Organizational Complexity in Family Practice: A Sociological Model of a Family Practice Group

John M. Tudor, Jr, MD
Salt Lake City, Utah

The growth of a family practice group is presented as a case study. Enlarging size and increasing functions require organizational change—from solo to collegial to bureaucratic to political systems. Organizational theory distinguishes between the characteristics and functions of individual, collegial, bureaucratic, and political organizations. Different styles and strategies are appropriate at different stages.

The role of behavioral sciences in family medicine has, for the most part, been limited to the application of social and psychological knowledge to the understanding and solution of problems seen among patients, their families, and their communities. Medical sociology as a discipline has primarily investigated the effects of illness and health upon society; a number of authors have also studied the relationships between health-care professionals and institutions.

Gallagher,[1] in his description of the functioning of medical systems, has defined sociology as a noneconomic description of behavior. This focuses attention on nonremunerative interpersonal relations. Abrahamson[2] discusses the relation of professional to organization primarily in terms of the social behavior of individuals and groups. In a short paper about the political environment of the hospital, Barton[3] describes the conflict of competing interest groups or individuals, as the conflict affects the course of a single emergency psychiatric admission.

Somers[4] has written several papers and contributed to a number of studies of the operation of the health-care system. The organization of the hospital has been a focus because of the relatively clear-cut administrative channels. Careful observation of the internal organization and external relationships has indicated that the hospital as center of the system is not really simple or efficient. Arguments over the "corporate practice of medicine" have never been resolved, but instead have blurred into problems of corporate control. The so-called health-care team model is described as a model lacking in structure. Much effort and discussion have been committed to role, rank, and relationship within the team without an acceptable result.

From the Department of Family and Community Medicine, University of Utah, College of Medicine, Salt Lake City, Utah. Requests for reprints should be addressed to Dr. John M. Tudor, Jr, Department of Family and Community Medicine, University of Utah Medical School, 50 North Medical Drive, Salt Lake City, UT 84132.

Theory

So long as one individual could provide for himself all that he needed, there was no basis for a theory of organizations. Even when one related to *one* other in barter, trade, or friendship for the purpose of sharing or assisting in work, the exchange was direct and did not involve groups. There was no need for rules, organizations, or delivery systems. A truly independent solo physician at the turn of the century could handle all of his business and maintain his practice as a series of personally managed transactions. Such simple arrangements are rare today.

When one individual began to relate to others and contacts passed beyond random personal interactions, the group so formed frequently organized into a set of equals. This tribal or *collegial* unit made decisions together, and one of those decisions was to select an individual to act for the group. The level of responsibility of the other members remained roughly equal.

With increasing growth of the organization there was division of labor and delegation of leadership functions to others with the development of a more rigid system of rules to specify allowable actions. This *bureaucratic* structure is formal, hierarchical (ranked), and tends to be stable.

When multiple units with overlapping or conflicting value systems and rules came together, as in governments, a different organizational structure came into being in which no one group or person held full power. Decisions were made by the bargaining of one group with another. Change was accepted as a requirement for agreement in order to meet some of the needs of the multiple (pluralistic) power groups. This type of organization is called *political.*

Health-care organizations, ranging from solo practice to regional health administrations, share many of the described characteristics. Health education organizations have been observed also, which represent each of the levels named. In some circumstances one program or department will pass through several such organizational levels. Familiarity with a theory or theories of organization should be useful in understanding and assisting in the growth of programs and departments.

Physicians have become as dissatisfied with the health-care system as have the health planners and the general public. Criticisms of the health-care "non-system" have become a driving force toward National Health Service. How the individual physician views the health-care system depends upon his/her philosophy of medicine and upon the outside influences of the economic and political system.

Many physicians have chosen a medical career based on concepts of independence and self-determinism. Observations of practice and practice profiles, however, show that from five to 35 percent of a private physician's time is spent in administrative tasks. This author believes that many physicians who are dissatisfied with the system have difficulty identifying for themselves a responsible, cooperative role in a complex system.

"No one practices alone, even in solo practice," is an aphorism designed to emphasize to the student or resident his inevitable involvement in bureaucratic and political health-care organizations. Medical practice increasingly requires the coordination of technical skills and cooperation of many persons often centered around the hospital.[5]

Method

This case study describes the growth of a small-town family practice group. A model of organizational growth will be presented with examples from the observation of practicing groups. The evolution of medical practice from simple to complex will not be reversed by the family practice movement, but rather family physicians must prepare themselves to deal with complex organizational relationships.

Personally observed cases have been selected as examples of applicable sociologic theory. The observations are not being used to overgeneralize in order to create a new theory. The theories presented already exist and will be referenced.

Detailed observations, which are summarized in the case study, are an acceptable and recognized study procedure in the social sciences.[6] Bennis has pioneered the presentation of personal knowledge (in an academic setting) as a case history.[7] Whyte has reported he was "seeking to build a sociology upon observed interpersonal events."[6]

The practice group described has some unique features but bears reasonable similarity to physicians, groups, and communities observed in other states.

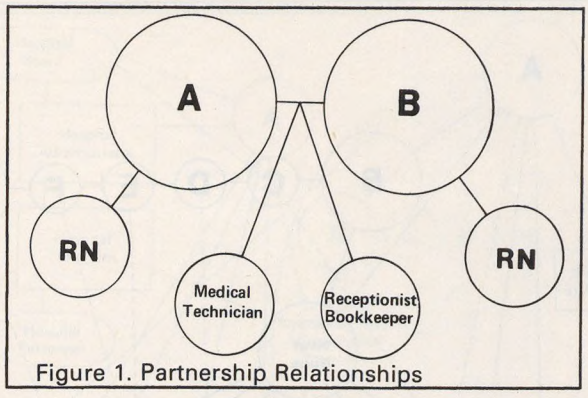

Figure 1. Partnership Relationships

Case Study

Caketown is a semi-rural community in the same county as a major midwestern university medical school. Caketown has a number of stable industries including a major testing laboratory, small machining companies, and a factory which produces cake mixes. It is surrounded by recreational areas of glacial ponds and hills, which are heavily populated with campers in the summertime. Patients come to the practice from as far as 25 miles west and 40 miles north of the community. A number of patients bypass the university hospital, coming from communities further east. Although the town population is less than 5,000 persons, the service area, thus defined, encompasses a population of more than 100,000 persons.

The Caketown Medical Center is composed of a 110-bed community hospital, an ambulatory surgery center with four operating rooms, an Emergency Room, and, in separate facilities, a dental office, optometrist-ophthalmologist, a pharmacy, and a medical clinic.

The Caketown Medical Clinic is a corporate group of family physicians. Two medical school classmates started a small practice in a rented building downtown. Figure 1 shows the simplicity of their partnership relationship and the direct supervisory relationship with their small number of employees.

A short time later two or three partners were added to form a group. Most of the new partners eventually left the group to start their own practices within a 50-mile radius of Caketown. Figure 2 illustrates the organizational relationships between the senior partners and the new members of the group. Various support facilities were needed and were developed as a function of the clinic.

Approximately ten years after the start, the group incorporated and subsequently several separate functions were incorporated for tax accounting and management control. Each of these corporations functions with some sort of administrative officer and represents a small bureaucracy. One can note from Figure 3 the multiple interactions between the hospital, owned by the community, and the laboratory and clinic, owned as corporations. The balance of power, represented by the different goals of the multiple organizations, is maintained partly by physician A, who is involved in most of the decisions. The newer physicians in the group are aware that they are not involved in all the decisions that are being made.

One other significant characteristic of this small community medical center is the availability of numerous specialized services. The commercial laboratory, operated by the laboratory corporation, affords high-quality laboratory support for both the hospital and the medical group. The hospital employs specially trained cardiac nurses and a respiratory therapist to furnish intensive care services on a six-bed, monitored coronary care unit plus two remote monitor units. The surgical unit provides services for a panel of specialists from the adjacent city, who carry out both ambulatory and inpatient general surgery procedures

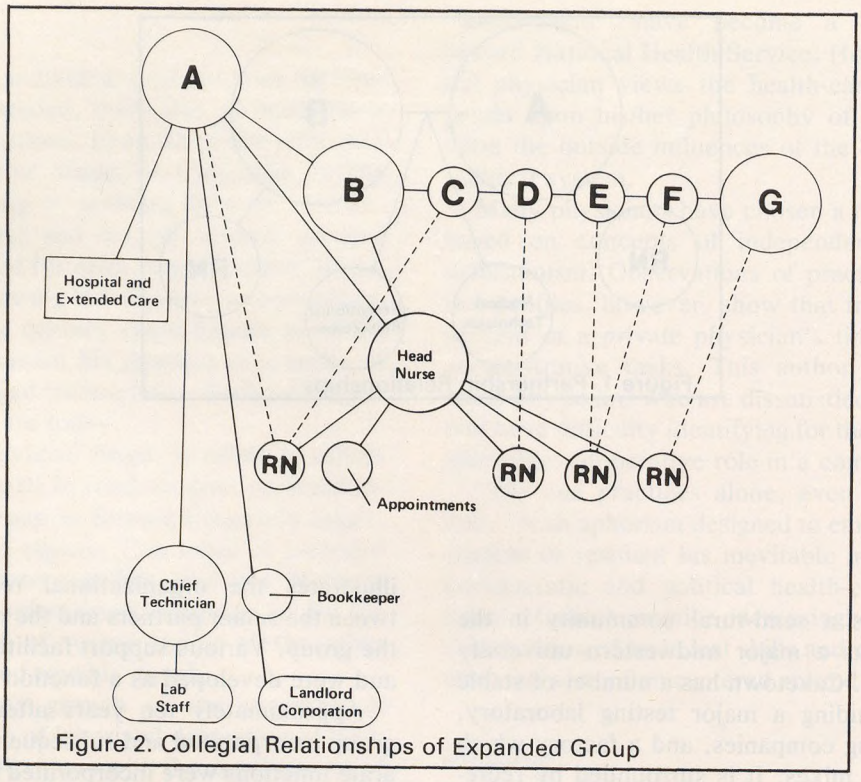

Figure 2. Collegial Relationships of Expanded Group

on a scheduled basis each week. These specialists also provide consultation to the inpatient services and to the family practice group. Occupational therapy and physical therapy exist in this small hospital primarily to meet the needs of a rehabilitation unit for burn patients which is subcontracted from the university. Social services, available to all patients in the hospital, are supported primarily by an Alcohol and Substance Abuse Program affiliated with the local community mental health organization.

The development of a pure bureaucracy would greatly simplify the complexity. A strict chain of command, such as the military services have, divides the responsibility for certain functions among different organizational units and gives them firm (usually written) guidelines for relationships with other units. Policies become fixed and management becomes routine. Figure 4 shows the example medical center organized as a bureaucracy. For some people this would be a more secure and acceptable relationship. This author is acquainted with physicians who have left their private practice to return to active military duty as Medical Officers, expressing resentment about the complexity of administration and the decisions required to maintain their practices. This is the basic simplicity that many health planners seek when they describe one centralized, government-run National Health Service.

Most organizations in this country are not, however, pure bureaucracies. Even hospital staff organizations (organized around a chain of command) have behind-the-scenes decision-making processes, both formal and informal, which represent more of a political interaction. The political model of organizational structure (illlustrated in Figure 5) shows a complicated but more balanced interrelationship between various organizations. Control of the system relates also to extramural factors (Figure 6). A more detailed inspection of the characteristics and advantages of the different organizational structures will be presented in the Discussion. Suffice it to say that in the political system each organization recognizes the probability of conflict between the objectives of different groups and works to resolve those differences in mutually satisfactory ways.

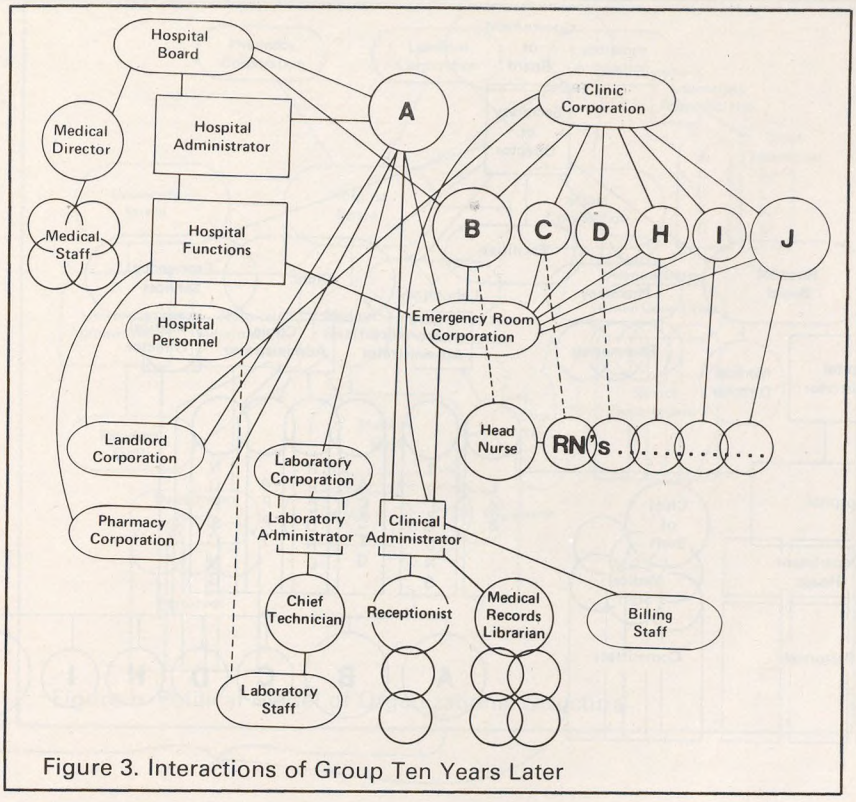

Figure 3. Interactions of Group Ten Years Later

Discussion

The development of this practice organization over a period of 20 years recapitulates the theory of organizations and demonstrates the importance of institutional structure. The sociological literature is full of examples of organizations growing from individual to collegial to bureaucratic structures. Increases in size almost guarantee that increasing complexity will result. The increasing interrelationship with external forces—third-party coverage, governmental funding, regulating and licensing bodies, and, of late, consumer groups—provide additional environmental stress favoring the evolution of more complex organizations. Just as in biological evolution, it can here be said that "ontogeny recapitulates philogeny."

Baldridge compares three models of organization which have been modified slightly in this paper.[8] Table 1 presents the collegial, bureaucratic, and political models side by side with a solo relationship.

Some categories in Table 1 were added as a result of discussion in Office of Medical Education Research and Development (OMERAD) seminars, and the first column was created to compare the solo type leadership of early stages. The structural relationship of these categories to the organizational charts representing practice growth (Figures 1, 2, 4, and 6) will require some thought. It is clear that the structures are increasingly complex. They also have different methods, rules, and communications. Most obvious is the inflexibility of the bureaucratic structure, which is based upon formal rules and policies. One must follow rules even to change a rule.

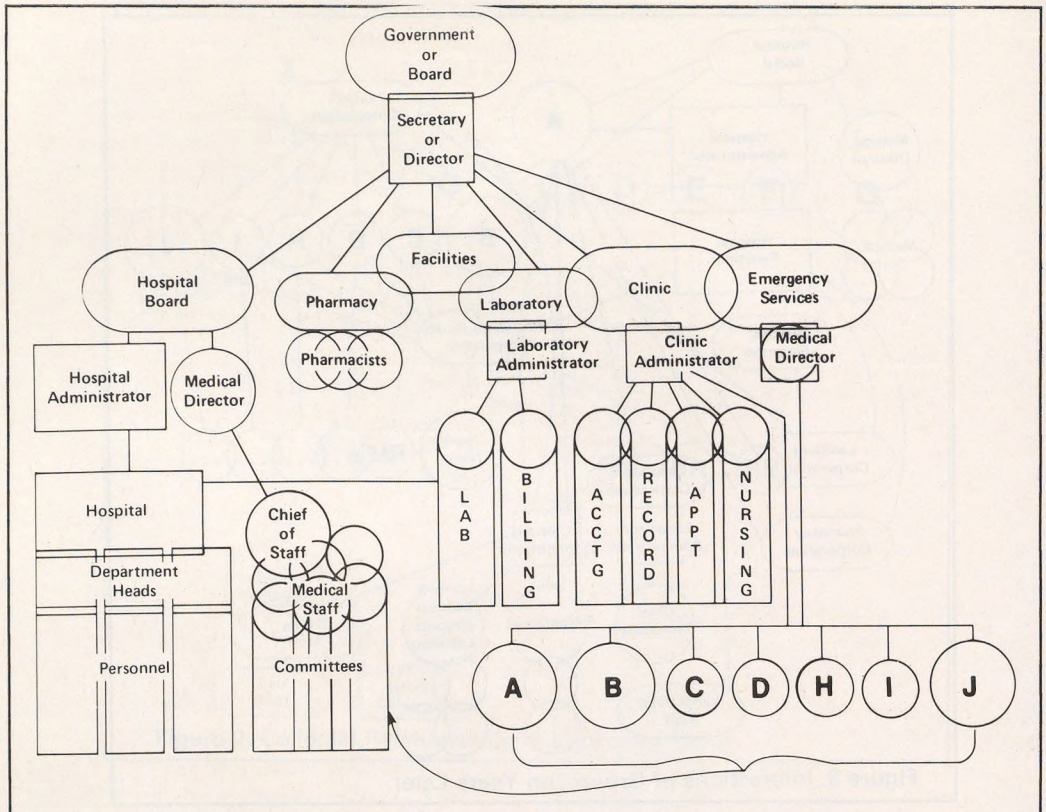

Figure 4. Medical Center as a Bureauracy

The control mechanisms of the political model are not so obvious. It should be pointed out, for example, that one of the characteristics of an open-systems theory is that pressure goes everywhere in a linking system.[9] That is, a change in one place or part of the system invariably affects other systems, which then react producing countereffects on the original part. Integrating a department or partnership into a complex organization without recognizing that fact leads to surprise and frustration, when previously autonomous decisions generate pressure in the surrounding system.

We should now look at the abstract concepts presented in the first column of Table 1 to see how they are represented in the various phases of growth in that practice. In the individual model which is a solo practice or, in this case, a very tight partnership, the sole ownership of the organization is vested in the professionals. The organization is noticeably small, limited by the economic resources of the group, and personally answerable to one or two professionals, in this case, physicians. The historical background for such an arrangement appears to be patriarchal, and decisions are made on an individual basis with the right to decide being seen as equal to the rights of the leader. Any kind of argument or conflict is seen as aberrant behavior usually punished by expulsion from the group, ie, firing.

In a slightly larger group, all of the professionals are seen somewhat as equals although one leader

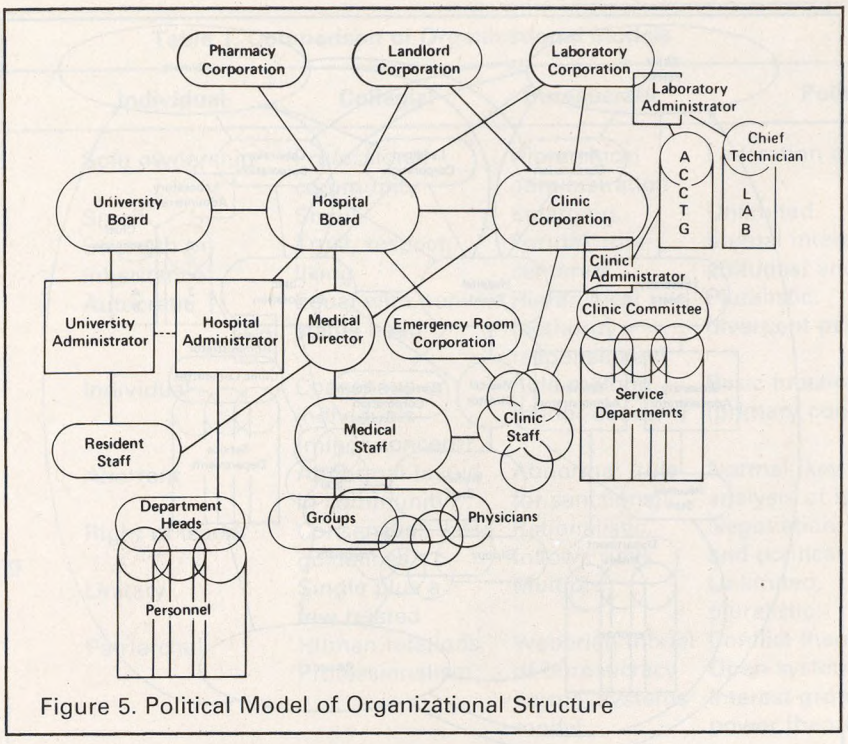

Figure 5. Political Model of Organizational Structure

may be elected or permitted to assume responsibilities for the group. Among the members of that group the status of the spokesman may be of limited importance; but his dealings with outside groups give him increased status with the rest of the community. Other members of the organization who have responsibilities for professional or paraprofessional tasks are seen as approximate equals with the permission to discuss their views and recommendations openly with all members of the practice. Decisions for change will generally be only consensual to set some general guidelines while maintaining freedom of action for all members of the group. The basic theoretical foundations of this model are seen to be a spirit of professionalism and shared responsibility plus a strong belief in human relations and communications as the best way to resolve differences. Serious conflicts are seen as disruptive of the relationships and are to be avoided wherever an alternative solution may be found.

Both size and multiple functions seem to be driving forces for bureaucratic reorganization. The bureaucratic organization is founded on a formal systems model of specialized functions and creates a hierarchical administrative chain of command which is based upon specialized knowledge. The individuals with higher responsibility are given a higher level of authority over others. Decision-making is very rationalistic and follows the organization's stated rules; changes are of minor concern and are expected to follow the rule

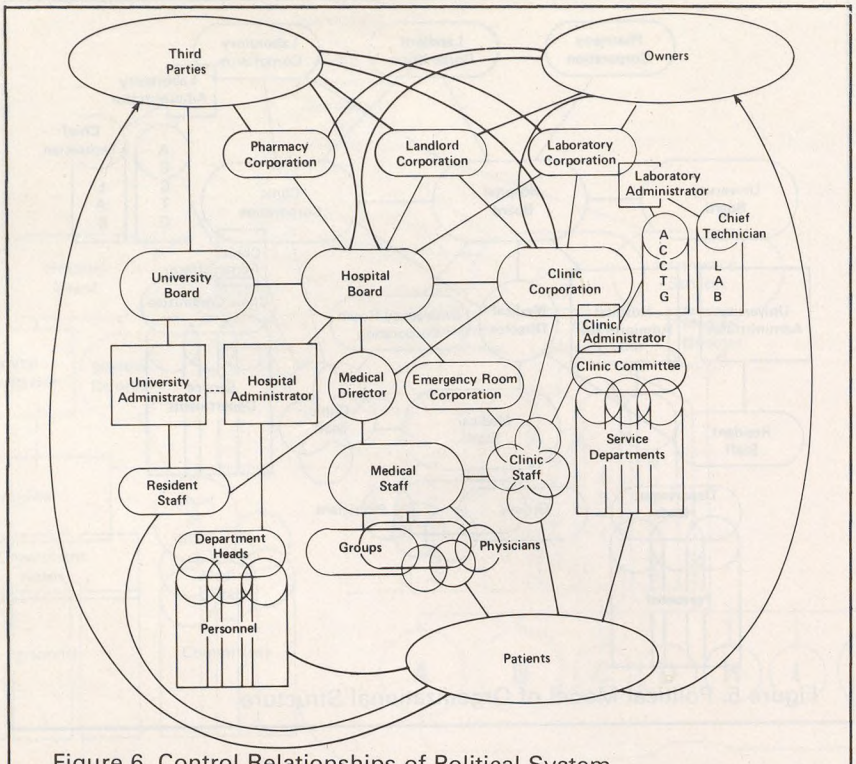

Figure 6. Control Relationships of Political System

also. The most familiar medical example of such a bureaucracy is a hospital administration of various specialized (nursing, laboratory, housekeeping, dietary, etc.) departments.

Examination of the overall system of health care suggests that it is unlimited in range and highly pluralistic in the goals of the various participating agencies. This is an example of the political model in which the relationships are based primarily on mutual interests and attitudes. The basic theoretical foundations include knowledge of interest groups and power theories as they relate to a fundamental belief in conflict as the mechanism for change. Conflict is therefore seen as normal; and analysis of the issues, resulting in negotiation and bargaining, is the mechanism for decision-making.

The position of most sociologists, and that transmitted by this author, is that none of these types of organization is perfect or even better than any of the others. There are appropriate places for each type of organization and each style of management and decision-making at various loci within the health-care system. It is generally recognized that the physician must maintain a one-to-one relationship with his patient in order to guarantee his professional responsibilities to that patient. The involvement of the traditional office nurse role does not interrupt that relationship.

The management of a complicated patient with multiple problems, however, of necessity requires a sharing of responsibility among various professionals and para-professionals. In many smaller community environments this is a very personal

Table 1. Comparison of Organizational Models

	Individual	Collegial	Bureaucratic	Political
Basic image	Sole ownership	Professional community	Hierarchical administration	Federation of interests
Size	Small	Small	Enlarging,	Unlimited
Basis of relationship	Strength or inheritance	Trust, respect, liking	Formal, rule-centered	Mutual interests, attitudes, and enemies
Social structure	Autocratic	Equal with non-status head	Hierarchical (authority= responsibility)	Pluralistic, divergent perspectives
Change process	Individual	Consensus of individuals (minor concern)	Rule method (minor concern)	Basic function (primary concern)
View of conflict	Aberrant	Abnormal (avoid in community)	Abnormal (rule for sanctions)	Normal (key to analysis of issues)
View of decision-making	Right of leader	Consensual, sets guidelines	Rationalistic, follows rules	Negotiation, bargaining, and political influence
Functions	Unitary	Single plus a few related	Multiple	Unlimited, pluralistic
Basic theoretical foundations	Patriarchal	Human relations Professionalism	Weberian model of bureaucracy Formal systems model	Conflict theory Open systems theory Interest group and power theories
Medical example	Solo practice	Group or team	Hospital staff	University or medical association

and egalitarian relationship between the family physician, the various specialists, and the technicians and nurses providing the daily service. While one of the individuals, usually but not always a physician, may be designated as the focal point and spokesman for the group, the relationship between the persons involved is clearly collegial and is an appropriate expression of the mutual concern about the patient. The success of many comprehensive health-care programs in rehabilitation medicine or community health services is based upon the preservation of such a relationship within the larger organization.

Beyond a certain size, theoretically 10 to 15, the communications and responsibilities become strained and there is a need for specified delegation of responsibility. This division of responsibility with stated rules and regulations is quite visible to most physicians in the hospitals in which they practice. All physicians adapt their practice styles to institutional policy when they are practicing in the hospital. It is more difficult for some physicians to adjust psychologically from their role as solo decision-makers to their specified roles in a staff organization. The staff physicians with the more successful adjustment are able to maintain their individuality while functioning as agents of the group.

The larger influences on the practice of medicine in the United States are (like the influ-

ences on most other systems operations) multifactorial, pluralistic, and subject to conflict. Many physicians have felt most comfortable ignoring this aspect of medical practice or assuming that it would be managed by their professional organization. Some physicians who have been most adept in working with the larger system, for example, cardiovascular surgeons and renal dialysis program directors, have improved the conditions for themselves and their departments by influencing the external political decision-making apparatus. Physicians who have isolated themselves from that decision-making process have been known to make somewhat critical and disparaging remarks about that decision process, when it inevitably affects their practice.

The provision of health and medical care services, as suggested in the Willard Commission's definition of family practice, involves the coordination of the multiple services of professionals, paraprofessionals, and community organizations. Knowledge of the interinstitutional relationships and the appropriate pathways to decision-making is an important part of coordinating those services.

Many physicians are concerned about the control of the health-care system. If it is to continue to function as an interrelated system with a plurality of choices, then a knowledgeable analysis is needed of the basic conflicts and the decision-making processes which are likely to influence it. Otherwise the simplified, but rigid, bureaucratic model may become dominant.

Summary

For an individual physician in practice (whether solo or group) it is important to develop an awareness of the organizational structure which surrounds him. This will help him to identify the critical points at which decisions affect his practice.

In order to maintain a choice of directions, one must anticipate growth and changes within the medical organization and throughout the entire health-care system.

The successes of the practice described are largely the result of interactions of this group, through its designated leader, with the hospital, the community, the university, the community mental health organization, the occupational therapy training program, and with various other professionals. Its difficulties result from a lack of awareness and a feeling of powerlessness in some of the group members to influence decisions that affect them. In other groups a failure to protect the individual (in the collegial setting) from outside pressures has resulted in other kinds of frustration. Group leadership must prevent serious organizational dissonance.

Acknowledgement

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