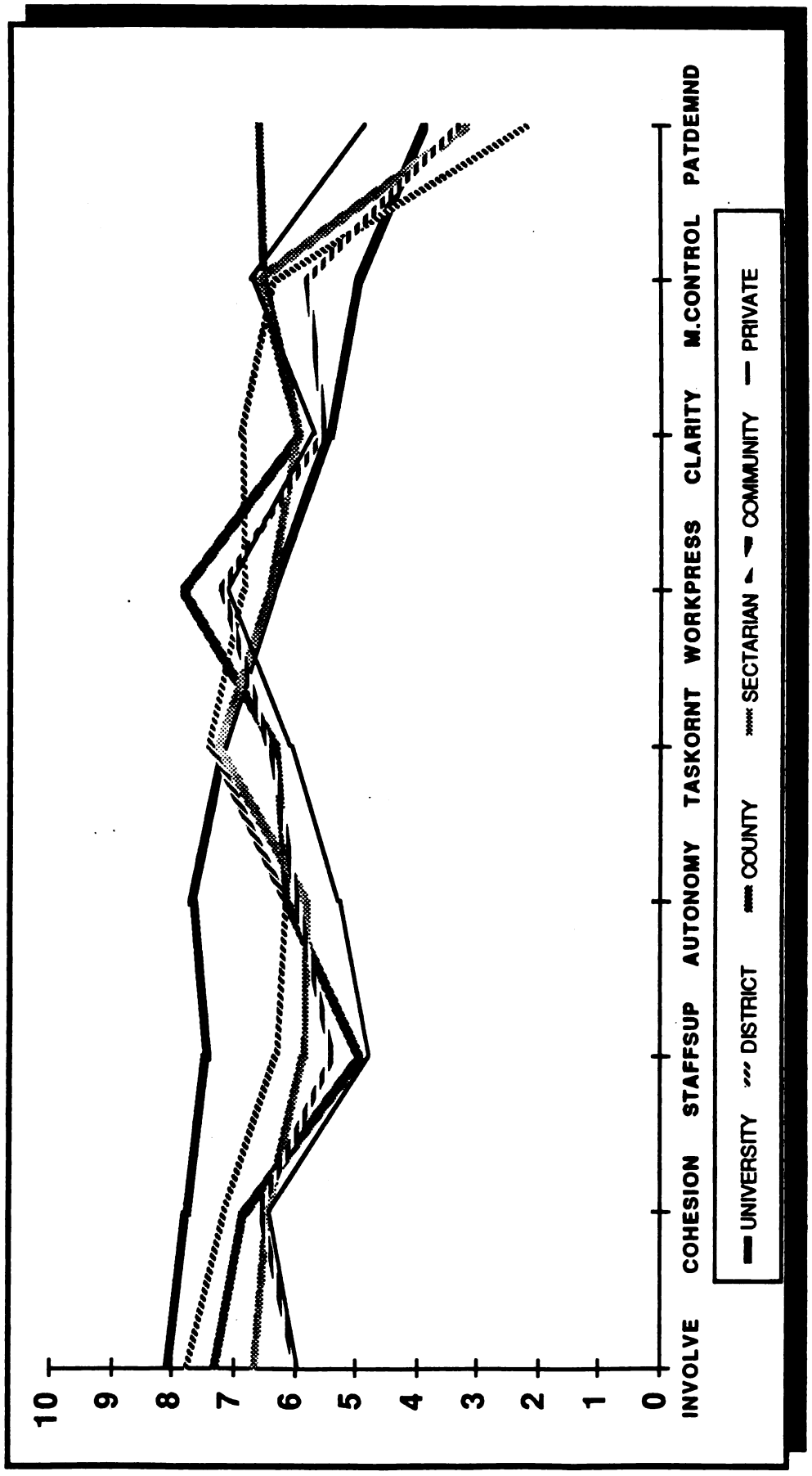

Figure 8. Mean Scores for Your Work Environment Scale Across the Six Study Hospitals.

Reward Systems

As indicated in Table 6, all of the study hospitals had adopted prevailing market standards as the basis for designing and administering their reward systems. These standards have largely been influenced by the collective bargaining outcomes gained by unionized registered nurses, particularly those represented by the California Nurses' Association. The four study hospitals described as offering pay and benefits which match market standards are those which currently have bargaining agreements with the California Nurses' Association. With respect to the two remaining hospitals, both exceeded area market standards by either offering nurses higher wages, more benefits, or both. For example, one of the two hospitals adopted the policy of paying nurses a wage that exceeds the market rate by five percent. As previously noted, the strategy of nonunionized hospitals has been to offer nurses both higher pay levels and greater numbers of benefits than generally reflected in area market standards. In 1984, salaries and employee benefits accounted for 65 percent of the nonunionized hospital's operating expenses or an amount in excess of 38 million dollars. By comparison, salaries and employee benefits accounted for less than 55 percent of the unionized hospital's operating expenses for fiscal year 1984.

The study hospitals were also found to differ somewhat in terms of the way monetary rewards were administered and distributed. Although none of the hospitals was found to to use a merit pay system exclusively, all six of the hospitals gave automatic raises to nursing

personnel for each additional year of service--known as the seniority system--and to use a job classification system to determine the position of the job in the hierarchy, such as Staff Nurse I, Staff Nurse II, etc. Only one of the study hospitals offered merit pay increases to nursing personnel based on outstanding performance appraisals from supervisors. The pay system of a second hospital appeared to be based primarily on seniority, but with some attention given to the classification system. The pay system in the remaining four hospitals were found to be primarily job or skill based, and also reflected an attempt of administration to match the pay rate of competing hospitals. In three of these institutions less than two percent of their employed staff nurses had advanced to pay levels beyond the Staff Nurse II category.

In summary, the findings tend to suggest that the reward systems of most of the study hospitals were more closely related to job level and seniority rather than to performance. Given their market orientation, these reward systems reflected relatively standard pay grades and pay ranges, standardized job evaluation procedures, and standardized promotion system. This finding implies that higher levels of pay tended to be associated with length of service and whatever the job-related skills were worth in terms of the marketplace. It also suggests that hospital nurses were relatively highly paid by working their way up a clinical ladder instead of having to move on to an administrative ladder in order to gain economic rewards. Moreover, the kind of market position that a hospital adopted with respect to its total compensation package also made a noticeable impact on member behaviors as well as the overall climate of the institution. For example, a standard policy

which calls for above market pay rates and benefits could contribute to the prevailing feeling in the institution that it is an elite institution, that staff nurses must be competent to be there, and that they are truly fortunate to be there. This perception of the function of reward systems was a recurring theme in the interview as noted in Table 7.

Career Mobility

Registered nurses seem to have specific aspiration about the goals they expect to achieve in their work settings. However, specific levels of aspiration vary according to individual differences in interests, motivation, and abilities. For example, individual differences have been noted in the desire and satisfaction of nurses relative to career advancement opportunities (Aiken et al., 1981; Poulin et al., 1983).

Current research on the causes of nursing turnover indicates that the problem lies not in the personal attributes nor in the motivations of individual nurses but in the design of hospital nursing jobs and career advancement opportunities (Beyers, Mullner, Byre & Whitehead, 1983 b; Wiseman, 1982). Solutions to the problem, therefore, are contingent on finding ways which facilitate the matching of nurses work-related aspirations to the staffing needs of hospitals over time. Career ladders, or clinical advancement systems, represent one approach which has the potential for accommodating both the career aspirations of nurses and the nursing resource needs of hospitals simultaneously.

Career ladder and clinical ladder systems are somewhat different but related concepts. Career ladder systems were designed to permit

nursing personnel to advance into different job categories or career tracks. By contrast, clinical ladder systems were generally limited to a single career track and structured to provide lateral advancement opportunities and recognition for nurses practicing at the bedside. Both types of ladders were based on nurse classification systems, which were designed to differentiate nursing personnel on the basis of graduated levels of skill and performance competencies. The number of levels and performance criteria are institution-specific, which provide a framework for classifying, evaluating, and advancing nurse employees. Each level represents increasing ability, accountability, responsibility, recognition, and remuneration. Finally, levels of performance are typically defined either in terms of the four areas of the nursing process or four nursing roles: clinical practice, administration, education, and research (del Bueno, 1982; Huey, 1982).

In general, the advancement systems for clinical and administrative nurses employed by the six study hospitals approximated the ladder structure addressed earlier. However, only two of the other study hospitals had a dual-track career ladder which offered nurses an opportunity for advancement according to administrative as well as clinical interests and competent performance. It was also found that unionized nurse employees of three of the study hospitals negotiated clinical ladders into their contracts. Since all of the study hospitals had clinical ladder programs, only findings related to these programs are presented in Table 6.

Table 6 suggests that the potential for clinical advancement in four of the study hospitals was relatively limited. For example, these

institutions were found to have three or less than three position levels for staff nurse progression while the other two institutions had four or five levels. The two hospitals that were described as offering low opportunities for advancement of staff nurses practicing at the bedside had clinical ladders that were based primarily on longevity and a combination of educational and experience requirements. Moreover, advancement to the highest clinical level such as Staff/Clinical Nurse III had been achieved by fewer than five staff nurses and tended to follow traditional lines relative to administrative positions such as the head nurse. It was further noted that in these two institutions, a lower proportion of baccalaureate prepared staff nurses appeared to have a minimal interest in clinical promotions as a valued reward.

The two study hospitals described as offering moderate advancement opportunities for staff nurses who desired to remain at the bedside had clinical ladders that contained three positions levels and well established promotional procedures for advancing eligible candidates into the Staff Nurse III classification. Thus far, more than five but less than 20 staff nurse employees of these two institutions had met the core criteria and performance expectations for advancement to Staff Nurse III. The two study hospitals identified in Table 6 as offering high advancement opportunities for staff nurses had clinical ladders that contained more than three position levels and promotional systems that included promotion reviews by peers, supervisors, and committees. In these two institutions, more than 20 but fewer than 100 staff nurses had met the core criteria and performance expectations for advancement

to Staff Nurse III. It should be pointed out that clinical ladders were implemented in these two institutions as an administrative strategy, rather than as a condition of collective bargaining agreements.

In summary, the findings indicate that considerable variation existed in the interpretation and implementation of clinical (or career) advancement systems across the six study hospitals. There was some evidence to suggest that this variation was partially influenced by a general lack of a long-term perspective on nursing resource development and utilization. For example, clinical ladder programs, with less than three position levels and without performance expectations for each clinical level, were among the more costly short-term nursing resource management strategies (del Bueno, 1982; Huey, 1982; Wiseman, 1982). In particular, promotion systems with only two position levels (e.g., probation and qualifying) offered little incentive for nurses who aspired to higher levels of clinical competence and expanded role performance. It would thus appear that lower turnover rates from nurses in several of the study hospitals may be partially due to expanded clinical promotion systems.

The importance of a long-term perspective on nursing resource management in contemporary hospital systems has been well documented. This perspective recognizes that present and future nurse employees are valued resources who require the same strategic considerations as other organizational resources. In this sense, hospitals that do not provide adequate promotional and career development opportunities for nurse

employees run serious risks of undesirable outcomes such as decreased performance, poor quality of care, and increased turnover.

Turnover

High turnover of nursing personnel is one of the most costly and disruptive problems encountered by hospitals across the country. Despite the reported abatement of the nursing shortage (Aiken, 1984), turnover rates for hospital nurses nationwide are exceptionally high, averaging anywhere from 20 to 70 percent annually (Aiken et al.; Beyers et al., 1983; Duxbury & Armstrong, 1982). California hospitals reported a nurse turnover rate of 17.4 percent in 1984, the lowest in years, but still costly in terms of the dollars lost by individual hospitals (California Hospital Association, 1985). For example, it has been estimated that the cost for each nurse leaving hospital jobs can easily exceed $2,500 in direct costs (Seybolt, Pavett, & Walker, 1978). Assuming an annual nurse turnover rate of 25 percent, a hospital with a staff of 400 nurses would incur a dollar loss of $250,000 annually (25% X 400 X $2,500).

High turnover rates among hospital nurses can also adversely affect the quality and quantity of nursing services, staff morale, group productivity, and overall institutional performance. When nursing positions are vacant, either patient admissions must be limited or the quality of nursing care compromised. In addition to disruptions in the continuity and quality of nursing services provided, turnover often contributes to greater instability in the work setting (Hall, 1983; Wolf, 1981).

Although turnover has traditionally been viewed as an undesirable consequence of employee job dissatisfaction, several authors have recently argued that turnover may have advantages for both the individual and the organization (Beyers et al., 1982; Dalton & Tudor, 1982). For example, turnover may benefit discontent employees by functioning as a viable alternative for coping with work-related stress. In addition to representing direct cost savings in employee wages and seniority pay or pension plans, turnover may also benefit the organization by promoting innovation and enchancing adaptation to changes in technology and related environmental contingencies. However, the utility of this approach clearly derives from an organization cost/benefit standpoint and, as such, requires achieving the optimal balance of retention and turnover costs. This suggests that certain levels of turnover may be desirable, but this level will vary from organization to organization (Dalton & Tudor, 1982). To the extent that turnover costs, direct and indirect, are excessive and exceed the benefit of turnover to the organization, a retention strategy might be more appropriate as well as cost effective in the long term.

As the findings presented in the case studies and Table 6 indicate, most of the study hospitals have experienced reductions in both operating bed capacities and nursing employees. In this respect, some of the hospitals' administrations have tended to view nurse turnover as a positive phenomenon and certainly more acceptable than having to resort to involuntary terminations and lay-offs. On the other hand, several hospital administrations appeared to have adopted a more proactive stance to nurse turnover as evidenced by their greater

investments in retention costs. For example, these institutions have typically invested more dollars in compensation and promotion systems that are oriented toward retaining nurses and creating a work climate that promotes and rewards higher levels of competent performance. However, it should be noted that no clear pattern emerged from the data to suggest that nurse turnover rates were a direct function of a specific set of attributes that distinguished one hospital from another. Rather, the findings tended to indicate that turnover was a function of the interaction between environmental, institutional, and individual attributes. Unionization, centralization, communication, monetary rewards, career mobility, and professionalization were the attributes that appeared to have the greatest impact on turnover rates from the standpoint of objective measurement.

Stability

Pfeffer and Salancik (1978) have developed a useful framework for understanding and examining the selection and tenure of directors of nursing in modern hospital settings. From a resource dependence perspective, these authors argued that the environment, with its contingencies, uncertainties, and interdependencies, strongly influences the distribution of power and control within the hospital setting. The resultant distribution of power and control affects both the selection and tenure of hospital executives. Hospital policies and structures are results of decisions affected by the distribution of power and control; therefore, executives who control hospital activities affect those activities and resultant structures. Finally, executives are a source

of control, and it does matter who is in control since control determines hospital activities and external relationships with its environment (Pfeffer & Salancik, 1978).

In general, research results to date support the resource dependence perspective. For example, Pfeffer and Salancik (1977) conducted a study on tenure of hospital administrators and found that high administrator turnover was related to poor hospital performance. However, there have been few investigations on the tenure of directors of nursing and how these roles within hospital settings have been affected by internal and external contingencies and pressures. Yet, it would seem that increased uncertainties or additional pressures that disrupt the provision of nursing services may eventually compromise the quality of patient care. This is likely to occur since directors of nursing are frequently the first line of defense against dysfunctional pressures from the external environment that may adversely influence the internal operations of the nursing department. High turnover of nursing executives, therefore, has implications for the stability of nursing service operations, the quality of patient care, and overall hospital performance.

As Table 6 indicates, four of the directors of nursing have been employed in their present hospital settings for a period of four or less years. Two directors of nursing have been with their respective hospitals for six or less years. Over a 10-year period (1974-1984), the tenure for directors of nursing in the six hospital settings averaged 2.5 directors per hospital. Three of the study hospitals had three directors of nursing and three had two directors of nursing during this

10-year period. Five of the directors of nursing were hired into the positions of associate or assistant hospital administrators with added responsibility for other clinical and support units within the hospital system. Two of the directors of nursing were prepared at the doctoral level and four were prepared at the masters level. The two doctorally prepared directors of nursing were found to have fewer years of tenure and to hold positions one level below (e.g., three levels as opposed to two levels down the hierarchy) the directors of nursing prepared at the masters level. All of the directors of nursing were members of the American Nurses' Association and the California Society of Nursing Service Administrators.

Overall, the directors of nursing in the present study were more highly educated and had greater corporate responsibilities than their predecessors. As noted above, only one nurse executive held the title of director of nursing. The other five nurse executives held titles such as vice-president for nursing, assistant vice-president for patient care service, associate hospital administrator for patient care services, and associate director of hospitals and clinics. One of the nurse executives held the title of adjunct professor and associate dean, school of nursing. The remaining five nurse executives held clinical titles, and served as nonsalaried clinical nursing faculty in schools of nursing in the area in which they were employed.

All of the directors of nursing perceived that their major responsibility was in their administrative role at the executive level of the organizational structure. Five of the nurse executives held responsibilities for the administration of two or three services as well

as nursing. Although all six of the nurse executives participated in budget and policy development at the administrative level, only three were found to be directly involved in decision-making and policy formulation at the corporate or institutional governance level. These three nurse executives were either members of governing board committees or strategic planning committees which included representation by hospital administration, medical staff, and governing board members. It was interesting to note that the expanded roles and functions of these nurses executives were not associated with longer tenure, higher academic qualifications, or more years of experience as directors of nursing services. Rather, environmental contingencies appear to have influenced their selection, placement, and function within these particular hospital settings. For example, the case study reports indicated that in each of these three hospital settings, environmental pressures provided the impetus for major organizational restructuring and, hence, the redistribution of power and control within the three hospital systems. In addition to the creation of new executive positions for planning and marketing expertise, administrative functions were redefined, and selections of new nurse executives were made to ostensibly make the institution's more aligned with their environments and internal and external demands. It was further noted that the administrations in these hospitals were described as being outward focused with emphasis on entrepreneurial and engineering activities (see Table 5).

At the microlevel, selection and tenure of the incumbent directors of nursing appeared to have resulted in nursing service activities and

structures that enhanced the stability of the nursing department in most of the hospital settings. For example, turnover of nursing staff was below the present statewide average of 17.4 percent in four of the settings. The changes in nursing leadership and improved stability in nursing service operations that ensued were also among the distinguishing characteristics that influenced the overall hospital ratings as indicated in Table 7. As previously noted, this rating represented the perceptions of three top level administrators interviewed in each of the six hospital settings. The rating was based on asking the administrators to identify the distinguishing characteristics of their respective institutions, thinking about the "ideal" hospital on a scale of one to ten (see Appendix B). Both the hospital administrators and associate/assistant directors of nursing noted that the leader behavior patterns of the incumbent nurse executives had been an important variable in creating a more positive work climate for nurses and in strengthening the reputations and competitive positions of the study hospitals.

The findings relative to staff nurse perceptions about the work climate within the six study hospitals provided additional evidence which partially supports the notion that the selection and tenure of directors of nursing affects the staff nurses' perceptions of their work environment as well as the stability of overall hospital operations. Figure 8 presents the mean scores on the nine subscales of The Work Environment Scale (WES) which was used to measure staff nurses' perceptions of their work situation within the six hospital settings. The scores represented the responses of a combined sample of 544

medical-surgical and critical care nurses who were employed by the six hospitals at the time of data collections for the present study. The Cronbach's alpha coefficient for the total Work Environment Scale was 0.87, with alpha coefficients for the nine subscales ranging from a low of 0.50 to a high of 0.80 (Bailey & Chiriboga, 1985). Since the subscales used different maximum values, the mean scores were transformed so that all of the subscales were on a scale of 0 to 10 (Range x Mean Score x 10).

The findings presented in Figure 8 indicate that, overall, the sample of critical care and medical-surgical nurses tended to perceive their respective work settings more positively than negatively on each of the subscales, with the possible exception of work pressure, management control, and patient demands. The results also indicated that only one group of staff nurses appeared to describe their work setting somewhat differently and more positively than the other five groups of nurses. For example, University Hospital nurses tended to rate their work setting substantially higher on staff support, highest on autonomy, and lowest on management control over employees. This finding was particularly interesting since turnover among staff nurse employees of University Hospital was found to be 24 percent in 1984.

In general, the findings in Figure 8 suggest that the selection and tenure of directors of nursing can have a major impact on both the stability of internal hospital operations and the work climate perceptions of nursing personnel. Since all six of the nurse executives were found to spend most of their time on either interpersonal or information role activities, they can be seen to enhance organizational

stability and work climate by reducing adverse or unnecessary pressures which disrupt the effective performance of nursing services. Interview data also supports the notion that each of the nurse executives utilized a variety of buffering mechanisms to protect nursing personnel from internal pressures and uncertainties which impact on the delivery of direct patient care. For example, several of the nurse executives restructured their departments to include positions for clinical nurse specialists and unit managers; others used formal and informal mechanisms to improve the processing, filtering, and dissemination of relevant information to the nursing unit level. Finally, most of the nurse executives delegated increasing amounts of authority for departmental operations to associate and/or assistant directors of nursing in order to more fully concentrate on their top administrative roles and buffering responsibilities at the executive or institutional level. In contrast to their predecessors, both the selection and tenure of the incumbent directors of nursing appeared to be related to external as well as internal variables.

Comparison of administrative and nurse staff perceptions of the work climate within the six hospital settings suggested that the incumbent directors of nursing have been quite effective in buffering their staff nurses from adverse internal and external pressures. As the findings in Table 7 and Figure 8 indicate, both the administrative and staff group perceived the work climates within the six hospital settings to be more positive than negative. There appeared to be considerable convergence between the two groups of perceptions on such factors as perceived work pressure and nurses' stress in the work place,

involvement, autonomy, and patient demands. For example, the quality of work climate ratings by administrative staff reflected the convergence of hospital and nursing administrators' perceptions of staff nurse autonomy and commitment, quality of the social and job milieu, and physical attractiveness and convenvience of the hospital setting.

In summary, the concept of organizational climate brings into focus the complexity of the individual-organization relationship. As the findings suggest, numerous environmental, organizational, and individual attributes interact to produce the quality of the work situation which is experienced and whch subsequently influences employee behaviors. The findings also indicated that work climates differ from one another and, as such, seemed to lead to somewhat different behavioral outcomes in terms of nurse turnover. In general, the findings suggested that the unique characteristics of each hospital, together with the actions and behavior of administration, strongly influence the work climate. Moreover, the findings give some indication that the selection and tenure of directors of nursing and their behaviors toward staff, as reflected in the departmental policies, practices, and structures that are implemented, represented an important determinant of work climate. Correspondingly, the findings further suggested that individual attributes such as needs, values, expectations, and abilities must be compatible with the prevailing work situation if desired outcomes are to be maximized. Thus, it would appear that once desired outcomes are identified, nurse executives can create work climates which will move the organization forward and attain these outcomes.

CHAPTER VI

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter summarizes the purposes and methodology of the study. Conclusions from the study findings, and implications for hospital and nursing service administration and for nursing education are also presented. In addition, recommendations are outlined for further research.

Purposes of the Study

The purposes of the study were to: (a) analyze the extent to which environmental conditions determined the structural-functional characteristics of contemporary, nonprofit acute care hospitals; (b) explore the relationships between selected hospital characteristics and the quality of the nurses' work climate; and (c) develop a descriptive data base for future theoretical and empirical work. The findings discussed in the preceding chapter indicated that substantial changes in structural-functional characteristics of the six types of modern hospital organizations have occurred as a result of changing environmental conditions. These changes have also influenced the work climate of nurses and subsequently their work attitudes and behaviors.

The conceptual framework for the study was derived from modern and contingency theories of administration and organizational behavior. The model which was developed and used to guide the study represented a synthesis of contingency viewpoints and, as such, suggested that the

nature and orchestration of health care services provided by contemporary hospital organizations were to a large extent dependent upon external environmental changes and pressures. The model further served to emphasize the multivariate nature of contemporary hospital organizations. The model also underscored the importance and value of integrating macro and micro levels of analyses to explore and describe specific characteristics and patterns of interrelationships among organizational variables. A paucity of conceptually-based research studies in relation to the problems, processes, and characteristics of acute care, nonprofit general hospitals provided the impetus for the study.

Methodology

The data base for the present study was generated from multiple sources and included: (a) focused interviews with 18 hospital and nursing administrators; (b) documentary analysis of hospital records and reports; (c) four months of field observations; and (d) questionnaires completed by a sample of 544 medical-surgical and critical care nurses who were employed by the six study hospitals at the time of data collection. Analysis of the data was guided by the theoretical propositions linking the variables of external environmental conditions, organizational context, structure, processes, and climate (see Figure 1, presented in Chapter II). The data were analyzed using descriptive techniques for the purposes of comparing the hospitals on pre-selected variables which were derived from the conceptual framework. Statistical procedures were used to determine if there were significant differences

among the six hospitals relative to the staff nurses' perceptions of their work environment.

Discussion of Conclusions

The Impact of External Environment on Organizational Context and Structure

Findings from the case study reports and interview data indicated that the impact of the external environment on nonprofit general hospitals has resulted in uncertainty and increasingly turbulent times for these organizations. After several decades of unprecedented federal subsidy for the expansion of hospital services and unquestioning reimbursement for the costs of those services, recent government regulations have been enacted to constrain growth and contain costs. As a result, hospitals have experienced a reduction in capital and a competitive market. These legislative initiatives were also accompanied by the following: (a) changes in the professional practice patterns of physicians; (b) new pressures from labor unions and consumer groups; (c) increased demands for more comprehensive services; and (d) substantial decreases in philanthropic support for nonprofit general hospitals. Survival has become a major concern for contemporary hospital organizations faced with the unpredictable and turbulent socioeconomic, regulatory, political, and competitive forces of the 1980s.

Other relevant findings presented in the previous chapter suggested that new prospective payment systems coupled with Medicare and Medi-Cal

cutbacks mandated that administrations of the six study hospitals comply with the new regulations, and operate under "cutback" management and competitive free-market practices. Concurrently, the issues of financial management, strategic planning, marketing, productivity, and human resources development have become major considerations in the administration and performance of these six institutions. Such considerations prompted several of these six institutions to rethink their health care roles in the community, redefine their missions and goals, and revise their strategies for future growth and development.

While shared service arrangements with other health care facilities and providers were among the strategies adopted by each of the study hospitals, vertical and horizontal integration, diversification, and formal merger with multihospital systems illustrate the major strategies that were more selectively pursued by the six institutions. The choice of strategies which were implemented by these institutions appeared to be strongly associated with their involvement and experience with strategic planning and marketing activities. In this respect, three of the hospitals studied shifted their administrative perspective from short-term capital expenditure planning to market oriented strategic planning. Strategic planning appears to have provided these institutions with the knowledge and creativity to capitalize on their strengths and to minimize their weaknesses.

The findings also support the underlying theoretical framework of the study and are summarized as follows: (a) there is no one best way to organize; (b) structure follows strategy; and (c) effective organizations develop adaptive structures that are congruent with the

environments in which they operate. For example, several of the study hospitals modified their structural configurations through mergers and joint ventures in order to strengthen and stabilize their positions in the face of changing environmental conditions. A number of the other study hospitals modified their internal structures by identifying issues, and by encouraging governing boards, hospital and nursing administrators, and physicians to jointly solve problems. Four of the study hospitals moved toward organic organizational forms, which are characterized by a high degree of horizontal differentiation and specialization of activities, a low degree of formalization, and a more dispersed or decentralized authority network (Kast & Rosenzweig, 1979). The basic organizational design of all six institutions reflected the traditional pyramidal form of bureaucracy since at successively higher levels there are fewer positions and administrators have broader responsibilities. However, it was noted that the structure of one of the study hospitals had entered into a merger agreement with another acute care facility and reflected an emerging matrix design.

Evidence on the relationship between centralization and professionalization strongly supported an inverse relationship between these two variables (Hage & Aiken, 19790; Hall, 1972; Hasenfeld, 1983; Heydebrand, 1973; Shortell & Kaluvny, 1983). However, the centralization-professionalization relationship appeared to be ambiguous in hospital settings since the indicators used for professionalization have frequently been based primarily on the educational preparation of physicians and nurses, rather than on the amount of authority inherent

in their respective professional roles. Thus, it was argued that the proportion of registered nurses employed within the nursing service departments of contemporary hospitals might more appropriately reflect the degree of professionalization exhibited by this employee group and, thereby, lead to more consistent results concerning the relationship between centralization and professionalization. When operationalized in this manner, the nursing staffs of five of the study hospitals were comprised of more than 70 percent professional and less than 30 percent nonprofessional nursing service personnel. Using the percentage of registered nurses and the percentage of board-certified/eligible physicians as indicators of professionalization led to an inverse relationship between centralization and professionalization in three of the study hospitals.

Although all of the study hospitals offered salary differentials for educational preparation of nurses, there was little evidence to suggest that the performance expectations for baccalaureate nurses were different from those for graduates of diploma or associate degree nursing programs in terms of written job descriptions. It was also concluded from the data that the percentage of baccalaureate nurses on staff was unrelated to the type of nursing care delivery systems in existence within the six institutions. For example, hospitals with lower percentages of baccalaureate prepared nurses were as likely to have implemented primary nursing on the same number of units as those hospitals who had higher percentages of baccalaureate prepared nurses. This inconsistency might be explained by the prevailing values of nurse managers or administrators within the six study hospitals.

Conclusions Related to Organizational Processes

Conclusions drawn from the case study and interview data reinforced the general contingency notion that integrating processes within contemporary hospital organizations tend to vary according to variations in strategy, structure, and people. In this respect, the processes or methods used to transform inputs into outputs in the six study hospitals tended to be influenced primarily by the type of ownership and control, type of administration, centralization, and professionalization of nursing staff. The data further indicated that the-state-of-the-art information gathering and analytic techniques for planning, managing, and evaluating nursing productivity in relation to process and outcome have only recently been recognized as being important to the overall effectiveness of the study hospitals.

Hospital and nursing administrators associated with four of the study hospitals appeared to perceive that ownership and governance mechanisms often impeded their ability to implement a more decentralized or less mechanistic organizational structure and to develop a more proactive as opposed to reactive stance in the existing health care market place. There was a general perception among administrators affiliated with three of the study hospitals that planning and decisions concerning the institution's strategy did not include more than perfunctory nursing involvement and only peripheral administrative staff involvement. Correspondingly, and partly as a function of ownership and control, the patterns of executive behaviors within these three hospital settings more closely approximated those associated with defender/reactor administrations (Miles & Snow, 1978). Work and

information flows within these hospital settings appeared to be more centralized, with limited nursing representation on executive level committees. In contrast, work and information flows within the three hospital settings which were described as having prospector/analyzer administration appeared to be less centralized, with greater nursing representation on executive level committees. More elaborate horizontal and diagonal communication patterns and committee structures were also associated with prospector/analyzer administrations.

Decentralized decision-making at the head nurse level was apparent in four of the six hospital settings. In these institutions, the head nurse prepared, defended, and managed the nursing budget at the unit level. However, the use of computer technology to enhance nursing practice and cost effectiveness in the form of validated patient classification systems was evident in only two of the study hospitals. Moreover, only one of the study hospitals had begun to systematically measure and relate the use of nursing resource to patients' diagnosis groupings (DRGs).

Findings from the study also led to additional conclusions concerning the impact of collective bargaining by nurses on the interactional and influence patterns within the six study hospitals. First, organizational structures and processes had been altered to ensure ongoing participation by staff nurses in institutional decision-making and policy-making. In this respect, bargained agreements contained provisions for creating interdisciplinary committee structures to deal with professional practice issues in an ongoing fashion. Second, administrative authority had been altered but not necessarily

eroded by the presence of collective bargaining agreements and unions in the hospital settings. Third, the role expectations of administrators and supervisors were expanded to include a working knowledge of labor relations. For example, in the five unionized hospital settings, contract administration became an increasingly important function of nurse managers. However, perceptions of nurse administrators toward collective bargaining by nurses remained largely negative. For example, directors of nursing were seldom at the bargaining table as members of the management team.

Conclusions Related to Work Climate

The fourth set of conclusions derived from the study findings related to the work climate of nurses within the study hospital settings. Hospital and nursing administrators perceived the nurse-physician relationships within each of their respective institutions to be "quite good" and markedly improved during the last few years. Five groups of hospital and nursing administrators described the overall quality of nurses' work climate to be above average, whereas the work climate in one of the hospitals was characterized as being average.

The reward systems and career mobility programs of the study hospitals have been influenced by the collective bargaining outcomes gained by unionized nurses. Consequently, the salaries of nurses appeared to be highly competitive, with differentials paid for experience, education, shift work, and clinical ladder advancement.

However, pay and promotion systems implemented by most of the study hospitals appeared to be more closely related to job level and seniority rather than to performance. This might be explained by five of the study hospitals having contracts with unions.

Career mobility opportunities for staff nurses employed by the study hospitals appeared to be rather limited. Only two of the six institutions had implemented dual-track career ladders which allowed nurses an opportunity for advancement according to administrative as well as clinical interests and competent performance. Clinical ladder programs in four of the study hospitals had no more than three position levels for staff nurse progression. It was also noted that less than 30 staff nurse employees of these four institutions had met the core criteria and performance expectations for advancement to Staff Nurse III. The variations in the interpretation and implementation of career advancement systems across the six hospitals might be partially explained by the general lack of a long-term perspective on nursing resource development and utilization. Clinical ladder programs with less than three position levels and operating with performance expectations for each clinical level are among the more costly short-term nursing resource management strategies besides offering little incentive for nurses who aspire to higher levels of clinical competence and expanded role performance (del Bueno, 1982).

Nurse turnover rates in most of the study hospitals have declined to the lowest percentage figures in years. However, no clear pattern emerged from the data to suggest that nurse turnover rates were a direct function of a specific set of attributes that distinguished one hospital

from another. Rather, lower turnover rates appeared to be a function of the interaction between environmental, institutional, and individual attributes.

The selection and tenure of the directors of nursing in the study hospitals appeared to have resulted in nursing service activities and structures which enhanced the stability of the nursing department in most of the hospital settings. Both hospital administrators and associate/assistant directors of nursing perceived the leader behavior patterns of the directors of nursing as being an important variable in creating a positive work climate for nurses and in strengthening the reputations and competitive positions of the study hospitals. Results of the analysis of the questionnaire data generated from staff nurse employees about their work environment provided additional evidence that partially supports the notion that the selection and tenure of directors of nursing affect the quality of the work climate as well as the stability of overall hospital operations. Since directors of nursing spend a great deal of time on either informational or interpersonal role activities, they were perceived to enhance organizational stability and work climate by reducing adverse and/or unnecessary pressures and uncertainties that disrupt the effective performance of nursing services.

Summary of Conclusions

The results of the present study appear to have particularly supported a basic premise of modern contingency theory relative to

organizations and their environments. Contingency theory contends that organizational behavior is a complex variable, which is affected by interdependent relationships which may differ because of specific situational factors. For example, in the present study different hospital organizations required the application of different administrative strategies and leadership approaches to enhance their potential for successful organizational performance and effectiveness.

The findings also supported the notion that organizational climate is a product of numerous external environmental, contextual, and internal organizational factors which are subject to some degree of control or influence by administration. Furthermore, the findings implicitly indicated that organizational climate and effectiveness may be related to one another. A favorably perceived climate carried with it the potential to influence the effectiveness of individuals, groups, and eventually the total organization. However, it is important to note that climate is more a function of how the individual perceives it rather than an objective reality. Consequently, administrators should not assume that they have been instrumental in creating a positive or favorable climate; but should obtain data as to how the employees view the climate of the organization.

In addition, the following general conclusions can be drawn from the findings:

- The study hospitals can no longer be described as secure, freestanding health care organizations.
- In the current era of rapid and dramatic change, these six hospital systems were perceived to be engulfed with turbulence, uncertainty,

competition, loss of state and federal monies, declining bed occupancy rates, and cost cutting.

- The six study hospitals were found to be involved in reshaping their missions, strategies, use of resources, reward systems, and community relations.
- New business and marketing strategies seemed to have become the "order of the day".
- Government regulations, such as Prospective Payment Systems, appeared to be forcing hospitals to balance costs with quality of patient care services.
- Affiliations or mergers were strategic options instituted in one-third of the study hospitals.
- New health care ventures such as home health care services were strategic choices pursued by two-thirds of the study hospitals.
- Collective bargaining activities of registered nurses appeared to be an important variable impacting on the structural, functional, and work climate characteristics across the six study hospitals.

Implications

As the conclusion suggested, contemporary acute care hospital organizations are systems in a profound state of transition. Within the last decade, many of the traditional structural and functional characteristics of these health care institutions have been altered to reflect the current trend toward corporate organizational structures and accompanying administrative practices. This transition from mechanistic

organizational cultures toward more complex and organic organizational forms has a number of implications for nursing service administration and nursing education.

Implications for Nursing Service Administration

Since nursing service administration is concerned with the goals of professional nursing practice, the processes and resources utilized for achieving these goals, and the various systems and subsystems through which nursing services are delivered, findings from the study indicated that nursing service administrators need to have a broad knowledge base. The knowledge base should encompass theories and practices from the administrative management sciences, the fields of economics and systems analysis, and the discipline of nursing.

The structuring, planning, and managing of systems which are designed to achieve the goals of professional nursing practice continue to be the ultimate and unique concern of nursing service administration. However, the expanded role expectations of contemporary nursing service administrators demand that new designs of more functional systems be created to assure greater access to the delivery of care, more coordinated efforts of the management team, and more cost-effective health care services. As the findings of this study suggested, nursing service administrators need to be sensitive to a variety of factors, both inside and outside the hospital setting, relative to creative designs of health care delivery and their ultimate effectiveness. Among these factors are: hospital type and mission; work force composition;

labor-management relations; use of new technologies; structures and work processes; and the social, cultural, economic, and political environment in which the hospital operates.

The rapidly changing external environment in the health care industry has prompted the need for nursing service administrators to examine ways in which organizations and administrative theories can provide them with new knowledge about the ways organizations function, the way behavior occurs in organizational settings, and the ways in which behavioral responses can be influenced by various administrative actions. Perspectives limited to the internal organizational processes or which fail to relate hospital systems and subsystems to their environments and component parts are no longer adequate for effective administrative behavior. Hence, nursing service administrators need to adopt modern contingency approaches to organizational and administrative behavior. Concurrently, the notion that the design of hospital and nursing management systems is related to situational factors has become more widely recognized. Additionally, nursing service administrators need to perceive one of their major functions as agents of change when present designs or management systems become obsolete.

Findings from the present study indicated that a number of forces have created strain on the more traditional vertical pyramidal health care structures with relatively fixed functional units. In particular, the new prospective pricing systems have forced a critical review of human resources and productivity in nursing service departments of acute care hospitals. As a consequence, additional pressures are forcing nursing service administrators to consider alternative forms of

organizational design which permit more effective and efficient use of their resources. Systems and matrix designs are two such alternatives which have been used effectively.

Both the systems and the matrix organizational structures are more flexible and adaptive than the traditional structure, and they are appropriate in situations where there is continued growth and change. Both structures provide for meeting situational contingencies and dealing with increasing specialization of nursing services since decision-making is decentralized throughout the structure to the level most directly involved. Thus more accountability or control is distributed throughout the structure which, in turn, facilitates change more readily. Both designs also enhance the work climate of nurses by promoting professional autonomy, individual creativity, and collaborative relationships among diverse groups of health care providers. Lastly, systems and matrix designs foster organizational renewal and innovation by emphasizing more adhocracy, temporary arrangements, and greater participation by personnel in total operations, and do indeed have implications for nursing service administrators.

With change becoming a dominant theme in contemporary society, an adaptive, responsive organizational structure and flexible administrative practices appear to be critical to effective performance of hospitals and their nursing service departments. Effective nursing service administrators need to depend increasingly upon the ability to create organizational climates which bring human potential, commitment, and productivity to the surface.

The results of the present study suggested that various environmental and organizational characteristics influence the climate or work setting of a particular organization and that climate, together with certain personal characteristics, influence motivation and performance of the worker. Unionization, economic factors, and job market factors are also relevant environmental determinants of organizational climate. Individual needs, values, abilities, and career aspirations are among the personal characteristics which seem to influence an organization's climate. Finally, both formal and informal internal characteristics of an organization play an important role in determining the quality of the climate in organizational settings. Among these internal factors which have relevance to organizations are: the formal and informal structures; leadership patterns; quality of supervision; administrative styles; and other related formalized policies, procedures, and practices.

The views of organizational climate which have just been presented have major implications for nursing service administrators who are presently under intense pressure to seek ways to improve nursing productivity while attending to consumer demands for more cost effective services as well as union and worker demands for increased economic benefits. The behavioral implications are evident in nurses' perceptions of the work climate which may affect job attitudes, absenteeism, turnover, and quantity and quality of work performance. To the extent that climate influences the behavior of nursing personnel, it is a critical determinant of overall hospital performance as well.

While the characteristics of each of the study hospitals were unique, there were some similarities of problems within each of the settings. When the similarities were placed within the context of the total problem, they provided insights, suggested cause-and-effect relationships, and pointed to tentative solutions or frameworks for dealing with both existing and new problems of a similar nature. For example, findings from the present study and other research studies suggested that the most favorable climates for productivity and commitment were ones that emphasized and rewarded clinical competence, encouraged personal goal setting, stressed participatory management, facilitated career development, provided positive motivation, and supported the notion of professional autonomy and accountability. To create a favorable climate, however, a systematic concern of nursing service administrators for numerous complex and interrelated variables which are unique to the specific situation was required, and this highlighted the need for theory-based administrative practice. It also called attention to the need for greater involvement by nursing service administrators in the ongoing development of their analytic, conceptual, technical, and interpersonal skills. These skills cannot be taught; rather, they "are developed through practice and through relating learning to one's personal experience and background" (Katz, 1974, p. 14).

In summary, nursing service administration has become more important and sophisticated as organizations have become more complex and as the turbulence and uncertainty of the external environment have increased. Additionally, the trend toward requiring administrators to

consider ethical issues, service to society, and the quality of organizational life has created new challenges for those who perform the work of administration in contemporary acute care hospital settings. To meet these challenges, nursing service administrators will need to place greater emphasis on improving nursing productivity through creating more effective work climates and through strategic staffing, planning and management. Regardless of the specific approach adopted, there can be little doubt that nursing service administrators will have to be increasingly knowledgeable about organizational behavior, organization-environment relations, and about the work of administration.

Implications for Nursing Education

The preparation and training of nursing service administrators have become a subject of increasing interest in recent years. This increased attention is related to a number of factors, both within and external to the profession. Among these factors are: unionization; nursing supply and demand issues; extended role and expected competencies of the nurse executive; new consumer expectations and demands; more competition for consumers; and new state and federal government regulations.

The findings from this study reinforce the need for graduate education programs in nursing service administration to promote effective administrative performance by designing curriculums to include the following areas of academic study: organization and administrative theories; communication and change theories; nursing theories and issues; health care systems, politics, and policy; leadership and decision theory; information systems and computer science; labor

relations; strategic planning and management technologies; financial and personnel management; and research methods. Graduate study in nursing service administration should also include multiple opportunities for students and/or practitioners to relate administrative theories, concepts and practices to the realities of the work setting. It is further suggested that an administrative residency be a requirement for masters' level students seeking first-line positions in acute care hospital settings, and that residency experiences be recommended for doctoral candidates in the specialty area of nursing administration.

Recommendations for Future Research

Since the findings of the present study suggested that the study hospitals were in a state of change, cost-cutting, declining resources, turbulence, and transition, it would seem that new ways need to be found to deliver cost-effective and quality patient care service. The study findings also indicated that administrators can no longer use traditional approaches in dealing with the current pressures to survive. Objective and reliable information regarding organizational design needs to be used as hospitals and nursing service redefine their mission and restructure the organization. As the external environment, within which hospitals operate, becomes more turbulent and uncertain, it is imperative that innovative and responsive organizational designs and administrative practices be instituted.

Hospitals in general, and nursing service administrators in particular, will need to reply increasingly on theory-based research to

enhance their understanding of the relationships between and among the complex sets of variables with which they must work as they deal with delivering quality and cost-effective nursing services. Recommendations for future research include the following:

1. Further research is needed to explore the impact of hospital restructuring on: (a) the design and functioning of the nursing service department; (b) the role expectations of nursing service administrators and managers; and (c) the adaptive capacity of clinical nursing professionals in emerging corporate or multihospital systems.

2. The concept of organizational climate needs to be refined and more systematically examined in relation to behavioral outcomes which are both economic and substantive in nature; for example, the relationship of climate variables on work performance and work satisfaction of nursing service personnel.

3. The behaviors of professional nurse employees in union and nonunionized hospital settings as they relate to job performance and turnover need to be studied to determine if there are differences. The nurses' perceptions of the work climate in union and nonunionized hospital settings should also be explored.

4. The selection and tenure procedures for directors of nursing or the senior nurse executive in hospital settings need to be systematically examined in relation to the selection and tenure of hospital administrators and other members of the administrative staff.

5. Comparative studies of the effectiveness of different patterns of organizational arrangement and administrative practices relative to

hospital nursing service departments are urgently needed in order to address the organizational design and human resource management problems confronting contemporary nursing service administrators.

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APPENDIX A

CONSENT FORMS TO ACT AS A RESEARCH SUBJECT

HOSPITAL CHARACTERISTICS AND THEIR RELATIONSHIP TO
THE QUALITY OF NURSES' WORK CLIMATE

INFORMATION SHEET FOR CONSENT TO ACT AS A RESEARCH SUBJECT

Purpose:

You are invited to participate in a study which will assess the physical plant, environmental context, and socioeconomic characteristics of the hospital in which you work.

Participation:

If you agree to participate, Darlene A. Anderson, a doctoral candidate at the University of California, San Francisco, will be observing a meeting in which you will be an active participant. You are free to withhold your permission to be oberved and to refuse to take part in the study.

Compensation:

You will not be compensated for your participation.

Benefits & Risks:

There will probably not be any direct benefit to your from participating in this study, but the information you provide may contribute to the understanding and resolution of the current nurse-related problems (e.g., stress and burnout, turnover, and absenteeism) in hospital settings. It is anticipated that there will be no risk to you.

Confidentiality:

Confidentiality of all data will be protected as far as is possible. Date will be interpreted and reported in aggregate form so the anonymity of each individual respondent is preserved.

INFORMATION SHEET FOR CONSENT TO ACT AS A RESEARCH SUBJECT

(continued)

If you have any questions about this study or your participation, please contact me at (415) 763-4405. Or questions can be addressed to the Human and Environmental Protection Committee's office, Clinics 116, University of California, San Francisco, California 94143, telephone (415) 666-1814 from 8:00 A.M. to 5:00 P.M. Monday through Friday.

HOSPITAL CHARACTERISTICS AND THEIR RELATIONSHIP TO
THE QUALITY OF NURSES' WORK CLIMATE

CONSENT TO ACT AS A RESEARCH SUBJECT

Purpose:

You are invited to participate in a study which will assess the physical plant, environmental context, and socioeconomic characteristics of the hospital in which you work.

Participation:

If you agree to participate, you will be asked to answer questions and/or corroborate the accuracy of descriptive data gathered from hospital documents and observations concerning this hospital setting. You will also be asked to answer a few questions about yourself and your professional/experential background. Participation is completely voluntary. You have the option of refusing to answer any specific question or to withdraw your consent at any time. The interview will require about forty minutes (or less) of your time.

Compensation:

You will not be compensated for the interview.

Benefits & Risks:

I cannot guarantee that there will be any immediate benefit to your being interviewed but the information you provide may contribute to the understanding and resolution of the current nurse-related problems (e.g., stress and burnout, turnover and absenteeism) in hospital settings. It is anticipated that there will be no risk to you.

CONSENT TO ACT AS A RESEARCH SUBJECT

(continued)

If you have any questions about this study or your participation, please contact me at (415) 763-4405. Or questions can be addressed to the Human and Environmental Protection Committee's offfice, Clinics 116, University of California, San Francisco, California 94143, telephone (415) 666-1814 from 8:00 A.M. to 5:00 P.M. Monday through Friday.

Signature	Date	Signature of Investigator or Witness

APPENDIX B

THE INTERVIEW PROTOCOL

INTERVIEW PROTOCOL

A. Philosophy, Mission, Goals

1. What, in your opinion are some of the distinguishing characteristics of your hospital?

2. As you think about the "ideal" hospital, how close do you perceive your hospital would come to the ideal?

3. If you were to rate the "ideal" hospital on a scale of 1-10, what rating would you give your hospital?

4. What is the overall mission of your hospital?

5. What steps have been taken in the last year or so to improve the quality of patient care?

INTERVIEW PROTOCOL

B. Organizational Context Dimension

1. Is there anything about this hospital's history which, in your opinion, has had a major influence on its growth and development?

2. What are the special health care needs of the community that your hospital serves? Are they being adequately met? If not, what specific barriers exist to meeting these needs?

3. Who are the major interest groups that influence the types of services available in this community?

4. To what extent do you have to compete with other hospitals for patients? Please describe.

5. (a) What do you consider to be some of the important ways in which this hospital deals with issues related to unionization?

   (b) How would you descibe the impact of nurses' collective bargaining activities on this hospital's management practices and personnel policies?

INTERVIEW PROTOCOL

C. Organization-External Environment Relations Dimension

1. In your opinion, what external factors have had the greatest impact on your hospital?

2. What structural changes have you made (if any) to deal with these external factors?

3. (a) Does your hospital's board of directors/trustees/regents have a major role in deciding what you should do to accommodate changes in the external environment? (If yes, please give me some examples.)

(b) What suggestions have your board of directors/-trustees/regents made relative to changes in your organization?

4. What do you consider to be the single most important factor affecting major decisions about this hospital's future?

INTERVIEW PROTOCOL

D. Organizational Structure/Process Dimension

1. How would you describe the structure of the organization?

2. To what extent is the nursing department an important part of the goverance and management systems of this hospitals? Please describe.

3. Does the size of this hospital create any particular problem regarding the accomplishment of its mission and goals? (If yes, what?)

4. To what extent do you feel this hospital has been able to achieve unity of purpose in the efforts of its many groups, departments, and individuals? (Please describe)

5. (If not mentioned) What formal or informal mechanisms have been established to strengthen relationships between nurses, physicians, and administration?

INTERVIEW PROTOCOL

E. Organizational Performance Dimension

1. When assessing the effectiveness of your organization, do you feel that your governing board employs different criteria than those used by yourself, the Nursing Service Director, or the Chief of Medicine? If so, how do they differ?

2. How do you measure the quality of patient care in your hospital?

3. What are the most difficult problems you face in implementing the DRG's?

4. What is or do you perceive to be nursing's role in dealing with DRG's.

INTERVIEW PROTOCOL

F. Organizational Climate Dimension

1. How would you describe the working relationships of nurses and physicians in this hospital?

2. How well do physicians and nurses collaborate in patient care management and decision making, compared to other hospitals?

3. How would you descibe the overall work climate of the hospital?

4. To what extent do you think your nurses are stressed on a scale of 1-4?

1 ..... not at all	3 ..... a lot
2 ..... some (somewhat)	4 ..... overwhelmed

5. What are some of the stressors?

6. Do you have a stress managment program? Describe.

7. How is clinical excellence of nurses rewarded?

INTERVIEW GUIDE (DIRECTORS AND ASSOCIATE DIRECTORS)

1. What do you consider to be the strengths of Nursing Service in your hospital?

2. What are some of the major problems you face as a Director (or Associate Director) of Nursing?

   Note: If recruitment is not mentioned, ask about vacancies and difficulties in recruitment.

3. How would you describe your management style?

4. What changes would you like to make to improve the quality of patient care and the satisfaction of nurses?

5. (If not mentioned) What are you doing to implement the DRG and the Prospective Price Setting System?

6. How has bed utilization influenced the use of nursing resources?

7. What particular programs or practices have you found to be most effective in improving the length of tenure of staff nurses?

APPENDIX C

"YOUR WORK ENVIRONMENT"

YOUR WORK ENVIRONMENT

There are 68 statements in this section. They are statements about the place in which you work. The statements are intended to apply to all work environments. However, some words may not be quite suitable for your work environment. For example, the term "supervisor" is meant to refer to the head nurse, manager, department head, or the person or persons to whom an employee reports. Please answer for your unit in general, regardless of whether you are a staff or head nurse.

You are to decide which statements are true of your work environment and which are false.

True - Circle the " T " when you think the statement is TRUE or mostly TRUE of your work environment.

False - Circle the " F " when you think the statement is FALSE or mostly FALSE of your work environment.

PLEASE BE SURE TO ANSWER EVERY STATEMENT.

T F 1. The work is really challenging.

T F 2. People go out of their way to help a new employee feel comfortable.

T F 3. Supervisors tend to talk down to employees.

T F 4. Few employees have any important responsibilities.

T F 5. People pay a lot of attention to getting work done.

T F 6. There is constant pressure to keep working.

T F 7. Things are sometimes pretty disorganized.

T F 8. There's a strict emphasis on following policies and regulations.

T F 9. Our jobs can be strongly affected by the political situation.

T F 10. Our patients are often argumentative.

T F 11. There's not much group spirit.

T F 12. The atmosphere is somewhat impersonal.

YOUR WORK ENVIRONMENT - continued

T F 13. Supervisors usually compliment an employee who does something well.

T F 14. Employees have a great deal of freedom to do as they like.

T F 15. There's a lot of time wasted because of inefficiencies.

T F 16. There always seems to be an urgency about everything.

T F 17. Employees generally have good relations with patients.

T F 18. Our jobs are reasonably secure.

T F 19. Patients are often demanding and give us a hard time.

T F 20. A lot of people seem to be just putting in time.

T F 21. People take a personal interest in each other.

T F 22. Supervisors tend to discourage criticisms from employees.

T F 23. Employees are encouraged to make their own decisions.

T F 24. Things rarely get "put off till tomorrow."

T F 25. People cannot afford to relax.

T F 26. Rules and regulations are somewhat vague and ambiguous.

T F 27. People are expected to follow set rules in doing their work.

T F 28. People seem to take pride in the organization.

T F 29. Employees rarely do things together after work.

T F 30. Supervisors usually give full credit to ideas contributed by employees.

T F 31. People can use their own initiative to do things.

T F 32. This is a highly efficient, work-oriented place.

T F 33. Nobody works too hard.

T F 34. The responsibilities of supervisors are clearly defined.

YOUR WORK ENVIRONMENT -continued

T F 35. Supervisors keep a rather close watch on employees.

T F 36. People put quite a lot of effort into what they do.

T F 37. People are generally frank about how they feel.

T F 38. Supervisors often criticize employees over minor things.

T F 39. Supervisors encourage employees to rely on themselves when a problem arises.

T F 40. Getting a lot of work done is important to people.

T F 41. There is no time pressure.

T F 42. Rules and regulations are pretty well enforced.

T F 43. Employees often eat lunch together.

T F 44. Employees generally do not try to be unique and different.

T F 45. It is very hard to keep up with your work load.

T F 46. Supervisors are always checking on employees and supervise them very closely.

T F 47. Employees who differ greatly from the others in the organization don't get on well.

T F 48. Supervisors expect far too much from employees.

T F 49. Employees are encouraged to learn things even if they are not directly related to the job.

T F 50. Employees work very hard.

T F 51. You can take it easy and still get your work done.

T F 52. Fringe benefits are fully explained to employees.

T F 53. Supervisors do not often give in to employee pressure.

T F 54. It's hard to get people to do any extra work.

T F 55. Employees often talk to each other about their personal problems.

YOUR WORK ENVIRONMENT -continued

T F 56. Employees discuss their personal problems with supervisors.

T F 57. Employees function fairly independently of supervisors.

T F 58. There are always deadlines to be met.

T F 59. Rules and policies are constantly changing.

T F 60. Employees are expected to conform rather strictly to the rules and customs.

T F 61. The work is usually very interesting.

T F 62. Often people make trouble by talking behind others' backs.

T F 63. Supervisors really stand up for their people.

T F 64. Supervisors meet with employees regularly to discuss their future work goals.

T F 65. There's a tendency for people to come to work late.

T F 66. People often have to work overtime to get their work done.

T F 67. Supervisors encourage employees to be neat and orderly.

T F 68. If an employee comes in late, he/she can make it up by staying late.