

# Hospital Contract Management: A Descriptive Profile

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*Despite the dramatic growth in hospital contract management in the last decade, research only recently has begun to provide insights into the structure, operation, and effectiveness of these arrangements. Two descriptive questions regarding hospital contract management are addressed in an effort to increase correspondence between theoretical and evaluative research in this area: (1) how do contract-managed hospitals differ from traditionally managed hospitals? and (2) how do contract-managed hospitals differ from each other? Principal discriminating variables in the analyses are hospital size, control, urban-rural location, region, management organization control, and management organization size. Results of the analysis on a sample of 406 contract-managed hospitals and 401 unaffiliated hospitals reveal important differences between contract-managed and traditionally managed hospitals as well as among contract management organizations. These findings are discussed in terms of their implications for future research and performance evaluations on contract management arrangements.*

## INTRODUCTION

Contract management has been defined as a situation in which the day-to-day management of a health facility is assumed by a separate contracting organization which reports to the board of trustees of the managed institution [1]. The contract management of hospitals is seen as the most rapidly developing form of multi-institutional arrangement in the hospital industry. From 1979 to 1980, the number of contract-managed hospitals in the United States grew by 20 percent; from 1970 to 1981, the number of hospitals under management contract has increased from 14 to 497. Further, these nearly 500 hospitals represent approximately 50,000 beds and span a number of ownership catego-

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ries, including voluntary nonprofit, religious, government, and investor-owned institutions [2,3].

Why have hospitals chosen to participate in contract management at such an unprecedented rate? While the answers to this question have gone largely untested, several preliminary explanations have been offered (see [4]). Management contracts are viewed as occupying the middle ground between less committed forms of interorganizational affiliation (e.g., consortia affiliation and shared services) and more integrated arrangements (e.g., multihospital systems and mergers). Brown and Money [1] argue that contract management offers potential for greater acceptance and flexibility of action than do the more integrated systems, while it offers many of the benefits of such systems (e.g., management expertise, specialized services, personnel, and access to joint purchasing and capital). In essence, the contract-managed organizations are able to derive many of the advantages of more integrated participation in systems, while maintaining to a large degree their organizational autonomy and policy direction. However, because contract-managed institutions fall somewhere between loose affiliations of hospitals and more integrated organizational arrangements, questions of organization, governance, and operations in these hospitals become exceedingly problematic. In what areas, for example, do contract-managed hospitals resemble freestanding hospitals, and in what ways are they like units of multihospital systems?

Despite the increasing numbers of hospitals operating under contract management, our knowledge of these organizational arrangements and their implications for hospitals remains fairly rudimentary. Studies of contract management of hospitals tend to fall into two basic categories: theoretical and evaluative/analytic. The theoretical studies have typically focused on developing typologies or classifications of contract management arrangements [5-8]. For example, Lowe [8] describes three types of structural models of contract management and their implications for hospital management and operations: the operating division model, the wholly owned subsidiary model, and the shared or joint management model. In another theoretical piece, Brown and Money [6] contrast contract management with more integrated organizational arrangements, such as multihospital systems, acquisitions, and mergers. They note that contract management offers the benefits of ease of implementation, alternative capital formation options, reduced threat to hospital staff, retention of control by hospital boards, and a more clearly specified short-term commitment by the hospital to management programs.

By comparison, analytic and evaluative studies on contract man-

agement have been less common than the theoretical investigations [9-11]. Although these analytic investigations address important questions regarding the effectiveness and performance of contract-managed hospitals, they are usually atheoretical, performed on very small samples of hospitals, and/or rarely include a group of freestanding hospitals with which contract management performance may be compared. However, what is most evident in the contract management literature is that little correspondence exists between theoretical and analytic research. Analytic research does not appear to build upon the typologies and classifications discussed in the theoretical studies, nor has theoretical understanding of contract management been appreciably advanced by empirical investigation.

As Fottler has noted, to make research on contract management useful for hospital administrators, trustees, and policymakers, a solid knowledge base must be established on which to build sound policy and administrative decisions. Existing knowledge is itself based largely on premature generalizations made from an incomplete mastery of organizational theory, and/or on health care research that is often impressionistic or inadequately grounded in theory [7].

In our opinion, a third type of analysis has been missing from the area of contract management—one that lies midway between the non-empirical, theoretical work and the highly focused analytical research. What is called for is a series of rigorous, descriptive studies characterized by systematic, empirical specification of researchable issues; such studies will serve to link the theoretical and analytic traditions of research.

In this light, the current study addresses three descriptive questions. *First*, how do contract-managed hospitals differ from traditionally managed hospitals? This question is approached by comparing a large sample of contract-managed hospitals with a comparison group of traditionally managed institutions. *Second*, how do contract-managed hospitals differ from each other? To address this latter question, the type and extent of variation within a sample of contract-managed hospitals is examined through comparative analysis. *Finally*, what differences exist between multihospital systems that manage hospitals and systems that only own, lease, or sponsor hospitals? From these analyses, a series of research questions is proposed, focusing on issues of public accountability and performance of contract-managed hospitals, reasons for hospital participation in contract management, marketing and competition among contract management organizations, and changes in hospital structure and governance that result from participation in contract management.

## SAMPLE AND DATA

For this investigation, a sample of 431 acute care community hospitals was designated as the "study" group. These hospitals had been validated by the American Hospital Association's (AHA's) Center for Multi-Institutional Arrangements, as operating under total contract management in July 1983. While the sample does not represent the total population of contract-managed hospitals, it is expected that at least 80 percent of all managed hospitals are included in this group. The most likely omissions are smaller hospitals that have contracted with tertiary hospitals for the provision of total management services.

The study sample also includes a comparison group of 4,129 hospitals selected from the population of hospitals meeting the following criteria: (1) not under contract management since 1979; (2) not owned, leased, or sponsored under a multihospital system arrangement; and (3) classified as a non-federal community or specialty hospital. Thus, hospital-level comparisons in the study are between hospitals that were under contract management in 1983 and hospitals that operated under more traditional management at that time.<sup>1</sup> Also available for analysis were descriptive data on the contract management operations of 245 multihospital systems which existed in 1983. For purposes of this investigation, "system" is defined as two or more hospitals that are owned, leased, sponsored, or contract managed by a separate administrative entity.

Two data sources were used in the investigation: the 1982 Annual Survey of Hospitals, conducted by the American Hospital Association Data Center, and a 1981 Validation Survey of Multihospital Systems, conducted by the AHA Center for Multi-Institutional Arrangements. The Annual Survey of Hospitals supplied data on ownership status, services, and facilities, hospital personnel, and hospital finances. The Validation Survey of Multihospital Systems defined the population of contract-managed hospitals used in the investigation and assessed the ownership status of the management organization and the date that each hospital contracted with the management organization.

## ANALYTIC STRATEGY

The analytic approach of this study emphasizes comparison. The investigation aims not only to describe the general characteristics of contract-managed hospitals, but to assess the extent to which these characteristics differ from those of traditionally managed hospitals and to examine how contract management organizations differ from each other. Four hospital-level and two system-level variables are examined:

hospital bed size, hospital control status, rural-urban location, regional location, system size, and system control. These variables were selected on the basis of previously demonstrated ability to distinguish among hospitals on cost, resources, services and facilities, and other operational and organizational characteristics. Tests of statistical significance are not employed in this investigation since comparisons are made for descriptive purposes rather than hypothesis testing.

Although comparisons in this investigation are based on a large sample of contract-managed hospitals, this group does not represent the entire population of contract-managed institutions. Because the omitted contract-managed hospitals are not identifiable, it is impossible to ascertain the extent to which they are similar to or different from the sample hospitals. Thus, the generalizability of the findings must be applied cautiously.

## MEASURES

For purposes of this investigation, hospital bed size is dichotomized into these categories: fewer than 100 beds and 100 beds or more. Hospital control type incorporates four categories: state and local government hospitals (public hospitals), including state, county and municipal, and hospital district institutions; religious hospitals, including both Catholic and other denominations; secular nonprofit hospitals; and investor-owned institutions. Urban-rural location is based on whether the hospital is situated in a designated Standard Metropolitan Statistical Area (SMSA) or outside an SMSA. Finally, regional location is classified according to the nine census tract regions that incorporate the 50 United States. The state-specific composition of these regions is contained in the Appendix.

## RESULTS

Table 1 presents comparisons between the sample of contract-managed hospitals and the comparison group of traditionally managed hospitals. Government (public) and secular nonprofit hospitals account for approximately 85 percent of the hospitals under contract management. Religious and investor-owned hospitals represent only 9 and 5 percent, respectively, of all hospitals operating under such arrangements. It is important to note that all control categories are proportionately similar in both the contract management sample and the population of nonfederal, traditionally managed hospitals. These findings indicate that hospitals in all control categories are equally likely to enter into a management contract.

Table 1: Characteristics of Contract-Managed and Traditionally Managed Hospitals

<i>Hospital Characteristic</i>	<i>Contract-Managed Hospitals</i>			<i>Traditionally Managed Hospitals</i>		
	<i>All Hospitals % (N)</i>	<i>Small % (N)</i>	<i>Large % (N)</i>	<i>All Hospitals % (N)</i>	<i>Small % (N)</i>	<i>Large % (N)</i>
<b><i>HOSPITAL CONTROL</i></b>						
State and local government	40.1 (173)	49.0 (129)	26.2 (44)	37.6 (1553)	49.2 (836)	29.5 (717)
Religious	9.1 (39)	6.5 (17)	13.1 (22)	7.9 (325)	3.2 (54)	11.2 (271)
Other nonprofit	45.5 (196)	38.8 (102)	56.0 (94)	48.5 (2003)	39.6 (673)	54.8 (1330)
Investor-owned	5.3 (23)	5.7 (15)	4.8 (8)	6.0 (248)	8.1 (137)	4.6 (111)
<i>Total</i>	100.0 (431)	100.0 (263)	100.1* (168)	100.0 (4129)	100.1* (1700)	100.1* (2429)
<b><i>BED SIZE</i></b>						
Fewer than 100 beds	61.0 (263)	— —	— —	41.2 (1700)	— —	— —
100 beds or more	39.0 (168)	— —	— —	58.8 (2429)	— —	— —
<i>Total</i>	100.0 (431)			100.0 (4129)		
<b><i>URBAN-RURAL</i></b>						
Rural	66.1 (285)	78.7 (207)	46.4 (78)	43.4 (1791)	67.7 (1151)	26.4 (640)
Urban	33.9 (146)	21.3 (56)	53.6 (90)	56.6 (2338)	32.3 (549)	73.7 (1789)
<i>Total</i>	100.0 (431)	100.0 (263)	100.0 (168)	100.0 (4129)	100.1* (1700)	100.0 (2429)

Continued

Table 1, however, reveals clear differences between the contract-managed and comparison hospitals on bed size. Of contract-managed hospitals in the sample, 61 percent have fewer than 100 beds. This contrasts with only 41 percent of the traditionally managed hospitals in the comparison group. These striking differences raise questions related to reasons why smaller hospitals are prone to contract manage-

Table 1: Continued

<i>Hospital Characteristic</i>	<i>Contract-Managed Hospitals</i>			<i>Traditionally Managed Hospitals</i>		
	<i>All Hospitals % (N)</i>	<i>Small % (N)</i>	<i>Large % (N)</i>	<i>All Hospitals % (N)</i>	<i>Small % (N)</i>	<i>Large % (N)</i>
<i>REGION</i>						
Associated Areas	0.2 (1)	0.0 (0)	0.6 (1)	0.9 (35)	.05 (8)	1.1 (27)
New England	3.3 (14)	3.0 (8)	3.6 (6)	7.3 (302)	6.4 (108)	8.0 (19.4)
Middle Atlantic	6.0 (26)	2.3 (6)	11.9 (20)	14.3 (592)	6.5 (111)	19.8 (481)
South Atlantic	17.9 (77)	13.7 (36)	24.4 (41)	13.3 (547)	9.8 (166)	15.7 (381)
East North Central	7.9 (34)	6.8 (18)	9.5 (16)	17.8 (736)	15.2 (259)	19.6 (477)
East South Central	7.9 (34)	7.6 (20)	8.3 (14)	7.6 (314)	8.9 (152)	6.7 (162)
West North Central	19.0 (82)	22.1 (58)	14.3 (24)	12.5 (514)	18.4 (312)	8.3 (202)
West South Central	10.7 (46)	11.4 (30)	9.5 (16)	11.1 (460)	16.0 (272)	7.7 (188)
Mountain	13.0 (56)	16.7 (44)	7.1 (12)	4.9 (202)	7.5 (127)	3.1 (75)
Pacific	14.2 (61)	16.4 (43)	10.7 (18)	10.3 (427)	10.9 (185)	10.0 (242)
<i>Total</i>	100.1* (431)	100.0 (263)	99.9* (166)	100.0 (4129)	100.1* (1700)	100.0 (2429)

\*Deviations from 100.0 reflect rounding error.

ment arrangements or, conversely, why larger hospitals appear to be underrepresented in the sample of contract-managed hospitals. These issues are discussed later in this article.

A similar pattern appears when rural-urban location is compared for contract-managed and comparison-group hospitals. Sixty-six percent of hospitals in the contract-managed group are located in rural areas, compared with only 43 percent in the comparison group of traditionally managed institutions. The respective influences of size and rural-urban status on reasons why hospitals choose or are chosen for contract management and on how contract-managed hospitals are

operated is open to empirical question because of the strong association between these two variables.

Regionally, contract-managed hospitals appeared to be most strongly represented in the South Atlantic, West North Central, Mountain, and Pacific regions. Fully 19 percent of the contract-managed hospitals fall in the West North Central region, which includes Minnesota, Iowa, Missouri, North and South Dakota, Nebraska, and Kansas. The New England, Middle Atlantic, East North Central, and East South Central regions contain the fewest contract-managed hospitals.

Comparatively, the most salient differences between the contract-managed and comparison group of hospitals occur in the Mountain, New England, Middle Atlantic, and East North Central regions. The Mountain region, comprising New Mexico, Montana, Colorado, Wyoming, Idaho, Utah, Nevada, and Arizona, contains nearly 2½ times the number of contract-managed institutions, proportionately, as traditionally managed hospitals.

#### EFFECTS OF HOSPITAL SIZE

Because bed size often tends to be related to control status, urban-rural location, and region in the population of U.S. hospitals, an additional analysis was performed controlling for the effects of hospital bed size. The samples of both contract-managed and traditionally managed hospitals were divided into small and large hospitals for each value of the discriminating variable. While not intended as a multivariate analysis of these data, the size control does provide preliminary indication of whether zero-order relationships are mediated or eliminated by the introduction of this important hospital characteristic.

Among the small contract-managed hospitals, nearly half are represented by state and local government institutions, while 39 percent are secular, nonprofit hospitals. Fifty-six percent of the 168 large hospitals under contract management are secular, nonprofit hospitals.

When size is controlled, the rural-urban difference between contract-managed and traditionally managed hospitals becomes less pronounced for small hospitals. Seventy-nine percent of the small contract-managed hospitals are situated in rural areas, compared with 68 percent of the small, traditionally managed hospitals. However, substantially more large contract-managed hospitals are located in rural areas relative to large, traditionally managed hospitals. This 20 percent difference is comparable to the difference exhibited between the two groups when size is not controlled.



In general, the regional distribution of contract-managed versus traditionally managed hospitals is not significantly affected by the introduction of the size control.

#### HOSPITAL CHARACTERISTICS AND MANAGEMENT TYPE

Table 2 compares hospital control, bed size, urban-rural location, and regional location across four contract management types. These types are non-Catholic religious, Catholic, secular nonprofit, and investor-owned management organizations. This analysis is intended to reveal any characteristics of the four management types that may distinguish them in terms of marketing patterns, competition, and market share.

Of the four management types, investor-owned systems manage 51 percent of all contract-managed hospitals in the sample, followed by secular nonprofit systems (31 percent), Catholic systems (10 percent), and other religious systems (8 percent). The major role of investor-owned management companies in contract management gives rise to a number of important accountability and operational issues, since such organizations manage primarily non-investor-owned institutions.

Table 2 indicates that the management activities of non-Catholic religious organizations are focused largely on public institutions. These hospitals represent 61 percent of the sample hospitals under non-Catholic religious management. By contrast, only 43 percent of the hospitals operated by Catholic management systems are non-religious affiliated. The ownership distribution of hospitals under secular nonprofit and investor-owned management appears strikingly similar. Of the hospitals managed under these management types, 43 and 40 percent, respectively, are public hospitals, and about 50 percent under each type are secular nonprofit hospitals. Little management activity is displayed by these organizations in either religious or investor-owned institutions.

Bed-size comparisons by management types reveal that non-Catholic religious and secular nonprofit management institutions are heavily concentrated in smaller hospitals. Although both Catholic and investor-owned management organizations also operate a substantial proportion of small hospitals, their participation in large hospital management appears significantly greater than that of the other two management types.

Not unexpectedly, a similar pattern is evident when urban-rural location is considered. All management types manage the majority of their hospitals in rural areas. However, secular nonprofit management

Table 2: Characteristics of Hospitals under Four Management Types

<i>Hospital Characteristic</i>	<i>Non-Catholic Religious Management % (N)</i>	<i>Catholic Management % (N)</i>	<i>Secular Nonprofit Management % (N)</i>	<i>Investor-Owned Management % (N)</i>
<b>HOSPITAL CONTROL</b>				
State and local government	60.6 (20)	18.2 (8)	42.9 (57)	39.8 (88)
Religious	18.2 (6)	56.8 (25)	1.5 (2)	2.7 (6)
Other nonprofit	21.2 (7)	25.0 (11)	53.4 (71)	48.4 (107)
Investor-owned	— (0)	— (0)	2.3 (3)	9.0 (20)
<i>Total</i>	100.0 (33)	100.0 (44)	100.1* (133)	99.9* (221)
<b>BED SIZE</b>				
Fewer than 100 beds	72.7 (24)	47.7 (21)	72.2 (96)	55.2 (122)
100 beds or more	27.3 (9)	50.0 (23)	27.8 (37)	44.8 (99)
<i>Total</i>	100.0 (33)	100.0 (44)	100.0 (133)	100.0 (221)
<b>RURAL-URBAN</b>				
Rural	57.6 (19)	59.1 (26)	79.0 (105)	61.1 (135)
Urban	42.4 (14)	40.9 (18)	21.1 (28)	38.9 (86)
<i>Total</i>	100.0 (33)	100.0 (44)	100.1* (133)	100.0 (221)

Continued

systems have a substantially smaller share of their managed hospitals in urban areas than the other three management types.

Distribution of contract-managed hospitals by region reveals several interesting patterns across the four management types. All management organizations except investor-owned systems display heavy concentrations of managed hospitals in the West North Central region of the United States, encompassing Minnesota, Iowa, Missouri, North and South Dakota, Nebraska, and Kansas. Interestingly, investor-

Table 2: Continued

<i>Hospital Characteristic</i>	<i>Non-Catholic Religious Management % (N)</i>	<i>Catholic Management % (N)</i>	<i>Secular Nonprofit Management % (N)</i>	<i>Investor-Owned Management % (N)</i>
<i>REGION</i>				
Associated areas	0.0 (0)	0.0 (0)	0.0 (0)	0.5 (1)
New England	3.0 (1)	4.5 (2)	3.8 (5)	2.7 (6)
Middle Atlantic	0.0 (0)	4.5 (2)	3.0 (4)	9.1 (20)
South Atlantic	12.1 (4)	4.5 (2)	20.3 (27)	19.9 (44)
East North Central	9.1 (3)	11.4 (5)	4.5 (6)	9.1 (20)
East South Central	15.2 (5)	2.3 (1)	2.3 (3)	11.3 (2.5)
West North Central	18.2 (6)	47.7 (21)	33.8 (4.5)	4.5 (10)
West South Central	21.2 (7)	2.3 (1)	5.3 (7)	14.0 (31)
Mountain	15.2 (5)	9.1 (4)	15.0 (20)	12.2 (27)
Pacific	6.1 (2)	13.6 (6)	12.0 (16)	16.7 (37)
<i>Total</i>	100.0 (31)	99.9* (44)	100.0 (133)	100.0 (221)

\*Deviations from 100.0 reflect rounding error.

owned management firms have one of the lowest concentrations of hospitals in this West North Central region. Also, unlike the other three management types, hospitals under investor-owned management appear to be distributed fairly evenly over the nine census regions. The highest concentration of hospitals operated by investor-owned systems is in the South Atlantic, where 19 percent of all investor-owned, contract-managed hospitals operate. It is interesting to note that in the same South Atlantic region, investor-owned and secular nonprofit contract management appear to be competing vigorously. Investor-owned and nonprofit management organizations manage 44 and 27 percent, respectively, of the hospitals in this region.

The largest concentration of hospitals managed by non-Catholic

religious organizations appears to fall in the West North Central and West South Central areas of the country. Catholic organizations have concentrated their hospital management activities primarily in the West North Central region, and to a more limited extent in the Pacific region. Hospital management by secular nonprofit organizations is concentrated primarily in the West North Central and South Atlantic regions of the country.

#### SYSTEMS-LEVEL ANALYSIS

The final phase of the analysis examines several basic characteristics of hospital systems that provide contract management services and compares these systems to systems that do not provide such arrangements. The objectives of this analysis are to assess the degree to which contract management is practiced across all systems and system types and to ascertain whether contract management is an important distinguishing characteristic among hospital systems.

Table 3 presents the distribution of number of hospitals per system for two groups: those systems with one or more contract-managed hospitals and those with no contract-managed hospitals. The figures show that the systems without contract-managed hospitals tend to be smaller, with 93 percent containing ten or fewer hospitals. Of these, the overall mean is 4.8 hospitals per system. In comparison, only 66 per-

Table 3: Contract Management Activity of Systems by Size and Control

System Characteristic	Contract-Managed Activity					
	1 or more Managed Hospitals		No Managed Hospitals		Total Systems	
	(N)	%	(N)	%	(N)	%
<i>Number of System Hospitals</i>						
1- 5	33	19.6	135	80.4	168	100.0
6- 10	17	42.5	23	57.5	40	100.0
11-326	26	66.7	13	33.3	39	100.0
Mean number of hospitals per system	4.9		14.7			
<i>Type of System Control</i>						
Public	1	6.2	15	93.8	16	100.0
Non-Catholic religious	16	50.0	16	50.0	38	100.0
Catholic	16	15.7	86	84.3	102	100.0
Secular nonprofit	28	39.4	43	60.6	71	100.0
Investor-owned	15	57.7	11	42.3	26	100.0

cent of those systems containing contract-managed hospitals have ten or fewer hospitals. Relative to systems with no contract-managed hospitals, this group has a much greater mean size, with 14.8 hospitals per system.

For those systems with contract-managed hospitals, the mean percentage of contract-managed to total hospitals is 46. This means that slightly fewer than half of the hospitals in each system, on the average, are contract managed. There appears to be considerable variation, however, in proportion of contract-managed hospitals in systems. Although many systems have only one or two contract-managed hospitals, regardless of their overall size, a few larger systems do operate a large proportion of their hospitals under contract management.

Table 3 also contains the type of system ownership for systems with either no contract-managed hospitals or with one or more managed hospitals. Although public hospitals are sometimes bound together into multihospital system arrangements (16 at the time of this study), only one practices contract management. Of the remaining system types that contain contract-managed hospitals, the more prevalent are secular nonprofit systems, 39 percent of which contain contract-managed hospitals. The other system types, non-Catholic religious, Catholic, and investor-owned, are managed in approximately equal amounts. This can be compared to those systems which contain no contract-managed hospitals. Of these, more than half (53 percent) are Catholic hospital systems and 27 percent secular nonprofit systems.

## DISCUSSION

This investigation suggests that important differences exist between contract-managed and traditionally managed hospitals, among contract management organizations, and among systems that do and do not provide contract management services. We discuss these differences now in terms of their implications for research and policymaking.

According to anecdotal information and exploratory studies, the reasons for hospital participation in contract management vary widely. They include problems with professional staff recruitment, specialized reporting demands of complex regulations, need for outside management services during internal hospital disputes, planning for capital expansion and growth, and—most commonly mentioned—financial difficulties [4]. Additional research is needed to assess whether such variation is associated with differences in organizational characteristics

(size, ownership) and environmental contexts (regional, and rural/urban locations) of hospitals under contract management. For example, the present investigation indicates that a disproportionate number of contract-managed hospitals are small and located in rural areas. Are such hospitals susceptible to unique types of management problems? And to what extent do these hospitals differ in their reasons for choosing contract management from the 35 percent of contract-managed hospitals operated in urban/suburban settings?

These same hospital, locational, and regional differences point to potential differences in expectations of hospitals for contract management and consequently for the types of performance standards employed in evaluative research. The unique characteristics of small hospitals or hospitals in rural areas, for example, may foster management problems unique to that set of hospitals—difficulty in attracting specialized managers to these locations, for example, or in raising sufficient operating capital. Conversely, larger hospitals or hospitals in a particular region of the country typically may experience a different set of management problems (e.g., intense regulation, competition, etc.). Researchers must address the issue of whether the management objectives, and thus the performance criteria, are similar for these hospital groups.

The descriptive analyses begun in this study clearly must be extended to other variables, particularly those that emphasize performance and effectiveness measures of contract management arrangements. Baseline studies on a range of management-related outcomes, from financial performance to utilization and manpower recruitment and retention, will lend a needed, pluralistic flavor to evaluative studies on contract management.

The study indicates that 40 percent of hospitals operating under management contract are public institutions (e.g., state, local, and municipal government). This finding has implications for the public trust placed in public hospitals and for possible ways in which accountability may undergo change upon the introduction of "external" management. For example, are public hospitals run along stricter business lines under contract management? And, if so, what impact does this have on their roles as public service institutions with responsibility to the community regardless of cost or ability to pay? Such issues are especially important, because public hospitals apparently rely on either proprietary or secular nonprofit organizations for their management. No contract-managed services are provided by public or governmental organizations.

Regional differences were also apparent when contract-managed

and traditionally managed hospitals were compared. Contract-managed hospitals were more prevalent, proportionally, in the West North Central, South Atlantic, Mountain, and Pacific regions and less common in New England, Middle Atlantic, and East North Central regions of the United States. These differences raise issues related to environmental pressure to enter into contract management arrangements (e.g., regulation), and historical and cultural differences providing a business and market climate conducive or inhibiting to the development of hospital contract management.

The study summarized here also addressed differences among management organization in terms of the characteristics of the hospitals they operate. The most salient findings in this area concern the competition between nonprofit and proprietary organizations for the management of nonprofit and public hospitals. Issues requiring more research include the comparative advantages of investor-profit and nonprofit management concerns for the operation of these hospitals. Other issues raised in the comparative analysis of management types relate to the prevalence of investor-owned management among large and urban institutions. Do these patterns result from marketing strategies, specialized management techniques, or simply more operational experience with hospitals in these environments?

The research issues outlined in this article should build upon the descriptive findings of this investigation through the use of rigorous, analytic research techniques and sound theoretical frameworks. Longitudinal studies are especially encouraged to examine changes in structure, services, and organizational affiliations over time. Such studies would be appropriate to answer questions about the performance of contract-managed hospitals and about whether a progression can be traced from contract management into more integrated organizational affiliations, such as multihospital systems. Additional analysis is also needed to address potential changes in the traditional relationships between the chief executive officer, medical staff, and governing board as power, accountability, and control patterns change with the introduction of external management. Finally, this study was limited to the analysis of differences between contract-managed and traditionally managed hospitals. Clearly, additional research should be performed on the differences between contract-managed hospitals and hospitals that have more integrated organizational arrangements, such as multihospital systems.

Studnicki [12], among others, has criticized research approaches to multihospital systems as simplistic in their dichotomous treatment of systems. According to Studnicki, simple dichotomies mask important

variations within multihospital systems. Contract management, like multihospital systems, is also a general concept that may encompass a wide range of operational, strategic, and administrative components. This variation may include differences in management goals, array of services provided, specialty emphasis, depth of management experience, and centralization of decision making in the management organization. Future research must address the potential for variation among contract management arrangements, particularly in view of the distinct hospital and environmental differences characterizing hospitals under contract management and the organizations that manage them.

## APPENDIX

### State Composition by Region

#### *New England*

Maine  
New Hampshire  
Vermont  
Massachusetts  
Rhode Island  
Connecticut

#### *Mid-Atlantic*

New York  
New Jersey  
Pennsylvania

#### *South Atlantic*

Delaware  
Maryland  
District of Columbia  
Virginia  
West Virginia  
North Carolina  
Georgia  
Florida

#### *East North Central*

Ohio  
Indiana  
Illinois  
Michigan  
Wisconsin

#### *East South Central*

Kentucky  
Tennessee  
Alabama  
Mississippi

#### *West North Central*

Minnesota  
Iowa  
Missouri  
North Dakota  
South Dakota  
Nebraska  
Kansas

#### *West South Central*

Arkansas  
Louisiana  
Oklahoma  
Texas

#### *Mountain*

Montana  
Idaho  
Wyoming  
Colorado  
New Mexico  
Arizona  
Utah  
Nevada



*Pacific*

Washington  
Oregon  
California  
Alaska  
Hawaii

*Associated Areas*

Canal Zone  
Marshall Islands  
Puerto Rico  
Virgin Islands  
Guam  
American Samoa

## NOTE

1. Hospitals whose management contracts may recently have lapsed (as of 1979) are eliminated from the comparison group to maximize the distinction between contract-managed and non-contract-managed institutions.

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